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*O’zbekiston Respublikasi Prezidenti Adminstratsiyasi huzuridagi Axborot va ommaviy kommunikatsiyalar agentligi tomonidan 2024-yil 29-yanvarda №213940-son bilan ro’yxatga olingan.*

## **KIRISH SO‘ZI**

Глобал сиёсий-ижтимоий тенденциялар, барча соҳаларда янги технологияларни ўзлаштириш, инновацияларни жорий қилиш – замонавий менежмент – бошқарув тизими олдига ҳам янги талабларни қўймоқда. Замонавий менежмент деганда давлат, нодавлат фаолият соҳаларини ўз ичига олган ижтимоий-иқтисодий тизимларни ишлаб чиқиш, яратиш, улардан максимал даражада фойдаланиш ва бошқариш тушунилади.

Замонавий менежмент одатда замонавий бизнес муҳитига мослаштирилган замонавий бошқарув амалиёти, техникаси ва назарияларини назарда тутди. Бунга бугунги тез ўзгарувчан дунёда долзарб бўлган етакчилик, ташкилий хатти-ҳаракатлар, стратегик режалаштириш, инновациялар ва қарорлар қабул қилиш тамойиллари киради.

Замонавий бошқарув амалиётидан хабардор бўлиш самарадорлик ва рақобатбардошликни таъминлаш учун жуда муҳимдир. Бу бошқарув технологиясидан фойдаланиш, хилма-хилликни қамраб олиш, инновацияларни ривожлантириш ва ўзгарувчан бозор динамикасига мослашишни ўз ичига олади.

Замонавий раҳбар учун стратегияни танлаш, қўйилган мақсадларга эришишнинг умумий йўналиши ва усуллари муҳимдир. Бунда замонавий менежмент тактикасини қўллаб асосий мақсадга эришиш жараёнида аниқ муаммоларни ҳал қилиш имконини беради.

Бугун кадрларни ривожлантириш стратегияси, ходимларни ривожлантиришни режалаштиришни, меҳнатни баҳолаш ва рағбатлантиришни ўз ичига олган инсон ресурсларини бошқариш тизими, яъни замонавий фаолият жараёнларини бошқариш самарадорлиги бошқаришни ташкил этиш маҳоратига бевосита боғлиқ.

Замонавий бошқариш корxonанинг инновацион ривожланиш стратегияси билан биргаликда ходимларни ривожлантириш стратегиясини ишлаб чиқиш ва амалга ошириш алгоритминини кўриб чиқади. Ҳозирги вақтда замонавий менежментни ривожлантириш меҳнат муҳитини самарали кадрлар билан таъминлаш, шунингдек, ташкилий, ҳуқуқий, иқтисодий, технологик, ахборот ва бошқаларга асосланади.

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## “INNOVATOR AYOLLAR: ZAMONAVIY DUNYODA TURIZM VA TEXNOLOGIYA” MAVZUSIDAGI XALQARO ILMIY-AMALIY KONFERENSIYA

Joriy yilning 18-aprel kuni Toshkent shahridagi Singapur menejmentni rivojlantirish institutida O‘zbekiston Respublikasi Turizm qo‘mitasi huzuridagi Turizmni rivojlantirish ilmiy-tadqiqot instituti va O‘zbekiston ishbilarmon ayollar xalqaro assotsiatsiyasi bilan hamkorlikda yuqori darajadagi xalqaro “Innovator ayollar: zamonaviy dunyoda turizm va texnologiya” mavzusidagi ilmiy amaliy konferensiya bo‘lib o‘tdi.



Konferensiyani kirish so‘zi bilan TSMRI rektori I.Mamatkulov, Oliy Majlis Senatining Yoshlar, madaniyat va sport masalalari qo‘mitasi raisi o‘rinbosari D.Toshmuhamedova, O‘zbekiston Respublikasi Turizm qo‘mitasi huzuridagi Turizmni rivojlantirish ilmiy-tadqiqot instituti rahbari E.Golisheva so‘zga chiqdilar. Tadbirni O‘zbekiston ishbilarmon ayollar uyushmasi raisi o‘rinbosari N.Yakubova olib bordi.

Konferensiyadan ko‘zlangan asosiy maqsad ilmiy-nazariy va amaliy taklif va tavsiyalar ishlab chiqish, xususan, bugungi kunda mamlakatimiz uchun dolzarb bo‘lgan masala – respublikamiz aholisining turli yoshdagi ayollar qismini tadbirkorlik sohasida, o‘z biznesini yuritishda, jumladan, turizm va IT xizmatlarini ko‘rsatish sohasida keng jalb etish masalalarini hal etishdan iborat bo‘ldi. Anjumanda asosiy ma‘ruzachilar sifatida O‘zbekiston ishbilarmon ayollari uyushmasi vakillari, ilmiy-tadqiqot institutlari olimlari, tajribali mutaxassislar, turizm va mehmondo‘stlik sohasidagi ekspertlar, davlat idoralari vakillari, mamlakatimizning yetakchi IT-kompaniyalari, O‘zbekiston oliy o‘quv yurtlari, yosh olimlar hamda xorijiy mutaxassislar ishtirok etdi.

Shuningdek, xalqaro konferensiya ishtirokchilari va ma‘ruzachilariga sertifikat va esdalik sovg‘alarini topshirishga bag‘ishlangan tantanali marosim bo‘lib o‘tdi.

## BESH MUHIM TASHABBUSDA STOL TENNISI MUSOBAQASI

Joriy yilning 18-aprel kuni institutimizda “O‘zbekiston Respublikasi Prezidentining beshta muhim tashabbusini birgalikda amalga oshirish maqsadida Toshkent shahri va Toshkent viloyatidagi xorijiy oliy ta’lim muassasalari filiallari o‘rtasida hamkorlik to‘g‘risida”gi memorandumida belgilangan vazifalar hamda tadbirlarni tashkil etish maqsadida oliygohlarning talabalari o‘rtasida stol tennisi bo‘yicha musobaqa o‘tkazildi.

Unda S.A.Gerasimov nomidagi butun Rossiya davlat kinematografiya universiteti, A.I.Gersen nomidagi Rossiya pedagogika universiteti, D.I.Mendelev nomidagi Rossiya kimyo-texnologiya universiteti, G.V.Plexanov nomidagi Rossiya iqtisodiyot universiteti, M.V.Lomonosov nomidagi Moskva davlat universiteti, Moskva davlat xalqaro munosabatlar institutlarining Toshkent shahridagi filiallari hamda “MISIS” Milliy tadqiqot texnologik universiteti Olmaliq shahridagi filiali va Toshkent shahridagi Turin politexnika universiteti talabalari qatorida bizning talabalarimiz ham ishtirok etishdi.

Qayd etish kerakki, musobaqa ko‘tarinki ruhda o‘tib tomoshabinlarda katta qiziqish uyg‘otgan bo‘lsa, jamoalar o‘rtasidagi murosasiz bahslar esa musobaqaga o‘ziga xos joziba bag‘ishladi. Musobaqa finalida M.V.Lomonosov nomidagi Moskva davlat universitetining Toshkent shahridagi filiali jamoasi hamda institutimiz jamoasi o‘rtasida bellashuv bo‘lib, unda institutimiz jamoasining qo‘li baland keldi.

Ushbu g‘alaba institutimiz talabalari uchun nafaqat musobaqadagi g‘oliblik, balki besh muhim tashabbusning faol namoyondalaridan bo‘lishning yaqqol misolidir.



**9-may - Xotira va qadrlash kuni** munosabati bilan Toshkent shahridagi Singapur menejmentni rivojlantirish instituti jamoasi tomonidan urush va mehnat faxriylari holidan xabar olindi. Jumladan, poytaxtimizning Chilonzor tumanidagi “Do‘mbirobod” hamda “Mexrjon” mahallalarida istiqomat qiluvchi bir guruh keksalarga bayramona kayfiyat ulashildi.



Keksalik gashtini surayotgan faxriylarimiz bugungi osoyishta kunlar uchun shukronalar aytib, tinchlikni qadrlash zarurligini ta'kidlashdi. Shuningdek, yurtimizda faxriylarga hamisha yuksak ehtirom va alohida hurmat ko‘rsatib kelinayotganidan minnatdor bo‘lishdi.

Shuni alohida ta'kidlash joizki, ulug‘ ajdodlarimiz, urush va mehnat faxriylarining fidoiyliklari hamda qahramonliklari tarixdagi o‘chmas iz, bugunimiz va kelajagimiz uchun ulkan ibratdir.

## AMALIY NATIJALARGA KO'CHAYOTGAN HAMKORLIK ALOQALARI

Joriy yilning 17-may kuni Toshkent shahridagi Singapur menejmentni rivojlantirish instituti jamoasi O'zbekiston xalqaro islom akademiyasiga tashrif buyurdi.



Tashrif davomida akademiya huzuridagi Imom Moturidiy xalqaro ilmiy-tadqiqot markazi faoliyati bilan tanishildi. Shuningdek, akademiyaning turizm salohiyatini namoyon etuvchi “Yunusxon” maqbarasi, “Shayx Xovand Tohur” va “Qaldirg‘ochbiy” ziyoratgohlariga ziyorat tashkil etildi. Shu yerning o‘zida Yoshlar ittifoqi Akademiya Boshlang‘ich tashkiloti yetakchilari bilan samimiy muloqot qilindi.

Qayd etish kerakki, uchrashuv yakunida hamkorlikning yangi qirralari muhokama qilindi. Jumladan, TSMRI va Akademiya o‘rtasida yo‘lga qo‘yilayotgan hamkorlik, yangi rivojlanish bosqichini boshlab berishi e‘tirof etildi.



## "MA'RIFAT ULASHIB" LOYIHASI DOIRASIDA TANIQLI IJODKORLAR BILAN UCHRASHUV

Joriy yilning 22-may kuni Toshkent shahridagi Singapur menejmentni rivojlantirish institutida O'zbekiston Respublikasi Prezidenti Administratsiyasining 2024-yil 13-apreldagi 03-RA 1-5357-sonli topshirig'i ijrosini ta'minlash hamda oliy ta'lim muassasalari talabalarini kitob mutolaasiga jalb etish, badiiy savodxonlik darajasini oshirish orqali ularni vatanparvarlik va yurtimiz kelajagiga daxldorlik ruhida tarbiyalashga qaratilgan "Ma'rifat ulashib" loyihasini amalga oshirish maqsadida taniqli ijodkorlarning oliy ta'lim muassasalariga tashrifi dasturi bo'lib o'tdi.

Tadbirga "Guliston" jurnali bo'lim muharriri Baxtiyor Haydarov, O'zbekiston Yozuvchilar uyushmasi a'zosi Farog'at Xudoyqulova hamda "Ma'naviy hayot" jurnali bosh muharriri Eshqobil Shukurov mehmon sifatida tashrif buyurib, institut hamda unda yaratilgan sharoitlar bilan yaqindan tanishdilar. Tadbirning asosiy qismida talabalar bilan suhbat tashkil etildi. Uchrashuv davomida mehmonlar o'zlarining hayot yo'llaridan misol keltirgan holda yoshlarimizni ilmi-ma'rifatli va ona vatanimizga muhabbatli insonlar bo'lishga chorlab, ijodlaridan namunalar taqdim qildilar.



Tadbir davomida talabalar ham o'z she'riy va badiiy chiqishlari bilan davraga ko'tarinki kayfiyat ulashdilar. Talabalar adabiyot, san'at va madaniyat haqidagi savollarga ustozlar tomonidan javob olish imkoniyatiga ega bo'ldilar. Shuningdek, mehmonlar bilan birgalikda "Yashil makon" umummilliy loyihasi doirasida universitet binosi atrofida manzarali ko'chatlar ekildi. Adiblar bilan tashkil etilgan mazkur keng qamrovli uchrashuvlar yosh avlodni ilmi, ma'rifatli hamda madaniyatli yuksak inson bo'lib voyaga yetishida o'z hissasini qo'shadi desak, mubolag'a bo'lmaydi.

## **INTERNATIONAL CONFERENCE ON “FINTECH: TRANSFORMATION OF BANKING AND FINANCE INDUSTRY IN UZBEKISTAN” TO EXPLORE DIGITAL INNOVATION IN FINANCIAL SERVICES**

An international conference “Fintech: Transformation of Banking and Finance Industry in Uzbekistan” was held on May 28, 2024 by MDIS in Tashkent with support of the Banking and Finance Association and participants representing diverse sectors of the economy and banking industry.

The conference has provided a platform for scientists, researchers, and experts to discuss digital transformation processes in Uzbekistan's economy, emphasizing the importance of financial technologies. The conference key speakers made presentations on global trends in FinTech and banking, digital banking initiatives in Central Asia, challenges and opportunities for digital banking in Uzbekistan, and more.

The conference has also featured insightful discussions on regulatory frameworks, artificial intelligence, blockchain technology, cybersecurity, financial inclusion, and sustainability in finance.

Such international academic events are valuable as they promote exchange of ideas and information, and allow establishing new connections to facilitate international cooperation among higher education institutions, commercial banks, financial organizations and companies.



## EXPLORING FUTURE POSSIBILITIES WITH INSURTECH IN UZBEKISTAN'S INSURANCE SECTOR

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**Abstract.** *This article delves into the rapidly evolving sector of Insurtech, a symbiotic fusion of insurance and technology aimed at revolutionizing traditional insurance models. By leveraging cutting-edge technologies such as artificial intelligence, blockchain, big data analytics, and the Internet of Things (IoT), Insurtech promises to enhance operational efficiency, personalize insurance products, and significantly improve customer experience. It also examines how Insurtech coexists with, complements, and occasionally disrupts traditional insurance paradigms, fostering a competitive yet collaborative ecosystem that benefits insurers, insureds, and society at large. The article also explores regulatory and legal considerations, emphasizing the need for adaptive frameworks that can accommodate the fast-paced nature of technological innovation while ensuring consumer protection and market stability. It infers that the future of insurance will be significantly shaped by the ability to navigate these challenges, advocating for a collaborative approach among stakeholders to harness the full potential of Insurtech innovations. The article discusses the current state of Insurtech in Uzbekistan, highlighting both the challenges and opportunities within the market. Uzbekistan has seen significant digital transformation efforts, including legislative measures to digitalize the insurance market. This transformation indicates a shift towards greater use of technology in the insurance sector. Despite these advancements, the Insurtech landscape in Uzbekistan remains nascent, with significant room for growth and innovation. Through a detailed exploration of Insurtech's impact, the article underscores the sector's role as a catalyst for change in the insurance industry, concluding with strategic insights and recommendations for embracing the opportunities presented by this technological frontier.*

**Keywords:** *insurance, Fintech, Insurtech, digitization, innovation, risk.*

### **Insurtech as a new frontier in insurance**

Insurance is a significant contributor to economic stability and supports economic activity by managing risks, and facilitating trade, investment, and financial sector development (Lester, 2014). There are significant challenges in effective insurance utilization, especially in developing economies which include scalability, the complexity of insurance products, lack of awareness of potential users, and regulatory hurdles.

In emerging economies, the level of insurance inclusion continues to remain very low (IAIS, 2022). Feyen et al. (2011) showed that along with other factors, the private sector involvement supported by technological integration within the insurance sector, particularly through digital platforms, introduces innovation, improved services, and enhanced efficiency in the insurance industry, driving its growth, dramatically improves outreach and operational efficiency. Technological advances are becoming increasingly important in modernizing the sector and expanding its reach. In this regard, Insurtech presents a promising avenue to broaden insurance coverage and enhance service delivery as well as enhance financial inclusion and protection, particularly for the poor and vulnerable populations (Chatterjee, 2023).

Insurance technology, known as Insurtech, is transforming traditional insurance practices both in developed and emerging markets, offering both challenges and opportunities for existing stakeholders (companies, startups, and investors). In emerging markets, where there is a significant “protection gap” due to low levels of insurance coverage, Insurtech presents a substantial opportunity (Holliday, 2019). Closing this gap is crucial since insurance penetration and economic growth are closely linked. Insurtech makes insurance more affordable, profitable, and accessible to a wider audience. Initially focused on digitization and automation of business processes to boost efficiency, the Insurtech sector increasingly utilizes data analytics, artificial intelligence (AI), and robotics throughout the value chain and in direct customer interactions. Through a customer-centric approach to digital activities, companies have been able to scale adoption while also capturing previously unimaginable value (McKinsey, 2018). Insurtech solutions are increasing in popularity as the global insurance industry recognizes efficiency gains (Swiss Re, 2019). Consequently, developing economies utilize Insurtech advancements to expand insurance accessibility (Holliday, 2019). However, Insurtech is thought to have improved insurance penetration more in developed economies compared to developing economies (Reddy et al. 2020), hence contributing to the persistence of the insurance inclusion gap between developed and developing countries.

#### **Methodology.**

This research adopts a comprehensive review methodology, incorporating extensive data collection and analysis to understand the nuanced impacts of Insurtech across different markets (IAIS, 2022). This approach facilitates an in-depth understanding of the Insurtech sector by identifying trends, challenges, and opportunities through academic literature, expert interviews, and empirical data. Comparative analysis, including benchmarking and case studies, is employed to compare Insurtech practices with traditional insurance methods, highlighting unique advantages and drawbacks. Finally, the research synthesizes all findings to formulate strategic recommendations for stakeholders to optimize the potential of Insurtech, addressing identified gaps and ensuring responsible growth within the sector.

#### **Defining Insurtech - the convergence of technology and insurance.**

Insurtech, a blend of 'insurance' and 'technology,' represents the infusion of technological innovations into traditional insurance processes to enhance efficiency, customer experience, and market penetration (VanderLinden et al., 2018). Insurtech is a subset of the larger fintech (financial technology) phenomenon. It is also used as a synonym for startups that offer new products or deliver traditional coverage with greater speed and efficiency than traditional carriers can provide.

In this article, we use the term ‘Insurtech’ in a broad sense from the general idea of digitization and integration of information technology into the operations of insurance companies to referring to new competitors in the insurance sector that emerge from the IT industry (Njegomir and Demko-Rihter, 2023).

Insurtech seeks to improve and streamline various aspects of insurance, from the way policies are sold and claims are processed to how insurance companies operate and assess risk.

The innovations in Insurtech range from mobile apps for insurance management and claims filing to the use of big data and analytics for risk assessment, AI and machine learning for customer service and fraud detection, and even blockchain for secure and transparent transactions. Insurtech companies might operate across various types of insurance, including health, life, auto, and

property insurance, aiming to make purchasing insurance easier, make claims processes faster and more accurate, and generally make insurance more tailored and responsive to customers' needs.

By leveraging technology, Insurtech companies challenge traditional insurance models, pushing for a more customer-centric approach and often enabling more personalized insurance products at competitive prices.

**Exploring the synergistic relationship between insurtech and traditional insurance**

Insurtech and conventional insurance are highly intertwined, with technology serving as a connector enhancing traditional practices and fostering new business models that cover the modern consumer’s needs (Eling and Schnell, 2016). Insurtech and conventional insurance are highly intertwined, with technology serving as a connector enhancing traditional practices and fostering new business models that cover the modern consumer’s needs. Insurtech interacts with traditional insurance through a varied dynamic, creating and supporting an ecosystem where conventional methods and innovative practices coexist and mutually influence one another. This relationship is revealed in various forms, including competition, collaboration, and integration.

In the competitive environment of the insurance market, Insurtech startups are becoming catalysts for innovation with more efficient, user-friendly, and cost-effective solutions. This competition is inducing insurers to refine their services and adopt innovative technologies to secure market positions, specifically in underserved segments or through the development of new products.

The integration of Insurtech is set up to reshape the insurance industry fundamentally, making it more responsive to the needs of today’s digital consumer. Strategic partnerships between insurers and Insurtech startups are important in the utilization of their strengths to overhaul the industry and deliver high value to consumers (McKinsey, 2018).

As per the collaboration, insurers are increasingly partnering with Insurtech firms to maximize the advantage of their technological expertise. These partnerships often focus on integrating sophisticated digital technologies into existing systems. Furthermore, many insurers invest in Insurtech firms to promote industry innovation as well as to actively engage in the development of new technology solutions.

By employing younger demographics and covering previously uninsurable groups Insurtech contributes to the insurance market expansion, hence reinforcing the industry's penetration and impact. Insurtech and traditional insurance are propelling each other's growth and evolution through complex continuous interactions. As technology evolves, the distinctions between methods and approaches insurers and Insurtech startups are dissolving, hinting at a future in which the insurance business is more integrated, efficient, and responsive to client demands.

Insurtech advances help both insurers and insured persons by making insurance more accessible, inexpensive, and personalized to specific requirements. Here are several major advantages:

**Figure 1 - The benefits of embracing Insurtech for industry and consumers**

Advantage	Form of realization
Potential benefits for the insurance industry	
Improved Risk Assessment	Utilizes advanced analytics for precise pricing and real-time data from IoT devices to adjust premiums based on usage and risk.

	Uses advanced analytics to set accurate prices and real-time data from IoT devices to change rates based on risk and usage.
Enhanced Efficiency	Integrates automation to reduce manual labor and digital platforms to streamline operations, enhancing speed and reducing costs.  Implements automation to decrease the need for human labor and utilizes digital platforms to optimize processes, resulting in increased efficiency and decreased
Customer Engagement and satisfaction	Employs personalized experiences to enhance customer loyalty and AI-driven tools for improved, round-the-clock customer interactions.
New Product Development	Develop innovative insurance products like on-demand insurance and microinsurance to tap into niche markets and expand the customer base.
Competitive Advantage	Leverages Insurtech innovations for market differentiation and uses technology to enhance operational agility and scalability.
Fraud Detection and Prevention	Applies AI and machine learning for fraud detection and uses blockchain for increased transaction security and transparency.
Compliance and Data Management	Facilitates easier regulatory compliance and improved data management through automated reporting and enhanced data analysis capabilities.
Potential benefits for the consumers	
Personalization	Offers policies tailored through advanced analytics and adjusts premiums dynamically based on real-time data and individual behavior.
Accessibility and Convenience	Provides easy access to insurance services through digital platforms and simplifies processes like applications and claims through automation.
Enhanced Customer Experience	Delivers 24/7 customer service with AI-driven tools for instant assistance and offers educational resources for better understanding of insurance coverage.
Innovation and New Products	Introduces innovative insurance options such as on-demand coverage and integrates IoT for real-time monitoring to prevent incidents and reduce premiums.
Increased Transparency	Simplifies policy documents to increase transparency and offers greater control over personal data usage, enhancing trust and privacy.
Financial Savings	Provides lower premiums due to operational efficiencies and offers rewards or discounts for maintaining healthy behaviors, encouraging a healthier lifestyle.

The rise of Insurtech extends far beyond the confines of the insurance industry, offering transformative benefits that resonate across society. These innovations are crucial not just for enhancing access to insurance and affordability but also for increasing safety, improving health outcomes, and broadening financial inclusion.

**Navigating the challenges and complexities of Insurtech**

Despite its benefits, Insurtech introduces complexities related to data privacy, cybersecurity risks, and regulatory challenges that need to be navigated carefully to sustain innovation and consumer trust (OECD, 2020).

One significant concern is privacy and data security. The extensive use of personal data for customization and risk assessment raises issues about data privacy, with users often uneasy about the amount of personal information being collected and its potential misuse. Moreover, as insurers increasingly depend on digital platforms, they expose themselves to greater cybersecurity risks, threatening the security of sensitive customer data.

The advent of Insurtech also introduces increased complexity into the insurance landscape. Consumers may find themselves overwhelmed by the array of new products and services, complicating their decision-making process. Insurers, particularly small to mid-sized firms, face technical challenges in implementing and managing new technologies due to resource constraints.

Ethical and fairness issues also surface with the rise of Insurtech. AI and machine learning models, commonly used for pricing and risk assessment, may unintentionally reflect biases from their training data, leading to unfair pricing or coverage decisions. Furthermore, while Insurtech aims to broaden financial inclusion, it could inadvertently heighten inequalities for those lacking access to technology or those who are not tech-savvy.

Regulatory and legal challenges are other critical concerns. The rapid pace of technological innovations often outpaces existing regulatory frameworks, creating a landscape rife with uncertainty and potential compliance risks. Additionally, new insurance models and products might encounter legal challenges that raise questions about liability, consumer protection, and the enforceability of novel contract types.

Dependence on technology introduces its own set of risks, including system failures that can disrupt service for numerous customers simultaneously and the obsolescence risk as technology swiftly evolves, potentially leaving insurers behind if they cannot keep pace.

Market disruptions resulting from Insurtech could lead to job displacement, particularly for roles centered around manual or administrative tasks, and contribute to market polarization, where technological advantages could lead to a few large players dominating the market, potentially diminishing consumer choice over time.

Despite these disadvantages, many industry observers still regard Insurtech as a predominantly positive force for innovation and improvement. However, to truly harness its benefits, there will need to be a concerted effort to address these challenges through thoughtful ethical consideration, careful regulatory oversight, and continuous efforts to ensure that the advancements brought by Insurtech remain accessible and equitable across all segments of the insurance ecosystem.

The following figure incorporates Insurtech solutions that are revolutionizing the insurance industry by harnessing technology to optimize traditional processes. Insurtech solutions specifically address each task in the insurance value chain, emphasizing the technology-driven approaches in the insurance industry.

**Figure 2 - Innovative Insurtech solutions across the insurance value chain**

Value chain process	Tasks	Insurtech solutions
Marketing	– Market and customer research: researching ideas for product development	Big Data analytics, AI-driven customer segmentation,

	<ul style="list-style-type: none"> <li>- Analyzing target groups,</li> <li>- Developing of pricing strategy for product sales</li> <li>- Designing advertisement and communication strategies</li> </ul>	<p>programmatic advertising platforms</p>
Product Development	<ul style="list-style-type: none"> <li>- 'Manufacturing' the products</li> <li>- Product pricing (actuarial methods)</li> <li>- Check legal requirements</li> </ul>	<p>Insurtech platforms for product customization, predictive pricing models using AI, regulatory technology (RegTech) for compliance</p>
Underwriting	<ul style="list-style-type: none"> <li>- Application handling</li> <li>- Risk assessment</li> <li>- Assessment of the final contract details</li> </ul>	<p>Automated underwriting engines, AI and machine learning for risk profiling, blockchain for transparent data verification</p>
Contract Administration/	<ul style="list-style-type: none"> <li>- Change of contract data</li> <li>- Answering customer requests regarding the contract or other purposes</li> </ul>	<p>Smart contracts enabled by blockchain, AI-powered chatbots for customer interaction, digital document management systems</p>
Customer Service	<ul style="list-style-type: none"> <li>- Handling inquiries and claims,</li> <li>- Policy management</li> <li>- Provide personalized advice and support</li> <li>- Managing feedback and complaints</li> </ul>	<p>AI chatbots for instant customer response, on-demand insurance services via apps, customer engagement platforms</p>
Claims Management	<ul style="list-style-type: none"> <li>- Investigation of fraud</li> <li>- Claim settlement</li> </ul>	<p>AI for fraud detection, blockchain for claims tracking, automated claims processing tools</p>
Asset Management	<ul style="list-style-type: none"> <li>- Asset allocation</li> <li>- Asset liability management</li> </ul>	<p>Robo-advisory services, AI-based asset management solutions, predictive analytics for asset risk management</p>



Risk Management	– Analysis and management of all risks	Real-time risk analytics platforms, IoT for continuous monitoring and data collection, predictive modeling tools
Support Activities	– General management – IT – Human resources – Controlling – Legal department – Public relations	Integrated ERP systems with AI capabilities, cloud-based HR and resource management, digital compliance tools

Note: Developed by the author based on Eling, M., & Schnell, W. (2016)

In summary, Insurtech represents a significant and positive disruption in the insurance industry, promising improved efficiency, customer engagement, and risk management. However, its successful integration depends on addressing regulatory, ethical, and social challenges, emphasizing the importance of collaboration, innovation, and consumer protection.

**Contextualizing Insurtech: digital connectivity and financial inclusion in Uzbekistan**

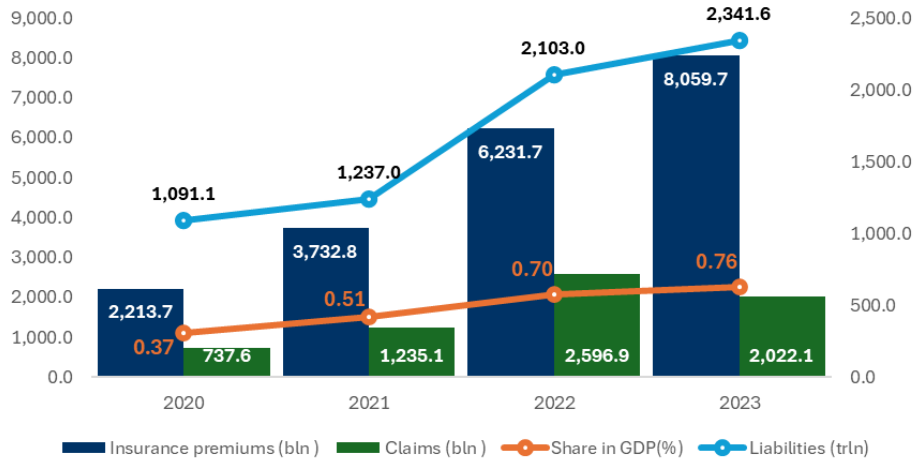
Uzbekistan exhibits high coverage rates for various network technologies. In 2021, 99% of the population was covered by mobile-cellular networks, 96% by at least 3G networks, and 85% by at least 4G networks. Mobile phone ownership was reported at 79% among individuals, and Internet access at home was available to 96% of households, showing substantial penetration of these technologies. Uzbekistan has a strong adoption rate for broadband services with 107 active mobile-broadband subscriptions per 100 inhabitants and 26 fixed broadband subscriptions per 100 inhabitants in 2021 (Demirgüç-Kunt at al. 2022. ITU,2024). The integration of digital financial services is crucial, as demonstrated by the substantial usage rates. There’s a continued need to enhance infrastructure and regulatory frameworks to support this growth. Despite high coverage, the ongoing expansion of faster network services (like 4G) and closing the gender gap in mobile ownership are essential for ensuring equitable access to digital services.

The data suggests a strong foundation but also points to areas where targeted improvements can help maximize the benefits of digital financial inclusion. Demirgüç-Kunt at al. (2022) recommend that policymakers focus on enhancing digital literacy and infrastructure to support the growing demand for digital and mobile financial services, ensuring that these developments lead to broad economic benefits.

Insurance companies in Uzbekistan offer a range of products, including life insurance, property insurance, health insurance, and liability insurance. The insurance market in Uzbekistan is characterized by both state-owned and private insurance companies, with increasing competition driving innovation and product diversification. However, the market remains relatively small compared to global standards, with untapped potential for expansion and growth.

In the post-covid period from 2020 to 2023, Uzbekistan's insurance market soared with premiums rising from 2,213.7 mln. UZS to 8,059.7 mln. UZS. Non-life insurance was the main growth driver, ballooning from 1,879.3 mln. UZS to 7,737.2 mln. UZS, thus substantially

**Uzbekistan Insurance market indicators (UZS)**



Note: Developed by the author based on NAPP.UZ and STAT.UZ data

increasing the insurance sector's share of the national GDP from 0.37% to 0.76%. However, claims paid by insurers peaked in 2022 at 2,596.9 mln. UZS, declined slightly in 2023 to 2,022.1 mln. UZS. Within this, life insurance claims saw a significant drop in 2023. Concurrently, liabilities, especially in

life insurance, surged in 2023, suggesting a potential upturn in the volume of policies or altered actuarial forecasts.

These trends occurred against the backdrop of a robustly growing Uzbek economy, with GDP almost doubling from 605,515 bln. UZS in 2020 to 1,066,569 bln. soum in 2023. This growth narrative encapsulates a vibrant insurance sector and a prospering economy with an increasing reliance on financial services.

According to state regulatory authority NAPP (Spot.uz., 2023), over the past five years, the number of insurance contracts increased from 59 mln. to 84 mln. units with the insurance premium per capita rising from \$5.5 to \$15.7. As of the year 2023 in total of 38 insurers were operating in Uzbekistan including 7 life insurance companies.

The insurance market in Uzbekistan has been traditionally focused on conventional products, with limited innovation in terms of new products and services. Insurers face challenges in developing innovative solutions that cater to emerging risks and changing consumer preferences.

Despite the growing economy, insurance penetration remains low in Uzbekistan, with a significant portion of the population uninsured or underinsured. Lack of awareness about insurance products and their benefits is a key factor contributing to low penetration rates (Spot.uz., 2023). The data also suggests a significant trust gap that needs to be addressed to enhance the penetration of insurance services in the country.

As per IFC (2020) about 14% of respondents in Uzbekistan reported being aware of insurance services, and only 3.4% reported using some form of insurance to manage risks. Interestingly, those in rural areas (26%) were slightly more likely to invest in risk-mitigating products compared to their counterparts in urban areas (23%). This may be attributed to insurance companies being more active in rural areas, possibly due to strategies like door-to-door selling. Fourteen percent of respondents cited a lack of trust in insurance service companies as their main reason for not investing in insurance. Trust concerns were notably higher among older age groups, with about 40% of individuals aged 65 or more indicating this as a major concern.

Distribution channels for insurance products in Uzbekistan are often limited, with a heavy reliance on traditional distribution channels such as insurance agents and brokers. Developing alternative distribution channels, such as digital platforms and bancassurance partnerships, can improve accessibility and distribution reach.

The regulatory environment for insurance in Uzbekistan is still evolving, with challenges related to regulatory compliance, licensing requirements, and transparency. Streamlining regulations and enhancing regulatory oversight are essential for fostering a more dynamic and competitive insurance market.

Insurers in Uzbekistan face challenges related to risk management, underwriting standards, and claims management practices. Improving risk assessment capabilities, enhancing underwriting practices, and implementing effective claims-handling processes are critical for sustainable growth and profitability.

As the insurance market faces growing internal and external competition, introducing modern information technologies became an essential requirement. The resolution of the President of the Republic of Uzbekistan PP-4412 dated August 2, 2019, “On measures to reform and ensure accelerated development of the insurance market of the Republic of Uzbekistan”, defined one of the main directions for the development of the insurance market as “...the wide use of modern information technologies in the field of organizing and regulating insurance activities, the active introduction and development of electronic types of insurance services”

The President of the Republic of Uzbekistan approved the Innovative Development Strategy 2022–2026 in July 2022. This strategy aims to help startups by giving them access to state and private funds, building a network of innovative infrastructure, and providing tax and customs incentives. A lot of attention is paid to accelerators and incubators that give help and advice. National Venture Capital Fund (UZVC) has been created. The government has also created youth technology parks and other programs to encourage innovation and entrepreneurship. Digital skills and entrepreneurship are emphasized in training programs and IT centers established across the country. Despite these proactive measures, Uzbekistan's startup environment still has problems, like better coordination between government bodies, updating procurement policies, and making it easier to get financing (Zufarov et al., 2023).

The government has established youth technology parks and other programs specifically aimed at engaging young people in innovation and entrepreneurial activities. There is a focus on developing digital skills and entrepreneurial capabilities, with training programs and IT centers established across the country to support this aim. Many startups are still in the early stages of development, facing challenges such as limited market reach and the need for more experienced founders to guide growth and expansion. The government is encouraged to develop innovative funding mechanisms such as a National Venture Fund and to provide tax incentives for private investors to support startups. Efforts are suggested to balance startup support across regions, ensuring that benefits and opportunities are not overly concentrated in the capital, Tashkent.

### **Examining the progress and potential of Insurtech in Uzbekistan**

In Uzbekistan, the landscape of Insurtech remains vague and primarily consists of low-premium and lower-coverage versions of traditional insurance products. These offerings have seen minimal adoption among the intended audiences, highlighting a significant gap in the market for inclusive insurance (IRFF UNDP, 2023).

Uzbekistan has embarked on significant digital transformation efforts, focusing on fostering innovation and attracting investment in financial technologies, including Insurtech. The country has recently adopted legislative measures to digitalize its insurance market, signifying a substantial shift towards electronic insurance (e-insurance) forms, making it easier for companies to offer all types of insurance services digitally.

Despite these advancements, the fintech ecosystem in Uzbekistan, which includes Insurtech, remains nascent. However, this also presents a plethora of opportunities for growth and innovation. The fintech sector has witnessed rapid growth, driven by the government's active promotion of financial inclusion, the development of digital infrastructure, and increased investment in fintech startups.

The Uzbek government has implemented a banking reform strategy to attract foreign entities and encourage local banks to innovate, which has indirectly supported the growth of fintech and insurtech. The rise of digital payments, and the popularity of Buy Now, Pay Later (BNPL) services are notable trends within Uzbekistan's fintech landscape that directly impact the Insurtech sector. These developments are part of a larger trend towards digitalization, which is set to redefine the financial services landscape in Uzbekistan (Sultanov, 2022).

Uzbekistan's Insurtech landscape is characterized by a period of dynamic change and growth, underpinned by legislative support, digital transformation initiatives, and an increasing influx of investment. While the sector is still developing, the ongoing efforts and achievements indicate a promising future for Insurtech in Uzbekistan, with potential benefits for both consumers and providers of insurance services.

Uzbekistan's first insurance marketplace, Sug'urta Bozor exemplifies how an insurtech start-up can effectively address market gaps in traditional industries like insurance. Evolved from a lead generation tool for insurance companies into a comprehensive Business-to-Consumer (B2C) and Business-to-Business (B2B) marketplace for insurance services, focusing particularly on auto insurance (MasterCard, 2023). Start-up consolidates offerings from various insurance companies, providing users with policies best suited to their needs. A standout feature of the service is its ability to offer car insurance policies without the need for vehicle inspection, streamlining the process for consumers. In 2022, Sug'urta Bozor attracted \$100,000 in investment from UzVC. In Uzbekistan, except for the above example, we do not observe active development of Insurtech in the form of startups with venture investments in such projects. However, Insurtech is in full swing in the form of the digitization of the insurance business through investment in R&D and outsourcing development and implementation of digital products by insurers themselves.

Significant capital investments by Uzbek insurers in IT infrastructure include server equipment, backup communication channels, routers, software, information security systems, etc. Additionally, there are ongoing expenses associated with maintaining this infrastructure (Sharipov, K. & Khalikov, R. 2023). These investments highlight the insurance industry's dedication to developing strong digital capabilities to improve operational efficiencies and ensure secure data management, crucial for maintaining a competitive edge and ensuring service reliability in the digital era. By early 2023, Uzbek insurers had automated business processes and integrated digital technologies. Nearly every insurer uses accounting and insurance contract management software. Of the 34 general insurance companies, 24 offer electronic policies, indicating a shift toward digital solutions to improve service accessibility and efficiency. All 42 companies in the insurance market have active websites, with 23 of them providing platforms for

online customer feedback. This demonstrates the industry's dedication to utilizing digital channels for improved customer interaction and service delivery (Sharipov, K. & Khalikov, R. 2023). The digital integration evidence demonstrates the industry's strategic focus on modernization and customer-centric service models.

Uzbekistan's strategy towards digital transformation in the financial sector is robustly supported through legislative initiatives that aim to foster the adoption of cutting-edge technologies. In 2020, a significant legislative action was the implementation of the Law on "Payments and Payment Systems". This legislation aims to guarantee the uninterrupted operation of payment systems and support the extensive adoption of cutting-edge technologies, demonstrating the government's commitment to fostering a favorable setting for digital finance and Insurtech. This law is essential for promoting the development of digital finance in Uzbekistan by fostering the incorporation of technology in financial activities. (Sultanov, 2022)

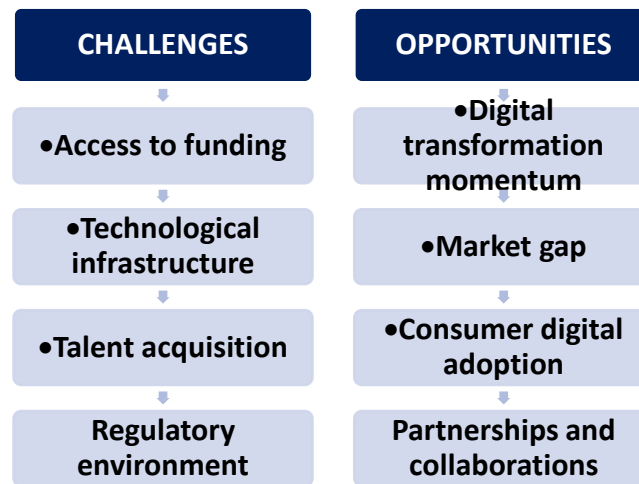
Another major legislative milestone was the Resolution of the President of the Republic of Uzbekistan dated 23.10.2021 No PP-5265 On additional measures for digitization of the insurance market and developing the life insurance sector, which came into effect on July 1, 2022. Several strategic directives were adopted by this resolution to accelerate the development of Uzbekistan's national insurance market and enhance public trust in the industry, including a transition to electronic insurance operations and a paperless policy mandate. The Unified Automated Information System (UAIS) for registering and monitoring all insurance policies was introduced.

This resolution marks a crucial step in enhancing the digital capabilities of the insurance sector in Uzbekistan. It allows for the operation of all types of insurance in electronic form, thereby directly supporting the growth of Insurtech. This move not only simplifies the process for companies to offer digital insurance services but also significantly improves consumer access and convenience.

The most recent initiative – the resolution of the President of the Republic of Uzbekistan On comprehensive measures for further development of the insurance market dated 01.03.2024 No PP-108 is set to augment the popularity and quality of insurance services through the comprehensive implementation of advanced information technologies and the enhancement of regulatory frameworks. Effective September 1, 2024, along with insurance policy issues all insurance and reinsurance contract registrations will mandatorily be carried out through the UAIS. Starting from January 1, 2025, insurers are required to simplify and automate reporting processes. Measures are put in place to facilitate the electronic execution of contracts and the calculation of insurance premiums, with an emphasis on automating processes to make them more efficient and user-friendly.

### **Challenges and opportunities facing Insurtech startups in Uzbekistan**

Insurtech startups in Uzbekistan, like those in many emerging markets, face a unique set of challenges and opportunities as they navigate the burgeoning fintech landscape. Understanding these factors is crucial for stakeholders looking to engage with or invest in the sector.



While investment in Uzbekistan's fintech sector is growing, insurtech startups may still find it challenging to secure funding. The investment landscape, though improving, remains nascent, with limited access to venture capital and angel investors specifically interested in Insurtech. Although Uzbekistan is making strides in digital transformation, insurtech startups might face challenges due to varying levels of technological infrastructure across the country. This includes issues with internet connectivity and digital payment systems, which are essential for insurtech operations. Finding skilled professionals in insurtech-specific domains such as data analysis, cybersecurity, and digital marketing can be a challenge. While the country is making significant investments in education and training, the current talent pool may not fully meet the specialized needs of insurtech startups. Navigating the regulatory landscape can be a significant hurdle. Although the government has introduced reforms to support digitalization, insurtech startups may still encounter bureaucratic hurdles and delays in getting the necessary approvals to operate. Keeping pace with evolving regulations and ensuring compliance can also pose challenges.

Uzbekistan's commitment to digital transformation, as evidenced by supportive legislation and government initiatives, presents a fertile ground for insurtech startups to innovate and grow. The push towards a digital economy opens up numerous opportunities for startups to introduce new products and services. The insurance sector in Uzbekistan, like in many emerging markets, is underpenetrated. This presents a significant opportunity for insurtech startups to introduce innovative insurance products that cater to the untapped needs of both individuals and businesses, expanding insurance coverage and penetration rates. The COVID-19 pandemic has accelerated consumer adoption of digital services in Uzbekistan. Insurtech startups can leverage this shift in consumer behavior by offering convenient, accessible, and tailored insurance solutions that meet the evolving needs of the digital-savvy population. There are opportunities for insurtech startups to collaborate with traditional insurance companies, banks, and other financial institutions. Such partnerships can provide startups with access to established customer bases, industry expertise, and additional channels for product distribution.

While insurtech startups in Uzbekistan face challenges related to funding, technological infrastructure, talent acquisition, and regulatory navigation, the landscape is ripe with opportunities. The country's commitment to digital transformation, combined with the untapped potential of the insurance market and growing consumer demand for digital services, sets the stage for innovative insurtech solutions to thrive. Success in this environment will require startups to

navigate challenges strategically while capitalizing on the unique opportunities the Uzbek market offers.

### **Assessing how Insurtech is transforming traditional insurance in Uzbekistan**

Traditional insurance companies in Uzbekistan are increasingly investing in digital technologies to revamp their legacy systems and processes. This includes adopting cloud computing for better data management and scalability, and AI for personalized customer services.

The digital transformation journey is becoming a strategic imperative for traditional insurance companies in Uzbekistan. This transformation goes beyond merely adopting new technologies; it encompasses a cultural shift within the organization toward innovation and agility. Traditional insurers are increasingly focusing on digital literacy and skills development among their workforce to navigate the digital landscape effectively.

The implications of Insurtech innovations for the traditional insurance industry in Uzbekistan are profound, pushing insurers towards digital adaptation, operational innovation, and strategic reorientation. By embracing these changes through partnerships, technological investments, and strategic shifts, traditional insurance companies can ensure their relevance and competitiveness in a rapidly evolving digital landscape. The Insurtech wave is not just a challenge but an opportunity for traditional insurers to redefine their role and value proposition in the digital era.

### **Reflecting on how Insurtech is shaping the future of insurance.**

Insurtech is fundamentally reshaping the insurance landscape, introducing innovations that enhance efficiency, personalization, and customer satisfaction. There's a marked shift toward more customer-centric business models, facilitated by Insurtech.

On the other hand, rapid growth of Insurtech brings to the fore significant regulatory and ethical considerations, particularly concerning data privacy, cybersecurity, and algorithmic fairness which requires addressing these considerations for sustaining innovation while ensuring consumer protection and trust. Beyond its impact on the insurance sector, Insurtech offers broader societal benefits, including enhanced safety and prevention measures, and increased financial inclusion.

The future of insurance likely lies in a collaborative ecosystem where traditional insurers and Insurtech startups work together, leveraging each other's strengths to deliver superior value to consumers. Strategic partnerships and investments can accelerate the adoption of Insurtech solutions across the industry.

The dynamic nature of Insurtech underscores the need for agile, forward-looking regulatory frameworks that can adapt to technological advancements while safeguarding against emerging risks. Regulators and policymakers must engage with industry stakeholders to understand technological trends and their implications, facilitating a regulatory environment that supports innovation and consumer protection.

### **Strategic recommendations for advancing Insurtech in Uzbekistan.**

To fully capitalize on the potential of Insurtech within Uzbekistan and address the accompanying challenges, the following comprehensive recommendations are proposed:

- **Implement a regulatory sandbox.** To foster innovation in Insurtech, a regulatory sandbox is established, and managed by a dedicated regulatory body. This environment allows both startups and established firms to experiment with new technologies such as AI, blockchain, and big data analytics in a controlled setting. The sandbox is designed with clear entry and exit

criteria, timelines, and specific relaxations of usual regulatory demands. This controlled freedom encourages firms to innovate with the comfort of legal and technical support, while the regulatory body monitors progress and iterates on regulatory approaches based on real-world learnings.

- **Integrate with national digital identity systems.** Enhancing customer verification processes involves leveraging national digital identity systems. This integration streamlines customer interactions by providing secure, instant identity verification, crucial for reducing fraud and enhancing user confidence. Collaboration with government bodies ensures alignment with national standards, while educational initiatives help customers understand and trust the use of their digital identities in managing their insurance needs.

- **Standardize APIs for industry integration.** To improve interoperability between Insurtech platforms and traditional systems, standardized APIs are developed in consultation with industry stakeholders. These APIs are documented comprehensively and supported by robust development tools, making integration seamless. Alongside this, stringent security protocols are established to safeguard data exchanges, ensuring that these integrations do not compromise data integrity or customer privacy.

- **Establish a legal framework for smart contracts.** A legal framework specific to the use of smart contracts in insurance is crafted. This involves drafting new legislation that recognizes and enforces these digital agreements, supported by pilot testing in real insurance settings to ensure their practical applicability and robustness. Additionally, mechanisms for dispute resolution are put in place to handle any conflicts arising from smart contract transactions efficiently and fairly.

- **Create an Insurtech regulatory Advisory board.** An advisory board comprising experts from the tech, legal, and academic sectors is formed to guide the evolving landscape of Insurtech. This board meets regularly to discuss new developments, challenges, and opportunities, providing strategic recommendations and maintaining a pulse on the needs of the industry and its customers. Their activities are complemented by public engagement, ensuring that the board's efforts are well-aligned with market and societal needs.

- **Encourage Public-Private Partnerships.** Strategic alliances between the public sector, academia, and private enterprises are initiated to pool resources, knowledge, and expertise. These partnerships focus on tackling significant industry challenges and driving forward innovation through joint ventures and shared initiatives, all supported by government funding and resources.

- **Expand consumer education.** National campaigns are launched to educate the public on the benefits and security of digital insurance services. These efforts are augmented by partnerships with educational institutions and community-based programs, ensuring broad outreach and deep penetration of digital literacy in insurance, thereby increasing trust and adoption rates among consumers.

- **Enhance Data protection laws.** Data protection laws are revised and strengthened to address the nuances of data management in the digital age, particularly in Insurtech. This includes aligning local laws with international standards to support global operations and implementing rigorous enforcement mechanisms to ensure strict compliance and protect consumer data effectively.

- **Promote the usage of advanced analytics.** Insurers are encouraged to adopt advanced analytics through access to state-of-the-art analytical tools and platforms. Training



programs and workshops enhance their capabilities in leveraging these tools for sophisticated risk assessment and product customization, supported by innovation labs that provide a nurturing environment for experimentation and refinement of these technologies.

- **Support R&D collaborations.** To spur innovation, collaborations between universities, tech companies, and insurance providers are facilitated through dedicated funding and clear intellectual property frameworks. These partnerships focus on developing new applications and methodologies in Insurtech, with regular showcases and dissemination of outcomes to encourage broader adoption and continuous improvement.

These initiatives collectively create a dynamic and responsive Insurtech ecosystem, equipped to adapt to emerging technologies and changing market demands, ultimately leading to enhanced services and greater consumer satisfaction.

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## OPTIMIZING HUB ALLOCATION FOR ENHANCED CONNECTIVITY IN UZBEKISTAN AIRWAYS: A BINARY INTEGER PROGRAMMING APPROACH

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**Abstract.** *In response to the need for operational optimization within the aviation industry, this study focuses on enhancing the hub allocation system of Uzbekistan Airways, the national carrier of the Republic of Uzbekistan. The research employs Binary Integer Programming to construct an algebraic model aimed at determining the optimal hub locations to effectively connect 11 local airports with 15 key CIS cities. The decision variables in the model indicate the selection of specific locations as hubs, with the objective of minimizing the total number of hubs while ensuring coverage for all target cities within a 1800-mile radius. Comprehensive data collection was undertaken, sourcing information from Uzbekistan Airways' official website, international aviation bodies such as IATA and ICAO, online distance tools, and interviews with industry insiders. The findings suggest that optimal connectivity can be achieved with minimal hubs, specifically through the strategic use of Tashkent and Nukus, which cover all 15 CIS destinations efficiently. Sensitivity analysis revealed that the feasibility of the model is sensitive to the distance threshold, with adjustments to the threshold and coverage requirements influencing hub selection. Implementing this optimal hub system could significantly reduce operational costs and improve passenger experience by streamlining connections across the CIS region.*

**Keywords:** *binary integer programming, operational research, business optimization, hub allocation strategy.*

**Аннотация.** *Авиация саноатида операцияларни оптималлаштириш зарурати жавобида, ушбу тадқиқот Ўзбекистон Республикасининг миллий ташувчиси бўлган “Uzbekistan Airways” АЖ хаблар тизимини яхшилашга қаратилган. Тадқиқот 11 та маҳаллий аэропортлар ва 15 та асосий МДХ шаҳарлари ўртасида самарали улашини таъминлаш учун оптимал хаб жойларини аниқлашга қаратилган алгебраик моделни яратиш учун иккилик бутун сонли дастурлашдан фойдаланади. Моделдаги қарор ўзгарувчилари махсус жойлар хаб сифатида танланганлигини кўрсатади, мақсад эса барча кўзда тутилган шаҳарларни 1800 миль радиусда қамраб олишни таъминлаш орқали хаблар умумий сонини минималлаштиришидир. Маълумотлар тўплаш ишлари кенг кўламда олиб борилди, бу Uzbekistan Airways расмий веб-сайтидан, IATA ва ICAO каби халқаро авиация органларидан, онлайн масофа ҳисоблаш воситаларидан ва соҳадаги инсайдерлар билан суҳбатлардан маълумотларни ўз ичига олади. Натижалар оптимал алоқани минимал хаблар орқали, хусусан, Тошкент ва Нукусни стратегик ишлатиш орқали таъминлаш мумкинлигини кўрсатади, бу шаҳарлар МДХнинг барча 15 та шаҳарини самарали қоплайди. Сезгирлик таҳлили моделнинг амал қилиш имконияти масофа чегарасига сезгир эканлигини кўрсатди, чеклов ва қамров талабларининг тузатилиши хаб танловига таъсир қилади. Ушбу оптимал хаб тизимини амалга ошириш операцияларни сезиларли даражада камайтириши ва МДХ бўйлаб алоқаларни соддалаштириш орқали йўловчилар тажрибасини яхшилаш мумкин.*

**Ўқалит сўзлари:** *иккилик бутун сонли дастурлаш, операцион тадқиқотлар, бизнес оптималлаштириши, ҳаб жойлаштириши стратегияси.*

**Аннотация.** *В ответ на потребность в оптимизации операций в авиационной индустрии, данное исследование сосредотачивается на улучшении системы распределения хабов АО Uzbekistan Airways, национального перевозчика Республики Узбекистан. Исследование использует бинарное целочисленное программирование для создания алгебраической модели, направленной на определение оптимальных местоположений хабов для эффективного соединения 11 местных аэропортов с 15 ключевыми городами СНГ. Переменные решения в модели указывают на выбор конкретных мест в качестве хабов, с целью минимизации общего числа хабов при обеспечении покрытия всех целевых городов в радиусе 1800 миль. Для сбора данных была проведена всесторонняя работа, включая информацию с официального сайта Uzbekistan Airways, международных авиационных органов, таких как IATA и ИСАО, онлайн-инструментов для расчета расстояний и интервью с инсайдерами отрасли. Результаты показывают, что оптимальная связность может быть достигнута с минимальным количеством хабов, в частности, через стратегическое использование Ташкента и Нукуса, которые эффективно охватывают все 15 городов СНГ. Анализ чувствительности выявил, что осуществимость модели чувствительна к порогу дистанции, с корректировками порога и требований к покрытию, влияющими на выбор хабов. Реализация этой оптимальной системы хабов может значительно снизить операционные затраты и улучшить опыт пассажиров за счет упрощения связей по всему региону СНГ.*

**Ключевые слова:** *бинарное целочисленное программирование, операционные исследования, оптимизация бизнеса, стратегия распределения хабов.*

### **Introduction.**

Operational Research is the field that involves the application of advanced analytical methods and mathematical techniques in order to enable organizations to make better and more informed decisions and reach their goals [1]. Through its' subset Business Optimization, many businesses can improve their efficiency, productivity and profitability through better allocation of resources, creating relevant schedules, establishing better routes and much more. One of the fields that might benefit from extensive appliance of principles operational research and business optimization is Aviation Industry.

Airlines usually tend to optimize flight schedules that minimize delays, maximize aircraft utilization, and improve passenger experience or crew and fleet allocation, revenue management, cost minimization or route optimization [2]. However, one another useful implication of Operational Research for airline companies is hub allocation to cover all of the needed destinations with minimums hubs used to improve connectivity thus optimizing fuel consumption and increasing passenger experience. This can be achieved through using Binary Integer Programming and finding minimum number of hubs needed to cover all intended destinations.

The following report includes Operational Research problem of Uzbekistan Airways, a national and flag carrier of Republic of Uzbekistan, that intends to cover all its' CIS destinations with minimum number of hubs used. Potential hubs for Uzbekistan Airways can be 11 domestic International-level airports that are located within Republic of Uzbekistan. Currently, establishing good hub-and-spoke model is a good commercial opportunity for Uzbekistan Airways, due to

geopolitical tensions between Russia and Ukraine that led to various sanctions towards Russian carriers restricted air travel opportunities for travelers to/from Russian Federation.

### **Problem Statement**

Uzbekistan Airways seeks to optimize its hub allocation system to efficiently connect flights between 11 local airports, which are considered potential hubs (Tashkent, Samarkand, Bukhara, Navoi, Urgench, Karshi, Namangan, Andijan, Fergana, Termez, and Nukus) and various CIS cities (Moscow, St. Petersburg, Kazan, Sochi, Ekaterinburg, Novosibirsk, Irkutsk, Samara, Krasnoyarsk, Almaty, Astana, Bishkek, Dushanbe, Baku, and Tbilisi). The goal is to determine the minimum number of hub locations that can adequately cover all cities, where a city is considered 'covered' if it is within a specific distance threshold of at least one hub.

Considering that minimal distance that all fifteen CIS destinations are covered at least by one hub is 1750 miles and that Uzbekistan Airways fleet that mostly operates to CIS A320 and A320 neo are capable of flying up to 3700 miles, Optimal distance threshold where all aforementioned destination cities are covered by at least one hub is considered as 1800 miles. Therefore, Mile limit is 1800 miles.

### **Objective:**

Develop a binary integer programming model to determine the optimal allocation of hub locations for Uzbekistan Airways that minimizes the total number of hubs while ensuring adequate coverage for all cities within the specified distance threshold.

**Sensitivity Analysis:** Investigate how hub allocation is sensitive to mile limit changes.

**Alter Objective:** Change the requirement for all destination cities from being covered by one hub to two hubs.

### **Literature Review**

In the following Literature Review theoretical knowledge and expertise required to formulate problem statement, as well as relevant operational research method to build algebraic model is shown. A Background information related to selected company would be provided as well. Moreover, sufficient review of available literature would be done in order to obtain input data to reflect decision variables and constraints of real-world case.

To build algebraic model and reflect it in Excel, Integer Programming, specifically Binary Integer Programming method is used. Integer Programming (IP) is a mathematical optimization technique that focuses on optimizing a given objective function subject to a set of linear constraints, where the decision variables are required to be integers [3]. While, Binary Integer Programming (BIP) is a specific case where the decision variables can only take binary values (0 or 1), representing the presence or absence of a particular element in the solution. This kind of programming is suitable for airline hub allocation problem in operational research [1]. The airline hub allocation problem is an example that deals with determining the minimum number of hubs to cover all intended destinations in order to improve flight connectivity between various destinations through hubs, at the same time using minimum number of hubs minimizes costs particularly, fuel consumption as well as airport costs.

In the context of Binary Integer Programming, the airline hub allocation problem can be formulated with binary decision variables denoting whether a specific location is chosen as a hub (1) or not (0) [4]. The objective function would quantify the desired outcome, such as minimizing total operational costs or maximizing network efficiency. Consequently, the constraints in the model would be requirements that each airport of a given destination city must be connected to a

hub, and through using minimum number of hubs to establish connection to all intended destination cities [4].

Uzbekistan Airways is National Air Carrier and Flag Carrier of Republic of Uzbekistan that is founded in 28 January 1992, and inherited its' starting infrastructure from USSR main carrier Aeroflot (now the largest carrier in Russian Federation) [5]. At the current moment Uzbekistan Airways is largest air carrier in Uzbekistan and one of the largest carriers in Central Asian and CIS region with 36 aircrafts in their fleet and 22 more being in order that operates to around 70 destinations around the world [5]. Apart from operating in CIS region, Uzbekistan Airways has flights to Middle East, Europe, East and South-East Asia, United States and many more charter flights according to demand and seasonality [2].

### **Data Collection**

Data has been collected through using both primary and secondary sources as well as several data sources were utilized to ensure accuracy and reliability:

- Official website of Uzbekistan Airways, [www.uzairways.com](http://www.uzairways.com) , necessary information, such as the airline's current route network, hub locations, flight frequencies, and aircraft types, was extracted from the official website of Uzbekistan Airways. This data served as a foundation for understanding the operational context and constraints faced by the airline.

- Several official sources of international regulatory bodies and associations like IATA and ICAO, [www.iata.org](http://www.iata.org) , [www.icao.int](http://www.icao.int) have been used as well in order to gain more understanding of hub-and-spoke model that airlines use in order to boost their connectivity [6]. These sites provided insights into industry trends, competitive landscape, and other factors that could potentially influence the hub allocation process.

- Distance calculating online tools like <https://www.distancefromto.net/> helped to compute the distances between potential hub locations and destinations and to construct distance matrix between hub and destination cities. These tools enabled the accurate estimation of travel distances, which played a crucial role in formulating the objective function and constraints for the binary integer programming model.

- Direct interview with an insider from Uzbekistan Airways, who is the head of Airline Cooperation Division. To gain a deeper understanding of Uzbekistan Airways operations, preferences, and decision-making processes, a direct interview was conducted with an insider from the company. This primary source of information offered valuable context and expert perspectives that enriched the analysis. Specifically, the latest information about flights and destinations have been obtained.

- Personal experience and knowledge: As a former employee of Uzbekistan Airways, personal experience and background knowledge of the company's inner processes and the way work and business organized and established has been helpful for the project.

### **Model Formulation**

In the following section algebraic / mathematical model of the case will be illustrated before all variables and constraints can be entered to Microsoft Excel Spreadsheet. The model is illustrated in the form of system of linear equations and binary integer programming method is applied.

1. Decision variables:

As it is indicated in the Problem Statement part, Uzbekistan Airways operates from eleven local hubs namely Tashkent, Samarkand, Bukhara, Navoi, Urgench, Karshi, Namangan, Andijan, Fergana, Termez, and Nukus and they are indicated as Decision variables.

Let  $x_1, x_2, \dots, x_{11}$  be binary variables, where:

$x_1 = 1$  if a hub is Tashkent, and  $x_1 = 0$  otherwise.

$x_2 = 1$  if a hub is Samarkand, and  $x_2 = 0$  otherwise.

$x_3 = 1$  if a hub is Bukhara, and  $x_3 = 0$  otherwise.

$x_4 = 1$  if a hub is Navoi, and  $x_4 = 0$  otherwise.

$x_5 = 1$  if a hub is Urgench, and  $x_5 = 0$  otherwise.

$x_6 = 1$  if a hub is Karshi, and  $x_6 = 0$  otherwise.

$x_7 = 1$  if a hub is Namangan, and  $x_7 = 0$  otherwise.

$x_8 = 1$  if a hub is Andijan, and  $x_8 = 0$  otherwise.

$x_9 = 1$  if a hub is Fergana, and  $x_9 = 0$  otherwise.

$x_{10} = 1$  if a hub is Termez, and  $x_{10} = 0$  otherwise.

$x_{11} = 1$  if a hub is Nukus, and  $x_{11} = 0$  otherwise.

## 2. Parameters:

Selected miles that determine hub, threshold is indicated as 1800 miles and illustrated with letter T. Destination cities that do lie within 1800 miles will be indicated as 1, and those which do not will be 0.

$b_{ij}$  is a binary variable, where  $b_{ij} = 1$  if the distance between hub city j and destination city i is within the threshold T, and  $b_{ij} = 0$  otherwise.

## 3. Constraints:

Each destination city (i) must be covered by at least one hub within the specified distance threshold T:

For each destination city i, the following constraint must be satisfied:

$x_1 * b_{i1} + x_2 * b_{i2} + x_3 * b_{i3} + x_4 * b_{i4} + x_5 * b_{i5} + x_6 * b_{i6} + x_7 * b_{i7} + x_8 * b_{i8} + x_9 * b_{i9} + x_{10} * b_{i10} + x_{11} * b_{i11} \geq 1$ , for each destination city i (from Moscow to Tbilisi)

$x_j \in \{0, 1\}$  for  $j = 1$  to 11.

Above formula is applied repeatedly for the rest fourteen cities.

## 4. Objective function:

Minimize the number of used hubs:

$$Z = x_1 + x_2 + x_3 + x_4 + x_5 + x_6 + x_7 + x_8 + x_9 + x_{10} + x_{11}$$

Table I: Distance Matrix

Uzbekistan Airways hub locations with distances		Distance Matrix - Distance from each potential hub to destination city, given in miles																		
Input Data		Moscow	St. Petersburg	Ekaterinburg	Novosibirsk	Kazan	Krasnoyarsk	Rostov	Ufa	Sochi	Samara	Almaty	Astana	Bishkek	Baku	Dushanbe	Tbilisi	Minsk	Minsk	
Distance Threshold / Mile	1800																			
Limit																				
Hub/destination																				
Tashkent	1753.39	2089.78	1140.26	1132.29	1351.33	1465.02	1508.92	1109.42	1507.92	1208.97	402.41	688.88	2941.91	1016.64	192.39	1263.36	2091.7	1797.28	1978.38	
Samarqand	1699.66	2069.38	1194.59	1291.53	1346.12	1635.81	1413.88	1128.5	1386.97	1188.47	593.61	813.51	477.65	868.83	163.38	1128.09	2032.63	1978.38	1978.38	
Andijon	1869.67	2215.51	1226.26	1099.85	1472.82	1404.6	1663.22	1219.61	1655.6	1339.2	294.69	720.2	188.44	1172.38	239.16	1420.96	2234.56	1693.35	1693.35	
Fergana	1872.05	2221.22	1242.48	1133.07	1479.69	1439.42	1654.18	1229.72	1651.39	1342.95	331.27	745.54	223.5	1152.13	204.61	1403.57	2233.15	1734.01	1734.01	
Namangan	1838.09	2185.04	1201.32	1097.22	1442.77	1408.61	1630.17	1191.01	1633.11	1308.01	311.72	703.74	197.24	1141.82	226.15	1389.29	2202.22	1711.55	1711.55	
Bukhara	1645.76	2021.69	1191.97	1355.02	1309.67	1708.6	1334.07	1107.04	1297.13	1146.39	689.24	857.23	567.65	771.55	247.37	1053.97	1956.65	2064.97	2064.97	
Navoi	1660.83	2033.04	1177.37	1309.7	1314.01	1639.91	1366.42	1102.61	1337.25	1153.57	634.56	819.71	512.99	818.62	210.08	1077.84	1989.56	2012.03	2012.03	
Fermez	1879.72	2254.38	1390.2	1433.41	1537.23	1757.28	1559.47	1323.99	1507.64	1376.07	658.17	905.85	548.33	901.5	123.32	1234.66	2199.94	2061.9	2061.9	
Karshi	1740.4	2114.96	1264.5	1370.93	1399.09	1712.62	1429.04	1189.85	1387.59	1226.99	654.57	893.97	535.48	854.19	162.2	1120.78	2062.83	2047.8	2047.8	
Niljus	1343.04	1724.8	994.33	1360.78	1033.82	1742.74	1024.87	865.89	1005.11	860.37	876.68	819.91	759.94	525.54	553.53	760.06	1653.13	2158.85	2158.85	
Jurgench	1424.82	1806.28	1055.59	1372.85	1112.12	1749.04	1100.3	936.75	1070.77	940.01	837.18	838.61	717.71	568.82	477.37	816.89	1733.86	2154.47	2154.47	

Table II: Binary Relationship between Hubs and Destination Cities



Cities covered by given mile limit																		
1. City is within 200 mile range; 0 if city is outside of range																		
Hub/destination	Moscow	St. Petersburg	Ekaterinburg	Novosibirsk	Kazan	Krasnoyarsk	Rostov	Ufa	Sochi	Samara	Almaty	Astana	Bishkek	Baku	Dushanbe	Tbilisi	Minsk	Istanbul
Tashkent	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Samarkand	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Antlijan	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Bergara	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Hamangan	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Bukhara	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Ilavoi	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Ternez	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Kashii	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Nolus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Uyegach	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0

**Table III:** Decision Variables / Constraints and Objective.

Decision Variables Used as Hubs																		
Tashkent	1																	
Samarqand	0																	
Andijan	0																	
Fergana	0																	
Namangan	0																	
Bukhara	0																	
Navoi	0																	
Termez	0																	
Karshi	0																	
Nukus	1																	
Ugarchi	0																	
Constraints																		
Destination	Moscow	St.Petersburg	Ekatirburg	Novosibirsk	Kazan	Krasnoyarsk	Rostov	Ufa	Sochi	Samara	Almaty	Astana	Bishkek	Baku	Dushanbe	Tbilisi	Minsk	Musisk
Hubs covered by	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Required	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Objective to Minimize																		
Total number of hubs	2																	

**Table IV:** Sensitivity Analysis

**Input:** Mile Limit

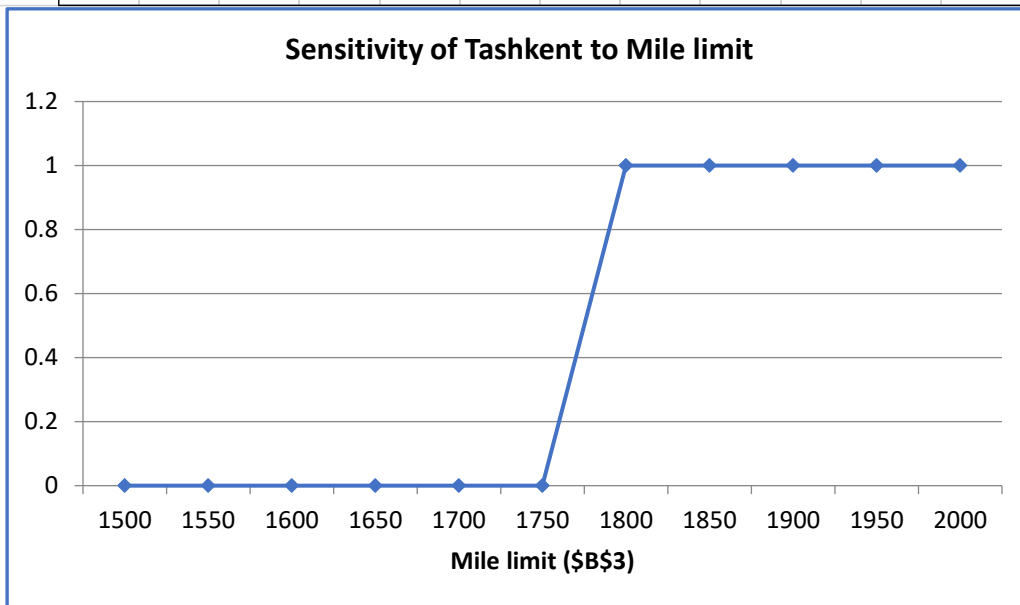
**Min:** 1500 miles

**Max:** 2000 miles

**Increment:** 100 miles

**Output:** Total Hubs / Decision Variables

One-way analysis for Solver model in Solution worksheet													
Mile limit (cell \$B\$3) values along side, output cell(s) along top													Data for chart
	Tashkent	Samarkand	Andijan	Fergana	\$B\$41	Bukhara	navoi	Termez	Karshi	Nukus	Urgench	Total_hubs	Tashkent
1500	Not feasible												Not feasible
1550	Not feasible												Not feasible
1600	Not feasible												Not feasible
1650	Not feasible												Not feasible
1700	Not feasible												Not feasible
1750	0	0	1	0	0	0	0	0	0	1	0	2	0
1800	1	0	0	0	0	0	0	0	0	1	0	2	1
1850	1	0	0	0	0	0	0	0	0	1	0	2	1
1900	1	0	0	0	0	0	0	0	0	1	0	2	1
1950	1	0	0	0	0	0	0	0	0	1	0	2	1
2000	1	0	0	0	0	0	0	0	0	1	0	2	1



**Table V: Sensitivity Analysis II**

**Changes in:**

Miles limit from 1800 to 1900

Constraints: Each city should be covered by at least two Hubs

Distance Threshold / Mile limit 1900

Cities covered by given mile limit		1 if city is within 1800 mile range; 0 if city is outside of range																	
Hub/Destination	Moscow	St.Petersburg	Ekaterinburg	Novosibirsk	Kazan	Krasnoyarsk	Rostov	Ufa	Sochi	Samara	Almaty	Astana	Bishkek	Baku	Dushanbe	Tbilisi	Minsk	Irkutsk	
Tashkent	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	
Samarkand	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	
Andijan	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	
Fergana	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	
Namangan	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	
Bulhara	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	
Navoi	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	
Termez	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	
Karshi	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	
Nukus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	
Urgench	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	
Decision Variables Used as Hubs																			
Tashkent	1																		
Samarkand	0																		
Andijan	1																		
Fergana	0																		
Namangan	0																		
Bulhara	0																		
Navoi	0																		
Termez	0																		
Karshi	0																		
Nukus	1																		
Urgench	1																		
Constraints																			
Destination	Moscow	St.Petersburg	Ekaterinburg	Novosibirsk	Kazan	Krasnoyarsk	Rostov	Ufa	Sochi	Samara	Almaty	Astana	Bishkek	Baku	Dushanbe	Tbilisi	Minsk	Irkutsk	
Hubs covered by	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2
Required	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Objective to Minimize																			
Total number of hubs	4																		

**Analysis and Evaluation of Outcomes:**

*Original Solution*

According to solution proposed by Solver, with total number of two hubs Uzbekistan Airways can cover fifteen CIS destinations. These two cities that can be potential hubs and create effective flight connectivity to Uzbekistan Airways are Tashkent, the capital and Nukus the capital of Karakalpakstan in Uzbekistan. From the calculations it can be seen that majority of destination cities that have connection with Tashkent and Nukus overlap if mile limit is set to 1800 miles. This

situation occurred due to that Tashkent cannot be hub for St. Petersburg as the distance between cities is 2089 miles, meanwhile Nukus cannot be hub for Irkutsk as the distance between cities is 2158 miles.

Therefore both hubs to some extent complete each other and allow Uzbekistan Airways to establish good connectivity to those destinations where one hub cannot cover, it can be completed through operating via another hub. Another advantage of having Tashkent and Nukus as hubs, cities are located at different parts of Uzbekistan and can connect surround local cities with CIS destinations.

#### *Sensitivity Analysis*

Sensitivity Analysis has shown that if mile limit drops below 1750 miles, solution is not feasible. At the point of 1750 miles, surprisingly Andijan becomes suggested hub alongside with Nukus. And only if mile limit increase to 1800 Tashkent becomes viable hub alongside with Nukus.

In the real-life conditions sometimes change, therefore another objective has been tried by changing requirement of each destination city being covered by at least two hubs. The first attempt where mile limit has not been changed did not bring any result as Solver could not find solution. But after increasing mile limit to 1900, four hubs were suggested by Solver, these are Nukus, Urgench, Andijan and Tashkent.

#### **Conclusion and Recommendations**

##### *Conclusion*

Based on the analysis and evaluation of the binary integer programming model, the following conclusions and recommendations can be made for Uzbekistan Airways:

Tashkent and Nukus are identified as the optimal hub locations for Uzbekistan Airways, which can cover all fifteen CIS destinations with a mile limit of 1800. This enables efficient flight connectivity and comprehensive coverage of both local and international destinations. Moreover, Tashkent and Nukus are strategically located in different parts of Uzbekistan, which allows for better connectivity with local cities and the ability to reach various CIS destinations where one hub may not be sufficient.

The model shows that the solution is sensitive to the mile limit. As the mile limit drops below 1750 miles, the solution becomes infeasible. However, at 1750 miles, Andijan and Nukus emerge as potential hubs. It is only when the mile limit is set to 1800 miles that Tashkent becomes a viable hub alongside Nukus.

##### *Recommendations:*

Uzbekistan Airways should focus on Tashkent and Nukus as the primary hubs for efficient flight connectivity and coverage of CIS destinations within the 1800-mile limit. They need to regularly monitor and assess the mile limit, as it plays a crucial role in determining hub viability. Adjustments in the mile limit may lead to alternative hub options or additional hubs for increased redundancy and connectivity.

If the requirement for each destination city to be covered by at least two hubs is introduced the company needs to consider the possibility of increasing the mile limit to 1900 miles. This will provide a more robust network and increase the resilience of the airline's operations. Company also needs to constantly evaluate and update the model to incorporate changes in the airline's fleet, routes, and demand patterns, ensuring that the hub allocation system remains optimized and aligned with Uzbekistan Airways' strategic objectives.

By implementing these recommendations, Uzbekistan Airways can establish a well-connected and efficient hub allocation system, providing seamless connectivity for passengers while optimizing resources and minimizing operational costs.

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# BANK TIZIMI BARQARORLIGINI TA'MINLASHDA CHET EL TAJRIBALARINI QO'LLASH

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**Annotatsiya.** Maqolada bank xizmatlari uning tadbirkorligini, daromadlilikini ta'minlashga va iqtisodiyotning talablarini qondirishga yo'naltirilgan an'anaviy sohasi ekanligidan kelib chiqqan holda, iqtisodiyotni erkinlashtirish bosqichida O'zbekiston Respublikasi milliy bank tizimi bir qator, shu jumladan, etarli darajada ko'rib chiqilmagan bank xizmatlari nazariyasini rivojlanishi bilan bog'liq muammolar aniqlangan va ularni xal qilishga qaratilgan takliflar ishlab chiqilgan.

**Kalit so'zlar:** tijorat banki, Markaziy bank, likvidlilik, regulyativ kapital, kapitalning yetarliligi, moliyaviy innovatsiyalar, qayta moliyalash stavkasi, ochiq bozor operatsiyalari, majburiy zahira stavkalari, aktivlar, Brutto.

**Аннотация.** Исходя из того, что банковские услуги являются традиционной отраслью, направленной на обеспечение предпринимательства, прибыльности и удовлетворение потребностей экономики, национальная банковская система Республики Узбекистан на этапе либерализации экономики рассматривается в ряде аспектов, в том числе недостаточного рассмотрения выявлены проблемы, связанные с развитием теории банковского обслуживания, и разработаны предложения, направленные на их решение.

**Ключевые слова:** коммерческий банк, центральный банк, ликвидность, регулятивный капитал, достаточность капитала, финансовые инновации, ставка рефинансирования, операции на открытом рынке, резервные требования, активы, валовой размер.

**Abstract.** Based on the fact that banking services are a traditional sector aimed at ensuring entrepreneurship, profitability and meeting the demands of the economy, the national banking system of the Republic of Uzbekistan at the stage of economic liberalization is considered in a number of ways, including insufficient consideration problems related to the development of the theory of banking services are identified and proposals aimed at solving them are developed.

**Keywords:** commercial bank, Central Bank, liquidity, regulatory capital, capital adequacy, financial innovation, refinancing rate, open market operations, reserve requirements, assets, Gross.

## 1. Kirish.

Iqtisodiyotni modernizatsiyalash sharoitida bank tizimini isloh qilishni yanada chuqurlashtirish va barqarorligini oshirish, bank tizimiga aholi hamda xorijiy investorlarning ishonchini yanada mustahkamlash, axborot-kommunikatsiya texnologiyalarini keng qo'llagan holda, ko'rsatilayotgan bank xizmatlarining turi va xizmatlar bozori ko'lamini kengayib borish hozirgi kunning dolzarb masalalaridan biri hisoblanadi. O'zbekiston Respublikasi Prezidentining 2018 yil 23 martda qabul qilingan "Bank xizmatlari ommabopligini oshirish bo'yicha qo'shimcha chora-tadbirlar to'g'risida"gi qarorida Bank xizmatlari ommabopligining oshirilishini va bank xizmatlari iste'molchilari huquqlarining himoya qilinishini ta'minlash O'zbekiston Respublikasi Markaziy bankining asosiy vazifalaridan biri ekanligi belgilab qo'yildi. Endilikda O'zbekiston Respublikasi

Markaziy bankning tuzilmasida bank xizmatlari iste'molchilarining huquqlari va qonuniy manfaatlari himoyasini ta'minlash, moliyaviy ochiqlikni hamda aholi va tadbirkorlik sub'ektlarining moliyaviy savodxonlik darajasini oshirish asosiy vazifalari bo'lgan Bank xizmatlari iste'molchilarining huquqlarini himoya qilish xizmati tashkil etildi.

## 2. Tahlil va natijalar muhokamasi.

2017-2021 yillarda O'zbekiston Respublikasini rivojlantirishning beshta ustuvor yo'nalishi bo'yicha harakatlar strategiyasida mamlakat bank tizimining barqarorligini ta'minlash makroiqtisodiy barqarorlikni yanada mustahkamlash va yuqori iqtisodiy o'sish sur'atlarini saqlab qolishning zaruriy shartlaridan biri sifatida qayd etilgan. O'zbekiston Respublikasi Markaziy bankning majburiy zaxira stavkalari 2009 yilning sentyabr oyidan boshlab tijorat banklari depozitlarining muddatlariga bog'liq ravishda quyidagi tartibda tabaqalashtirildi:

\* talab qilib olinadigan depozitlar va bir yilgacha muddatga jalb qilingan depozitlarga nisbatan - 15%;

\* bir yildan uch yilgacha muddatga jalb qilingan depozitlarga nisbatan -12%;

\* 3 yildan ortiq muddatga jalb qilingan depozitlarga nisbatan - 10,5%. Majburiy zaxira stavkalarining bu tarzda tabaqalashtirilishi tijorat banklarining uzoq muddatli resurs bazasini mustahkamlashga xizmat qiladi. Quyidagi jadval ma'lumotlari orqali respublikamiz tijorat banklarining kapitallashish darajasini tavsiflovchi ko'rsatkichlarga baho beramiz (1-jadval).

1-jadval.

### O'zbekiston Respublikasi tijorat banklarining kapitallashish darajasini tavsiflovchi ko'rsatkichlarning holati

Ko'rsatkichlar nomi	01.07.2021		01.07.2022	
	mlrd. so'm	ulushi, foizda	mlrd. so'm	ulushi, foizda
<b>I darajali kapital</b>	<b>54 698</b>	<b>86,9%</b>	<b>65 819</b>	<b>84,7%</b>
<i>Asosiy kapital</i>	<i>54 503</i>	<i>86,6%</i>	<i>65 624</i>	<i>84,5%</i>
<i>Qo'shimcha kapital</i>	<i>195</i>	<i>0,3%</i>	<i>195</i>	<i>0,3%</i>
<b>II darajali kapital</b>	<b>8 211</b>	<b>13,1%</b>	<b>11 866</b>	<b>15,3%</b>
<b>Jami regulyativ kapital</b>	<b>62 909</b>	<b>100%</b>	<b>77 684</b>	<b>100%</b>
<i>Kapital monandlilik darajasi</i>	<i>17,7%</i>		<i>17,0%</i>	
<i>I darajali kapital monandlilik darajasi</i>	<i>15,4%</i>		<i>14,4%</i>	

Shu o'rinda e'tirof etish joizki, hozirgi davrda, O'zbekiston Respublikasi bank tizimining barqarorligini ta'minlash bilan bog'liq bo'lgan ayrim muammolarning mavjudligi kuzatilmoqda. Ana shunday dolzarb muammolardan biri Markaziy bankning majburiy zaxira talablari tijorat banklarining moliyaviy barqarorligiga salbiy ta'sir ko'rsatishidir. Mamlakat bank tizimining barqarorligini ta'minlash borasidagi keyingi muammo - banklarning kapitallashish darajasini



xalqaro bank amaliyotida umume'tirof etilgan me'yoriy talabdan past ekanligidir. Yuqorida qayd etilgan muammolarni hal qilish maqsadida, fikrimizcha, quyidagi tadbirlarni amalga oshirish kerak:

1. Monetar siyosatning bozor tabiatiga ega bo'lgan instrumentlaridan (qayta moliyalash siyosati, ochiq bozor siyosati, valyuta siyosati, depozit siyosati) foydalanish amaliyotini takomillashtirish yo'li bilan majburiy zaxira siyosatidan voz kechish lozim. Buning natijasida majburiy zaxira siyosatining tijorat banklarining likvidliligi va moliyaviy barqarorligiga nisbatan yuzaga kelgan salbiy ta'siri barham topadi.

2. Devalvasiya zaxirasini tijorat banklarining regulyativ kapitali tarkibidan olib tashlab, uni banklarning daromadi sifatida hisobga olish va zaxirani o'tgan yillarning taqsimlanmagan foydasi hisobidan shakllantirishni yo'lga qo'yish lozim. Buning natijasida, birinchidan, tijorat banklari kapital bazasining barqarorlik darajasi oshadi, ikkinchidan, Bazel qo'mitasining tijorat banklari regulyativ kapitalining tarkibini shakllantirishga qo'yilgan talablarini bajarish yo'lida bir jiddiy qadam qo'yiladi.

3. Respublikamizning bir qator yirik tijorat banklarining depozit xizmatining samaradorligiga salbiy ta'sir qiluvchi omillarning mavjudligi.

Tadqiqotning ikkinchi bobida amalga oshirilgan tahlillarning natijalari shuni ko'rsatadiki, depozitlarining umumiy hajmida talab qilib olinadigan depozitlarning salmog'i 60 foizdan yuqoridir. Bu esa depozit xizmatining samaradorligiga salbiy ta'sir ko'rsatuvchi omil hisoblanadi.

4. Respublikamiz tijorat banklarining hisob-kitob xizmatidan oladigan daromadlarining banklarning operatsion daromadlari hajmidagi salmog'ini oshirishga to'sqinlik qilayotgan omillar mavjud va ular quyidagilardan iborat:

respublikamiz tijorat banklari xizmatlarining tarkibida forfeyting, trast, kontokorrent xizmatlarining mavjud emasligi;

respublikamiz tijorat banklarida faktoring, forvard, anderrayting xizmat turlari bo'yicha operatsiyalar hajmining kichikligi.

Tijorat banklari o'rtasidagi sog'lom raqobat ular tomonidan o'z mijozlariga bank xizmatining lizing, faktoring, forfeyting, kontokorrent, overdraft kabi zamonaviy bank xizmatlari yangi turlarini taklif etish imkonini yaratdi. Hisob-kitoblarni amalga oshirishda qulayliklar yaratish maqsadida bir necha banklarda talab qilib olinguncha depozit hisobvaraqlari ochish, bevosita bank-mijoz dasturlarini joriy etish, elektron to'lov tizimi orqali mamlakat hududida har qanday to'lovni 5-10 daqiqada amalga oshirish imkoniyatlarini yaratib berdilar. Oxirgi yillarda tijorat banklari tomonidan mijozlariga bank kartalari orqali elektron to'lovlarni amalga oshirish uchun imkoniyat va qulayliklarni yaratish borasida sezilarli ishlar amalga oshirildi. Bugungi kunga kelib, tijorat banklari tomonidan 4 mln. 500 mingdan ortiqroq bank kartalari muomalaga chiqarildi hamda banklar tomonidan savdo hamda aholiga pullik xizmat ko'rsatadigan korxonalarda 27504 dan ortiqroq terminallar o'rnatildi.

O'zbekistonda bank xizmatlari bozorini rivojlantirish va banklararo raqobat sharoitida mijozlarga ko'rsatiladigan bank xizmatlarining samaradorligini oshirishda jahon banklari tajribasidan foydalanish, tashkil etilgan bank xizmatlari bozorini rivojlantirish muhim omilga aylanishi lozim. Bunga bog'liq holda quyidagi holatlarni ajratib ko'rsatish zarur:

• Xorij tajribasidan foydalanish samaradorligi banklarimizning Evropa kliring to'lov tizimi doirasida hisob-kitoblarni o'tkazishning zamonaviy shartlariga moslashish

darajasiga bog‘liq. Mijozning tashqi iqtisodiy faoliyatiga xizmat ko‘rsatishdagi risklarni boshqarish kabi bunday bank xizmatlari va mahsulotlarini rivojlanishi, elektron bank xizmatlarini yaratish uchun Internetdan foydalanish, investitsion bank xizmatlarini rivojlanishi, xususan, korporativ moliyalar sohasida, aktivlarni boshqarishda, sekyuritizatsiyasida, ssuda kapitallari bozorida bank xizmatlarining rivojlanishi uchun banklarning halkaro kredit tarixini yaratish muhim ahamiyatga ega.

Yuqorida aytib o‘tilganlardan kelib chiqqan holda, mijozlarga bank xizmatlarining EVROdagi namunaviy to‘plami taklif qilish mumkin:

To‘lov xizmatlari:

- Evropa to‘lov tizimlari orqali evroda kliring hisoblari bo‘yicha xizmatlar;
- boshqa sub'ektlar qoldiqlari hisobiga evro hisobvarag‘i likvidligini ta‘minlash imkoniyati bilan turli valyutali schyotlarni ochish;
- mijozlarning qisqa muddatli likvidligini boshqarish;
- internet orqali evro hisobvaraqlarini boshqarish.

Korporativ mijozlar uchun xizmatlar:

mijozlar uchun xizmatlar paketini shakllantirish, ya’ni “moliyaviy xizmatlar”ni shakllantirish bilan shug‘ullanuvchi, bo‘linmalar tarmog‘ini tuzish bo‘yicha bankni boshqarish strukturasi takomillashtirish maqsadga muvofiqdir. Bank menejerlarini ixtisoslashishiga, korporativ mijozlar guruhi segmentatsiyasiga va bank xizmatlarini korporativ mijozlarga sotish tizimini markazlashtirishga talabning tug‘ilishi bunday bo‘linmalarining zaruriyatini keltirib chiqaradi.

### **3. XULOSA VA TAKLIFLAR**

Ma’lumki jahonning aksariyat rivojlangan banklari mijozlarga uzluksiz xizmat ko‘rsatishga harakat qiladilar, bunday xizmat ko‘rsatishni “Doyche bank” (Germaniya), “ABN AMRO Bank” (Gollandiya), “Sosete Jeneral” (Fransiya) va “Sitibank” (AQSH) banklarida ko‘rish mumkin. Bu banklarda bank xizmatlari strategiyasi asosan past tariflarda yangi mijozlar, korrespondent-banklarni jalb etish, zamonaviy to‘lov tizimlaridan foydalana olish imkoniyatlariga asoslanadi va mijozlarga xizmat ko‘rsatish kuniga 24 soat davomida haftasiga 7 kun olib boriladi. Xizmatlar mijozlarning ko‘proq o‘z-o‘ziga xizmat ko‘rsatish tamoyiliga asoslanadi, xizmatlarning doimiy ravishda mobilligini ta‘minlaydi va mijozlarni jalb etish strategiyasi hisoblanadi.

Mazkur tadqiqot natijasida tijorat banklarining xizmat bozori va banklar tomonidan ko‘rsatilayotgan xizmat turlari, samaradorligi va sifatini chuqur tahlil qilib chiqqan holda, quyidagi ilmiy xulosalar shakllantirildi va takliflar ishlab chiqildi:

1. O‘zbekiston Respublikasi banklararo bozori bank kapitali, bank depoziti va kreditlar bo‘yicha bozor konsentratsiyasi koeffitsientining haqiqatdagi darajasidan yuqori ekanligi sog‘lom banklararo raqobatning to‘liq shakllanmaganligidan dalolat beradi.
2. Respublikamizda banklararo raqobatni shakllantirish, yirik banklarning moliya bozoridagi monopol mavqeiga barham berish imkonini beradigan alohida qonunning mavjud emasligi sog‘lom raqobat muhitni shakllantirishga to‘sqinlik qilmoqda.
3. Respublikamizning ayrim yirik tijorat banklarida kreditlarning aktivlar hajmidagi salmog‘ining beqaror bo‘lganligi, ayrim davriy oraliqlarda pasayish sur‘atiga ega bo‘lganligi, bank aktivlari va kreditlarining daromadlilik darajasiga nisbatan salbiy ta‘sirni yuzaga keltirdi.

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## MBENEFITS OF DEVELOPING REPO TRANSACTIONS MARKET IN UZBEKISTAN

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**Abstract.** *This article examines the imperative role of REPO transactions markets in enhancing liquidity positions of financial institutions in the banking system of Uzbekistan. It explores the country's emerging REPO market and the associated challenges and opportunities. Through a comprehensive analysis of ongoing banking industry reforms, innovative approaches of the Central Bank of the Republic of Uzbekistan to monetary policy, best practices of the World's leading economies in this field, the study identifies key issues hindering further development of REPO markets and proposes practical solutions. By addressing these challenges, Uzbekistan can capitalize on the opportunities offered by the development of REPO markets not only for ensuring enhanced liquidity of the commercial banks and therefore stability of the banking system, but also for achieving sustainable growth in other sectors of the Economy as well.*

**Keywords:** *REPO (repurchase) agreements, liquidity, monetary policy, financial risks, financial risks management, financial crisis, monetary policy, monetary policy tools.*

### 1. METHODOLOGY

This article makes use of the secondary research approach i.e. findings highlighted in the existing articles and publications will be explored in order to find out the most successful best practices deployed by Central Bank institutions, economists and policy makers in the advanced economies of the World. This approach not only allows the author to come up with the most appropriate best practices to be recommended to the Central Bank of the Republic of Uzbekistan (referred to as CBU hereafter), but also it points out what are the bitter lessons and potential pitfalls involved in developing REPO markets that Western economies had to experience before.

Furthermore, this article will also demonstrate some aspects of comparative analysis in order to customize the World's best practices as much as possible to the current needs of the banking system in Uzbekistan and the country's entire economy.

### 2. OVERVIEW OF REPO MARKETS

Repurchase (REPO) transactions markets are markets in which securities are exchanged for cash with an agreement to repurchase the securities at a future date. In the transaction, securities serve as collateral for what is effectively a cash loan. The securities which are used as collateral in repos are government debt securities such as T-bonds (Treasury bonds), however private sector debt instruments such as commercial paper or corporate bonds can also be used as a collateral for this purpose.

According to the legislation in the United States, where repurchase agreements originated, REPOs can be of any maturity. However, three types of maturity are the most common – overnight, open and term. Overnight repurchase agreements have a single day maturity, whereas term repos are the ones that have fixed maturity of more than one day. The open maturity REPOs are basically overnight REPOs that can be extended as per the consent by the two parties to the agreement.

According to the Bank for International Settlements (1999), the use of repurchase

operations to obtain funds is perhaps the most straightforward use of this transaction, as it can be compared to a collateralized loan. From this point of view, the principal merit of repos is the generally lower cost of financing relative to the uncollateralized market. For the lender of cash, the advantage is the provision of collateral to limit credit risk.

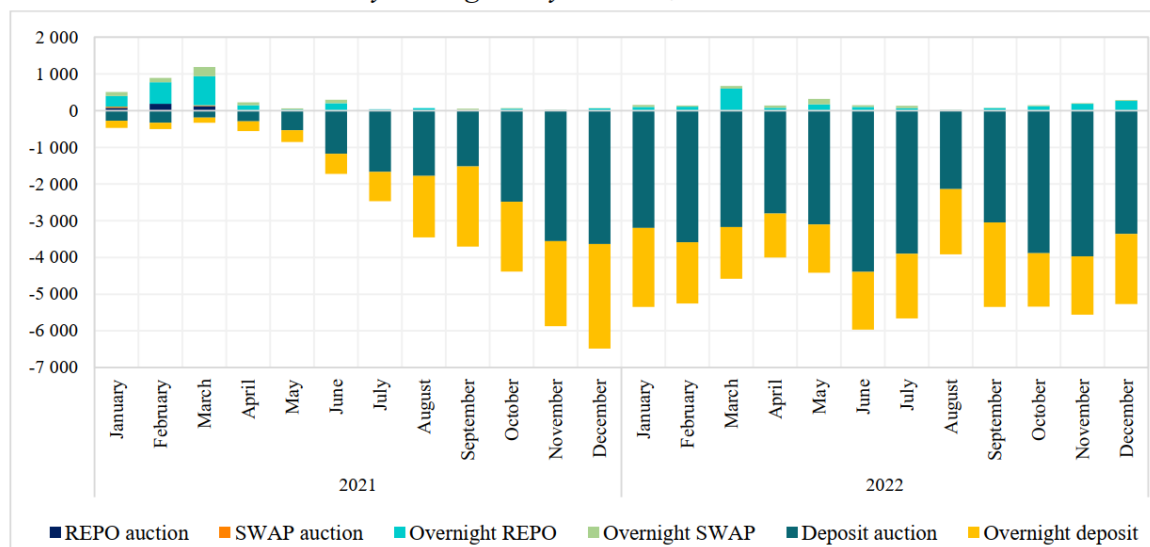
The repurchase agreement (repo) market is also perceived as a potential source of instability since the financial crisis of 2007-2009 (see Gorton and Metrick (2012), Adrian and Shin (2011), and Copeland et al. (2014) among others).

Nevertheless, for several decades already the Central Banks of G7 countries have been using REPOs as a very effective and efficient tool of monetary policy that helps their economies to recover faster from the crisis during the recessions and to achieve sustainable economic growth rates during the expansions in the business cycle.

### 3. CURRENT STATE OF THE REPO MARKET IN UZBEKISTAN

Figure 3.1.5

Short-term transactions balance of the Central Bank, monthly average daily balance, in billion soums



The Figure 3.1.5. above is taken from the Annual Report 2022 of the Central Bank of the Republic of Uzbekistan (2022). This Figure shows short-term transactions balance of the CBU in 2021 and 2022. According to the CBU (2022), Owing to the seasonal decline in government spending and the external concerns that emerged in March, the need for operations to attract cash declined slightly in the first quarter of 2022, while the need for overnight REPO and SWAP operations to provide liquidity increased.

According to the CBU (2024), based on the experience of advanced foreign countries and international financial markets that have transited to the inflation targeting regime, the following changes will be introduced **from February 20, 2024**, in order to develop the operational framework of monetary policy and increase the efficiency of liquidity management in commercial banks:

1. Based on the overall liquidity condition in the banking system, the practice of holding **1-week REPO auctions** will be introduced to **provide liquidity** to banks.

REPO auctions are held on **Mondays** at 11:00 a.m. and serve to provide liquidity to

commercial banks during the week. These auctions are carried out at a variable interest rate (*minimum – policy rate*) in a fixed amount based on the banking system's liquidity forecast.

2. **Intraday credit instrument** of the Central Bank for providing liquidity to commercial banks – interest-free credit operations will be introduced until the closure of the bank payments with clients. The main purpose of using this instrument is to ensure the **continuity of payments** in the banking system and to provide banks with the necessary liquidity during the day.

It is envisaged that the banks will use the funds attracted through this instrument during the day and return them by the end of the client payments. Intraday loan instruments that are **not repaid** before the closure of bank settlement day are automatically converted into interest-bearing overnight operations.

3. The operating hours of **interbank money and REPO markets** will be extended until **30 minutes** after the closure of bank payments with clients as well as banks will be able to use the **overnight operations** of the Central Bank within **1 hour** after the closure of the bank payments.

As a result of this change, after the completion of payment operations with the clients of commercial banks, there will be an opportunity to **redistribute liquidity** among themselves and then apply to the operations of the Central Bank. In this case, the activity of banks in the interbank money and REPO markets is expected to increase further.

4. In order to minimize the credit risk in the implementation of monetary operations, a **5 percent haircut** will be applied to collateral property for liquidity providing operations.

Improvements mentioned above will provide more flexibility and convenience to commercial banks in liquidity management, ensure the continuity of the payment system, and minimize the credit risk of monetary operations.

#### 4. CHALLENGES

To fully reap the benefits of the advanced REPO market the following challenges need to be overcome in Uzbekistan:

**Capacity building** - *developing the necessary expertise within financial institutions and their customers/counterparties to the REPO transactions stands as a common challenge. This includes training professionals to fully understand all of the aspects of REPO transactions, including risk management issues involved in REPOs, in order to design and implement this kind of transactions effectively and efficiently so to enhance the liquidity position and improve the risk management practices not only from the point of view of the financial institutions but also from the perspective of their customers/counterparties to the REPO agreements.*

**The banking system's and financial markets' own further institutional development** – *a lack of well-developed financial markets in Uzbekistan, such as domestic bond markets for instance, currently doesn't allow for various types of securities, including private sector securities like commercial papers or corporate bonds, to be used as a collateral in REPO contracts. This in turn limits possibility not only for the financial institutions but also for all of the firms in the economy to make effective use REPOs for the purposes of managing their liquidity positions as well as financial risk management purposes.*

**Legislation framework** – *clear, supportive and flexible legislation frameworks should be in place in order to regulate the further development of the entire financial system in the country including its components – institutional development of financial institutions and development of financial markets including REPO markets.*

## 5. BENEFITS OF DEVELOPING REPO MARKET

If Uzbekistan can succeed in developing its REPO market, its economy can reap the following benefits:

- All the firms in the economy including financial institutions can use REPO transactions to improve their liquidity position and therefore to avoid bankruptcy cases.

- One of the obvious advantages of repurchase agreements is the fact that when banks are refusing to the customer in lending the money because of the customer's shaky financial position, that firm can raise funds by making a REPO agreement. Since in REPOs some of the borrower's assets e.g. a financial security is pledged as collateral, this feature of REPO transactions minimizes default risk and therefore financial institutions are readily lending the money.

- The CBU can make use of the REPO transaction as a very effective tool of the monetary policy to improve the liquidity position of the commercial banks and therefore to ensure stability of the entire banking system.

- REPOs can also be used by the CBU for the management of foreign currency reserves as it is very widely practiced by the Central Banks of the advanced economies in the World such as the Federal Reserve System of the United States, Bank of England, the European Central Bank, etc.

The above mentioned benefits are just a few examples of numerous advantages offered to the economy by a well-developed REPO market.

## 6. CONCLUSION

In conclusion, despite the challenges on the way of developing efficient REPO market in Uzbekistan, if the country will succeed in achieving this goal, then the Economy of Uzbekistan will obtain numerous benefits and advantages.

Advanced REPO transactions market not only will enhance the liquidity of the banking system, but it will also help the CBU ensure the stability of the entire Economy of the country.

For several decades already the Central Banks of G7 countries have been using REPOs as a very effective and efficient tool of monetary policy that helps their economies to recover faster from the crisis during the recessions and to achieve sustainable economic growth rates during the expansions in the business cycle.

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## IN THE DOLLAR WE TRUST: IS DE-DOLLARIZATION FEASIBLE IN UZBEKISTAN?

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**Abstract.** *The discussion about the end of the U.S. dollar dominance era was resumed by the world economic community with the outbreak of the military conflict between Russia and Ukraine and the subsequent Western sanctions against Russia. Some countries, due to restrictions, were forced to look for an alternative to settle payments, others were afraid of probable secondary sanctions. As a result, despite the active attempts of the leaders of the BRICS countries to trade in national currencies, the position of the dollar as a reserve and settlement currency has only strengthened.*

*Numerous research studies reveal that dollarization is persistent to different extent in all CIS countries (Gevorkyan, 2023, Dabrowski, 2022; Dudkova, 2020; Usmanova, 2021). A handful of the studies examined dollarization processes in Central Asia, and the ones analyzing Uzbekistan are even fewer. The main objective of this paper is to fill this research gap. The applied research method is a qualitative analysis of the previous research studies on dollarization process. This approach enables a better evaluation of the current trends and dynamics in Uzbekistan and compares it to the stylized facts on dollarization. The results show that Uzbekistan experiences dollarization mainly due to unanchored inflation expectations of domestic residents, therefore low confidence in the domestic currency, the underdeveloped local capital markets, and the absence of alternative savings instruments. The Central Bank of the Republic of Uzbekistan has been trying to reduce the level of dollarization in the economy using various measures suggested in previous studies. A slight reduction in financial dollarization has occurred thanks to attractive interest rates on savings accounts in the local currency, however the impact on other dollarization types is still obscure. Further the study suggests certain measures on reducing dollarization.*

**Keywords:** *dollarization of economy; de-dollarization measures; monetary policy; development policies; economies in transition; Uzbekistan.*

### **Introduction.**

Dollarization happens when a foreign currency (usually the U.S. dollar) is commonly used in transactions within a particular country, substituting the national currency. The transfer of savings into a foreign currency is a first sign of the beginning of dollarization in an economy and the widespread use of the foreign currency in the domestic money circulation. The second sign is the transition to payments in the foreign currency or setting prices in conventional units (c. u.).

Dollarization has become conventional for many developing countries and economies in transition all over the world so that people barely notice it. The use of the U.S. dollars as a means of payment and specifically as a store of value is not merely a tradition, but rather a ritual for the majority of population in these countries.

### **LITERATURE REVIEW**

#### ***Dollarization and its taxonomy***



Ponsot (2019) has classified four dollarization regimes based on quantitative and qualitative aspects. The first one measures how actively the foreign currency is used in monetary transactions. An economy can be fully or partially dollarized depending on the level of a local currency substitution. The second dimension focuses on the recognition of the foreign currency on both legal and institutional levels. The author emphasizes that particularly institutional characteristics should be examined to adequately measure the state tolerance towards dollarization.

Ize and Parrado (2002), as well as Heysen (2005) propose a typology based on the use of a foreign currency by domestic residents and discuss payment, financial, and real dollarization. *Payment dollarization* is associated with a general acceptance of foreign currency as a mean of payment. *Financial dollarization* refers to holding assets in the foreign currency. In case, salaries/wages and prices for particular goods are set in a foreign currency, it is a signal of *real dollarization*. The World Bank (n.d.) pulls these factors into one term – *asset dollarization* and adds *liability dollarization* which is described in the research papers focusing on foreign currency debt obligations (Bitar, 2022; Murat, 2022). Liability dollarization refers to loans and other debt instruments in a foreign currency that can have an adverse effect on the balance sheet of a particular country when its domestic currency depreciates. Dollarization comes in different shapes and sizes, so a clear understanding of what type of dollarization is under consideration helps to identify its root causes and suggest correct policy recommendations.

#### ***Drivers of dollarization***

Drivers of dollarization vary from country to country, as unique dimensions like history, culture, politics, daily life, and decision-making structures have a considerable effect on the process of dollarization (Eradze, 2022). However, the existing research literature suggests several common interdependent macroeconomic and institutional factors forcing private agents to demand a foreign currency.

The early studies on dollarization have main focus on triggers of currency substitution, i.e. real and payment dollarization (Yeyati, 2006). A volatile domestic currency followed by high inflation leads to the situation when economic agents lose confidence in the domestic currency and shift to a stable foreign currency (hard currency).

In the course of time, dollarization was treated as asset substitution and the economic literature concentrated on addition of models - portfolio view, market failure view, and institutional view (Yeyati, 2006). The portfolio view assumes the minimum variance portfolio approach suggesting that economic agents set their currency composition based on their desire to generate a stable return on their portfolios or at least minimize it's fluctuation (Basso et al., 2011; Ize and Yeyati, 2006). Thus, dollarization is viewed as an insurance arrangement, primarily when financial markets cannot provide alternative indexed instruments in national currencies. The market failure view suggests that dollarization can exist due to certain imperfections like "market frictions, information asymmetries, distortions induced by deposit or government guarantees" (Ize and Yeyati, 2003, p.41). An illustrative example is an attempt of banks to shift exchange rate risk to debtors by encouraging them to borrow in a foreign currency. Therefore, this model assumes that exchange rate and default risks are highly correlated unless adequate regulations are introduced. The institutional view assumes that a poor macroeconomic policy management increases dollarization. If institutions lack credibility or don't take any measures to protect a domestic currency, then a foreign currency provides confidence that residents need (Chang and Velasco, 2002). The relative simplicity, transparency, and credibility of foreign currencies like the U.S.

dollar or Euro spur further dollarization in economies with under-developed financial markets. Inability to borrow in a domestic currency fuels further dollarization in liabilities due to the widespread and persistent “original sin” phenomenon in developing countries (Eichengreen et al., 2002). In addition, trade and financial linkages with the anchor country can attribute to dollarization (Windischbauer, 2016).

#### ***De-dollarization measures***

It is admitted fact that high dollarization of an economy is associated with high risks, for example, changes in the U.S. interest rates cause major implications for financial conditions in a highly-dollarized economy (Caballero and Upper, 2023). Post-Keynesian economics acknowledges the role of central banks in ensuring the stability of monetary, financial, and real sectors (Hein, 2023). However, the national regulator is not able to mitigate the systemic risk if the economy faces high dollarization. The hard currency shortage might cause liquidity risk that might be alleviated to a certain extent by draining liquid dollar reserves of commercial banks and a central bank’s international reserves, and this consequently would lead to further dollarization (Balino, 2003). If liquidity inflow from exports or capital flow does not generate extra foreign reserves, inelastic credit supply might lead to continuous stagnation as the interest rate increases (Ponsot, 2019). These adverse effects of dollarization emphasize the importance of minimizing dollarization, as a complete de-dollarization is nearly impossible due to globalization and asymmetrical global power relations (Eradze, 2022).

Berg and Borensztein (2000) claim that understanding the reasons, measuring costs and benefits of dollarization, and assessing associated risks should be case-based. The one-size-fits-all approach does not work in specific characteristics of a dollarized economy (Reinhart et al., 2003). Many studies suggest that promoting the use of a domestic currency through credible and sustainable anti-inflationary policies and adopting regulations to discourage the use of a foreign currency are key necessary steps (Ize and Yeyati, 2006). Making a domestic currency more attractive is possible by lowering the risks and costs associated with its use. First and foremost is having low and stable inflation by moving towards well-designed and credible inflation targeting and more flexible exchange rate regimes to attain macroeconomic stability and ensure institutional credibility (Ize and Parrado, 2006; Windischbauer, 2016). However, this process requires considerable time and consistent efforts, and the national authorities have to commit to it in order not to undermine their credibility. Ize and Yeyati (2006) argue that a relatively stable exchange rate and inflation rate might not directly lead to de-dollarization due to the “dollarization hysteresis”. A relative short-term macroeconomic stability might not change the expectations, especially in case of repeated high inflation. Hence, the authorities should work with the expectations and mindset of domestic residents as well to anchor inflation expectations. Regulations and legal barriers are another substantial leverage in reducing dollarization as they should focus on encouraging borrowing in a domestic currency in a soft manner allowing some flexibility, as tight rules on foreign currency borrowing might urge residents to look for borrowing sources other than commercial banks, resulting in less control and monitoring over dollarization and systematic risk (Anhert et al., 2021). Structural changes can take the form of higher reserve requirements for foreign currency deposits or higher interest rates on foreign currency loans. Higher reserve requirements for foreign currency deposits might not reduce the level of dollarization in case of the presence of foreign banks with access to funding in foreign currency (Eradze, 2022). However, the introduction of controls on accumulation of loans denominated in

foreign currency might solve this problem (Basso et al., 2007). Restrictions or ban on the use of foreign currency can reduce dollarization, but this might have adverse effects, such as capital flight or dual exchange rate (Windischbauer, 2016). After reaching relative macroeconomic stability, the next step in lowering dollarization is development of local capital market as it provides a choice of public securities and other financial instruments denominated in a local currency that is an alternative to foreign currency assets (Reinhart et al., 2003; Zettelmeyer et al., 2010).

### **Discussion**

#### ***The dollar's international role***

The dollar with an unprecedented 46,56%-share in global payments remains the most used currency in international settlements, with the euro (23,25%) holding the second place according to the data from the monthly report tracking the market share of China's yuan within the international bank transfer system of the Society for Worldwide Interbank Financial Telecommunication (SWIFT, 2024). Despite China's largest foreign currency reserves in the world the yuan is ranked as the fourth most used currency with only 4% in global payments (SWIFT, 2024). The current surge in dollar-based SWIFT payments raises challenges to any attempt to end its dominance in global payments and fund transfers.

According to data of the Bank for International Settlements (2023) the role of the dollar in payments and other transaction is even more powerful – more than 80% of the global transactions is made in the dollars, because it is frequently used as a “vehicle” currency - currencies of different countries are exchanged in the foreign exchange markets not directly, but through the dollar (Waller, 2024). Moreover, the share of the dollar in foreign currency assets and liabilities of the global banking system has also remained strong at around 60% (Tombini, 2023). The dollar's attractiveness to private investors and businesses is especially important as a medium of exchange – its dominance is tracked in trade invoicing, global banking, international debt issuance, and foreign exchange transactions. The dollar also has a leading role as a unit of account as it remains the most popular “anchor currency” against which other countries try to limit their exchange rate volatility. As Waller (2024) states countries anchored to the dollar represent around 50% of the world gross domestic product (GDP).

The above mentioned proves, that the international movement against the dollar's global dominance, led by nations including China and Russia, has suffered a setback. The dollar continues to dominate by a large margin in the three main measures - a store of value, a medium of exchange, and a unit of account.

#### ***Dollarization in Uzbekistan***

According to the Central Bank of the Republic of Uzbekistan (CBU) (2023) the U.S. dollars account for 30.4% of deposits due to the asymmetry between the exchange rate depreciation and expectations in the economy, and the absence of alternative saving instruments in the domestic currency, while loan dollarization is 43.6% due to a strong preference for the private sector to borrow in the hard currency and absence of hedging instruments.

High dollarization of a country's economy is seen as one of the main problems that impede the ability to control inflation (Khoshimov, 2020; Vargas, 2023). In the particular case of Uzbekistan dollarization limits the effectiveness of monetary policy (CBU, 2023). The existence of the shadow economy that tends to rely on cash transactions denominated mainly in the U.S. dollars makes the situation with dollarization even more complicated.

Experts and analysts admit that the dollarization level of Uzbekistan's economy is considerably high, but the country's sovereign credit rating remains stable due to sufficient gold reserves (\$24.1 billion as of CBU report on March 1, 2024) to neutralize currency risks.

Among achievements of the local regulator is a gradual fall in the rate of financial dollarization owing to the increased required reserve ratio for foreign currency deposits (18%) and increased yield rate for deposits denominated in the local currency (CBU 2022).

Moreover, due to the regulations on banks' currency position, loans are currently granted primarily in the UZS, causing decrease in loan dollarization. Further reduction in loan dollarization is forecasted due to expensive external financial resources and restrictions on open foreign exchange positions (CBU, 2023).

Asset and liability dollarization of commercial banks in Uzbekistan are 49 and 51%, respectively (CBU, 2022). The gap between the two indicators is minor as the national regulator sets a limit on it to minimize systematic risks.

Although the national regulator is actively introducing various measures to curb the financial dollarization, unanchored inflation expectations and biases, distrust in the local currency cause a strong dollarization hysteresis and even psychological dependence on the dollars among the domestic residents.

What is not mentioned in official reports is that real dollarization partially takes place among households (informal payment dollarization happens, for example, on secondary housing and auto markets). As it is also explained by Gondo et al. (2020), although wages and salaries are set in the local currency, remittances/money transfers in dollars represent a source of income for many households with little incentives to convert them fully into the domestic currency. It became a ritual for people to hoard the U.S. dollars in cash and rely on informal borrowing as they feel safe with "the legal tender under their pillow" (Missaglia, 2021, p.4). This informal saving and borrowing also partially stems from negative mindset about local financial institutions and financial illiteracy, which the government tries to change with the support from the World Bank Group (Ahunov, 2018).

### **Conclusion and Recommendations**

The research results show that the reasons of dollarization in Uzbekistan are well-described in the previous studies on dollarization. De-dollarization measures implemented in the country also go in hand with recommendations in the main research literature. Uzbekistan economy is an example of informal partial dollarization. The main drivers of dollarization in Uzbekistan are unanchored inflation expectations and biases of domestic residents, the underdeveloped local capital markets, and the absence of alternative savings instruments.

In the special context of modern Uzbekistan with reforms in full swing, the recommendations are to continue further successful measures of the national regulator in reducing financial dollarization. The experience of other CIS countries proves that prudential regulations in the banking system, floating exchange rate, anchoring inflation expectations of domestic residents through generating confidence in Central Bank's monetary policy, reviewing interest rate policy in the financial market, prohibition on the use of foreign currency as a mean of payment or on setting prices in a foreign currency are effective in the de-dollarization process (Hobotova and Dolgonos, 2021). Some of the tools have been used by CBU, so the next step could be the provision of cheaper borrowing in the domestic currency through decreasing the interest rate, once the inflation-targeting goals are reached. The government should also focus on development of the

financial capital market in order to boost the influence of money market interest rates on asset pricing and offer domestic bonds with longer maturity, so that domestic residents have other alternatives for hedging their assets (Al Rasasi and Cabezon, 2022).

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## FACTORS AFFECTING THE PROFITABILITY PERFORMANCE OF UZBEKISTAN BANKING SYSTEM

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**Abstract.** Banks play the significant role in the economic development of any country, therefore, analyzing bank performance is more important. This study tried to evaluate the profitability performance of banks operating in Uzbekistan for the period of 2017 to 2024. This study uses Return on Assets (ROA) and Return on Equity (ROE) as the dependent variables to evaluate bank's performance. The independent variables, used in this research, are to be classified into two categories as bank-specific and macroeconomic determinants of bank profitability. Bank specific variables are Size of the bank, Liquidity, Asset Quality, Capital Adequacy and Credit Risk. Macroeconomic determinant is Inflation. Data analyzed with the help of descriptive statistics, correlation analysis and regression analysis. Overall, this study found that, some predictors show promising relationships with the dependent variable, further analysis and consideration of additional factors may be necessary to fully understand the model's explanatory power and robustness.

**Keywords:** Uzbekistan, banking, performance, economic.

### Introduction.

The banking system is crucial for facilitating financial intermediation, promoting economic growth, and ensuring financial stability in modern economies. Douglas, J. L. (2008) studied the banking system plays an important role in nation building. Therefore, performance of the banking system is crucial because it directly impacts economic stability, growth, and development by facilitating efficient allocation of capital, promoting financial inclusion. The performance of banking system dependent upon many factors such as bank related, industry related, economy related and related to many other specific events and incidents. Banking sector experienced lot of changes after 2015, in the form of revolution in the internet, smartphones, changes in the technology Act, increase in the online payment, development of alternative financing, Fintech etc. In this context, this article is to extend earlier work on the determinants of performance of Uzbekistan banks and examine the effect of bank-specific and macroeconomic determinants of bank profitability performance.

### REVIEW OF LITERATURE

Azlarova, A. (2023) investigated features of the development of the banking system of the republic of Uzbekistan and found that Uzbekistan banking system demonstrates stability and growth, supported by strategic measures aimed at liberalizing the economy and enhancing competitiveness since 2017. Positive trends include significant asset accumulation, substantial increases in loans granted, and favorable assessments by international rating agencies, reflecting a promising trajectory for the sector. Brahmaiah, B. (2018) studied the factors influencing profitability of banks in India by collecting samples from 89 banks operating in India for the period 2005 to 2015. Return on Assets (ROA) and the Return on Equity (ROE) as proxy for measurement of banks' profitability. San, O. T., & Heng, T. B. (2013) analyzed factors affecting the profitability



of Malaysian commercial banks and results shows that all bank-specific determinants affect bank profitability significantly in the anticipated way. However, no evidence is found in support of the macroeconomic variables have an impact on profitability. Clair, R. W. S. (2004) conducted a study on macroeconomic determinants of banking financial performance and resilience in Singapore using data since 1990. Ulashovich, B. Z., & Ilhomovich, S. E. (2022) investigated the performance of commercial banks in Uzbekistan during 2016 to 2020 and found that the performance (ROA) of commercial banks of Uzbekistan mainly effected by loans to deposit ratio and total loans to total assets ratio. There has been a numerous studies conducted in this field across various countries, but a limited number of research conducted in Uzbekistan, particularly in post-2017. Therefore, this study aims to investigate factors influencing performance of banking.

**DATA AND METHODOLOGY**

Descriptive quantitative research used in this study with secondary data analysis. The data collected from the official website The Central Bank of the Republic of Uzbekistan from 2017 to 2024 for 8 years. The most common variables used to measure the performance of banks are the profitability ratios. This study uses Return on Assets (ROA) and Return on Equity (ROE) as the dependent variables to evaluate bank’s performance.

**Table 1 - Variables Measurement Selected for the Model**

Category	Variables	Measures	Notation	Source Citation
Performance	Return on assets (ROA)	Net Profit/Total Assets	ROA	Gul, S., Irshad, F., & Zaman, K. (2011).
Performance	Return on equity (ROE)	Net Profit/Equity	ROE	Gul, S., Irshad, F., & Zaman, K. (2011).
Size	Assets (billion UZS)	Natural (Normal) Logarithm of Total Asset of the Bank	SIZE	Saeed, M. S. (2014).
Liquidity	High-Quality Liquid Assets (HQLA)	High Quality Liquid Assets (HQLA) / Total assets	HQLA	Ihrig, J. E., Vojtech, C. M., & Weinbach, G. C. (2019).
Asset Quality	Non-Performing Loan (NPL)	Non-Performing Loan/Total Loan	NPL	Akter, R., & Roy, J. K. (2017).
Capital Adequacy	Capital adequacy ratio	Capital/Risk-Weighted Assets	CAR	Hirindu Kawshala, K. (2017).
Credit Rist	Loan to Deposit Ratio	Loan/Deposit	LTD	Nugraha, N. M at al, (2021).
Inflation	Inflation	Inflation (Y-o-Y) (%)	INFL	Jaouad, E., & Lahsen, O. (2018).

Source: Cited in above table

The independent variables, used in this research, are to be classified into two categories as bank-specific and macroeconomic determinants of bank profitability. Bank specific variables are Size of the bank, Liquidity, Asset Quality, Capital Adequacy and Credit Risk. macroeconomic determinant is Inflation. Table 1 shows the category, variables selected for the study, measures to calculate variables, notation used in the analysis and sources of articles for the selection of variables.

**DATA ANALYSIS**

Data analysis involves summarizing the data sets with summary statistics, identifying the association between independent variables using correlation analysis, finally regression analysis used to model the relationship between the dependent and independent variables.

**Descriptive Statistics**

The data collected from the secondary sources was analyzed using Microsoft Excel. The data was analyzed using descriptive statistics including mean, median, standard deviation, minimum and maximum values which is presented in table 2. These variables provide insights into the financial performance, liquidity, risk management, inflation, GDP and other variables selected for the study. Analyzing and understanding these variables can help researchers and policymakers identify the current state and trends. Overall, this table serves as a valuable resource for understanding the statistical distribution and characteristics of the variables under consideration.

The average Return on Assets (ROA) is 2.08%, with a median of 2.1% and a standard deviation of 0.40%, indicating relatively stable performance across the years. The Return on Equity (ROE) with a means value of 13.98%, with a median of 15.2% and a standard deviation of 4.03%, suggesting that there is variability in ROE across the dataset. The range between the minimum (6.1%) and maximum (17.95%) values indicates a considerable spread in ROE, reflecting diverse levels of profitability among the banks.

**Table 2 – Summary Statistics of Dependent and Independent Variables**

Variables	Mean	Median	SD	Minimum	Maximum
Return on assets (ROA) (%)	2.08	2.1	0.40	1.3	2.6
Return on equity (ROE) (%)	13.98	15.2	4.03	6.1	17.95
Assets (billion UZS)	344725	319424	197043.58	84075	652157
High-Quality Liquid Assets (HQLA) (%)	16.46	16.3	4.85	9.4	22.7
Loan to Deposit Ratio (%)	2.03	2.02	0.34	1.41	2.41
Capital adequacy ratio (%)	17.97	17.65	2.62	14.7	23.5
Non-Performing Loan (NPL)	2.52	1.95	1.43	1.2	5.2
Inflation (Y-o-Y) (%)	12.4	11.9	3.64	8.6	20.1

*Source: Authors calculation using MS Excel*

The total assets displayed an average of 344725 billion Uzbekistan som (UZS), with a median of 319424 billion UZS and a standard deviation of 197043.58 billion UZS, indicating significant variability in asset sizes among the entities. The range between the minimum (84075 billion UZS) and maximum (652157 billion UZS) values shows the wide range of asset scales, suggesting diverse scales of operation within the dataset.

The analysis of High-Quality Liquid Assets (HQLA) reveals an average percentage of 16.46%, with a median of 16.3% and a standard deviation of 4.85%, indicating a moderate level

of variability in liquidity management among the banks. The loan to deposit ratio shows a mean ratio of 2.03%, with a median of 2.02% and a standard deviation of 0.34%, suggesting relatively consistent lending practices across the selected years. The capital adequacy ratio demonstrates an average ratio of 17.97%, with a median of 17.65% and a standard deviation of 2.62%, indicating healthy capitalization among the banks across the selected years. The non-performing loan ratio exhibits an average ratio of 2.52%, with a median of 1.95% and a standard deviation of 1.43%, suggesting varying levels of credit risk within the dataset, with some entities experiencing higher proportions of non-performing loans. Finally, the analysis of inflation (Y-o-Y) indicates an average yearly inflation rate of 12.4%, with a median of 11.9% and a standard deviation of 3.64%, suggesting moderate variability in inflationary pressures over the observed period.

After presenting summary statistics, correlation matrix was provided to understand strength of the association between the independent and dependent variables. When two or more variables in a multiple regression model have a strong linear relationship, multicollinearity is said to exist.

**Correlation Matrix**

A correlation matrix is a square matrix showing the correlation coefficients between variables. Correlation matrices is used to find situations where two or more variables are highly correlated with each other. This situation is called multicollinearity.

**Table 3 – Correlation Matrix between Independent Variables**

	CAR	SIZE	HQLA	LTD	NPL	INFL
CAR	1					
SIZE	0.27	1				
HQLA	-0.30	-0.32	1			
LTD	0.45	0.38	-0.85	1		
NPL	-0.01	0.76	0.03	0.03	1	
INFL	0.41	-0.32	0.18	0.12	-0.50	1

Source: Authors calculation using MS Excel

According to Tabachick and Fidell (2007) occurs multicollinearity, when the correlation between the explanatory factors is more than 0.90. The six independent variables were tested for multicollinearity. The correlation matrix table shows there is no multicollinearity among the selected dependent variables since the correlation is ranging from 0.76 to -0.85.

**Multivariate Linear Regression**

A multivariate linear regression model was used in the study to examine how the selected factors affected banks' performance. The study model is as follows:

Model I –  $ROA = \beta_0 + \beta_1CAR + \beta_2SIZE + \beta_3HQLA + \beta_4LTD + \beta_5NPL + \beta_6INFL$

Model II -  $ROE = \beta_0 + \beta_1CAR + \beta_2SIZE + \beta_3HQLA + \beta_4LTD + \beta_5NPL + \beta_6INFL$

Model I presented in table 4 below with ROA as dependent variable. The R squared value of 0.9881 suggests a strong positive correlation between the predictors and the dependent variable, indicating that the model explains approximately 98.81% of the variability in the dependent variable. The adjusted R-squared value of 0.9171 indicates that approximately 91.71% of the variance in the dependent variable is explained by the independent variables included in the model, adjusting for the number of predictors.

**Table 4 - Regression Statistics – ROA Dependent Variable**

**Regression Statistics**

Multiple R	0.9941
R Square	0.9882
Adjusted R Square	0.9171
Standard Error	0.1163
Observations	8

Predictors	Standard		t Stat	P-value
	Coefficients	Error		
Intercept	-6.4207	1.6766	-3.8295	0.1626
CAR	0.0146	0.0219	0.6664	0.6258
SIZE	2.2359	0.2917	7.6652	0.0826*
HQLA	-0.0247	0.0250	-0.9890	0.5035
LTD	-1.0343	0.3338	-3.0984	0.1987
NPL	-0.4365	0.0658	-6.6331	0.0953*
INFL	-0.0291	0.0221	-1.3146	0.4140

Source: Authors calculation using MS Excel

In this regression analysis, the coefficients term indicates the expected value of the dependent variable when all predictor variables are zero. Among the predictor variables, Size of the bank (SIZE) stands out with a coefficient of 2.2359 suggesting that larger entities tend to have higher profit in terms of ROA, though its p-value of 0.0826 suggests marginal statistical significance (at 10%). On the other hand, Non-Performing Loan (NPL) demonstrates a negative coefficient of -0.4365 with a significant p-value of 0.0953, implies that higher levels of non-performing loans are creating lower values of the profit as expected.

Both Capital Adequacy Ratio (CAR) and High-Quality Liquid Assets (HQLA) show relatively small coefficients and high p-values, indicating that the relationships between these variables and the dependent variable (ROA) may not be statistically significant in this model. Loan to Deposit Ratio (LTD) shows a negative coefficient of -1.0343, suggesting that an increase in the loan to deposit ratio is associated to a negative change in the ROA but not statistically significant. There is a negative relation between credit risk and performance of the bank. Inflation (INFL) demonstrates a negative coefficient of -0.0291. This suggests that an increase in inflation is associated with a negative change in the performance. However, the p-value of 0.4140 suggests that the relationship between inflation and the dependent variable may not be statistically significant in this model.

Model II presented in table 5 below with ROE as dependent variable. The R-squared value of 0.9966 indicates that approximately 99.66% of the variance in the dependent variable is explained by the independent variables, demonstrating an exceptional level of explanatory power. Additionally, the adjusted R-squared value of 0.9759 suggests that approximately 97.59% of the variance in this model.

**Table 5 - Regression Statistics – ROE Dependent Variable**

<i>Regression Statistics</i>	
Multiple R	0.9983
R Square	0.9966
Adjusted R Square	0.9759

Standard Error	0.6272
Observations	8

Predictors	Coefficients	Standard Error	t Stat	P-value
Intercept	44.8485	9.0445	4.9587	0.1267
CAR	0.0911	0.1183	0.7696	0.5824
SIZE	2.6328	1.5735	1.6732	0.3429
HQLA	-0.9433	0.1347	-7.0017	0.0903*
LTD	-16.6033	1.8007	-9.2205	0.0688*
NPL	-1.7913	0.3550	-5.0462	0.1245
INFL	0.5545	0.1192	4.6497	0.1349

Source: Authors calculation using MS Excel

Capital Adequacy Ratio (CAR) coefficient of 0.0911 suggests that an increase in the capital adequacy ratio is create a positive change in the ROE, but the result is not statistically significant with a higher p-value of 0.5824. Size of the bank (SIZE) with a coefficient of 2.6328, larger banks tend to have higher values of the ROE, but the result is not statistically significant as the p-value is 0.3429.

The ratio of HQLA to total assets with a coefficient of -0.9433 indicates that an increase in the ratio leads to a negative change in the ROE, the result is statistically significant at 10% (p-value = 0.0903). Loan to deposit ratio (Credit Risk) with a coefficient of -16.6033 suggests that an increase in the loan to deposit ratio is leads to substantial negative change in the dependent variable-ROE and the result is significant at 10% as the p-value is 0.0688. Non-Performing Loan (NPL) shows a negative association with ROE and which is not statistically significant (p-value = 0.1245). On the contrary, Inflation (INFL) the coefficient is positive of 0.5545 which shows positively related with changes in ROE but the p-value is 0.1349 resulted in not statistically significant. The result from Model I and Moel II significantly matches with the finding published by Durguti, E. A., Krasniqi, E. H., & Krasniqi, D. (2020), Al-Abedallat, A. Z. (2017, Dawood, U. (2014), Bojare, K., & Romanova, I. (2017), Shanko, T., Timbula, M. A., & Mengesha, T. (2019), Abate, T. W., & Mesfin, E. A. (2019), and Lohano, K., & Kashif, M. (2019).

**CONCLUSION**

This study aims to examine the main factors that can affect Uzbekistan banks performance during the period 2017 -2024. This study used two model (Return on Asset and Return on Equity) to analyses the data. The data analysis shows a mixed result. Overall, while some predictors show promising relationships with the dependent variable, further analysis and consideration of additional factors may be necessary to fully understand the model's explanatory power and robustness. The findings of this study regarding the determinants of banks' profitability performance would be useful to policymakers, researchers, investors etc. Based on the findings of this study, the policymakers can design short-term, as well as long-term strategies for improving the performance of the banks. The future studies could be benefited with use of more dependent variables and time frame. Regarding the independent variables, more variables could be incorporated to explain bank performance such as credit risk, service quality, productivity, efficiency and customer satisfaction.

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# CUSTOMER PERCEPTION TOWARDS THE ADOPTION OF SELF-SERVICE CHECKOUT SYSTEM IN THE CONTEXT OF “KORZINKA” UZBEK GROCERY RETAIL CHAINS

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**Abstract.** *This article investigates the consumers' perceptions about the adoption of the recently launched self-service checkout system in the “Korzinka” supermarket retail chains in Uzbekistan. The UTAUT model's key constructs are employed as the major framework to explain the adoption of various technologically-related behaviors. The antecedents included are performance expectancy, effort expectancy, social influence, and facilitating conditions.*

*This study is among the first that examines the aspects that affect customer perception about the adoption of self-service checkout system in the Uzbek retail market. The results of this research may assist retail businesses in general to better understand how customers perceive the aforementioned system and make informed decisions about implementing as well as optimizing this technology.*

**Keywords:** *self-service checkout system, unified theory of acceptance and use of technology, behavioral intention, performance expectancy, effort expectancy, social influence, facilitating conditions.*

## Introduction.

The rapid advancement of technology, along with the communication methods, have had a substantial influence on the dynamics of consumer-retailer relationships. In order to enhance cost-efficiency, value, maintain competitiveness in global markets, and customer satisfaction, retailers are increasingly implementing a range of self-service technologies (SST). The current phenomenon has been driven by recent technological innovations that are drastically changing the future course of the retail sector (Williams, 2019), facilitating the seamless integration of physical and digital sales channels (Rigby, 2011). Self-service checkout systems (SCS) are a type of innovation that has gained significant popularity in numerous industrialized countries.

It is critical to mention that grocery retail chains in developing countries, such as Uzbekistan, encounter a deficiency in the implementation of SCSs and a comparatively lower rate of customer usage in contrast to developed countries (Sharma, et al., 2017). This finding further supports the existing body of research that has been undertaken in several developing countries, with a specific focus on Uzbekistan. Obviously, there is a lack of understanding on the main factors that influence the acceptability and adoption of SCS in countries with rising economies. Korzinka, a grocery retail chain in Uzbekistan, has recently put the aforementioned technology into practice among its several large branches to enjoy the benefits of SCS, but facing the task of efficiently promoting this system. Thus, the current study aims to examine the moderating effects of the SCSs on consumers' perceptions and to address the principal elements that affect users to consider the system.



**THEORETICAL BACKGROUND**

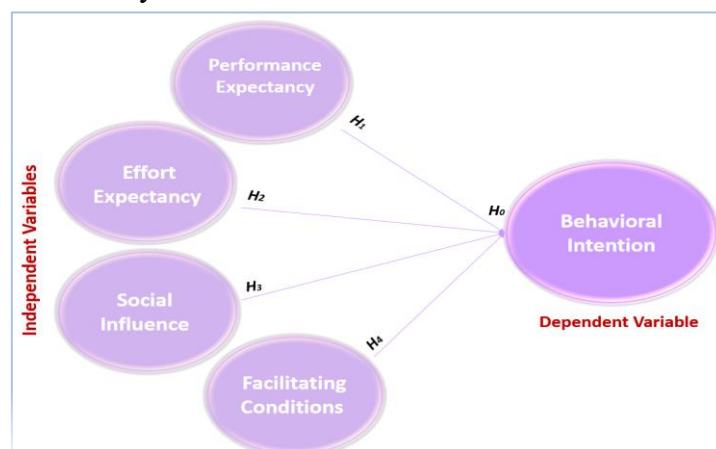
**Customer Perception**

Consumer perceptions can be seen as the cognitive process by which individuals actively seek and evaluate information related to market conditions, with the aim of developing an understanding of the market and its offerings (Sahaf, 2019). Consumers actively form and modify their perceptions of various alternative products and services, which then influence their attitudes and preferences towards those things. According to Schiffman and Kanuk (2019), the influence of perceptions on consumer decision-making is emphasized over factual information, hence highlighting the significance of perceptions for marketers. Marketers have recognized that the likelihood of consumers purchasing products and services is significantly higher when they possess distinct and favorable perceptions, as opposed to those with ambiguous or unfavorable images. Consequently, marketers have realized the importance of comprehending the consumer's perceptual process in order to develop more effective strategies for fostering favorable perceptions of their offerings.

**Unified Theory of Acceptance and Use of Technology (UTAUT) and the study Conceptual Framework**

The UTAUT model suggests that performance expectancy, effort expectancy, social influence, and facilitating conditions related to the technology can predict an individual's attitude to adopt and use new technologies (Yogesh K. Dwivedi, 2017). Performance expectancy, linked to the construct of perceived usefulness in the TAM, is an individual's perception of how a technology will enhance their job or task execution (Venkatesh, et al., 2012). This concept pertains to the relationship between the perceived utility, efficiency, and productivity enhancements that customers feel when utilizing new technological advancements. Chiu and Wang (2008) found that users are more likely to adopt a new information system if they perceive it as user-friendly and requiring less time and effort for learning.

Extensive study in several academic disciplines shows that the degree of performance expectancy is a key factor in influencing an individual's decision to adopt a certain technology and subsequently use it in practical ways. The study done by Lee and Lyu (2019) revealed that people who see positive advantages from using SCSs are more likely to perceive a higher level of service quality and consider it as less risky.



**Figure 1: Conceptual Framework - Behavioral Intention and Its Antecedents**

The hypotheses and their explanations are presented in the paragraphs to follow.

**H<sub>1</sub>:** Performance expectancy is positively and significantly related to consumers' intention to use SCS.

Effort expectancy is one more component of the UTAUT model, which evaluates a user's perception of the level of easiness associated with using information technology. This construct has similarities to the term of perceived ease of use within the TAM framework. The availability of technology in an easy-to-use way acts as an encouragement for shoppers, resulting in an increased probability of employing and integrating the technology into their practices (Alam, et al., 2018). Effort expectancy and the intention to employ a technology are positively correlated. Venkatesh et al. (2003) believe that the early adoption of technology is highly influenced by the perception of effort expectancy. However, this impact tends to diminish over time. This implies that the perceived level of effort required to utilize a technology may significantly impact the intention to embrace it during the initial stages of its introduction. However, the impact of technological adoption diminishes with time as people get more acquainted and accustomed to using the technology. Given the current emphasis on the first stage in research related to the adoption of technology, it is very likely that there exist causal connections between people's perceived ease of use and their intention to engage in certain activities.

**H<sub>2</sub>:** Effort expectancy is positively and significantly related to consumers' intention to use SCS.

The term of social influence refers to the degree to which an individual perceives that significant individuals in their life encourage the adoption of a new information system. The concept has similarities to subjective standards as proposed in the theory of rational conduct (Venkatesh, et al., 2012). Lee et al. (2019) argue that individuals are more likely to be sensitive to the influence and persuasion of their close relationships when they recognize the need of adopting new technologies. Social influence has been shown to substantially enhance behavioral intention in critical conditions but its impact is rather limited in voluntary situations (Venkatesh, et al., 2003).

**H<sub>3</sub>:** Social influence is positively and significantly related to consumers' intention to use SCS.

Facilitating conditions refers to a consumer's perceptions of the availability of necessary resources and support to participate in a certain activity (Venkatesh, et al., 2003). This phenomenon indicates the degree to which customers view themselves as having agency over their own behaviors. Positive facilitating conditions include the allocation of sufficient support and resources, which enable an individual to efficiently accomplish a task, free of any obstacles. Prior research has highlighted supportive factors that are essential for the adoption of SCSs, providing support for the aforementioned proposition (Gallivan, et al., 2005). Based on the research done by Palau-Saumell et al. (2019), the presence of facilitating conditions has a remarkable influence in inspiring consumers to adopt sustainable consumption patterns in the setting of grocery retail chains.

**H<sub>4</sub>:** Facilitating conditions are positively and significantly related to consumers' intention to use SCS.

The existing literature indicates a positive correlation between the UTAUT model and customers' behavioral intention to use SCSs in the retail sector. The adoption of SST is strongly associated with each component. Additionally, the UTAUT model has been suggested as a comprehensive framework for understanding the factors that influence the adoption of SCS technology in grocery retail chains, specifically from the perspective of consumers.

**METHODOLOGY**

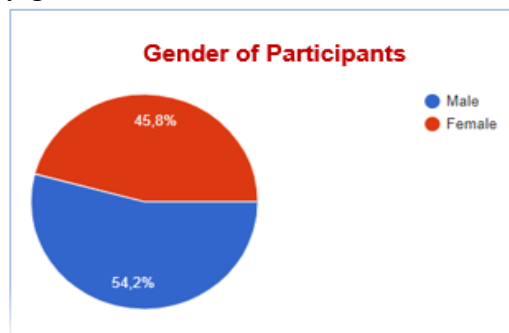
This study used a quantitative descriptive research approach to investigate consumers' behavioral intentions about the adoption of SCSs. The participants of the survey were selected according to their possession of a certain level of expertise, hence requiring a random selection process for participation. The research used convenience sampling, a non-probability sampling approach, to choose participants from the target population. The study's target population included individuals who have used the SCSs at Korzinka supermarkets. This study used a close-ended questionnaire includes a Likert Scale to gather data by providing statements. In this research, participants were asked to evaluate their attitude towards the statement using a 5-point Likert-type scale.

The study utilized quantitative data analysis techniques for data analysis purposes. Prior doing the data analysis, the questionnaires collected from the field were exported from Google Forms and uploaded in the Microsoft Excel xlsx format. The Excel file was thereafter imported into the SPSS software. The data underwent analysis utilizing inferential statistical techniques, such as Pearson's correlation analysis and multiple regression analysis. Correlation analysis was used to investigate the relationship between performance expectancy, effort expectancy, social influence, facilitating conditions and behavioral intention towards the adoption of SCS within the context of grocery retail, with the specific aim of determining if a positive or negative relationship existed. The dissemination of the ultimate processed information involved the utilization of pie charts, tables, and other illustrative modes of display.

All individuals involved in this study were adequately informed of the research's objectives, and their voluntary agreement was obtained prior to the distribution of the questionnaire.

**PRESENTATION OF RESEARCH FINDINGS**

The ratio among the male and female (Figure 2) is not too far away from one another according to the data. Even though the male participants had a slight edge with 54.2% over opposite gender counterparts who were accounted for the rest 45.8%. This indicates that the results of this study were not affected by gender bias.



*Figure 2: Gender of Participants*

The findings demonstrate that most of participants are aged between 25-34 years (45.8%), while younger generation consumers, age range between 18-24, make up the second largest with 20.8%. The participants, whose ages range from 35 to 44 years and above, have shown a similar percentage which is less than 17%. In general, the data indicates that the participants represent diverse age groups and fairly involved in this project.

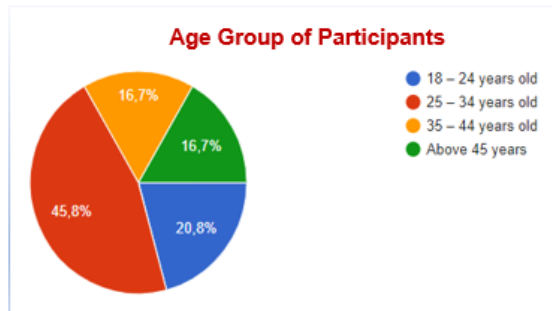


Figure 3: Age Group of Participants

The data implies that a large chunk of the respondents who participated in the survey have higher education. For example, people with postgraduate or higher degrees make up 54.2% and 4.2%, respectively, while 29.2% of the respondents are undergraduates. However, there are still a small number of participants 12.5% who do not have education degree.

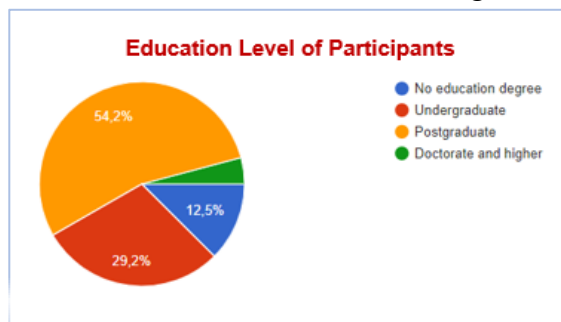


Figure 4: Education Level of Participants

The next chart gives information in terms of the occupation status of the participants. It shows that the employed or already retired but still working draw up almost a two third of respondents, while 37.5% of them are students with some sort of part time jobs. However, none of respondents are unemployed.

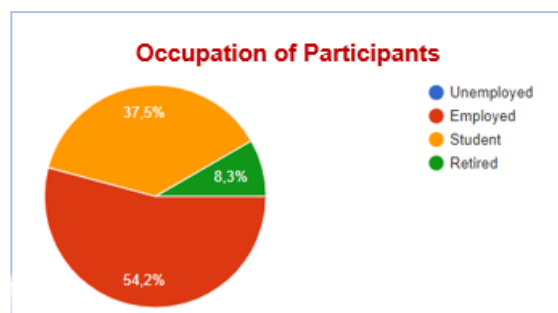


Figure 5: Occupation of Participants

Correlations

Correlations		PEXP	EEXP	SINFL U	FACILATO RS
PEXP	Pearson Correlation	1	.996**	.991**	.987**
	Sig. (2-tailed)		.000	.000	.000
	N	240	240	240	240

EEXP	Pearson Correlation	.996**	1	.987**	.982**
	Sig. (2-tailed)	.000		.000	.000
	N	240	240	240	240
SINFLU	Pearson Correlation	.991**	.987**	1	.961**
	Sig. (2-tailed)	.000	.000		.000
	N	240	240	240	240
FACILATORS	Pearson Correlation	.987**	.982**	.961**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	240	240	240	240

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 1: Correlations**

The antecedents of performance expectancy, effort expectancy, social influence and facilitating conditions are highly, positively and significantly correlated with each other. The significance value=.000 clearly confirms that there are high and significant correlations between the variables.

**Regression Analysis**

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.963 <sup>a</sup>	.927	.926	.176	

a. Predictors: (Constant), FACILATORS, SINFLU, PEXP, EEXP

**Table 2: Model Summary**

The coefficient of determination,  $R^2$ , in Table 2 is .927. What this indicates is that the four antecedents for independent variables, as a group, explain 92.7% of the variability in behavioral intention of the customers.

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	91.655	4	22.914	743.627	.000 <sup>b</sup>
	Residual	7.241	235	.031		
	Total	98.896	239			

a. Dependent Variable: BI  
b. Predictors: (Constant), FACILATORS, SINFLU, PEXP, EEXP

**Table 3: ANOVA**

In Table 3, the significance value is .000, that is, much less than 0.05. This confirms that the coefficient of determination, that is,  $R^2$  of .927 almost certainly did not happen by chance showing the high validity of the regression model.

Coefficients <sup>a</sup>
---------------------------

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.226	.071		3.185	.002
	PEXP	.256	.088	.261	2.899	.004
	EEXP	.334	.099	.339	3.382	.001
	SINFLU	.172	.080	.174	2.154	.032
	FACILATORS	.191	.079	.199	2.407	.017

a. Dependent Variable: BI

**Table 4: Regression Coefficients**

The behavioral intention antecedents of performance expectancy, effort expectancy, social influence and facilitating conditions have statistically significant effects on the behavioral intention of the customers because their respective p-values are all lower than alpha value of .05. For these four dimensions the study can reject the null hypothesis and claim that the study hypotheses are supported. The coefficients of these four variables are also positive. This for performance expectancy, for instance, means that a 1 unit increase in the expectancy with regards to performance will result in a 25.6% improvement in behavioral intention of the customers. Likewise, a 1 unit improvement in the facilitating conditions will lead to a 19.1% increase in the intention of the customers to use SCS.

**DISCUSSION OF FINDINGS**

The results of this study examine several connections and provide evidence for these relationships, as identified by a comprehensive examination of the existing literature. Within this particular context, the section emphasizes on the testing of hypotheses that relate to a possible association between the constructs of the UTAUT model and the adoption of a SCS by consumers.

**H1:** Performance expectancy is positively related to consumers’ intention to use SCS.

In this study, the findings accept the commentary of that performance expectancy has a positive relation to consumer’s intention to adopt self-service checkout technology that confirmed by (Chiu & Wang, 2008) and (Lee, et al., 2019). This finding suggests that consumers perceive advantages in using SCS will influence their desire to try it (Weijters, et al., 2007). Therefore, customers with favorable performance expectancy aim to implement newly launched self-service checkout system in Korzinka’s supermarkets.

The study shows that a majority of participants (54.2%) had postgraduate degrees, and for them, SCSs seemed to be simple. Meuter et al. (2005) support this finding with their research findings that higher education is associated with the perception of SCS as being more understandable and pleasurable.

**H2:** Effort expectancy is positively related to consumers’ intention to use SCS.

This hypothesis, according to Alam, et al. (2018) and (Venkatesh, et al. (2003), that effort expectancy from SCS experience will have a positive relationship with customers' intention to use it. Thus, if shoppers accurately understand the system, they are likely to believe that SCS is easy to use. The hypothesis was confirmed as most of the survey participants (45.8%) were almost

young adults in the age group (25-34 years) and male respondents for whom self-monitoring can be quick and easy to use. It is in well agreement with Weithers' et al. (2007) argument that men are more likely to adopt SCS, as they tend to focus on the benefits of using the technology.

Today grocery consumers prioritize efficiency and convenience while visiting retail outlets because they demand a seamless and easy checkout experience. Furthermore, the rise of e-commerce is intensifying the rivalry faced by traditional grocery shops. Consequently, technologies like as SCS may assist grocers in simulating the ease and advantages of online buying while enhancing the in-store checkout experience.

**H<sub>3</sub>:** Social influence is positively related to consumers' intention to use SCS.

The result of the hypothesis reveals a significant relationship between social influence and intention to use SCS. Thus, the findings are consistent with previous studies which confirm that social influence promotes the use of SCS in retail stores (Venkatesh, et al., 2003), (Venkatesh, et al., 2012) and (Lee & Lyu, 2016).

Social influence is important here as the shoppers do value whether other people in their lives believe that they should use the new system. Hence, in the study findings social influence acts as a direct determinant of behavioral intention.

**H<sub>4</sub>:** Facilitating conditions are positively related to consumers' intention to use SCS.

In this study, the findings support the commentary of Venkatesh, et al. (2003), (2012) and Palau-Saumell, et al. (2019) that facilitating conditions are essential factor to encourage people to adopt SCS in retail sector.

The participants believe that there is a significant influence of an organizational and technical infrastructure on the use of the system. Hence, perceived behavioral control, facilitating conditions, and compatibility are vital considerations.

## **CONCLUSION**

This study indicates that the behavioral intention antecedents of performance expectancy, effort expectancy, social influence and facilitating conditions are highly, positively and significantly correlated as well as have statistically significant effects on the behavioral intention. These findings are consistent with the findings of Venkatesh et al. (2003). Although in their study, the effects of performance expectancy, effort expectancy and social influence on behavioral intention are moderated by gender, age, experience etc., the current study has found direct effects of these variables on the intention to use SCS. Both studies do not use moderators with regards to the facilitating conditions and both studies reveal significant influence of the facilitating conditions on behavioral intention.

## **RECOMMENDATION**

Based on the research findings, the following recommendations are worth stating:

Firstly, it suggests that Korzinka should make SCSs that are user-friendly, reliable, accurate, and efficient for daily utilization. Furthermore, the checkout process, SCSs should assist shoppers in efficiently scanning all items with barcodes, as well as those that require weighing and bakery products.

Secondly, Korzinka should implement training programs for its personnel and establish frequent communication channels to assess consumer perception towards using SCS, hence improving their effort expectation. Furthermore, Korzinka has to make SCSs more convenient by offering customers multiple choice in terms of payments, besides debit and credit cards.

Thirdly, Korzinka should provide immediate assistance to shoppers using SCSs in case of errors or safety concerns. Korzinka should also integrate alarm systems into their self-checkout interface when it becomes necessary to open more tills. The presence of a greater number of SCSs compared to traditional cashier tills may incentivize customers to engage in more purchases and quicker shopping visits.

Lastly, Korzinka should implement digital displays inside stores to showcase real customer videos, effectively demonstrating the straightforward nature of the SCS. Using these screens to execute marketing campaigns that portray SCSs as enjoyable experience for consumers.

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## INVESTMENT POLICY IN UZBEKISTAN, ITS ROLE AND PECULIARITIES IN REGULATING EMPLOYMENT OF THE POPULATION

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**Abstract.** *Currently, investment policy and its impact on the living standards of the population are receiving significant attention as the main factor for sustainable economic development at both macro and micro levels in our country. The investment policy pursued by the state provides for the creation of real opportunities and conditions for investment, promotes effective participation of the state in the investment market and makes an important contribution to ensuring employment of the population. In view of this, the state exerts a huge influence on investment activities in society and purposefully creates funds for the implementation of an appropriate investment policy in order to create a favorable investment climate in a dynamically developing economic environment.*

**Keywords:** *Investment policy, investment activity, budget, investment, resources, strategy, depreciation, efficiency, investment circumstance.*

### **Introduction.**

Today, income and investment are one of the very important factors for the sustainable development of the economy and employment of the population, which is considered its most important social problem. The main reason for this is that they determine the course of the most basic economic processes taking place at the level of the economy of any country in one or another norm and its sectoral and regional segments, as well as individual economic entities. From the experience of economic processes taking place in the world at present, we know that investment manifests itself as one of the main driving tools of the economy, affecting the level of social production and employment, structural changes in the economy and the development of industries and sectors of the national economy. If we look at this in a single industry, then the growth of its investments in the industry will primarily lead to increased labor productivity, the renewal of production capacities, the full use of existing ones and the creation of new jobs. For this reason, the size and availability of the included investment resources is considered their rational use, a long-term factor in the development of the national economy.

Even taking into account the above, the state determines its investment policy, the country's position in relation to its investment activities, which is an integral part of socio-economic policy. At the same time, the main goals of the state in investment policy, trends in economic development and forms of state management of investment activities in the country are determined. This will solve the problem of employment of labor resources, which is growing due to the creation of new jobs.

**Analysis of literature regarding the topic:**

In the current period, investment in the national economy is the theoretical and practical issues of the implementation and formation of effective management of policy and, on this basis, the provision of employment of the population from foreign scientists U.Sharp, G.Alexander, Dj.Bailey [1], from scientists from the CIS countries, P.L.Vilensky, V.N.Livshis, S.A.Smolyak [2], V.T.Zolotogorov's [3], Dj.M.Keynes [4] is reflected in his scientific works prepared on the basis of his scientific research.

This is shown in detail in the scientific works of economists Abdurakhmanov K.H. [5], D.G. Gozibekov [6], A.T. Uzokov and Sh. Ergasheva [7], who conducted scientific research on the implementation of investment policy and employment in Uzbekistan.

The contribution of foreign and Uzbek scientists, whose names are given above, in this area serves as an important basis for drawing scientific conclusions. At the same time, investments in the economy were studied by them in accordance with the periods of formation and development of market relations in the Republic of Uzbekistan on issues of policy implementation, employment of the population, and It cannot disclose the issues of implementation and management of investment policy of the present time, characteristic of the current era of reforms in the field of employment.

**Research methodology.**

The results of our scientific research, comparative analysis and comparison of factors affecting the volume of investments and investment processes attracted by enterprises operating in economic sectors, a systematic analysis of employment problems, the use of methods.

**Analysis and results:**

The definition of the state's investment policy is given in various interpretations in the scientific and economic literature and legislation. The law of the Republic of Uzbekistan "On Investments and Investment activities" states this as follows: "Investment policy is a set of interrelated measures aimed at ensuring the necessary level and structure of investments in the economy of the Republic of Uzbekistan and its individual sectors, searching for investment sources of investment activity and determining priority sectors for their use" [6]. This can be understood as a set of targeted measures implemented by the state to create favorable conditions for all business entities in order to revive investment activity in our country, boost the economy, increase production efficiency and involve them in public life.

Thus, the investment policy of the state is a set of measures implemented by the state to manage investment activities in order to create optimal conditions for strengthening the investment process.

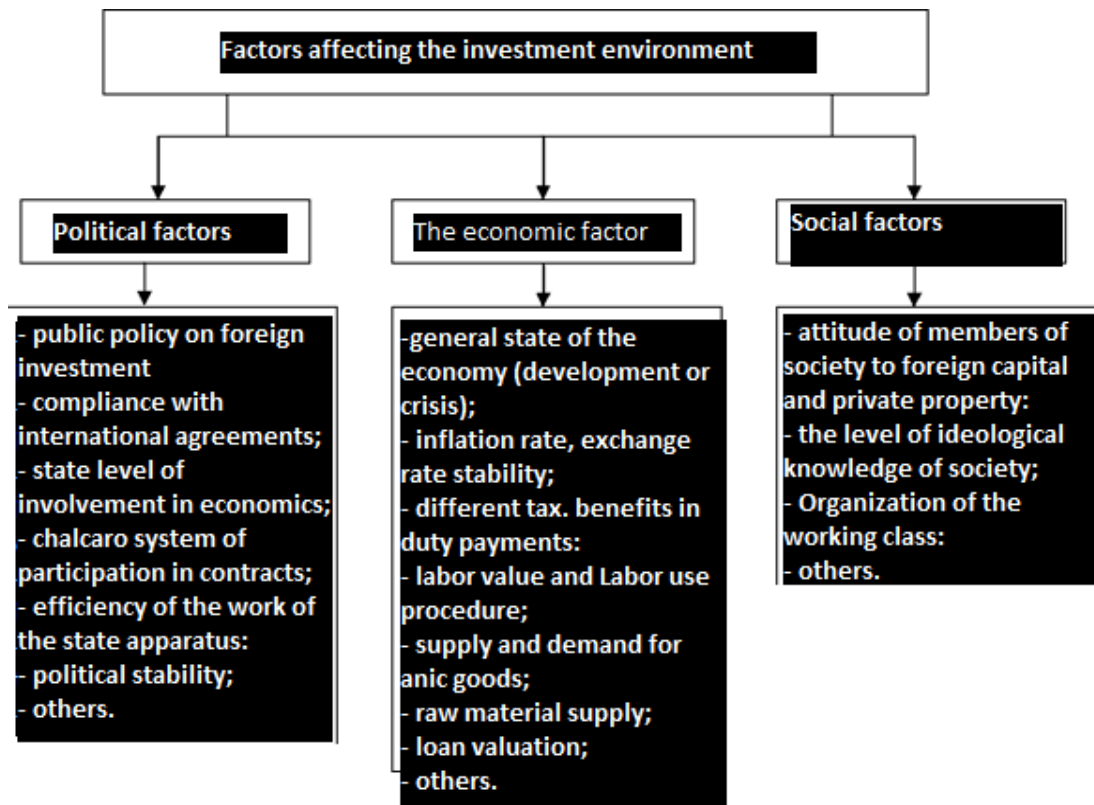
The main objectives of the state investment policy are: mobilization of financial resources necessary for investment activities, elimination of deterioration of investment activities, implementation of state-oriented construction programs, ensuring structural changes and increasing the efficiency of capital investments, as well as significant improvement of the social life of their society.

The following are identified as the main objectives of the country's investment policy:

- 1) support (encouragement) of some predominantly leading sectors of the economy;
- 2) ensuring balanced development of economic sectors and producers of export products;
- 3) achieving the competitiveness of domestic manufacturers' products;

- 4) implementation of social and environmental programs (health promotion, education, housing and communal services and environmental protection);
- 5) ensuring and regulating the employment of the population, calculated based on the most pressing problems of today's kunn;
- 6) ensuring the defense and security of the state.

At one time, the country's investment policy assumed the creation of an equally favorable investment environment for projects financed by both the state and private investors at their own expense. In order to determine the convenience of the investment environment, it will be necessary to enrich the investment climate. The investor determines what the level of investment risk is in the process of evaluating the investment environment. The better the equity investment, the higher the attractiveness and wider the penetration of investments, otherwise, the higher the investor's risk in doing business in the UK, the lower the investment flow. The factors affecting investment autonomy at the macro level are described in the following Figure 1.



**Figure 2.2. Investment factors determining the environment [5].**

At the macro level, the investment environment can be considered as a set of economic, social, and political conditions aimed at ensuring the effectiveness and safety of investments in the country where investments are made. Based on this, the factors affecting the investment environment are also divided into social, economic and sociological factors.

Political factors affecting the investment environment may include:

- State policy on foreign investments;
- compliance with international agreements;
- the level of government intervention in the economy;
- the system of participation in international treaties;

- efficiency of the state apparatus; - political stability, etc.

This will give you a taste for political factors and foreign investment. In addition, there are also economic factors that strongly influence the investment environment, and in stable developing countries their impact will not be strong.

The address of the President of the Republic of Uzbekistan to the Supreme Assembly also pays special attention to the tasks of accelerating the privatization and transformation of state-owned companies in the implementation of structural changes in the economy. In particular, the appeal mentioned that joint-stock companies Navoi Mining and Metallurgical Combine, Uzbekneftegaz, Uzbekhydroenergo, Uzavtosanoat will be able to enter the international financial market and receive funds without state guarantees this year. [7] The result of this, firstly, is the penetration of investments without government guarantees, and secondly, it makes it possible to direct public funds to other sectors of the economy. This requires the creation of its own legal framework for conducting investment policy in the country. Legal instruments guarantee the implementation of administrative and economic means of state influence.

This includes: developing forms of cooperation projects between the state and companies based on joint financing of projects related to strengthening a specific target component of government regulation, supporting infrastructure and strengthening the competitive position of the corporate sector in the economy. Provision of capital transfers for the socio-economic development of regions on a capital basis.

### **Conclusions and suggestions**

The results of scientific research show that investment policy is the main direction of state regulation and should be calculated based on the following:

1. Determining priorities for financing investment activities, taking into account the influence of internal and external factors in the country;
2. Prioritizing investments in this direction in order to expand existing institutions and their technical re-equipment, in other words, shifting the main goal from new construction to technical re-equipment and institutional reconstruction;
3. Budget subsidies to strategically important projects in important sectors of the national economy for investment activities;
4. The expansion of the rights of institutions and investors in investing funds withheld from the profits of enterprises, and the official registration of depreciation charges;
5. Reducing the number of investment projects financed from the state budget and increasing the number of private investment projects financed directly.

It is possible to ensure the intensive and dynamic growth of the country's economy through the implementation of an effective and suitable state investment policy for a market system, the formation of a state investment policy and its scientific implementation, the development of modern management styles in this area and compliance with its principles.

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## ANALYSING CORPORATE GOVERNANCE AND ETHICAL ISSUES OF JPMORGAN CHASE: IMPACT OF COVID-19

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**Abstract.** *It is clear that corporate governance is the set of laws, customs, and procedures that regulate and control an organization. It covers how an organization's management, board of directors, shareholders, and other stakeholders interact with one another and offers a framework for balancing their interests and attaining the company's goals. The aim of this study is to identify and analyze the corporate governance of JPMorgan Chase company and their ethical issues. Additionally, the research was conducted on the influence of COVID-19 on corporate governance.*

**Keywords:** *Corporate governance, JPMorgan Chase Ethical issues, COVID-19 Impact, Financial Regulations, Stakeholder Interests, Risk Management, Compliance Failures, Investment Strategies, Corporate Responsibility, Financial Services Industry.*

### Introduction

As known, the main goal of corporate governance is to ensure that the company is managed in such a way as to maximize value for shareholders, as well as the interests of other stakeholders, such as the interests of its employees, customers and society.

This is accomplished through establishing distinct lines of authority and responsibility, implementing reliable risk management procedures, and encouraging openness and disclosure. Corporate governance principles are often formalized in a company's laws, rules, and procedures, and they may also be regulated by government agencies or industry organizations. While representing plans, accomplishment measurement, transparency standards, CEO compensation decisions, dividend policies, procedure for reconciling conflicts of interest, and explicit or implicit contracts between the company and stakeholders are all examples of corporate governance processes. This assignment investigated the role of corporate governance on the example of JPMorgan Chase organization and all the above issues which needs to be discussed.

### Brief History of JPMorgan Chase

JPMorgan Chase & Co is one of the oldest, largest, and virtually well-established banking corporations in the world. The firm's antecedent was leased in New York City in 1799, and its history may be derived back to that time. This is a monetary retention corporation that supply financial services and investment banking. It equipy firm strategy and structure consultancy, equity and debt capital raising, forward-looking financial planning, bills and derivatives market-making, prime brokerage, and evaluation across all major capital markets. monetary services, consumer business services, small corporate and commercial banking, bank transaction processing, asset management, and confidential equity are among the services offered.

### Corporate governance of JP Morgan Chase

J.P. Morgan Asset Management is committed to provide the best investment results for its clients around the world. Even though, it evaluates the principles and practices of corporate governance of firms in which these investments are one of the key factors in the effectiveness of investments. It is planned to manage in this way by employing investment strategies that have been

perfected through more than 40 years of active management expertise in Asia and throughout the world and the regular engagement with investee firms.

This is essential to this process, as it allows to understand better their operations and governance challenges. As fiduciaries, it understands the value of active ownership on behalf of their clients, and have a responsibility to interact with the firms in which they invest in order to ensure that their clients' interests are represented and safeguarded. In order to fulfill their ownership duties, they meet with the top executives of all firms on a regular basis.



Picture 1. JPMorgan Chase

(<https://www.vanityfair.com/news/2019/04/chase-bank-tweet>)

**]Ethical issues**

Since the global financial crisis of 2008, JPMorgan Chase & Co has engaged in a pattern of illegal and immoral behavior that shows no indications of abating. The following are a few of these occurrences (by no means all).

2015	The Consumer Financial Protection Bureau and the Maryland Attorney General accused JPMorgan Chase and Wells Fargo of running an illegal kickback scheme for marketing services. Bank customers are tricked into using a particular firm by at least six employees who are paid for their efforts in cash and other assets.
2014	The company along with the Royal Bank of Scotland, HSBC Bank, Citibank, and UBS, have been fined a total of £2.6 billion for manipulating foreign currency markets in what has been described as a free for all atmosphere.
2013	The Securities and Exchange Commission fined JPMorgan Chase & Co \$920 million for falsifying financial statements and neglecting controls to prevent its traders from fraudulently repricing investments to hide hundreds of millions of dollars of business losses.
2012	JPMorgan Chase & Co has been fined \$600,000 for trading on the InterContinental Exchange in the United States while exceeding speculative position limitations.



2011	For manipulating at least 93 municipal bond reinvestment deals in 31 jurisdictions, the company has been penalized a total of \$228 million. This was achieved by organizing the illegal acquisition of information about the positions of competitors.
2009	For using client funds and failing to report the violation in a timely manner, the corporation was fined \$300,000, and for failing to separate client and business funds.

**Table 1. JPMorgan’s ethical behavior**

(<https://sevenpillarsinstitute.org/jpmorgan-chase-code-of-ethics-and-revisions-since-the-2008-financial-crisis/>)

**JP Morgan Chase’s failure and weaknesses**

Weaknesses are the negative features that a company has throughout time. These factors may become an issue in the future if they are not handled now.

- **The United States has a vast market:** Despite of having functioning in more than 100 countries, JP Morgan Chase is particularly focused on the United States. This unreasonable reliance on the US market is furthermore seen as a problem. The response for the bank if this market experiences a crisis might be tremendous.

- **Limited success:** It has only had little profitability in its existing economy, and none in others.

- **Management shortsightedness:** JP Morgan Chase has been involved in a number of recent issues. The UK Financial Services Authority (FSA) fined the bank \$33.32 million between 2002 and 2009 for failing to protect billions of pounds in client cash. Such occurrences must be avoided in the future.

- **Failure on the technical level:** JP Morgan Chase had a technical problem in February 2018. Its online banking system had a security weakness that allowed select individuals to view the account details of other customers. Customers who were inconvenienced by the issue vented their frustrations on social media. Technical troubles can arise in any firm, but when they do so in such a huge one, the customer's faith may be jeopardized.

- The reasons for the failure of JP Morgan Chase were related to employees who frequently interacted with the securities business on their personal devices using text messages, WhatsApp and personal email accounts from January 2018 to November 2020. the firm did not keep any of these records as required by the federal securities laws. Thus, JPMS also confirmed that the errors were company-wide and that firm procedures were not hidden.

- JPMS received both subpoenas for documents and voluntary requests from SEC officials as part of separate investigations throughout the time it failed to retain the necessary records. In responding to these subpoenas and requests, JPMS was often unable to find relevant records on the personal devices of its employees.

- JPMS' recordkeeping failures deprived the SEC staff timely access to evidence and possible sources of information for long periods of time. As a result, the firm's activities had a significant impact on the SEC's capacity to investigate suspected securities law breaches. This means that JPMorgan's failings impacted on multiple commission investigations and forced the staff to take additional procedures that should not have been necessary.

Therefore, JPMorgan Chase was charged by the Securities and Exchange Commission for pervasive and long-standing failures by the business and its employees to keep and preserve written correspondence. To resolve the case, JPMorgan Chase obligated to give a \$125 million penalty and make major changes to its compliance rules and processes.

### **Impact of COVID-19 on corporate governance**

The COVID-19 outbreak happened at a time when corporate governance was becoming more essential. By stressing the importance of incorporating environmental, social, and governance factors into decision-making, the crisis has accelerated the trend of the need of strong corporate governance as well as the role of business in addressing bigger societal issues. (Bloom, Fletcher and Yeh, 2021).

As a result, many boards were effective at adjusting to governance throughout the crisis, and they continued to refine their approach to corporate governance even as they concentrated on the pressing governance challenges of keeping their companies afloat in the midst of a global pandemic. Boards are looking ahead, pondering what their sector will look like in the future and how corporate governance may help them recover. While management and the executive team will be fighting for survival in the short term, the board must keep a clear eye on the long-term effects of actions and assist management in modifying and executing strategy, which enables the company to prosper once the crisis is over.

On the contrary, loss of work and rearrangement may be particularly difficult decisions to make in light of the current condition of uncertainty. However, one of the epidemic's most striking aspects has been the rapid acceleration of the trend toward online life. It is unquestionably the new reality with consequences of corporate governance, data security, and data protection, as well as the supply chain.

### **Conclusion**

It is clear that JPMorgan Chase & Co is the biggest and leading bank in the United States. They do well in the United States' economic and financial markets. In terms of assets, they are one of the top four banks in the world. They have a larger collection of assets. Despite the fact that they are having a number of problems with the financial markets. Criminal cases were pressed against the bank and many of its employees when some of the bank's workers sued the bank over its credit cards.

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## ИҚТИСОДИЙ ЎЗГАРИШЛАР ШАРОИТИДА ЎЗБЕКИСТОНДА ЗИЁРАТ ТУРИЗМИНИ РИВОЖЛАНТИРИШГА ИННОВАЦИОН ЁНДАШУВЛАР

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**Аннотация.** Ушбу мақолада иқтисодий ўзгаришлар шароитида Ўзбекистонда зиёрат туризмини ривожлантиришга инновацион ёндашувлар тугрисида суз бормокда.

**Калим сузлар:** иқтисод, Ўзбекистон, зиёрат, туризм, инновация.

Ўзбекистонда туризмнинг барча турларини ривожлантириш имкониятлари юқорилиги мутахассислар томонидан таъкидланмокда. Мамлакатимизда қабул қилинган “2019-2025 йилларда Ўзбекистон Республикасида туризм соҳасини ривожлантириш Концепсияси”да 2019- 2025 йилларда туризм соҳасини ривожлантиришда туризмни миллий иқтисодиётнинг стратегик соҳасига айлантириш, туристик хизматларни диверсификациялаш ва сифатини ошириш ҳамда туристик инфратузилмани, шу жумладан, хорижий сармояларни жалб қилиш ва самарали реклама-маркетинг ишларини олиб бориш эвазига такомиллаштириш орқали эришиш вазифаси қўйилди.

Тарихий ва диний диққатга сазовор жойларга бой Ўзбекистон зиёрат туризмини ривожлантириш учун улкан салоҳиятга эга. Юритимизда дунёнинг турли бурчакларидан келган зиёратчиларни ўзига тортадиган кўплаб зиёратгоҳлар, мақбаралар, масжидлар ва тарихий обидалар жойлашган. Туризмнинг ушбу турини ривожлантириш нафақат ҳудудларнинг иқтисодий юксалиши, балки мамлакат маданий меросини асраб-авайлаш ва тарғиб қилишга ҳам хизмат қилади.

Ўзбекистонда иқтисодиётни модернизация ва диверсификация қилишга қаратилган жадал иқтисодий ислохотлар амалга оширилмокда. Ушбу ўзгарувчилар туризм саноати, жумладан, зиёрат туризмига турли хил таъсир кўрсатади. Инвестиция сиёсатидаги ўзгаришлар, транспорт ва меҳмонхона инфратузилмасини ривожлантириш, шунингдек, халқаро ҳамкорликни мустаҳкамлаш Ўзбекистонга кўпроқ зиёратчилар ва сайёҳларни жалб қилиш учун қулай шарт-шароитлар яратиши мумкин. 2023 йил 11 сентябрда қабул қилинган “Ўзбекистон – 2030” стратегиясида хорижий туристлар сонини 15 миллионга, ички сайёҳлар сонини 25 миллионга, зиёрат туризми бўйича келадиган туристлар сонини 3 миллион нафарга ошириш вазифалари белгилаб берилган.

Ўзбекистонда зиёрат туризмнинг шаклланиши ва ривожланишида иқтисодий ўзгарувчилар муҳим рол ўйнайди. Ушбу ўзгарувчиларни чуқур таҳлил қилиш учун иккита асосий жиҳатни кўриб чиқиш лозим: туризм индустриясига таъсир этувчи асосий иқтисодий ўзгарувчилар ва туризм инфратузилмасининг ривожланишига таъсир этувчи инвестиция муҳитидаги ўзгаришлар.

1. Туризм саноатига таъсир этувчи асосий иқтисодий ўзгарувчилар таҳлили қуйидагилардан иборат:

– макроиқтисодий барқарорлик: бекарор иқтисодий шароитлар туризм

индустриясига салбий таъсир кўрсатиши, ноаникликни келтириб чиқариши ва мамлакатдаги туристларнинг ишонч даражасини пасайтириши мумкин.

– даромад даражаси ва аҳоли фаровонлиги: маҳаллий аҳоли даромадларининг юқори даражаси ва барқарор иқтисодий ривожланиш туризм хизматлари, жумладан, зиёрат туризмига ички ва ташқи талабнинг ошишига ёрдам беради.

– миллий валюта курси: миллий валюта курсининг ўзгариши чет эллик сайёҳлар учун саёҳат харажатларига таъсир қилиши мумкин, бу эса уларнинг мамлакатга бориш қарорига таъсир қилиши мумкин.

*2. Инвестиция муҳтидаги ўзгаришлар ва уларнинг туризм инфратузилмасини ривожлантиришга таъсирини баҳолаш:*

– инвестицияларни жалб қилиш: қулай сармоявий муҳит туризм инфратузилмасини ривожлантириш, жумладан меҳмонхоналар қуриш, транспорт тармоғини ривожлантириш ва зиёрат туризми учун зарур бўлган бошқа объектларни яратиш учун ҳам маҳаллий, ҳам хорижий инвесторларни жалб қилиши мумкин.

– такомиллаштирилган инфратузилма: янги йўллар, аэропортлар, маданий мерос объектлари ва жамоат жойларини қуриш каби инфратузилмани ривожлантиришга йўналтирилган инвестициялар сайёҳлар учун янада қулай муҳит яратади ва мамлакатимизга зиёратчилар сонининг кўпайишига хизмат қилади.

Иқтисодий ўзгаришлар ва инвестиция муҳтидаги ўзгаришлар Ўзбекистонда зиёрат туризмнинг ривожланишига бевосита таъсир кўрсатади. Барқарорлик сиёсати, қулай сармоявий муҳит ва туризм инфратузилмасини ривожлантириш зиёратчилар ва мамлакатимизга ташриф буюриш истагида бўлган сайёҳлар учун жозибадор муҳит яратишда муҳим аҳамият касб этмоқда.

Инновацион технологиялар сайёҳларни зиёрат туризмига жалб этиш ва сақлаб қолишда муҳим рол ўйнайди. Улар зиёратчиларнинг имкониятлари ва тажрибасини оширади, саёҳатни янада қизиқарли, маълумотли ва ҳаяжонли қилади.

XXI аср жаҳон иқтисодиётида ахборот инқилоби асосида рақамлаштириш жараёнининг фаол амалга ошириши билан боғлиқ. Ҳозирги вақтда иқтисодиётга глобал рақобатбардош рақамли технологияларни жорий этиш давом этмоқда, жумладан, илғор ишлаб чиқариш, ахборот, телекоммуникация, шунингдек сунъий интеллект тизимлари, виртуал ҳақиқат ва шунга мувофиқ равишда иқтисодиётни рақамли форматга ўтказиш ёки, бошқача қилиб айтганда, рақамли иқтисодиётни шакллантириш жараёни юз бермоқда. Шу билан бирга туризмни ривожлантириш бўйича хориж тажрибасини ўрганиш туризмда ҳам инновацияларни кенг қўллаш заруриятини кўрсатиб берди.

Замонавий технологиялар зиёрат туризмига таъсир қиладиган баъзи жиҳатлар 1-жадвалда келтирилган.

**1-жадвал**

**Замонавий технологияларниг зиёрат туризмига таъсири**

Замонавий технологиялар	Таъсири
<i>Мобиль иловалар</i>	Зиёратчилар учун ихтисослаштирилган мобиль иловалар зиёратгоҳлар, мамлакат тарихи, диний урф-одат ва анъаналар ҳақида маълумот олиш имконини беради

	Иловаларда берилган зиёратгоҳлар белгиланган ҳудуднинг интерактив хариталари, хизмат кўрсатиш ва бошқа диний тадбирлар жадвали ҳақидаги маълумотлар тақдим этилиши мумкин
<i>Виртуал ҳақиқат (VR)</i>	VR технологияларидан фойдаланиш сайёҳларга зиёратгоҳлар ва тарихий манзилларни улар етиб келгунига қадар виртуал зиёрат қилиш имконини беради
	Виртуал саёҳатлар зиёратчиларга бориш қийин бўлган ёки асосий зиёрат йўлларида узок бўлган жойларни кўриш имконини беради
<i>Интерфаол кўргазмалар ва мультимедиа қурилмалари</i>	Музей ва зиёратгоҳларда зиёратчилар ушбу жойнинг маданий-тарихий аҳамияти ҳақида қўшимча маълумот олишлари мумкин бўлган интерактив экспонатлардан фойдаланиш сайёҳлар эътиборини кўпроқ жалб қилади
	Мультимедиа қурилмалари, масалан, танланган тилларга эга аудио қўлланмалар зиёратгоҳлар ва тарихий жойларни зиёрат қилиш тажрибасини бойитади

Рақамли иқтисодиётга ўтишнинг асоси сифатида рақамлаштириш жараёни объектив воқелик талаблари билан белгиланади ва биринчи навбатда унинг субъектлари фаолиятида рақамли технологиялардан фойдаланишга таянади. Рақамли технологиялар иқтисодий фаолиятни ташкил этиш шаклларида ўзгаришига олиб келади, ҳодисаларнинг моҳиятини мураккаблаштиради, уларни ўзгартиради. Сўнги пайтларда турли мамлакатларда рақамли иқтисодиёт устувор йўналиш бўлиб келмоқда, буни рақамли технологияларни ривожлантириш ва рағбатлантиришга қаратилган давлат дастурлари ва стратегиялари мавжудлиги ҳам кўрсатмоқда. Фақат Европа Иттифоқи (ЕИ) мамлакатларида, Европа Комиссиясининг маълумотларига кўра, 2019 йилда иқтисодиётни рақамлаштириш бўйича 30 дан ортиқ миллий ва минтақавий дастурлар мавжуд эди. Рақамли ривожланиш индекси (ДЕСИ) бўйича рақамли технологияларни ривожлантиришда етакчи ўринларни Норвегия, Швесия, Швейсария, Дания, Финляндия, Сингапур, Жанубий Корея, Буюк Британия, Гонконг ва АҚШ эгаллайди. Рақамли иқтисодиёт ва жамият индексини ҳисоблаб чиқувчи Европа комиссияси маълумотларига кўра, 2018 йилда Финляндия, Швесия, Нидерландия ва Дания иқтисодиётни рақамлаштириш бўйича етакчи бўлди. Аммо шуни таъкидлаш керакки, етакчи давлатларнинг позитсияси ўзгариши мумкин. Фақат инновацияларга очиқлик, уларни фаол амалга ошириш учун институтсионал шарт-шароитлар яратиш иқтисодиётни янада ривожлантириш учун имкониятлар яратади.

Экспертлар бир қатор давлатларни, жумладан, Хитой ва Ҳиндистон каби мамлакатлар ҳозирда рақамли технологияларни ривожлантиришнинг пастроқ даражасида, лекин ўсишга тайёрлигини кўрсатмоқда, улар инвесторлар учун жозибадор ва динамикаси секинлашган мамлакатларни сиқиб чиқариши мумкин. Ўзбекистон Республикасида ҳам рақамли иқтисодиётни ривожлантириш йўлида дастлабки қадамлар қўйилди. Ўзбекистон Республикаси Президентининг 2020 йил 5 октябрдаги “Рақамли Ўзбекистон 2030” стратегиясини тасдиқлаш ва уни самарали амалга ошириш чора-тадбирлари тўғрисидаги Фармони билан тасдиқланган “Рақамли Ўзбекистон – 2030” стратегияси иқтисодиёт тармоқлари, ижтимоий соҳа ва давлат бошқаруви тизимининг жадал рақамли ривожланишини таъминлаш, шу жумладан, электрон давлат хизматларини кўрсатиш механизмларини янада такомиллаштириш мақсадида ишлаб чиқилган бўлиб, унда рақамли

иқтисодий ривожлантиришнинг устувор йўналишлари белгиланди ҳамда рақамли технологиялар миллий бозори учун қулай муҳитни яратиш ва истиқболли “рақамли” стартапларни ривожлантириш мақсади қўйилди. Мамлакат иқтисодий рақамлаштириш йўналишлари белгилаб олинди.

Хизмат кўрсатиш соҳасида етакчи ўринларни эгаллаши зарур бўлган туристик фаолият субъектлари фаолиятнинг турли соҳаларига инновацияларни жорий этиш учун майдон бўлиб хизмат қилади. Шу боис рақамли технологиялар, мобил интернетдан фойдаланиш замонавий туризмни ривожлантириш манбаи бўлиши мумкин.

Худудий туризм секторини рақамли иқтисодийга жалб қилиш қуйидаги усуллар билан амалга оширилиши мумкин (1-расм):

- янги бизнес моделларини шакллантиришга олиб келадиган ахборот-коммуникация технологияларидан фойдаланиш асосида туризм секторини рақамлаштириш;

- туризм фаолиятини рақамлаштириш давлат дастурларини ишлаб чиқиш ва амалга ошириш.

Пандемиядан кейинги даврда чекловлар босқичма-босқич бекор қилингандан сўнг, туризм соҳаси тиклана бошлади ва туристик оқимларни бошқариш ва янги шароитларда фуқароларнинг хавфсиз фаолиятини рағбатлантириш учун замонавий воситалардан фойдаланиш жуда муҳимдир. Бу бизнес моделлари ва жараёнларини рақамли трансформациясининг долзарблигини оширади.

Ўзбекистон вилоятларида туристик кластерларни ривожлантиришнинг асосий мақсади ижтимоий-иқтисодий ривожланишни рағбатлантириш, минтақада тадбиркорликни ривожлантириш учун қулай муҳит яратиш, иш ўринларини кўпайтириш, аҳолининг турмуш даражасини яхшилашдир. Ўзбекистонда туризм саноатининг муваффақияти ушбу соҳани давлат томонидан қай даражада қўллаб-қувватланишига бевосита боғлиқ. Тошкент вилоятида туризм саноатининг муваффақиятли ривожланиши учун туристик фаолиятнинг барча секторлари фаолиятини мувофиқлаштирадиган кенг қамровли минтақавий ривожланиш стратегиясини ишлаб чиқиш керак. Хорижий аналогларга нисбатан минтақавий маҳсулотнинг рақобатбардошлигини ошириш мақсадида. Туризм индустриясини минтақавий меҳмондўстлик саноатининг ривожланишида кўпаювчи таъсирни яратишга қодир деб ҳисоблаш керак, айрим корхоналарда эса ижтимоий-иқтисодий ривожланиш режаларининг асоси бўлиши керак.

Ўзбекистон вилоятларида туристик кластерларни ривожлантиришнинг асосий мақсади ижтимоий-иқтисодий ривожланишни рағбатлантириш, минтақада тадбиркорликни ривожлантириш учун қулай муҳит яратиш, иш ўринларини кўпайтириш, аҳолининг турмуш даражасини яхшилашдир. Ўзбекистонда туризм саноатининг муваффақияти ушбу соҳани давлат томонидан қай даражада қўллаб-қувватланишига бевосита боғлиқ. Тошкент вилоятида туризм саноатининг муваффақиятли ривожланиши учун туристик фаолиятнинг барча секторлари фаолиятини мувофиқлаштирадиган кенг қамровли минтақавий ривожланиш стратегиясини ишлаб чиқиш керак. Хорижий аналогларга нисбатан минтақавий маҳсулотнинг рақобатбардошлигини ошириш мақсадида. Туризм индустриясини минтақавий меҳмондўстлик саноатининг ривожланишида кўпаювчи таъсирни яратишга қодир деб ҳисоблаш керак, айрим корхоналарда эса ижтимоий-иқтисодий ривожланиш режаларининг асоси бўлиши керак.

Кўпгина мамлакатлар, масалан, Бразилия, Эквадор, Боливия, Австралия, АҚШ, Андорра, Аргентина, Гречия, Кения ва Япония туристларни қизиқтириш ва келажакда саёҳатни режалаштиришни рағбатлантириш учун виртуал турлар ва ижтимоий медиа компаниялари ёрдамида “рақамли туризм”ни ривожлантира бошлади. Шунингдек, сайёҳлик

йўналишларини оммалаштириш учун қизиқарли блоглар, веб-сайтлар ва платформалар пайдо бўлди, жумладан соуч туризм (диван) туризми - Чили ҳақидаги бир қатор мақолалар ва тўпламлар (озиқ-овқатдан тортиб мамлакат ҳақидаги китобларга ва дастурларга қадар), Аргентина платформалари (360), Пуерто Рико (виртуал саёҳат ва Зоом воситасида), Эквадор (мамлакатни маҳаллий, минтақавий ва глобал микёсда тарғиб қилиш учун рақамли платформа) кабилар ишга солинган.

Туризм соҳасида янги ечимлар ва бизнес моделларини рағбатлантириш учун бир қатор мамлакатларда туризм акселераторлари ва инновацион марказлар яратилмоқда. Хусусан, Европа Иттифоқида рақамли инновацион марказлар шаклланимоқда. Бундай марказлар компанияларга техник экспертизадан ўтиш имкониятини яратади ва уларга сармоя киритишдан олдин турли хил инновацион технологияларни синаб кўришга имкон беради. Рақамли инновацион марказлар, шунингдек, муваффақиятли рақамли трансформатсия учун зарур бўлган консалтинг хизматларини, ўқитиш ва кўникмаларни ривожлантиришни таъминлайди.

Австралия, Бразилия, Сингапур, Кариб денгизи мамлакатлари, Янги Зеландия, Эквадор, Чили, Аргентина ва Филиппин янги, трансформатсиялашган туризм соҳаси учун кадрлар тайёрлаш, кичик ва ўрта бизнес ва туризм соҳасида ишлайдиган одамларга инкироздан чиқиб олиш учун ёрдам бериш мақсадида масофавий ўқитиш курслари ташкил этилди. АҚШда зарар кўрган туристик компаниялар, хусусан меҳмонхона бизнеси вакилларига тезда иш топишга имкон берадиган платформа яратилди. Таиланд, Филиппин, Колумбия ва Белгия пандемиядан зарар кўрган маҳаллий ишлаб чиқарувчиларга тезлик билан ўз бизнесини тиклашга имкон берадиган платформалар яратдилар.

Ўзбекистон туризм соҳасида ҳа бу борада жиддий ижобий ўзгаришлар рўй бермоқда. Бир қатор мамлакатлар фуқаролари учун визаларни бекор қилиш, меҳмонхоналар куриш ва янги йўналишларни ривожлантириш билан биргаликда мамлакатимизга келган саёҳатчилар учун қулайлик яратувчи инновацион ечимларни жорий этишга ҳам катта эътибор қаратилмоқда.

Рақамли технологияларни жорий этиш соҳа рақобатбардошлигини оширишда, Ўзбекистоннинг туризм салоҳияти билан потенциал сайёҳларни таништиришда муҳим аҳамият касб этади. Туризм соҳасида рақамли технологияларни қўллашда онлайн хизматлари алоҳида ўрин тутади. Одатда туризм соҳасида қуйидаги онлайн хизматлари кенг тарқалган:

- авиа, темир йўл, автобус ва автомобил маршрутлари бўйича билетларни онлайн усулда заказ қилиш ва сотиб олиш;

- туризм бўйича онлайн маслаҳат бериш хизматлари;

- автомобилларни онлайн ижарага бериш хизмати;

- саёҳатларга, маҳсус турларга ва кўргазмаларга заказлар бериш ва уларни сотиб олиш бўйича хизматлар;

- билетларнинг, турларнинг ва турли хилдаги саёҳатларнинг калькулятсиясини электрон усулда тақдим қилишнинг онлайн сервислари;

- онлайн усулда меҳмонхоналарни заказ қилиш хизматлари;

- шаҳарлар, музейлар ва кўргазмалараг виртуал саёҳатлар уюштириш сервислари ва бошқалар.



Рақамли кўникмалар туризм сектори учун кадрлар тайёрлаш тизимида ҳам касбий маҳоратнинг ажралмас қисмига айланиши зарур. Рақамли иқтисодиётда илғор технологик лойиҳаларни амалга ошириш қатор қатъий, мослашувчан ва махсус рақамли ваколатларга эга мутахассисларга талаб шаклланади. Шу сабабли ҳам туризм соҳасига кадрларни тайёрлашда қуйидаги талабларга алоҳида эътибор бериш зарур:

- ўз соҳасини чуқур англаш, шунингдек, ёндош соҳаларда ҳам билим ва тажрибага эга бўлиш;

- янги технологияларни қўллаш билан боғлиқ имкониятлар ва хатарларни тушуниш;

- лойиҳани бошқариш усулларига эгалик қилиш;

- “рақамли эпчиллик”;

- катта маълумотлар ва визуализатсия воситалари билан ишлаш кўникмаларига эга бўлиш;

- киберхавфсизлик асосларини тушуниш;

- маълумотлар базалари билан ишлаш қобилиятлари;

- тизимли фикрлаш;

- ҳиссий интеллект;

- жамоавий иш;

- узлуксиз ўрганиш қобилияти;

- ноаниқлик шароитида мослашиш ва ишлаш.

Иқтисодиётни рақамлаштириш туризм соҳаси учун учун янги имкониятлар ва истиқболларни очади. Рақамли технологиялардан фойдаланиш туризмга харажатларни камайтириш, компаниялар самарадорлиги ва рақобатбардошлигини ошириш, рақамли товар ва хизматлар бозорида ўз ўрнини эгаллаш учун янги турдаги туристик маҳсулотларни чиқариш имконини беради. Шу билан бирга инвестицияларни излаш, туристик фаолият субъектларининг рақамли трансформатсия шароитида муваффақиятли ҳаракат қилиш имконини берувчи янги ваколатларини шакллантириш билан боғлиқ янги муаммолар ҳам вужудга келади. Бу соҳада туристик фаолият билан шуғулланувчи хусусий тадбиркорларни давлат томонидан қўллаб қувватлаш тизимини шакллантириш зарур.

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# RELIABILITY OF FINANCIAL STATEMENTS THROUGH AN EFFECTIVE INTERNAL CONTROL: A LITERATURE REVIEW

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**Abstract.** *This literature review delves into the important role of internal control in providing reliability to the financial statements which examines the different roles and components of internal control which includes assessing the risk, controlling of activities and management of the risk, systems, monitoring and communication. It is crucial to understand the role of internal control to detect fraud by following laws, rules, and regulations and provide an over- all credibility to the financial statements through a robust internal control that safeguards the assets of the organizations. This paper highlights the importance of a strong tone at the top, organizational culture, and ethical values in fostering an environment conducive to effective internal controls. There are several challenges involving reliability of financial statements in different organizations and awareness of the functions of the internal control provides an avenue to continually improve the reliability and transparency of financial reporting. Overall, this paper emphasizes the critical need for organizations to adopt a holistic approach to internal control to instill confidence among stakeholders and uphold the integrity of financial statements in today's dynamic business landscape.*

**Keywords:** *financial, effective, internal, control.*

## **Introduction:**

Financial statements are important reports issued by business organizations. These reports are instruments used by users to make decisions like the management. The management of different business organizations depends on the data provided by financial reports in making important business decisions and therefore it is very crucial that information presented in financial statements are free of any fraud or material misrepresentation. Many stakeholders also depend on these financial reports and statements to protect their own interest, goals and objects like employees, government agencies, suppliers, business partners and investors. It is the responsibility of the top management to ensure that the financial statements issued represent the true and fair financial status of a company.

Many business organizations in the world encounter different challenges and one of the biggest challenges is how to protect company assets to maximize the use of those assets to produce more assets increasing the value for shareholders. The objective of many business organizations is to increase its potential for many reasons and that includes making shareholders satisfied and happy. This objective of the organization can be a reason that companies may resort to fraud and misrepresentation especially if the company is undergoing financial trouble or is obsessed with pleasing shareholders and other stakeholders.

Scandals involving financial statements include the cases of Enron, WorldCom, Lehman Brothers and many more. These big scandals have brought damage and shock around the world especially in the USA. These corporate scandals show how management can manipulate financial statements and deceive people and even governments. This is the reason why the U.S. congress

has passed the Sarbanes-Oxley (SOX) Act of 2002 requiring the management organizations to express and assume the responsibility to the fairness of the assumptions on the financial statements as well as the duties and responsibilities of those involved in the preparation including the audit of the financial statements.

A good internal control is a process which is designed specific to the organization that provides a reasonable assurance for achieving the objectives of an organization affected by an entity's stakeholders including board of directors, top and middle management and other personnel who are responsible to develop internal control culture to maintain the effectiveness and efficiency of operations and complying the applicable laws and regulations that results minimizing the misuse or wastage of resources and presenting reliable financial statements which shows true and fair picture of the company's financial position to the stakeholders and help them to make their best investment decisions(Abbas & Iqbal, 2012).

**RESEARCH AIMS AND OBJECTIVES:**

This paper examines available literature and researches on the topics of Internal Control. The objective of the review is to answer the following questions:

- A. What are the objectives of Internal Control in ensuring that Financial Statements are free from material misstatements?
- B. How can Internal Control prevent Fraud and Misrepresentations in the Financial Statements?

**METHODOLOGY:**

The researcher examines available literatures discussing the topic of Internal Control and its role in preventing fraud and misrepresentation in the Financial Statements.

**LITERATURE REVIEW:**

**DEFINITION OF INTERNAL CONTROL**

The Committee of Sponsoring Organizations of the Treadway Commission defines Internal Control as a process, effected by a company's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting and compliance (COSO, 2013).

Objectives of Internal Control:

Operations Objectives- These pertain to an entity's effectiveness and efficiency in operations, including operational and financial performance goals, and safeguarding assets against losses.

Reporting Objectives-These pertain to internal and external financial and non-financial reporting and may encompass reliability, timeliness, transparency, or other terms as set forth by regulators, recognized standards setters, or the entity's policies.

Compliance Objectives- These pertain to adherence to laws and regulations to which the entity is subject.

**DEFINITION OF FINANCIAL FRAUD OR MISREPRESENTATION**

Fraud is defined as an intentional perversion of truth in order to induce another to part with value or to surrender a legal right or as an act of "deceiving or misrepresenting". Fraud is a generic term and embraces all the multifarious means which human ingenuity can devise, which are resorted to by one individual, to get an advantage over another by false presentations. No definite and invariable rule can be laid down as a general proposition in defining fraud, as it includes

surprise, trickery, cunning and unfair ways by which another is cheated. The only boundaries defining it are those which limit human knavery» (Akers & Gissel, 2006)

The first approach to ensuring quality control in the financial statements is identifying the risks involve in transactions. Modern risk management program integrates the method of risks identification and description, qualitative and quantitative assessment of the risks, choice of risk management strategies and their monitoring. In many large companies, where there are resources and capabilities available, separate department and employees deal with internal control of business processes. In small organizations, this can be an issue as there are not enough manpower to ensure proper implementation of internal control procedures if available. Most of the time, the characteristic of internal control depends on the size of the organization. Those organizations which are big are able to afford not only employees that will look into the implementation of proper business procedure but at the same time can engage the services of professionals like auditors to ensure reliability of financial statements (Vovchenko, et.al, 2017).

In order to be useful, the information from the accounting reports have to respect a series of qualitative attributes or characteristics, such as: intelligibility; relevance significance step; credibility loyal representation; the prevalence of the economic over the juridical, neutrality, prudence, exhaustively; information comparability. Some of these attributes, with the necessary amendments could be enlarged also over the fiscal information, over which there could be added the objectivity reported. In order to accomplish the targeted objectives by the users, the accounting information have to be easily understood, respectively to be intelligible. In practice, this characteristic is difficult to accomplish since the users could have difficulties regarding understanding the information referring to the complex problems presented in the accounting reports, and this aspect could not be a reason for eliminating this type of information. The relevance is put into evidence when the information supplied influence the taken decisions, contributing also to the evaluation of the past, current or forecasted events, confirming or infirming the previous evaluations, in order to make the necessary adjustments. The relevance is influenced by its nature and the established significance margin as a reference system for its appreciation. In this respect it is mentioned that, if through the omission or the erroneous declaration of the information the decision-making process could be influenced, as a consequence this could be considered significant. The loyal representation of the described operations or transactions is the essential condition for insuring the credibility of the information. Hence, through this characteristic the targeted users are given the assurance that, the information does not contain significant errors and that they are objective. In this way the risks that could affect the credibility of the information are eliminated or diminished, offering the users a plus of security (Danescu, et. Al, 2012).

#### **THE ROLE OF CORPORATE GOVERNANCE**

In July 2002, President George W. Bush signed the Sarbanes-Oxley Act giving collective consciousness to global business leader and governments around the world. The objective of this act is to conduct reforms in accounting, reporting and corporate governance which deals with the responsibility of the management on the information provided in the financial statements. The Sarbanes-Oxley Act makes company executives explicitly responsible for establishing, evaluating, and monitoring the effectiveness of their company's internal control structure. For many executives, the intricacies of compliance and the implications of failure can be daunting. Yet the situation may not be as dire as imagined. That's because almost every public company already has in place some semblance of an internal control structure ( Deloitte & Touche, 2003).

Corporate governance is based on a set of attributes, including ensuring accountability to shareholders or stakeholders, creating mechanisms to control managerial behavior, ensuring that companies are run according to the laws and answerable to all stakeholders, ensuring that reporting systems are structured in such a way that good governance is facilitated. These aspects we also find in the OECD Principles, first adopted by the 30 member countries of the OECD in 1999, which have become a reference tool for countries all over the world. Corporate governance represents “the system by which companies are directed and controlled”. The control aspect of corporate governance includes the notions of compliance, accountability, and transparency (Dumitrascu and Savulescu, 2012).

Business organizations depend on the Internal Audit department to perform functions to ensure the effectiveness of the internal control, which is essential for effective governance, management of risk and the internal control process. Some of the functions of the internal audit department includes:

Assess and manage the risk which may be present across different operations of the organization. The Internal audit identifies potential risk, analyzed their impact on the organization and develop any necessary strategy to reduce or mitigate the risk. (The Institute of Internal Auditors , 2017).

The Internal Audit department evaluates the effectiveness of the internal control as part of their functions by reviewing different policies, process and procedures and systems to understand, establish and ensure compliance of employees and key people with different regulations and objectives of the organizations (IIA, 2017). Internal auditors examine various financial and accounting records and documents to look for discrepancies and irregularities. This also include looking into the operation to observe how employees follow certain policies and to make sure that employees comply with the laws, regulations and the policies of the business organizations. This function is helpful in detecting and preventing fraud which may happen to the business (ACFE, 2020).

### **HOW INTERNAL CONTROL PREVENTS FRAUD AND MISREPRESENTATIONS IN FINANCIAL STATEMENTS?**

The function of internal control begins with identifying what type of control should be applied to ensure credibility of financial statements. Internal controls can be detective which means it is designed to detect errors or irregularities. Corrective internal control is design to correct errors or irregularities that have been detected and preventive internal control is designed to keep errors or irregularities from happening in the first place.

The COSO (2013) provides the fundamental framework of internal controls which includes the components that management must perform. The components are listed below:

1. Control Environment which demonstrates the commitment to integrity and ethical values, exercises oversight responsibility, establishes structure, authority and responsibility, demonstrate commitment to competence and enforces accountability.
2. Risk Assessment specifies suitable objectives, identify and analyzes risks, assess fraud risk and identify and analyzes significant changes.
3. Control Activities selects and develops control activities, selects and develops general controls over technology and deploys through policies and procedures.
4. Information and Communication uses relevant information, communicates internally and communicates externally.

5. Monitoring Activities conducts on going and/or separate evaluations and evaluates and communicates deficiencies.

These components of the Internal Control must be applied by organizations to ensure that risk is evaluated and any irregularities are detected and corrected.

AICPA (2014) stated that there is always a possibility that errors and fraud may happen, it is important to establish mechanism to safeguard the assets of the company and this is done by an effective internal control system. An effective internal control systems reduces the risk of asset loss and helps ensure that information are complete and accurate, and financial statements are reliable. This is performed by following applicable laws and regulations. Internal control protects the company from unintentional errors and intentional fraud that may harm the company and the other is discovering small errors before they become big. It added that internal control provides a process for policies and procedures that allow segregation of duties and responsibilities among employees to reduce the likelihood of deliberate fraud can occur. It also ensures that only qualified staff are assigned to perform the function and qualified staff must follow sound practices in performing their responsibilities.

### CONCLUSION

The effectiveness of the Internal Control plays a very crucial role in ensuring the reliability of Financial Statements issued by business organizations. An effective Internal control ensures accuracy, integrity, and trustworthiness of financial reporting. Through the review of different works of scholars and researchers relating to the function of Internal Control, it gives stakeholders of business organization more specifically the top management, an understanding of the multifaceted role of Internal Control such as assessing the risk and how to manage this financial related risk through a very good internal control systems that can prevent and detect fraud in business organizations. This control system must start with the top management in their desire to impose compliance of existing policies and law by all employees in the organization responsible for the preparation of the financial report.

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# ROADMAP TO RESILIENCE: FOSTERING SUSTAINABLE FINANCE LITERACY FOR UZBEKISTAN'S FUTURE

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***Abstract.** As Uzbekistan progresses in its transition towards a more diversified and sustainable economy, the enhancement of sustainable finance literacy emerges as a pivotal component. This research paper delves into the current landscape of sustainable finance literacy within the nation, pinpointing prevalent gaps and delineating the disparities between existing educational programs and the evolving demands of a sustainability-oriented global economy. Through qualitative analysis and comparative studies, frameworks are proposed to elevate the understanding and application of sustainable finance among various stakeholders, including financial institutions, individual investors, and educational entities. The integration of these frameworks into Uzbekistan's broader economic strategies is discussed as a means to harness sustainable finance for national economic resilience and to align with international sustainability objectives. This paper contributes to the discourse on sustainable finance by highlighting its potential as a cornerstone for economic sustainability in emerging markets.*

***Keywords:** Sustainable Finance, Financial Literacy, Economic Transition, Uzbekistan, Sustainability Goals, Economic Resilience, Emerging Markets.*

## 1. Introduction.

Uzbekistan's economy, which has long relied on commodities like cotton and gold, finds itself at a pivotal crossroads, necessitating a shift towards diversification and the integration of sustainable practices to ensure continued growth and stability. This transition is driven by the increasing valuation of sustainability in global markets, highlighting the urgent need for the country to develop a comprehensive understanding of sustainable finance (Smith, 2020; Jones & Williams, 2019). This paper delves into the critical importance of sustainable finance literacy as a catalyst for building an economically resilient Uzbekistan and outlines strategic measures to infuse these practices within the nation's financial and educational frameworks. By advancing sustainable finance literacy, Uzbekistan not only aims to bolster its economic structure but also seeks to align with international sustainability goals, thereby enhancing its competitive position on the global stage (Doe, 2021).

The financial sector in Uzbekistan is poised to play a decisive role in this transformation. Financial institutions, by adopting and advocating for sustainable practices, can serve as exemplars in the marketplace, showcasing the tangible benefits of investments in sustainability. These institutions are uniquely positioned to spearhead public outreach and educational campaigns, thereby elevating public consciousness about the benefits of sustainable financial products and fostering a more informed investor base.

Moreover, this paper emphasizes the vital role of education in this transformative endeavor and calls for a unified, cross-sectoral effort to actualize these changes. The government is tasked with leading this initiative, weaving sustainable finance principles into the fabric of national economic planning and policy-making. This leadership is crucial in setting a standard and crafting

a supportive regulatory framework that encourages adherence to sustainable practices. Educational institutions have a significant responsibility as well. They must develop and implement curricula that not only convey theoretical knowledge about sustainable finance but also promote its practical application and foster analytical thinking among students. This education plan should aim to train a new generation of professionals who are knowledgeable about environmental issues and skilled in making wise decisions that consider both financial details and the importance of caring for the environment.

Together, these actions form a thorough plan to incorporate knowledge of sustainable finance across all levels of Uzbek society. By promoting a widespread understanding of sustainable finance from local communities to government officials, Uzbekistan can strengthen its economy and become a leader in sustainable development in Central Asia and beyond. By weaving sustainable finance knowledge into both government policy and education, Uzbekistan will not only meet international environmental and economic standards but also play an active role in global discussions on sustainability.

## **2. Literature Review.**

Sustainable finance literacy is crucial for countries like Uzbekistan, which are navigating the transition to a diversified and sustainable economy. This literature review examines the current research on sustainable finance literacy, focusing on its role in fostering economic resilience and development, particularly in the context of Uzbekistan.

### **2.1 Understanding Sustainable Finance Literacy.**

Sustainable finance, as defined by scholars such as Patel and Singh (2022), involves integrating environmental, social, and governance (ESG) considerations into financial decision-making processes. It aims to support economic growth while considering environmental sustainability and social equity (Patel & Singh, 2022). Lusardi and Mitchell (2008) emphasize the importance of financial literacy, suggesting that an understanding of basic and complex financial concepts is critical for making informed financial decisions. Extending this framework, sustainable finance literacy involves not only understanding financial concepts but also how these concepts impact sustainability goals.

### **2.2 The Importance of Sustainable Finance Literacy**

Jones and Williams (2019) argue that global markets are increasingly prioritizing sustainability, driving the need for a deeper understanding of sustainable finance. This trend necessitates educational reforms to include sustainable finance in curricula, as noted by Harris and Jackson (2022), who suggest that integrating sustainability into financial education can prepare individuals to participate effectively in a green economy. Furthermore, research by Doe (2021) highlights the competitive advantage nations can gain by aligning their financial sectors with global sustainability standards, thereby enhancing their economic stability and attracting international investments.

### **2.3 Challenges in Enhancing Sustainable Finance Literacy**

The transition to sustainable finance literacy is fraught with challenges. Lee (2019) identifies the lack of educational resources and trained educators as significant barriers to financial education in emerging markets. Similarly, Omar and Davidson (2021) discuss the practical challenges of integrating complex sustainability topics into existing financial education frameworks. For Uzbekistan, adapting global financial education practices to the local context is

crucial, a sentiment echoed by Kumar and Zhao (2020), who advocate for the localization of financial education content.

#### **2.4 Strategic Measures for Uzbekistan**

For Uzbekistan, a strategic approach involves multi-dimensional reforms. These include government leadership in policy integration, educational reforms to include sustainable finance, and engagement with financial institutions to promote sustainable practices (Morris & Patel, 2021; Nguyen & Tran, 2023). Such measures ensure that sustainable finance literacy is embedded at multiple societal levels, from grassroots to policy-makers, thereby fostering a comprehensive understanding and application of sustainable finance principles.

#### **3. Research Objectives and Methodology:**

The primary objective of this research is to assess the current state of sustainable finance literacy in Uzbekistan and to evaluate its impact on the country's economic resilience. Additionally, the study aims to identify effective strategies to enhance sustainable finance literacy among the general population and within the financial sector.

This study is based on extensive review of literature to explore the impact of sustainable finance literacy on economic resilience in Uzbekistan. The research designs.

#### **4. Discussion:**

Analysis of Sustainable Finance Literacy and Its Implications for Uzbekistan

##### **4.1. Understanding Sustainable Finance Literacy**

Sustainable finance literacy is emerging as a pivotal component of financial education, reflecting a broader trend towards sustainability across global financial systems. The increasing integration of environmental, social, and governance (ESG) criteria into investment decision-making is largely driven by evolving consumer preferences, regulatory shifts, and dynamic market conditions (Scholtens, 2017). Financial literacy now extends beyond traditional money management to encompass a nuanced understanding of how financial decisions can impact environmental and societal well-being.

This expanded definition implies that individuals are not only expected to manage finances prudently but also to make decisions that advance sustainability. According to Jones and Williams (2019), sustainable finance literacy entails making informed judgments that balance financial returns with long-term environmental and social impacts. This shift challenges the conventional focus of financial literacy by embedding ethical considerations into financial education and practice.

##### **4.2. The Role of Sustainable Finance Literacy in Economic Resilience**

Research indicates a strong correlation between sustainable finance literacy and economic resilience. Patel and Singh (2022) highlight that countries with robust frameworks for environmental and social governance literacy tend to exhibit enhanced economic stability. These nations attract more sustainable investments, which are less susceptible to global economic shocks due to their alignment with long-term sustainability goals.

The influence of sustainable finance literacy on economic resilience can be understood through its ability to foster a more informed and conscientious investment environment. By understanding and integrating ESG principles, investors and consumers contribute to a more stable economic system that is less prone to the excesses and imbalances of short-term, profit-driven decisions. This systemic shift towards sustainability-oriented practices helps in cushioning economies against both financial and environmental risks, promoting long-term stability.

### **4.3. Current State of Finance Literacy in Uzbekistan**

Despite experiencing considerable economic growth, Uzbekistan faces notable challenges in the domain of sustainable finance literacy. As observed by Kumar and Zhao (2020), there is a significant gap in the general population's awareness of sustainable investment opportunities. This lack of knowledge curtails the potential for economic diversification and hinders the transition towards a sustainable economic model.

The limited understanding of sustainable finance among Uzbekistan's population can be attributed to inadequate educational frameworks that fail to address the complexity and necessity of sustainability in financial decision-making. This oversight necessitates a strategic overhaul of the financial education system to incorporate sustainable finance principles effectively.

### **4.4. Strategies for Enhancing Sustainable Finance Literacy in Uzbekistan**

To bridge the gap in sustainable finance literacy, Uzbekistan needs a comprehensive approach that encompasses educational reform, professional training, and regulatory support. The proposal by Morris and Patel (2021) for a multi-faceted strategic framework offers a viable roadmap. Key strategies include:

**Curriculum Development:** Revise educational curricula at all levels to include sustainable finance concepts. This would ensure that students from a young age are equipped with the knowledge needed to make sustainable financial choices.

**Professional Training:** Implement continuous training programs for financial professionals to keep pace with global best practices in sustainable finance. This would enhance the capability of Uzbekistan's financial sector to support sustainable economic development.

**Public Awareness Campaigns:** Launch comprehensive campaigns to raise public awareness about the benefits of sustainable investments. This would help to cultivate a culture of sustainability among consumers and investors alike.

**Supportive Regulatory Frameworks:** Develop regulatory policies that encourage sustainable business practices and investment. Such policies could provide incentives for companies and investors that prioritize ESG criteria in their business operations and investment decisions.

## **5. Conclusion**

Promoting sustainable finance literacy in Uzbekistan is not just an educational goal; it represents a fundamental strategic imperative that is critical to the nation's economic resilience and growth. By broadening the understanding of sustainable finance across all societal levels—from grassroots communities to top-level executives and policymakers—Uzbekistan can foster a more robust, diversified, and environmentally conscious economic framework. This initiative goes beyond the mere dissemination of knowledge; it involves embedding sustainable principles at the core of financial decision-making, which is essential for long-term prosperity and stability.

By adopting a holistic strategy that integrates education, professional training, public engagement, and supportive regulations, Uzbekistan can enhance its economic stability and align more closely with global sustainability trends. This proactive approach to sustainable finance literacy promises to transform Uzbekistan's economic landscape by making it more resilient, diverse, and aligned with global sustainability objectives.

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## VEB-ILOVALARGA TAHDIDLAR VA HIMOYA QILISHNING MAVJUD USULLARI TAHLILI

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***Annotatsiya.** Ushbu maqolada SQL in'eksiyasi, saytlararo skript va boshqalar kabi veb-ilovalarga turli xil hujumlar, veb-ilovalar xavfsizligini ta'minlash uchun qo'llanilishi mumkin bo'lgan mavjud usullar tahlil qilinadi. YAKunida veb-ilovalarga tahdid va hujumlardan samarali himoya qilish uchun mashinani o'qitish va sun'iy intellekt usullaridan foydalanish afzalliklari ko'rsatilgan.*

***Kalit so'zlar:** veb-ilovalar, internet, tarmoq, tahdid, himoya.*

Bugungi kunda veb-ilovalar foydalanuvchilarning shaxsiy ma'lumotlari, moliyaviy ma'lumotlari va korporativ ma'lumotlar kabi nozik ma'lumotlarni qayta ishlash va saqlash uchun keng qo'llaniladi. Biroq, veb-ilovalarning tobora ommalashib borayotgani, shuningdek, veb-ilovalarning zaifliklarini topishga va ulardan foydalanishga intilayotgan tajovuzkorlarning e'tiborini tortmoqda. Ular ma'lumotlarni buzish, ilovalarning funksionalligini buzish yoki hatto veb-serverlarni butunlay buzishga qaratilgan turli hujumlarni amalga oshirishi mumkin.

Veb-ilovalar tajovuzkorlarning turli tahdidlari va hujumlariga duchor bo'ladi. Quyidagilar veb-ilovalarga tahdid va hujumlarning eng keng tarqalgan turlariga quyidagilar keltirish mumkin [3, 4]:

1. SQL in'eksiya.
2. Saytlararo skript.
3. O'g'irlangan sessiyalar.
4. Fishing.
5. Xizmatni rad etish hujumlari.

SQL in'eksiya veb-ilovalar uchun eng keng tarqalgan tahdidlardan biridir. Ma'lumotlar bazasi bilan ruxsatsiz amallarni bajarish uchun tajovuzkorlar zararli SQL-kodini foydalanuvchi kirish oynalari orqali kiritadilar. Ko'pgina hollarda, tajovuzkor ushbu ma'lumotlarni o'zgartirishi yoki o'chirishi mumkin. Muvaffaqiyatli SQL in'eksiya hujumi parollar, kredit karta ma'lumotlari yoki foydalanuvchilarning shaxsiy ma'lumotlari kabi maxfiy ma'lumotlarga ruxsatsiz kirishga olib kelishi mumkin.

Saytlararo skript zararli kod yoki skriptlar bo'lib, hujumchilar veb-sahifalarga ularni kiritadilar. Keyinchalik bu kod yoki skriptlar mijoz tomonida bajariladi. Bu ularga seanslarni o'g'irlash yoki foydalanuvchini zararli saytlarga yo'naltirish kabi turli xil operatsiyalarni bajarishga imkon beradi. Uning asosiy xavfi shundaki, tajovuzkor ulardan to'lov kartalari, foydalanuvchilarning kompyuterlari va boshqalarga kirish uchun foydalanishi mumkin.

O'g'irlangan sessiyalar faol foydalanuvchi sessiyalarining noqonuniy egallanishi bo'lib, hujumchilar ruxsatsiz kirish yoki haqiqiy foydalanuvchilar nomidan turli harakatlarni amalga oshirishi mumkin. Hujumchilar foydalanuvchi sessiyasiga kirish uchun foydalanishi mumkin bo'lgan bir nechta usullar mavjud, jumladan paketlarni ushlab, saytlararo skript va "o'rtada

odam” hujumlari. Quyida turli dasturlash tillarida sessiyalarni o‘g‘irlanishiga sababchi bo‘ladigan zaif kod namunasi keltirilgan:

PHP:

```
session_start();  
$session_id = session_id();  
echo “Your session ID is: $session_id”;
```

Ushbu kod sessiyani o‘g‘irlash hujumlariga qarshi himoyasiz, chunki u shunchaki joriy sessiya identifikatorini takrorlaydi, agar u foydalanuvchi brauzeriga yoki tarmoq trafigiga kirish imkoniga ega bo‘lsa, tajovuzkor tomonidan osongina o‘g‘irlanishi mumkin.

Python:

```
import requests  
session = requests.Session()  
response = session.get(“https://example.com”)  
print(“Your session ID is: “+session.cookies.get_dict()[“session_id”])
```

Ushbu kod sessiyani o‘g‘irlash hujumlariga ham zaifdir, chunki u javobda oddiy matnda sessiya identifikatorini taqdim etadi.

JavaScript:

```
var session_id = localStorage.getItem(“session_id”);  
console.log(“Your session ID is: “+session_id);
```

Ushbu kod sessiyani o‘g‘irlash hujumlariga qarshi himoyasiz, chunki u foydalanuvchi brauzeriga kirish huquqiga ega bo‘lgan tajovuzkor osongina kira oladigan mahalliy xotiradan sessiya identifikatorini oladi.

Fishingda soxta veb-sahifalar yoki elektron pochta xabarlaridan foydalaniladi. Ushbu hujumda tajovuzkorlar foydalanuvchilarni osongina aldash va ularning maxfiy ma’lumotlarini olish uchun qonuniy platformalar yoki tashkilotlarni taqlid qiladigan soxta veb-sahifalar yoki elektron pochta xabarlarini yaratadilar. Kirish uchun foydalanuvchi o‘zining shaxsiy ma’lumotlaridan foydalanadi va natijada tajovuzkor bu ma’luotlarga ega bo‘ladi.

Xizmatni rad etish hujumlari DoS (Denial-Of-Service) va taqsimlangan xizmatni rad etish Distributed Denial Of Service (DDoS) nomlari bilan mashxur. Bular veb-serverni yoki boshqa hisoblash tizimini ishdan chiqaradi. Tajovuzkorlar veb-dastur resurslarini bitta manbadan (DoS) yoki bir nechta manbalardan (DDoS) ortiqcha yuklaydi. Bu qonuniy foydalanuvchilar uchun veb-ilovalardan foydalanish imkoniyatini kamaytiradi. Hukumat veb-saytlari, yirik portallar, onlayn ommaviy axborot vositalari, onlayn o‘yin serverlari, onlayn-do‘konlar va moliya sektorining korporativ veb-saytlari bunday hujumlarning qurboni bo‘ladi [1].

### **Mavjud himoya usullarini**

Veb-ilovalarga tahdid va hujumlardan himoya qilishning ko‘plab usullari mavjud. Bu ular veb-ilovalarni samarali himoya qilish bilan birga qator kamchiliklarga ham ega. Quyida ular qaida batafsil ma’lumot keltirilgan [4, 6, 7]:

1. *Kirishni filtrlash va tasdiqlash usullari* foydalanuvchi tomonidan zararli kod kiritilishini yoki yaroqsiz belgilar uchun tekshirish imkonini beradi. Ammo bu usullar filtrlar va tekshirish qoidalarini diqqat bilan aniqlash va sozlashni talab etadi, shuningek noto‘g‘ri sozlash qaysidir ilova funsiyalariga va foydalanish qulayligiga ta’sir qilishi mumkin.

2. *Ma’lumotlarni shifrlash usullari* mijoz va server o‘rtasida uzatiladigan ma’lumotlarni himoya qilish uchun, shuningdek uni saqlashda ishlatiladi. SHifrlash ma’lumotlarning



maxfiylikini ta'minlaydi. Ammo shifrlash serverlariga qo'shimcha yuk qo'shishi va javob vaqtini oshiradi hamda xavfsiz shifrlashni ta'minlash uchun yaxshi kalit va sertifikatlarni boshqarish talab qilinadi.

3. *Sessiyani boshqarish usuli* foydalanuvchi seanslarini boshqarish va tekshirish uchun xavfsiz mexanizmlardan foydalanish belgilaydi. Kuchli sessiya identifikatorlarini yaratish, sessiya ma'lumotlarini to'g'ri saqlash va o'chirish kabi choralar sessiya o'g'irlanishini oldini olishga yordam beradi. Ushbu usulning kamchiligi sessiya ma'lumotlarini saqlash va qayta ishlash uchun qo'shimcha resurslarni talab qiladi, sessiyani noto'g'ri boshqarish faol sessiyalarni ushlab qolish yoki autentifikatsiyaning etarli emasligi kabi zaifliklarga olib kelishi mumkin.

4. *Ko'p faktorli autentifikatsiya usuli* parol, biometrik ma'lumotlar, bir martalik kod kabi ikki yoki undan ortiq autentifikatsiya omillarini talab qiladi. Ko'p faktorli autentifikatsiya foydalanuvchiga kirish xavfsizligini oshiradi, chunki muvaffaqiyatli kirish nafaqat parolni bilishni, balki boshqa omilning mavjudligini ham talab qiladi. Ushbu usuldan foydalanish bir nechta omillarni taqdim etish zarurati tufayli foydalanuvchilar uchun noqulaylik tug'diradi, bunday tizimni amalga oshirish uchun qo'shimcha integratsiya va sozlamalarni talab qiladi.

Tahlillar shuni ko'rsatadiki mavjud himoya usullari o'zining afzalliklari bilan birgalikda kamchiliklariga ham ega. SHuning uchun veb-ilovalarni samarali himoya qilish ko'pincha yangi usullarni talab qiladi.

#### **Sun'iy intellekt usullaridan foydalanish**

An'anaviy xavfsizlik usullari statik bo'lishi mumkin va hujumlarning yangi turlariga yoki tajovuzkorlarning xatti-harakatlaridagi o'zgarishlarga moslasha olmaydi. Signaturali aniqlash kabi ushbu himoya usullari oldindan ma'lum bo'lgan hujumlarga asoslangan. Biroq, hujumlarning yangi turlari signatura ma'lumotlar bazasida tavsiflanmagan noma'lum bo'lishi mumkin. Mashinani o'qitish va sun'iy intellekt (SI) usullaridan foydalanish tizimga katta hajmdagi ma'lumotlarni tahlil qilish va nostandart hujumlarni aniqlash imkonini beradi [1, 2].

Veb-ilovalarni himoya qilishda sun'iy intellektdan foydalanish hujumlarni aniqlash va oldini olish jarayonini avtomatlashtirishga, shuningdek xavfsizlik tizimlarining samaradorligini oshirishga imkon beradi.

Sun'iy intellektdan foydalanishning asosiy afzalliklaridan biri bu tizimning o'zgaruvchan tahdid muhitiga moslashish qobiliyatidir. Kiberjinoyatchilar doimiy ravishda hujumning yangi usullarini ishlab chiqmoqdalar va xavfsizlik tizimlari ular bilan kurashishga tayyor bo'lishi kerak. Sun'iy intellektdan foydalanish tizimga hujumlarning yangi turlariga tezda moslashish va real vaqtda himoya algoritmlarini yangilash imkonini beradi.

Bundan tashqari, SI anomaliyaga asoslangan hujumlarni aniqlash va oldini olishga yordam beradi. Foydalanuvchilarning g'ayritabiiy xatti-harakatlari yoki tizimdagi g'ayrioddiy hodisalar ruxsatsiz kirishga urinish yoki zararli faoliyatni ko'rsatishi mumkin. Mashinani o'rganish va SI usullaridan foydalanish tizimga bunday anomaliyalarni avtomatik ravishda aniqlash va hujumlarning oldini olish uchun tegishli choralarni ko'rish imkonini beradi.

Veb-ilovalarni himoya qilish uchun sun'iy intellektdan foydalanish bir qator imkoniyatlar va afzalliklarni beradi:

- Katta hajmdagi ma'lumotlarni tahlil qilish orqali hujumni aniqlashni avtomatlashtirish va g'ayritabiiy foydalanuvchi xatti-harakatlarini yoki potensial zararli faoliyatni, shu jumladan SQL inyeksiyasi, saytlararo skript va boshqalarni aniqlash imkonini beradi.

- Hujumlarni yuqori aniqlik va minimal miqdordagi noto'g'ri pozitivlar bilan aniqlay oladigan modellarni yaratish hujumlarga javob berish vaqtini qisqartirish va xavfsizlik ma'murlariga yukni kamaytirish orqali ishlash va aniqlik yaxshilash imkonini beradi.

- Sun'iy intellekt yangi ma'lumotlardan saboq olishi va yangi turdagi hujumlarga moslasha oladi, bu esa veb-ilovalarni himoya qilish tizimini doimiy rivojlanayotgan tahdidlar bilan kurashishda yanada moslashuvchan va samarali bo'lishiga imkon beradi.

- Sun'iy intellekt yangi tahdidlarni bashorat qilish, ishlab chiquvchilar va ma'murlarga kelajakdagi hujumlarning oldini olish choralarini ko'rish uchun hujumlar hamda zaifliklar haqidagi ma'lumotlarni tahlil qilishiga yordam beradi.

### **Xulosa**

Ushbu maqolada veb-ilovalarga tahdid va hujumlardan himoya qilishning mavjud usullari va vositalari tahlil qilinib, har xil turdagi tahdid va hujumlar, shuningdek, ulardan himoya qilish usullari va vositalari ko'rib chiqildi. Veb-ilovalarga tahdid va hujumlardan himoya qilishning mavjud usullari va vositalarini tahlil qilish mutlaq xavfsizlikni ta'minlaydigan universal echim yo'qligini tasdiqlaydi.

Veb-ilovalarni himoya qilish uchun sun'iy intellekt usullaridan foydalanish ko'plab imkoniyatlar va afzalliklarni taqdim etadi. Ular hujumlarni avtomatik ravishda aniqlash va tasniflash, anomal holatlarni tasniflash, yangi tahdidlarga moslashish, zararli harakatlarning oldini olish uchun kontent va foydalanuvchi xatti-harakatlarini tahlil qilish imkonini beradi.

Kelgusida veb-ilovalarga tahdid va hujumlardan himoya qilishning yangi usullari va vositalarini tadqiq qilish va ishlab chiqishni davom ettirish kerak. Ushbu sohadagi tadqiqotlar DDoS hujumlar, SQL in'eksiyalari, saytlararo skriptlar va boshqalar kabi veb-ilovalarga turli xil hujumlarni aniqlash uchun mashinani o'qitish algoritmlari, neyron tarmoqlari va boshqa sun'iy intellekt usullaridan foydalanish orqali ijobiy natijalar olish mumkin.

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## THE STATE OF FINTECH IN ISLAMIC FINANCE IN UZBEKISTAN

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**Abstract.** *The State of Fintech in Islamic Finance in Uzbekistan is on the cusp of significant growth and development, driven by the emergence of digital Islamic banks and fintech startups, government support, and a growing demand for Sharia-compliant financial products. While challenges in regulatory frameworks and infrastructure remain, collaborative efforts among stakeholders offer opportunities for innovation and expansion, positioning Uzbekistan as a key player in the intersection of fintech and Islamic finance.*

**Keywords:** *fintech, Islamic, finance, Uzbekistan.*

### Introduction

In recent years, the intersection of fintech and Islamic finance has been gaining traction in Uzbekistan. With a growing demand for Sharia-compliant financial products and services, the country has seen a rise in digital Islamic banks and fintech startups. This article delves into the current state of fintech in Islamic finance in Uzbekistan, highlighting the opportunities and challenges facing the industry.

**Overview of Fintech in Islamic Finance** Fintech, or financial technology, refers to the use of technology to provide innovative financial solutions. In the context of Islamic finance, fintech plays a crucial role in developing Sharia-compliant products and services that cater to the specific needs of Muslim consumers. In Uzbekistan, the fintech industry is at a nascent stage but shows promising growth potential, particularly in the Islamic finance sector.

**The Rise of Digital Islamic Banks and Fintech Startups** One of the notable developments in the Uzbekistan fintech landscape is the emergence of digital Islamic banks and fintech startups. These platforms offer a range of Sharia-compliant financial services, including savings accounts, investments, and payments. By combining technology with Islamic finance principles, these entities are able to cater to the needs of Muslim consumers who seek financial solutions aligned with their religious beliefs.

**Government Support and Regulatory Framework** The Uzbek government has shown support for the growth of Islamic finance in the country. In 2019, a decree was issued allowing Islamic banking and finance activities, paving the way for the development of the industry. However, challenges remain in terms of regulatory frameworks and infrastructure. The lack of a comprehensive regulatory framework for Islamic finance and fintech poses obstacles to industry growth and investment.

**Addressing Challenges and Promoting Growth** To overcome these challenges, stakeholders in the Islamic finance and fintech sectors in Uzbekistan are working together to develop a more robust regulatory framework. Collaboration between industry players, regulators, and policymakers is essential to foster innovation while ensuring compliance with Sharia law. Investments in infrastructure and technology are also needed to support the expansion of fintech and improve accessibility to Islamic financial services.

### Conclusion

The state of fintech in Islamic finance in Uzbekistan is evolving, with digital banks and fintech startups offering Sharia-compliant products and services to meet the needs of Muslim consumers. While challenges persist, the overall outlook for Islamic finance in the country is positive, with opportunities for growth and development in the coming years. By addressing regulatory hurdles and investing in technology, Uzbekistan is well-positioned to become a hub for fintech in Islamic finance.

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# THE IMPACT OF SOCIAL MEDIA ON TRANSPARENCY AND CITIZEN ENGAGEMENT OF GOVERNMENT ORGANIZATIONS IN UZBEKISTAN

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**Abstract.** *Social media has had an impact on society in many ways during the past two decades. It has changed the way public discourse and communication occurs. Numerous studies in the past have indicated that governments need to increase transparency, the policy of social media communication and general responsiveness to achieve a high level of citizen engagement and satisfaction. Therefore, open communication, participatory engagement strategies and transparency need to be aimed. However, in countries like Uzbekistan, where Authoritarian style governance is still in power, the mass media, social media and internet use are restricted and controlled by the governments to prevent the narratives of the online discourse. In the current study, a mixed-method approach is used to understand the kinds of strategies that the Uzbek government is using for social media communication with its citizens, finding out the typology of information that is made available online by the government in Uzbekistan to its citizens and the impact that the government use of social media has on the citizen trust, engagement and perceived responsiveness. The findings of the study revealed that the content mainly published by the government is informational. The major strategies being implemented are relating to engagement, networking and representation of information and the government. Also, significant associations between citizen engagement and the perceived responsiveness of the government were indicated. Overall, this study is a significant addition to literature and has numerous practical and policy-oriented implications. The researcher has also listed the study's limitations and the future research directions that can be adopted.*

**Keywords:** *Social-Media, Government Organization, Transparency, Citizen Trust, Citizen Engagement, Government Agency, Communications.*

## Background

Transparency was a major focus of the Uzbek government's economic reforms, which recognized its importance to both efficient governance and public confidence. Previously, the public was unable to see how their tax dollars were being spent due to a lack of open data. Initiatives to enhance public participation and create legislative frameworks for budgeting were also successful. The Citizens' Budget, which was first published in 2018, lays out government goals, resource allocation, and total expenditure in simple terms (Figenschou, 2020). For the first time, the government released medium-term macroeconomic and fiscal forecasts, as well as an analysis of fiscal risks that the government should be aware of. Rather than relying solely on a presidential decree to make budgetary decisions, the Uzbek Parliament has taken on a more active role in this year's budget bill. The government of Uzbekistan decided to implement a bold and comprehensive plan to overhaul the nation's economic tax system, and it appears to be working.

Another advantage of using social media by the government bodies lies in the increased collaboration that is supported by use of such a medium between the governance stakeholders.

From the point of view of the citizens, social media is a platform for increased engagement with the programs, services and any information about the government and allows to bridge the gap that traditionally exists between the government and the locals in the society. As from the governments point of view, social media provides a viable platform that can be used to engage public participation and motivate increasing collaboration. Social media, therefore, not only strengthens public relations, but also provides a means for creating an informed citizen body (Arshad & Khurram, 2020a; Enke & Borchers, 2019; Solis & Breakenridge, 2009; Xiong, Feng, & Tang, 2020; Yakobi). the level and type of information available on the social media handles of government bodies or individuals is their personal choice and is dependent on communication and information sharing rules and strategies that are drafted by the government. The challenge in this regard lies in two aspects; the typology of shared information and the content of information that is shared (Medaglia & Zheng, 2017). The type and content both need to be reflective of the truth as these persons or organizations will be under scrutiny and it will also need to keep the rules of professionalism in check (Chen et al., 2020; DePaula & Dincelli, 2018; DePaula, Dincelli, & Harrison, 2018). The movement towards increased social media use by government to increase responsiveness, customer satisfaction, trust and engagement is based on transparency, staff preparedness to handle the scrutiny, time, skills of communication and a positive attitude towards it all (Medaglia & Zheng, 2017; Verma, Kumar, & Ilavarasan, 2017).

Personal income tax and social tax rates were lowered to a single 12.5 percent and VAT payments were simplified, while the number of taxes and other obligations were reduced as a result of the reform. Taxes on small businesses and individuals were also reduced, as was the tax on corporations. As a result of these rate reductions and increased compliance, revenue increased by 33 percent, despite widespread criticism and showing that well-designed reforms can work. There is a lot at stake for the platforms if the public sees what they're up to. Platforms make money by displaying advertising, and by keeping their algorithms private and obscuring data on where the ads appear, they evade responsibility, avoiding complaints from advertisers, protests from users, and even congressional inquiry. Without reliable information on how these massive platforms operate and how their technology works, there can be no real accountability. Despite its partnership with the Social Science Research Council, Facebook has been slow to release information. External watchdogs are needed to ensure that the platforms are acting in the best interests of the public, despite their lack of transparency. Initiatives like this have made a difference in the lives of authors. Although these and other companies have caused widespread destruction, their actions go far beyond simple economics and market dominance.

The significance and reach of social media is difficult to exaggerate, mainly, because it continues to grow at an unprecedented rate in the type and kind of tools used, introduced, and the different levels of participation and resultant effects of such activities on the engagement and loyalty of the citizens and users. Particularly for the local governmental institutes and organizations, the research indicates that the citizens that engage with the governmental agencies and utilize their content effectively demonstrate higher levels of civic engagement and increased participation in community events compared to the citizens who aren't involved in any dialogue with the government. Research also indicates that the usage of social media of the government inspires citizen trust in the institutions. These findings relegate a strong case for the governmental agencies to create effective and active social media presence that singularly focuses on the development of citizen engagement and increase the transparency of the governments. Social

media has also been used by the local governments for increase of efficiency and effectiveness in other areas for instance building of community and encouragement of civic improvement.

The research by Dobos and Jenei (2013) outlined that the citizen participation can be converted to active engagement mainly by the use of instrumental and normative activities that are supported by social media platforms. A responsive government would lead to an engaged citizen body as they would be receiving active responses from the governance processes and would be in knowledge of activities supported and taken place by the government officials (Barr, 2016; Kasymova, 2017). Dialog and communication in social media are active means of increased instrumental communication between the government and citizens and can increase overall engagement as this medium is a place that the government officials are active, are listening and using innovative interaction means provided by these social media platforms. These platforms provide a two-way mechanism for inquiring about strategies and actions, expressing opinions about specific actions and plans, making suggestions of tackling with a social or global issue, and taking responsibility (Gálvez-Rodríguez, Haro-de-Rosario, & Caba-Pérez, 2018; Keller & Kleinen-von Königslöw, 2018; Lovari & Valentini, 2020).

A full overview of these issues is provided in *Tackling Corruption in Uzbekistan*, which details how these issues became ingrained in the country's political and economic landscape. Informal decisions are made, rules are unclear, and supervision is lacking. Inequality in Uzbekistan is exacerbated by these factors, which lead to power battles amongst the country's economic and political elites. The country's long-term stability is under jeopardy as a result of this. The anticorruption efforts of the Uzbek government are mostly ineffective in addressing the root causes of the issue. Officials use them to settle scores and consolidate power via selective prosecutions. Independent journalists and civil society activists who keep tabs on corruption are often harassed, persecuted, and imprisoned by the government (Premade). International technical aid initiatives have so far had little effect. *Tackling Corruption in Uzbekistan* presents analyses and suggestions to assist the international community better its efforts to investigate claims of money laundering and business misconduct, and to encourage individuals who confront corruption both inside and outside the country. As a foundation for market trust and long-term economic viability, fiscal openness is essential to good public financial management. Citizens in every nation may hold their leaders to account by having a better understanding of how their government spends its money.

However, some researchers have heavily critiqued the uses of social media by the government sector as it is considered to be an inadequate means of communication of strategies, plans and other information regarding public and private policies by the government (Mergel & Greeves, 2012; Nagarwal, 2019; Permadi, Shabrina, & Aziz, 2019). Social media is considered as a platform that supports freedom and free speech; hence they seem like an unlikely pairing (Barley, Treem, & Kuhn, 2018; Gao & Lee, 2017) as the proper citizen engagement will need for a systematic means of probing, not supported by social media.

Furthermore, the desire of the government to increase development and recognition of knowledge and understanding in the citizens regarding the political and administrative policies and activities can lead to influencing them to post information that may not be entirely true and can lead to impacting the ability of the citizens to analyze, express unbiased opinions, participate and debate in current issues, etc. Social media may have quickly grown into public organization tools but there is still a need for face-to-face communication to ensure accurate development of policy and strategy.

In this authoritarian state, independent media is majorly considered as non-existent ref. Censorship is pervasive in all sorts of media, including the strategy of self-censorship due to the utter of fear of the consequences of publishing or posting anything that the regime or the government might not approve of (Mamatov, 2020). While this strictness was worse before 2016, it has eased, only a little, overtime (Khalilova, 2020; Mamatov, 2020). The freedom on the Net index, published every year by freedom house indicated a slow but gradual increase in the freedom of internet in Uzbekistan, however, it is as of yet considered as not free (FreedomHouse, 2021). Uzbekistan proves to be on the path of incremental increase in internet freedom, as shown in figure 1 given below, primarily as the internet access across the country has shown to be improved. However, the grip of the government sector and authorities over the online environment are still tight in the country.

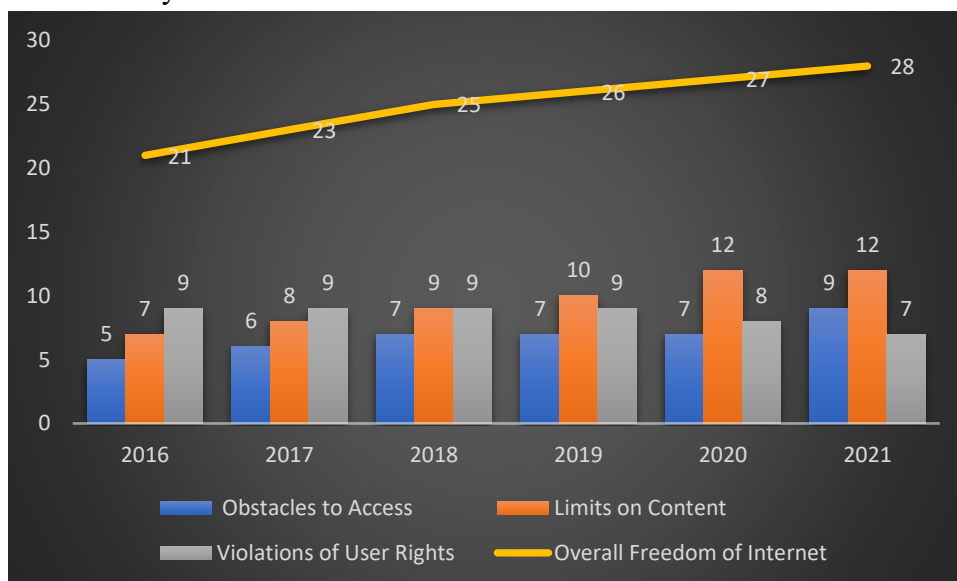


Figure 1: Internet Freedom in Uzbekistan

Source: (FreedomHouse, 2021)

The government is still continuing to block any websites that are deemed detrimental to their control and multiyear prison sentences are handed out to citizens that protest or try to gain access to restricted networks. Moreover, Uzbekistan’s government has strict data protection laws that require the localization of user data for safety purposes, this is how the authorities justify their acts of blocking prominent social media platforms in the country. However, the social media use is increased in the country, nonetheless, over the past few years. This is depicted in the accounts of last 12 months of social media use as shown in figure 2 below. While the ongoing reforms carried out in the country in past few years under President Shavkat Mirziyoyev have led to improvements on several social issues in the country, including a visible and modest reduction in the repression of social and mass media, Uzbekistan is as of yet an authoritarian regime that has not depicted a movement towards democratization in the minimal. All media sources are tightly controlled by the government authorities, and there is little to no freedom of speech.



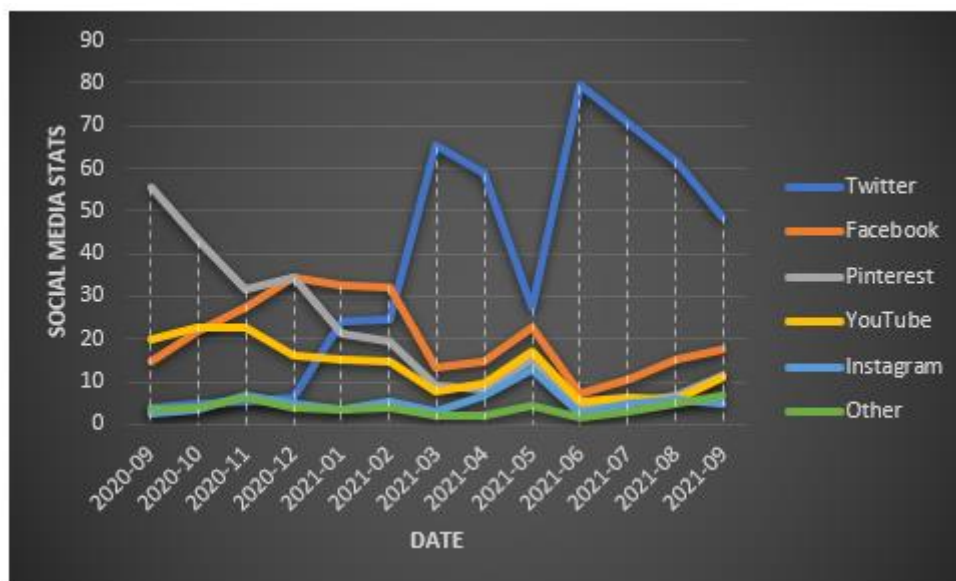


Figure 2: Social Media Use in Uzbekistan in past 12 Months

Source: <https://gs.statcounter.com/social-media-stats/all/worldwide/2018>

During the meeting, participants discussed the implementation of the law, the actions of government agencies, and the rights of individuals to access information, among other things. In this manner, Uzbekistan has also made major efforts. Internationally compliant regulations and other legislative actions are critical to the steady growth of this country's media landscape. Uzbekistan's continuing democratic changes have also resulted in a new legislation on civil service openness. During the conference, authors learned about the law's implementation and discussed ideas with members of parliament, journalists, and specialists from across the world.

To begin, the Uzbek administration concentrated on the most serious flaws in the economic model that had governed their country's growth plan since independence. The allocation of resources and outputs among state-owned businesses had been planned and orchestrated by the state. Apart from commodities like gold that linked the nation to global markets, the economy was shut off. With limited competition in markets, the model and attitude were inward-looking, which resulted in little economic and social dynamism (Bashir & Bhat, 2017; Gezgin, 2017). Heavily industrialized societies made extensive use of natural resources and physical capital, but they neglected to invest in people's education, training, and job opportunities as part of their growth strategy. Jobs were limited at the time. Misjudgments were made in the allocation of resources. There was a lack of freedom of movement for the workforce.

The previous style of government rationed essential services to everyone, with no regard for efficiency, accountability, or productivity, since the government did not relate budget outlays to outcomes. A lack of government involvement throughout the economy impeded the country's ability to expand at a sustainable pace, resulting from the government's over- or under-involvement in certain sectors. As in Eastern Europe and Asia, the earliest reformers have followed a similar pattern in implementing changes (Barley, Treem, & Kuhn, 2018). The administration was steadfast in its pursuit of pricing and trade liberalization and the unification of the currency rate. To restructure the financial structure of the government and rethink its role in the economy, more time has elapsed. Reorienting capital expenditures toward reform priorities and significantly increasing social sector expenditures have changed public spending, and the tax system has been simplified and neutralized through comprehensive tax policy revisions and improved tax administration. The

openness of fiscal and debt matters has greatly increased. It has been possible to establish a new economic model and provide a foundation for future growth because of changes in fiscal policy and the structure of public finances.

#### Research method

The stage of data analysis can be defined as the process of conversion of raw data into meaningful and useful information. Several steps are included in both quantitative and qualitative methods of data analysis which include preparation of data, exploring the data, analyzing data using either descriptive or statistical methods, representing and interpreting the analysis and results and validating the interpretation (Cresswell, 2014). Mostly, these steps are carried out in a sequential form during a quantitative analysis and in iterative form during a qualitative analysis. In studies that are designed as mixed method researches, data analysis can involve various kinds of analytical techniques that may be applied to both quantitative and qualitative data or may be applied to only one kind of data. As in this study mixed method design is implemented, the data was collected via interviews and online surveys. The research has been divided into a qualitative and quantitative phase and the methods of population, sampling and data analysis have been discussed in the next section.

The research strategy can be explained as the researcher's plan about addressing the specific research questions. The success of a research is dependent on the strategy selected for data collection and analysis (M. Saunders, Lewis, P. and Thornhill, A., 2009). Qualitative studies require to involve the use of action research to solve a specific problem (Maxwell, 2012). The strategy adopted for the qualitative section of this study is based on qualitative interviews for exploratory analysis. The strategy for this study was to evaluate the type of information, social media strategy and outlook of the government relating to the usage of social media. The researcher evaluated previous research on government's usage of social media and conducted face to face interviews with governmental agents with experience of using and planning content for social media. The researcher collected information from government agents from different departments i.e., emergency management, media wing, volunteer leadership, policy planning, etc. following the direction of Kavanaugh et al. (2012). The interviews were conducted with five officials from the above mentioned departments, but details aren't being disclosed to maintain the anonymity of the respondents. The questions were focused on the governmental policies of social media, content development process and the future strategies and outlook of the digital presence of the government. These questions were exploratory and will evidently support the findings of the quantitative portion of the study which is exploring the perceptions of the individuals/citizens relating to the government usage of social media.

Qualitative data, such as interview transcripts, may be analysed using qualitative analysis. Rather than generating predictions or attempting to explain phenomena, qualitative analysis focuses on "sense-making" or gaining an understanding of a phenomenon. Creative and exploratory mindsets are required for qualitative analysis, which requires ethical awareness and participation in the setting. When we talk about "qualitative data" we're talking about anything that isn't quantifiable. In-depth interviews or diary entries may be used to gather this sort of information, which can then be evaluated using grounded theory or a thematic approach. Qualitative researchers, on the other hand, conduct their research in the real world, aiming to understand and explain occurrences in terms of the meanings that individuals assign to them. Only

by putting things into perspective can they be fully appreciated. A qualitative researcher, on the other hand, immerses herself or himself in the natural environment. The settings of the investigation aren't made up; they're derived from real life. In the end, there is nothing that can be taken for granted (Maxwell, 2012). Those who are being investigated by qualitative researchers want to speak for themselves and express their thoughts and feelings in words and other ways. In other words, qualitative research is a collaborative effort between the researcher and the people being examined. As a result, without the active engagement of the qualitative researcher, no data could exist. In the course of the research, the study's design might be modified or reworked. To a qualitative researcher, reality exists only in relation to the observer; there is no objective, objective truth. As the facts are gathered, the theory evolves based on what is known at the time.

The researcher received several confirmative responses from potential participants, however, as the study objectives indicated to conduct detailed in-depth interview that needed to be analyzed for content and themes, it was deemed suitable to select a smaller group of respondents. Hence, a sample selection was made of 6 interviewees. From these interviewees, 1 was later unable to attend the interview as scheduled. Therefore, the study is conducted using interview data from a final set of 5 expert respondents for the qualitative stage.

The researcher needs to collect data once from all respondents in virtually the same time zone i.e., data is collected at a single point of time from the social media experts. Hence, the time horizon of the study can be termed as cross-sectional (Olsen & St George, 2004). As for data collection strategy, an interview strategy was finalized and for conducting these interviews, a semi-structured interview questionnaire was preferred as it allows the interviewers to prepare questions beforehand to help control and guide the conversation and keep respondents informed of time limitation so they are encouraged to stay on the main topic (Adams, 2015). Moreover, this interview design allows for open-ended responses from participants so that a more in-depth information collection can be carried out using a two-way communication (Harvey-Jordan & Long, 2001; McIntosh & Morse, 2015). In the study setting, the interview protocol included providing the details of the purpose of interview and objectives of the study to the participants along with a tentative list of questions one day prior to the interview. Moreover, they were communicated the set time for interview 1 week beforehand so they could confirm their participation at least 3 days prior to the interview. The responses of the interviewees were recorded using a good quality phone recorder and the individuals were informed of this recording. Later on, the data was transcribed, edited and summarized for analysis by the researcher.

Data is analyzed and managed by using the NVIVO software for the qualitative stage in this study. This software enables a researcher to clearly upload textual data, tag it and categorize it for a clean organization and storage of qualitative type of data (Hilal & Alabri, 2013; Welsh, 2002). After the data was recorded during each of the five interviews, the researcher transcribed the data and uploaded it on NVIVO software. Then each of the responses was scrutinized to formulate distinct themes of in the answers of the respondents and tagged them as common of unique responses. After this step, the researcher reviewed the coded data again and organized it into suitable themes. Overall, two strategies were used for conducting content analysis; framework-based technique and word cloud generation. The framework-analysis is a popular qualitative tool that is an analytic technique to organize data in a tabular format to understand and depict the underlying themes. Each row of the table will include a theme and corresponding views of the respondents arranged in form of similar and distinct opinions that will be already tagged

using NVIVO (Abdel-Basset, Zhou, Mohamed, & Chang, 2018). The word cloud analysis will also allow to provide a further insight into explanation of each particular theme by highlighting the most frequent words and notions observed in response

**Result and discussion**

The qualitative analysis focused on the last two objectives of the study. The main focus was on evaluation of the typology of information presented by the Uzbekistan’s government i.e., the category and type of information being put out by the governmental social media accounts and also the strategies they use for planning the content and the overall strategy behind the use of social media at the governmental front. Social media has become an active component of everyday life of people and the usage by the governmental agencies has seen the increase over the last couple of years. It has become a tool for communication for the governmental agencies and plays a large part in humanizing the government and its agents for the masses (Adrees et al., 2019). Studies have indicated that the two-way interaction made plausible by the social media has created a framework due to which the agencies can improve the dissemination of information to the citizens, increase their reach and responsiveness (Dekker, van den Brink, & Meijer, 2020; DePaula & Dincelli, 2018). Thus, the present section will be focusing on the method and strategy that is adopted by the government of Uzbekistan for the social media usage by their representatives. This tool has enabled the information to be passed along to the citizens and the public with marginal bureaucratic barriers. For the purpose of evaluation of the information collected by the social media specialists has been evaluated based on the framework analysis and word cloud analysis, after creation of themes via NVivo.

The data for the qualitative analysis was collected through interviews. The data was transcribed and entered into the NVIVO software for evaluation of the key themes present in the data. The researcher first arranged the data with respect to the interviewers. Then the data was coded and themes were created by manually going through the contents of the transcription. The main features of the discussion with the social media strategists were the strategy behind the formulation and design of content for the social media, the type of content published by the governmental agencies of Uzbekistan and the process of planning and strategizing for the design of social media content. The data was scrutinized carefully and a total of five themes were found to be present in the data. These themes were then used for the framework-based and word cloud analysis as well. The following table indicates the main themes and highlights the key aspects of the information coded among these themes as well;

Theme	Characteristics
<b>Typology of information</b>	The major strategy and rationale behind the creation and usage of the social media platforms is the dissemination of relevant information.
<b>Content strategy</b>	The strategy design for the content development and creation by the governmental agencies and agents of Uzbekistan. The main planning strategies as discussed by the social media strategists are representation, engagement and networking.
<b>Feedback</b>	Recently the focus of the government has been on mobilizing the voice of the people and has been passing laws and policies for facilitating open and honest journalism as well. Thus, this theme focused on the responses

of the strategists related to the suggestions, complaints and messages by the citizens to the governmental social media accounts.

**Tools**

The main tools and applications for the social media in Uzbekistan were discussed and the discussion related to this aspect was coded into this theme. The research and discussion with the strategists indicate that Facebook, Instagram, and Telegram are the most active social networks in Uzbekistan. Thus, most of the strategies of the governmental agencies are focused on development of a repertoire with the citizens through these applications or also by using the domestic ones.

**Participation**

The participation by the citizens or the people in the discussion around the social media and the communication with the governmental agencies through the usage of the social media. The social media strategists were asked to share their perceptions. The discussion entailed that Uzbekistan is moving towards a model of

participatory democracy. With this vision and with the evaluation of the current proceedings of the agencies greater responsiveness and regular interaction is required by the government agencies and a focus on the mobilization of social media is being focused.

In the first step of the analysis, the transcriptions were uploaded to NVivo for evaluation of the main themes. Once the main themes were identified, the data was codified in order to be analyzed through the framework-based method. This method is a systematic approach for the review of data and allows the researcher to present the data in accordance with the major themes. In the present analysis, the transcriptions were sifted, coded and sorted in accordance with the main objectives and themes. The following table presents the themes, and the responses of the social media experts. The responses have been presented as similar and unique responses to present an overview of the overall discussion;

Theme	Similar response	Unique response
<b>Typology of information</b>	The major strategy and rationale behind the creation and usage of the social media platforms is the dissemination of relevant information. Mainly, the agencies and governmental agents use social media as a tool for educational and promotional purposes for policy information and also for building a participatory democracy.	Mainly educational, informational, campaign related and sometimes for some crisis management as evidenced by the pandemic.
<b>Content strategy</b>	The biggest and the most important role of governmental social media is always to serve the community by important updates. This includes all information and news from public holidays to road closures, to election and campaign	The engagement on the official postings is pretty low. Also, the main strategy of these agents is to network with the community and humanize the agencies, which can only be

announcements to policy changes and breaking news.

The main planning strategies are representation, engagement and networking. Through these strategies the social media agents seek to push forward the information dissemination activity and mainly focus on publishing news and official information through public announcements, press releases or simply posting on the preferred channels.

### Feedback

By listening actively to the suggestions, complaints and messages forwarded to the governmental accounts by the citizens.

The best way is to focus on developing citizen cells and portals, hotlines, complaint registers etc. so that all information and feedback can be registered. According to the social media agents, in this way they can consider the most relevant feedback and include it in the policy considerations if it aligns with the overall goal of the strategy and the general direction adopted by the government.

achieved through building active engagement

The consideration of the people is essential for management of these accounts. You can't throw information out there if no one is waiting for it. Unfortunately, these aspects have been somewhat compromised in the context of Uzbekistan. The government has a strict mandate for publishing of wrongful or blasphemous information and mainly the push is concentrated for the usage of the domestic platforms. The community needs to feel heard and adjusted if the plan to be productive and use it to your advantage.

There have been studies showing that voters tend to be more involved when they see transparency and authenticity from the government. So, the key to being more engaging or developing your reach is to become authentic and as honest as possible. All the developing and developed countries of the world are leveraging social media to make the citizens feel heard and as participatory democracy is on the agenda, making them feel heard and

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**Tools**

Facebook, Instagram, and Telegram are the most active social networks in Uzbekistan. We can build a repertoire with the citizens through these applications or also by using the domestic ones. The approach you say, in my opinion it is transparency and openness. The more open, accountable and transparent we become, the more the public will support the agencies and ministries and all the politicians.

**Participation**

Social media offers everyone a chance to provide individuals with a platform that overcomes barriers of distance and time, allowing them to connect and reconnect with others and thereby expand and strengthen their networks. The future outlook of the government is participatory democracy. With this vision and with the evaluation of the current proceedings of the agencies greater responsiveness and regular interaction is required by the government agencies, so that they can work with the citizens through open dialogue and develop a safe space for communication.

acknowledged is the best way. Also, the incorporation of feedback within the policy development is a latter issue for the time being, first of all mediums for receiving the feedback need to be devised. We can set up helplines, emails and citizen portals for registering the feedback from the public.

Alexandria Ocasio-Cortez. She uses the social media as a tool to put her opinions forward and she engages actively with her followers on twitter and Instagram. She also gives her followers a look into her personal or daily life and a behind-the-curtain look at how Congress operates. This strategy of her humanizes herself and the congress. So, I think a similar approach if applied would work anywhere, as the community will feel that they are a part of everything that is happening

need of open law-making portals to gain trust and increase transparency of our officials. The evaluation of the current system shows that there is ardent need for developing a single body that mandates the governance and data portals and facilitates the vision of the e-government

The freedom on the internet is very low in Uzbekistan, in 2020 it was 27/100 by the ranking maintained by freedom house. Also, for making the internet accessible, developing a true participatory democracy and building engagement with the

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community the government  
needs to ease the sanctions on the  
internet and content

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Additionally, studies substantiate evidence suggesting that quality content and increased interaction invigorates trust of the citizens in the governing agencies. The dialogue and interaction humanize the government and its agents for the public. Also, the increase in response to citizen queries and issues helps in building trust and association with the government. Also, Bryer (2011) proposed that the limited governance bodies cannot hold the queries of the larger population that is why this condition is also overwhelming in Uzbekistan. Thus, along with quality and scheduled content, governance is also required for inspiring trust and satisfaction in the citizens. Furthermore, Chun, Shulman, Sandoval, and Hovy (2010) proposed positive association between good governance and citizen trust as well. Accordingly, scholars suggest that public trust is essential for success of the government. Bonsón et al. (2015) has proposed that good governance is also something effective that can be secured through the good governing practices of the state and government. Trust of the citizens is vital as it can be achieved by performing better governing practices across the country. The maximum level of public trust can be achieved by showing the loyal sympathies of the government to its citizens. The trust and interaction through social media of governmental agencies is required as the usage of social media was restricted previously in Uzbekistan. The present is working on improving the digitization of the country. Thus, the present government is working effectively towards the incorporation of social media in their governmental procedures and communication with the citizens. The medium was adopted for communication during the pandemic and twitter and Facebook are increasingly used for postings related to policy procedures.

Thus, in accordance with the framework analysis and opinion of social media experts there are primarily four different typologies of information that can be adopted on social media by the governments or their representatives; including information dissemination, online dialogue, agency presentation and input seeking. These ideas have been put forward by previous researchers as well, suggested that the governmental usage of social media stems from need for creation of online dialogue, information and agency dissemination, crisis communication and input seeking. The provision of information and the process that goes into the development of content for socials is detailed and the governmental agencies refer to the operations, events and policies for design of content. Social media has been increasingly used by governments and its agencies for putting across regulatory information and also directions for different procedures. Discuss that the second most observed content on social media is related to the public service announcements including the announcements regarding well-being of the public, health and safety of the public as well. Also, in the recent pandemic, the social media was excessively used by governments around the world for educating public about SOPs, vaccinations, social distancing and other requirements. Indicated that the second most highlighted and discussed content on social media in Uzbekistan is information seeking and dissemination of citizen based information. Moreover, the governmental agents and agencies set out polls and question answer sessions for interacting with the public and to know of their opinions and feedback. These activities suggest of online dialogue persistent on the social media platforms and contributes towards the development of an amicable relationship between the citizens and government. Studies indicate that the online dialogue is essential for the



development of trust in the citizens and works as an effective image building tool as well. The information sharing between the governmental representatives and the citizens, the posts and online interaction through the comments, lives, stories, agency posts, results in increased dialogue between the two parties and works by decimating the perceived distance between the citizens and governments.

The governments adopt the technique of political positioning, expressing and taking a position on a political issue, which also enhances the level of interaction and responsiveness of the government towards the citizens on political issues (Ishii, Lyons, & Carr, 2019). Thus, all of these actions are facilitating to the development of dialogue between governments, agencies and citizens which ultimately leads to the development of trust and invigorates responsiveness in the government pertaining to the issues of the citizens. Also, the developmental perspective of the governmental agencies and agents for postings on social media relates with the mission or agenda of the government. The primary essence of the content is information and education-oriented messages. Dekker et al. (2020) showed that social media has been successfully adopted despite some of the social, policy and strategic barriers in various public organizations and was integrated into the daily activities of several public service organizations (law enforcement) and other governmental bodies for dealing with emergency and crisis situations (FREW & Griswold, 2016).

This facet of the data is important for generalization of the results and explains how the respondents based on their profile will be responding to the constructs under evaluation. In accordance with Connelly (2013), it is important to describe and evaluate the research participants i.e., the demographics and the profiling of the respondents is an essential part of reporting. Demographics have been realized as components or variables that are collected by the researchers to explain the nature of the sample used with the inferential statistics. The demographical data mainly responds to the sample and helps in explaining the facets of the people or subjects that have been drawn from the population, following a particular technique. The process of demographical profiling is among the key facets among the survey research and defines from whom to collect the data and in what way the overall survey response data needs to be broken down so that a meaningful group of respondents can be achieved. The information collected from the participants under the characterization of demographics, is essential for generalizing the results of the study. Moreover, these are independent variables because they cannot be manipulated through any other variable. In this research, data has been collected from the citizens of Uzbekistan that use social media. The objective of the study is to evaluate the effectiveness of the social media usage by the government of the country and the degree of trust and engagement it inspires within the populace and also the responsiveness of the government on part of any complaint or request adhered by the citizens on social media. For illustration of the demographical profile of the respondents, the frequency distribution method has been used and the results can be seen in table 2.

Table 4: Profile

		Frequency	Percent
Gender	Male	217	55.2
	Female	176	44.8
	Total	393	100.0
Age	Less Than 25 Year	124	31.6
	25 to 35 Years	160	40.7

	35 to 45 Years	94	23.9
	More Than 45 Years	15	3.8
	Total	393	100.0
Experience	Less than 2 Year	55	14.0
	2 to 5 Year	167	42.5
	5 to 8 Year	132	33.6
	More than 8 Year	39	9.9
	Total	393	100.0

It can be seen that the researcher has used 3 measures for defining the respondent profile. The study reports on the gender, age and experience of the respondents. There are a total of 393 respondents in the study and from these 217 i.e., 55.2 percent are male whereas 176 i.e., 44.8 percent are female respondents. The gender disparity shows that more men or male population took part in the study in comparison to the female population, as it was an online survey. The second characteristic is the age. The age variable has been divided into intervals of 10 years. The first interval is comprised of all respondents under 25 and last one comprises of those above 45. 124 respondents fall in the first range i.e., below the age of 25 years representing 31.6 percent of the sample, the second interval is from 25-35 years and includes 160 respondents representing 40.7 percent of the sample, 94 in the third range i.e., 35-45 years and is representative of 23.9 percent of the sample and 15 are in the last interval of more than 45 years i.e., 3.8 percent of the sample.

The age distribution shows that most of the respondents in the study are falling in the dimension of early twenties to middle age. The third and final characteristic of people included in the sample is their experience. The experience is defined in terms of the usage of the social media. The researcher inquired for the level of experience in terms of years, i.e., the amount of time or the number of years for which the citizens has been using the social media applications. There are 55 respondents, 14 %, that have below two years of experience, 167 respondents, 42.5%, which have experience between 2 to 5 years of experience, 132 respondents, 33.6%, which have below between 5 to 8 years of experience and 39, 9.9%, having over 8 years of social media usage experience.

The descriptive analysis is used to present an explanatory evaluation of the general features of the data like the summary statistics of the variables being studied (Fisher & Marshall, 2009). The studies that are based on large datasets, use the descriptive analysis to manage the data and study the essential details like the outliers, missing values, normality and response orientation of the data. Generally, the descriptive statistics are used for numerically describing and summarizing the basic features of the study.

Rearranging, reorganizing, and altering data to make it easier to understand and evaluate this same presented data are all examples of data reshaping. Constructive analysis refers to the process of describing, explaining, or summarizing data in such a way that it allows for the formation of patterns that satisfy all of the data's requirements. Both descriptive and inferential statistical analysis methods have significant differences. Descriptive statistics are used to describe the data, rather than draw conclusions from it.

There are three ways to describe the average, median, and mode of the data set's distribution's frequency, which is used to determine the most frequently occurring patterns. The

mean, standard deviation, and frequency are some of the descriptive and inferential statistics used to characterize or summarize a sample or data set. Inferential statistics can help shed light on large datasets. The sample mean, variance, but also distribution of a variable can help us better understand the world and the things in it.

The statistics that are computed through the descriptive evaluation are used to inform the researcher of the main characteristics and these are essential to be evaluated for the application of the SEM analysis. The presence of outliers affects the model fitness and increases the incidence of error values, thus it needs to be evaluated and the presence of missing values leads to faulty estimates. According to J. F. Hair, Black, Babin, and Anderson (2011) the presence of missing data is considered to be a significant problem as the results and analysis can be affected due to its presence. The impact of missing values or data is more severe when the structural equation modelling is to be applied (Arbuckle, 2009), which is true in the present case. The normality is also a prerequisite for most of the regression-based studies and was a considerable factor in the present study as well.

Structural equation modeling, a powerful multivariate tool, is increasingly being used in scientific research to investigate and evaluate causal links involving multiple variables. SEMs, in contrast to previous methods of modeling, examine the impact of causality assumptions on the models under study, both directly and indirectly. Both route and confirmation factor analysis are used in structural equation modeling. People's attitudes and levels of contentment are a primary focus of the psychological assessment technique known as confirmatory factor analysis. Route analysis is often used to mediate the correlation between two variables, assuming that one variable impacts an outcome directly and indirectly through the other. To estimate composite variables, it is not possible to use factor analysis because it doesn't take into account any variation in error among the indicators. Hypothesize a latent variable by considering why you want to do it. Model assessment uses quantitative indices to gauge the overall performance of the model's fit.

The conceptual model and fitness of the model were verified in the previous section and in this section the structural model and relationships have been evaluated. Structural equation modelling is a widely used method in the field of social sciences, mainly due to its many advantageous features. It is a multivariate technique of statistical modelling and analysis that is used to test the truth of the relationships. SEM is a combination of factor and multiple regression analysis (Kerlinger, 1966). A statistical technique that is used to "analyze the relationship between a single dependent variable and several independent variables" is known as "multiple regression analysis". Such analysis helps in assessing the "strength of the relationship between the variables". These variables include: dependent and the independent variables as well as several "predictor variables". However, the impact of "predictor variables" is eliminated statistically considering only the outcomes and the independent variables.

Many studies have showed a significant relationship between perceived transparency and individual perception of the government's social media usage. According to Gelders (2005), the information provided by the government for the citizens by means of social media should be complete as well as trustworthy. This is also supported by other scholars. According to Jaeger and Bertot (2010), the information given to the citizens by the government is found to be more impactful if it is reliable. This shows the significant impact of perceived transparency. According to Rebolledo, Medina, and Rodríguez-Virgili (2016), the transparency of the methods also help the citizens in pointing out the flaws thus providing them a room to give suggestions. Thus, an accurate

and impactful information provided by means of social media to the citizens help in encouraging them to participate in policy making decisions (S. S. Park, Rohani, & Bae, 2015). This also leads to a significant association between the social media usage by the government and the citizen engagement. The e-government is found to have an important impact on the participation of the citizens. According to I. Mergel (2013b), the government of a country uses social media for three important reasons which include: “to get citizens’ opinions regarding improvements in policies”, “to seek citizen cooperation in solving issues”, and “to keep citizens updated regarding government processes and decisions i.e. to enhance transparency”. This shows the significance of social media in engaging the citizens in the decision making processes of the government. The findings obtained from the study also showed that the social media has significant and positive associations with the content type. The quality information provided on the social media, is found to have a significant impact on the citizens. The social media helps the government in reaching the larger audience in a short period of time and more effectively. This provides the citizens an opportunity to access the information provided by the governments more easily (Porumbescu, 2017). This supports the democratic system of the country. Thus, the content provided by the government on the social media should be informative as well as accurate for the citizens so that they can be able to make their decisions accurately on the basis of the provided information. This leads to more effective outcomes (Rebolledo, Zamora Medina, and Rodríguez-Virgili, 2016).

Many studies have also contributed towards the associations between the social media usage by the government and perceived responsiveness. Such association is found to be significant by many scholars. The responsiveness of the government towards the citizens is highly considered especially in a democratic society. According to Powell Jr (2004), the government is needed to be responsive to the wants of the majority of the people. This helps in creating trust among the citizens. The satisfaction of the citizens is considered to be related to the responsiveness of the government (Armingeon & Guthmann, 2014; Torcal, 2014). Thus, the social media platform, if used properly can play an important role in perceived responsiveness of the government to the citizens. However, the results obtained from this study showed a weak relationship between the citizen trust and social media usage by government. However, many other research studies have contradicted to it.

According to Houston & Harding, 2013, the trust is considered to be an important factor for the smooth running of the system. Such trust helps in gaining the needed confidence by the citizens which encourage them to accept the policies, regulations as well as rules implemented by the government (Park et al., 2015). It has also been observed that an increase in no. of scandals as well as cases of corruption results in mistrust of the citizens towards the government and this results in lowering of economic growth of the country as well (Gracia & Arino, 2015). It has also been concluded that without the support of citizens, no reforms of the government could be applicable and this is only possible if the citizens have full faith in the government and thus, trust is found to play an important role in this regard. Thus, the government of Uzbekistan, is using the social media platform especially Twitter and Face book to provide quality information to its citizens with full transparency. However, the content provided by the government by social media means show the responsiveness of the government to its citizens. This helps in encouraging the citizens to take part in dialogue with the government through social media platforms to put forward their thoughts and suggestions which are respected by the government of Uzbekistan while making

any reforms or policies. However, the chaos observed on the social media platforms has resulted in obtaining weak trust of the citizens in the government.

Many research findings have also helped contribute to the connections between the government's use of social media and the perception of responsiveness. ' Many academics believe that this connection is significant. Democracy places a high value on government responsiveness, especially when it comes to citizens. Having a responsive government is essential, says Powell Jr. (2004), because it allows citizens to voice their concerns and desires. As a result, citizens have a greater sense of confidence in the government. The government's responsiveness is thought to be associated with citizen satisfaction (Armingeon & Guthmann, 2014; Torcal, 2014). As a result, the use of social media can play a significant role in the public's perception of how responsive the government is. A correlation between trust in the government and its use of social media was found to be weak in this study. Many other studies, on the other hand, have found the opposite. For the system to function properly, trust is critical. This kind of trust encourages citizens to accept the government's policies, regulations, and rules because they give them the confidence they need (Park et al., 2015). It's also been found that as the number of scandals and cases of corruption rises, citizens lose faith in the government, which has a negative impact on economic growth (Gracia & Arino, 2015). Government reform cannot be implemented without any of the endorsement of citizens, and this can only be done if the citizens have complete faith in the government, which is why trust is so important in this context. As a result, the Uzbek government uses social media, particularly Twitter and Facebook, to provide its citizens with high-quality information that is also completely open. Social media posts from government agencies show how responsive they are to their constituents. When the government is making whatever reforms or policies, it encourages citizens to participate in the dialogue via social networking sites to express their thoughts and ideas, which are taken into consideration by the government. As a result of the confusion on social media, citizens have lost faith in their government.

### **Discussion**

Mainly, this research looks at how the use of social media platforms has affected the openness and participation of government agencies in Uzbekistan. Researchers opted for a mixed methodology, combining quantitative and qualitative techniques, to address the concerns raised by this line of inquiry. Among the quantitative goals of the research was a better understanding of how social media can be used to increase public trust in and participation with government agencies in Uzbekistan. The government's reaction toward its people was the focus of the second goal. The researchers chose to make the government's use of social media the independent variable and the trust in government, public participation with government via social media, and the perception of government responsiveness to citizens the dependent variables in order to achieve the study's quantitative aims. Perceived honesty and content type have also been considered as mediators in the study. The qualitative goals of the study include, first, an analysis of how the government of Uzbekistan categorizes the material it uses, and second, an examination of the policies and practices of the government in regard to social media. These two goals are connected to the investigation's qualitative component.

All throughout the world, governments have made it a top priority to facilitate more public engagement with the online community and dialogue. Citizens' active involvement in government's daily operations demonstrates their trust in the institution and, in turn, increases openness and interaction between the parties. The inclusion of citizens remains a top priority for

governments as they seek to improve the morale and trust of their populations. For instance, a recent study by Goncalves looked into the function of municipal governments and their use of Facebook. The study found that digital administrators utilize a number of different social media platforms to help them create content that is both relevant and interesting. Results like this provide credence to the study's working hypothesis.

The operators' connection with residents via the social media pages fostered confidence and spurred them to interact more frequently with the governmental agents, according to a comparable study that analyzed the role of the Canadian immigration authorities. The Canadian government confirmed this to be true. Similar strategies have been used by Alexandria Ocasio-Cortez. She's a Republican in the United States who uses social media like Twitter and Instagram to have conversations with her fans and spread her political views. By taking part in these many events, citizens' views on the positive potential of social media and its various applications can be shifted.

There is a wide variety of buyers and sellers in Uzbekistan's media market, making it reminiscent of a lively bazaar. It's no secret that journalistic freedom in Uzbekistan was severely restricted when Karimov was president. Bonsón et al. (2019; 2015) Those who dared to speak out against the established order were met with severe legal consequences. Being a journalist was not seen as a very noble profession, and neither was the salary.

A noticeable change has occurred during the previous three years. The amount of coverage provided by traditional media has increased significantly. In response to market demand, an increasing number of businesses are entering the television and internet media distribution industries. The media sector is benefiting from a rise in revenue. It has deteriorated to the point where it is now an overcrowded, noisy, scandalous convenience shop. Social media facilitates people's continued interaction with one another. Moreover, young people appreciate social networking sites as a way to keep in touch with their peers and project an image of coolness.

To begin, we'll talk about the section of the conversation that centers on the findings from the quantitative analysis performed to address and focus the study's quantitative elements. The study's first hypothesis states, "The influence of government usage of social media on citizen trust in government is significant". Prior research was reviewed in order to form this hypothesis for the current study. The research results support this idea, showing a favorable and statistically significant effect. These results are in line with those of a different study (Alryalat, Rana, Sahu, Dwivedi, & Tajvidi, 2017) that argues citizens will have more faith in their government if they see it actively participating in social media. This is due to the fact that people feel closer to their government while communicating with it via social media. The results here agree with those of the study. Multiple studies have shown that when governments are active on social media and interact with their constituents, it fosters more openness and trust on both sides (Bonsón et al., 2019; Bonsón et al., 2015). This has been proven to be true. It is also hypothesized that "the impact of government usage of social media on citizen involvement with government through social media is significant" and this will be investigated in the research. This research suggests that this idea is valid. Furthermore, it was discovered that the government's usage of social media has a favorable impact on citizen interaction with the government via social media. Previous studies (Bonsón et al., 2012) found similar associations between the government's usage of social media and increased citizen involvement with that same administration. The results line up with what has been found in the past.

One of the worst things that can happen to an adolescent is to go out of step with current fashion. It's no longer just the largest social networking sites that carry social media's weight; their impact has broadened considerably. In today's world, keeping up a strong profile on multiple social media sites is crucial. Talented journalists remain hard to come by. There was a lack of education for journalists in the past. The most talented journalists in the country all left the country for other nations since there was no place for them to learn and no one to follow in their footsteps. A lack of trained journalists prevents the market from expanding. In 2020, many universities will launch brand-new journalism programs, which will go a long way toward meeting the demand for qualified journalists. Media in Uzbekistan probes businesspeople, state businesses, and internal and foreign policy to the best of their ability and with the most courage they can muster because they have no other obstacles. Teens can use this to see beyond their immediate surroundings and learn about the world beyond their community. As a result, on her special day, people all around the world wish their grandmother a happy birthday by sending her an electronic message.

### **Conclusion**

The study is mainly focusing on the impacts of social media on the transparency and citizen engagement of the government organizations in Uzbekistan, for the purpose of addressing this research problem, the study has chosen a mixed methodology including both quantitative and qualitative aspects and objectives. The objectives related with the quantitative part of the study included analysis of the citizen trust and engagement with the government organizations in Uzbekistan with the help of social media whereas, the second objective focused on the response of the government towards the citizens.

For the achievement of the quantitative objectives of the study, the study considers social media used by government as independent variable, citizen trust in government, citizen engagement with government through social media and perceived responsiveness of government to citizens as the dependent variables and inculcating the variables of perceived transparency and content type as mediators for the research. The total respondents include 393 participants and as far as the results for the quantitative analysis are concerned, the impacts have been found out with the help of structural equation modeling. Moreover, the analysis was also done with the application of the tests including descriptive statistics, KMO and Bartlett's test, rotated component matrix, confirmatory factor analysis and convergent and discriminant validity.

According to the results of the quantitative portion, it has been found out that the impact of social media used by the government is significant and positive on the citizen trust in the government, citizen engagement with the perception of the government through the social media and perceived responsiveness of the government to the citizens. As far as the mediation of perceived transparency is concerned, it has been found out that there is significant medication of the mediator perceived transparency in between the independent variable social media used by the government and the dependent variables citizen trust in government, citizen engagement with government through social media and the perceived responsiveness of government to the citizens.

Moreover, the mediation of perceived transparency is concerned, it has been found out that there is significant medication of the mediator content type in between the independent variable social media used by the government and the dependent variables citizen trust in government, citizen engagement with government through social media and the perceived responsiveness of government to the citizens. The objectives related with the qualitative portion of the study include the first objective that addresses the typology of information that is utilized by the government of

Uzbekistan whereas, the second objective focuses on the strategies Uzbekistan government for the usage of the social media. As the interview-based approach is utilized for satisfying the qualitative objectives, so, the first question and the first theme identified in the study was of the content type published by the governmental social media handles.

As a result of which, it is found out that, the major typology of information that is shared by the government with the citizens on the social media platforms and handles include educational campaigns, informational campaigns, and information related with different policies, regulations and crisis management steps. The second question focused on the content planning strategy used by the governmental agencies, ministries and agents for the social media. As a result of which it has been found out through the responses of the social media experts that the objectives behind the strategies include utilization and creation of social media platforms for the dissemination of important and relevant information.

The government uses the social media platforms for providing the citizens with relevant and important information and updates. Furthermore, it has been found out strategies also involve objectives to connect with the citizens and form is significant and positive network between the citizens and the government as well.

The third question focused on the strategies used by the governmental agents and agencies for planning and also the basic strategy that they have towards the social media. As a result of which it has been found out that the major planning strategies include engagement, representation and networking strategies. With the help of these strategies, the social media agents have the objective to push forward the information dissemination activity and majorly focus on the publishing of news and dissemination of official information with the help of press releases, public announcements and posts on the preferred channels.

The fourth question focused on the incorporation of the feedback received by the governmental agencies through the social media platforms. To which the social media experts responded that with the help of listening closely to the suggestions and complaints of the citizens, the feedback can be improved, so it is important that the government not only makes sure that feedback is taken from the citizens, but steps are taken as well in order to improve public relationships based on the feedback.

The fifth question focused on the incorporation of the feedback received by the governmental agencies through the social media platforms. In response to which, it has been observed that the social media experts are of the idea that the best possible way is to focus on the development of portals and cells, complaint registers and hotlines for creating a valuable network and connection in between the government and the citizens as well.

Furthermore, according to the social media agents, with the help of these platforms and portals, the government can make sure that only the constructive and most important feedback is considered, and then the government can align the relevant feedback with the strategies and goals of the government as well.

The sixth question focused on the future digital outlook for the country and also the tools and mechanisms that can promote access to and participation in social media technologies to all members of society. It has been found out that the government today is utilizing Facebook, Instagram and telegram for the purpose of networking with the citizens, whereas the most effective approach for the government has been found to be transparent and open towards the citizens. The social media agents propose that the government must be accountable, transparent and open



towards the citizens, so that the citizens can be supportive and trusting towards the government as well.

The social media agents propose that if utilized positively and with transparency, social media platforms can significantly remove the barriers in between the government and the citizens that are there because of the time and distance. This is going to allow the government to connect with the citizens, strengthening and expanding the network and connection between the citizens and the government as well. This will also result in enhanced participation of citizens and democracy in Uzbekistan so, there is a significant requirement of transparent, open and vivid communication and information sharing between the government and the citizens.

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# UNVEILING THE IMPACT OF APPLIED DATA SCIENCE ON BUSINESSES IN UZBEKISTAN: A COMPREHENSIVE REVIEW

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**Abstract.** *The impact of applied data science on businesses in Uzbekistan has been profound, revolutionizing the way companies operate and make decisions. In this comprehensive review, we will delve into the various ways in which data science has transformed the business landscape in Uzbekistan, and the implications it holds for the future. From optimizing operational processes to informing strategic decisions, the application of data science has proven to be a game-changer for businesses across diverse industries in Uzbekistan. This review will explore case studies and examples to illustrate the real-world impact of data science, as well as the challenges and opportunities that lie ahead for businesses in the country. Finally, even though a systematic approach was used during this literature review, the findings show that the application of data science in businesses in Uzbekistan has led to significant improvements in efficiency, cost savings, and overall performance. One of the key areas where data science has made a substantial impact is in marketing and customer analytics. Companies in Uzbekistan have been able to leverage data-driven insights to better understand consumer behavior, tailor their marketing campaigns, and ultimately improve customer engagement and retention.*

*Moreover, the integration of data science into supply chain management has enabled businesses to optimize inventory levels, streamline logistics, and reduce operational costs. This has not only improved the overall efficiency of the supply chain but has also led to a more responsive and agile business environment.*

*Looking ahead, the future of applied data science in Uzbekistan holds promising opportunities for businesses to further innovate and gain a competitive edge. As advancements in technology continue to evolve, businesses will have the opportunity to harness the power of big data, machine learning, and AI to drive innovation and enhance decision-making processes.*

**Keywords:** *Applied Data Science, Business in Uzbekistan, Data Analytics, Forecasting, Data Visualizations.*

## Introduction.

In today's rapidly changing world, the significance of accurate weather forecasts cannot be overstated. Weather forecasts play a crucial role in various sectors, including agriculture, transportation, tourism, and disaster Weather conditions have a direct impact on various aspects of businesses, ranging from agricultural production and energy consumption to logistics and retail sales. Therefore, it becomes imperative for businesses in Uzbekistan to incorporate applied data science methods to harness the power of weather forecasting and make informed decisions. This paper aims to provide a comprehensive review of the impact of applied data science on businesses in Uzbekistan, specifically focusing on how weather forecasts can be utilized to optimize

operations and maximize profits. By leveraging historical weather data, businesses can better understand seasonal patterns and anticipate weather-related challenges. This proactive approach allows companies to adjust their production schedules, inventory levels, and staffing to mitigate potential disruptions caused by extreme weather conditions.

Furthermore, the use of advanced data science techniques enables businesses to develop more accurate demand forecasting models based on weather patterns. For instance, retailers can adjust their product offerings and marketing strategies in anticipation of changes in consumer behavior driven by weather fluctuations.

In addition to strategic planning, data science can also be employed to improve risk management and disaster preparedness. By analyzing historical weather data and simulating various scenarios, businesses can better prepare for natural disasters and minimize their impact on operations.

The integration of data science into businesses in Uzbekistan presents a valuable opportunity to enhance resilience, adaptability, and overall performance in the face of weather-related challenges.

#### Objectives of the research

The objectives of the research on the impact of applied data science on businesses in Uzbekistan are:

- To identify the benefits and challenges of implementing data science in organizations across different sectors in Uzbekistan.
- To assess the current state of data-driven strategies in businesses in Uzbekistan and understand the extent to which data science is being utilized for decision-making.
- To analyze the role of policy and regulatory frameworks in shaping the adoption and responsible use of data science in Uzbekistan.

#### Methodology

##### Literature review approach

The research will begin with a comprehensive literature review to gather insights from existing academic and practitioner-oriented literature related to data science, business impact, and weather-related decision-making. This review will provide a foundation of knowledge and help identify gaps in current research that can be addressed through the study.

##### Selection criteria for articles and studies

The selection criteria for articles and studies will include relevance to the research objectives, publication date (preferably within the past 5 years), credibility of authors and sources, and applicability to the context of businesses in Uzbekistan. Additionally, the research will prioritize studies that focus on the practical implementation and outcomes of data science initiatives in real-world business settings.

##### The Potential Benefits of Applied Data Science

With the increasing availability of big data sources such as satellite imagery, sensor data, and internet of things devices, businesses in Uzbekistan have the opportunity to enhance their weather forecasting capabilities (Ma, L. and Nie, F., 2017). By leveraging advanced data science techniques, including machine learning algorithms and predictive analytics, companies can analyze large volumes of diverse data to improve the accuracy of their weather forecasts. This can result in several potential benefits for businesses:

**Improved operational efficiency**

By accurately predicting weather conditions, businesses can optimize their operations and resource allocation. This includes adjusting production schedules, optimizing transportation routes, and managing inventory levels more effectively(Khan, N. et al., 2018).

**Enhanced customer experience**

With more accurate weather forecasts, businesses can provide customers with timely and relevant information. This can lead to improved customer satisfaction and loyalty, as well as the ability to tailor products and services based on weather conditions(Anaman, A, K. and Lellyett, C, S., (no date)).

**Better risk management**

Accurate weather forecasts can help businesses identify and prepare for potential risks, such as extreme weather events or supply chain disruptions. By implementing data-driven decision-making processes, businesses can develop proactive risk management strategies and mitigate the negative impacts of weather-related risks. Ultimately, the implementation of applied data science in Uzbekistan can revolutionize businesses by enabling them to make data-driven decisions, optimize operations, and improve risk management, ultimately leading to increased competitiveness and resilience in the face of weather-related challenges(Improving Investment Operations through Data Science: A Case Study of Innovation in Valuation | Portfolio Management Research, (no date)).Improved resource allocation and cost savings: By having more accurate weather forecasts, businesses can optimize their use of resources such as energy, raw materials, and equipment. This can result in cost savings, reduced waste, and increased efficiency(Ayscue, E. et al., 2015).

**Enhanced planning and decision-making**

Applied data science can provide businesses with valuable insights and forecasts that enable better long-term planning and informed decision-making. These benefits can lead to increased profitability and competitiveness in the market for businesses in Uzbekistan(Hedgebeth, D., 2014).

**Improving Agricultural Productivity**

One of the key areas where enhanced weather forecasting can have a significant impact is in agriculture. With access to more accurate weather predictions, farmers and agricultural businesses can make informed decisions regarding planting, irrigation, and harvesting schedules. By integrating weather data with historical crop yields, businesses can optimize their agricultural operations and minimize the impact of adverse weather conditions on crop production(Khan, N. et al., 2018).

**Enhancing Energy Management**

Weather conditions greatly influence energy consumption and production. By utilizing data science methods to forecast weather patterns, energy companies can better plan for fluctuations in demand and optimize the generation and distribution of energy resources. This not only improves operational efficiency but also reduces costs and ensures reliable energy supply to businesses and consumers(Inman, H, R., Pedro, C, T, H. and Coimbra, M, F, C., 2013).

**Optimizing Logistics and Transportation**

For businesses involved in logistics and transportation, accurate weather forecasting is essential for route planning, vehicle maintenance, and overall supply chain management. By leveraging real-time weather data and predictive analytics, companies can better anticipate and

respond to weather-related disruptions, ultimately improving the reliability and efficiency of their transportation operations (Raj, J., Bahuleyan, H. and Vanajakshi, L., 2016).

### **Improving Risk Management**

The use of applied data science in weather forecasting can also greatly enhance risk management for businesses. By analyzing historical weather data and utilizing predictive models, businesses can assess the potential risks associated with severe weather events such as storms, hurricanes, or extreme temperatures in order to develop contingency plans and mitigate potential financial losses (Ballentine, V., 1994).

Strengthening Tourism and Hospitality Industries such as tourism and hospitality heavily rely on weather conditions. Accurate weather forecasting can help businesses in Uzbekistan optimize their operations and make informed decisions. For example, hotels and resorts can anticipate fluctuations in demand based on weather forecasts and adjust their pricing and marketing strategies accordingly. Furthermore, tour operators can plan outdoor activities and attractions based on weather predictions to enhance the overall tourist experience (Scott, D. and Lemieux, J. C., 2010).

### **Rationale for studying its impact on businesses in Uzbekistan**

Understanding the impact of applied data science on businesses in Uzbekistan is crucial for several reasons. Firstly, Uzbekistan is an agricultural country where weather has a significant impact on crop production and overall agricultural practices (Khan, N. et al., 2018). Secondly, with the growing emphasis on technological advancements and digital transformation in Uzbekistan, businesses in various sectors are increasingly adopting data-driven approaches to improve their operations. Additionally, the geographical location of Uzbekistan exposes the region to a diverse range of weather patterns, including extreme temperatures, seasonal fluctuations, and occasionally, natural disasters such as droughts and floods. Therefore, studying the impact of applied data science on businesses in Uzbekistan not only aligns with the country's economic and industrial priorities but also addresses the specific challenges and opportunities presented by its unique environmental context.

By examining the application of data science in various sectors such as agriculture, energy, logistics, and tourism, researchers and business leaders can gain insights into the specific strategies and technological interventions that are most effective for mitigating weather-related risks and optimizing operations in Uzbekistan. Moreover, understanding the potential benefits of data science in this context can serve as a catalyst for further innovation and investment in advanced technologies, ultimately contributing to the modernization and competitiveness of Uzbekistan's business landscape.

As businesses continue to adapt to the changing climate and evolving consumer demands, the role of data science in weather forecasting and risk management becomes increasingly vital. Therefore, developing a comprehensive understanding of the potential benefits and challenges of integrating data science into business practices is essential for fostering sustainable growth, resilience, and innovation across diverse industries in Uzbekistan.

### **The Impact of Applied Data Science on Businesses in Uzbekistan**

#### **Analyzing Current Industry Trends**

To fully comprehend the impact of applied data science on businesses in Uzbekistan, it is important to analyze the current industry trends and the extent to which data-driven approaches are being embraced across different sectors. By examining the adoption of data science



methodologies and technologies in agriculture, energy, logistics, and tourism, researchers can identify the specific challenges and opportunities that businesses are facing in integrating advanced data analytics into their operations(Rejeb, A., Karim, R. and Zailani, S., 2021).

#### **Assessing Technological Infrastructure**

Another critical aspect of understanding the impact of applied data science on businesses in Uzbekistan is assessing the existing technological infrastructure and capabilities. This includes evaluating the availability of data collection systems, the sophistication of analytics tools, and the level of digital connectivity across different regions. Understanding the technological readiness of businesses and the broader ecosystem will provide valuable insights into the potential barriers and enablers for the widespread implementation of data-driven strategies(Baeuo, M, O, M., Rahim, A, B, Z, N. and Al-araibi, M, A, A., 2016).

#### **Exploring Policy and Regulatory Frameworks**

In addition to technological considerations, the impact of applied data science on businesses in Uzbekistan is inherently linked to the policy and regulatory frameworks governing data privacy, security, and innovation. Researchers must delve into the existing legal landscape to identify any constraints or opportunities that may influence the adoption of data science solutions and the responsible utilization of weather-related insights in business decision-making(Tikkinen-Piri, C., Rohunen, A. and Markkula, J., 2018).

#### **Collaborating with Industry Stakeholders**

To gain a comprehensive understanding of the impact of applied data science on businesses in Uzbekistan, it is imperative to collaborate closely with industry stakeholders, including business leaders, governmental bodies, and industry associations. By engaging in dialogue and knowledge-sharing with key actors in the business ecosystem, researchers can capture diverse perspectives and gather firsthand insights into the challenges, successes, and aspirations related to leveraging data science for weather-related risk management and operational optimization(Ma, L. and Nie, F., 2017).

#### **Identifying Opportunities for Cross-Sector Collaboration**

Furthermore, exploring the potential for cross-sector collaboration and knowledge transfer can uncover synergies that amplify the impact of applied data science across diverse industries. Understanding how businesses in different sectors can learn from each other's experiences and solutions in utilizing weather forecasting and risk management insights will provide a comprehensive view of the interconnectedness of data-driven approaches and their overarching benefits for the Uzbekistani business landscape(Terekhov, A. et al., 2020).

#### **Current State of Applied Data Science in Uzbekistan**

Currently, the state of applied data science in Uzbekistan is relatively nascent, with limited adoption and utilization across different sectors. Businesses in Uzbekistan are just beginning to explore the potential of data science and its impact on their operations, decision-making processes, and overall performance. There is a growing recognition of the importance of data-driven approaches, including weather forecasting and risk management, in achieving business success in Uzbekistan. However, there are several challenges that hinder the widespread adoption of data science in Uzbekistan, including limited data availability, inadequate technical infrastructure, and a lack of skilled data science professionals(Kobilov, A. et al., 2023). Nevertheless, there are some notable examples of organizations in Uzbekistan that have successfully implemented data science initiatives(Muhhammadi, K., Keldiyorovich, I, O. and Kamoliddin, M., 2021). These

organizations have demonstrated the value of data-driven decision-making and have seen positive impacts on their business performance, including improved forecasting accuracy, better risk management strategies, and enhanced operational efficiency. These organizations serve as valuable case studies for understanding the potential impact of applied data science on businesses in Uzbekistan and can provide valuable insights for other organizations looking to embark on their own data science journeys.

### **Key Areas of Impact of Applied Data Science on Businesses in Uzbekistan**

Based on the reviewed sources, the key areas of impact of applied data science on businesses in Uzbekistan can include:

1. Improved decision-making

Applied data science can provide businesses in Uzbekistan with valuable insights and analytics to support more informed and data-driven decision-making processes. This can lead to better strategic planning, optimized resource allocation, and improved operational efficiency (Sazu, H. M. and Jahan, A. S., 2022).

2. Enhanced customer experience

By leveraging data science techniques, businesses in Uzbekistan can gain a better understanding of their customers' preferences, behaviors, and needs, leading to the ability to personalize products and services, offer targeted marketing campaigns, and provide a seamless customer experience (Medeiros, d, M. M., Hoppen, N. and Maçada, G. C. A., 2020).

3. Cost savings and operational optimization

Applied data science can enable businesses in Uzbekistan to identify cost-saving opportunities, streamline processes, and optimize resource utilization. This can lead to improved cost efficiency and overall operational effectiveness (Saleem, H. et al., 2020).

4. Risk management and mitigation

Data science techniques can assist businesses in Uzbekistan in identifying and mitigating various risks, including weather-related risks, market fluctuations, and operational challenges. This can help businesses in developing proactive strategies to minimize potential disruptions and enhance resilience (Mayakova, A., 2019).

5. Innovation and competitive advantage

The application of data science can foster a culture of innovation within businesses in Uzbekistan, allowing them to develop new products, services, and business models that align with evolving customer needs and market trends. This can ultimately lead to a competitive advantage in the marketplace (Sedkaoui, S., 2018).

6. Workforce empowerment and skill development

Embracing data science can create opportunities for upskilling the workforce in Uzbekistan, equipping them with the necessary knowledge and skills to leverage data-driven insights for improved performance and innovation (Wu, D., Lv, S. and Xu, H., 2020).

The impact of applied data science on businesses in Uzbekistan spans across various dimensions, from strategic decision-making and customer-centricity to operational excellence and resilience in the face of challenges. Understanding these multifaceted impacts will be essential for shaping the research's conclusions and recommendations to support the advancement of data-driven strategies in the Uzbekistani business landscape.

### Adoption and utilization of data science techniques

In businesses in Uzbekistan has the potential to revolutionize their operations and drive transformational growth. By harnessing the power of data, businesses in Uzbekistan can gain valuable insights into customer behavior, market trends, and internal processes. These insights enable data-driven decision-making, helping businesses tailor their strategies and tactics to align with market demands and customer preferences.

### Recommendations for the Research

Having reviewed the current state of applied data science in Uzbekistan and the potential areas of impact, the next steps for the research should focus on gathering primary data through interviews and surveys with businesses across different sectors in Uzbekistan. This primary data will provide valuable insights into the specific challenges and opportunities that businesses face when implementing data science initiatives. Furthermore, conducting case studies of organizations that have successfully implemented data science in Uzbekistan will offer practical examples and best practices for others to learn from.

#### 1. Primary Data Collection

The primary data collection phase of the research will involve reaching out to businesses in Uzbekistan through interviews with key stakeholders, including data scientists, business leaders, and decision-makers. Surveys will also be distributed to gather a broader range of perspectives on the adoption and utilization of data science techniques and the challenges encountered in the process(Karimova, Z. G. and Kim, Y., 2018).

#### 2. Case Studies

Selecting and studying specific organizations in Uzbekistan that have embraced data science will be crucial for illustrating the practical impact and benefits of data-driven strategies. These case studies will spotlight the challenges faced, the approaches taken, and the outcomes achieved, providing valuable insights for other businesses looking to embark on similar endeavors(Lü, J., Cairns, L. and Smith, L., 2020).

#### 3. Analysis and Recommendations

By analyzing the gathered primary data and case studies, the research will be able to offer tailored recommendations for businesses in Uzbekistan on how to overcome challenges and maximize the benefits of applied data science. Additionally, the research findings can inform policymakers and regulatory bodies on potential measures to support and incentivize the adoption of data-driven strategies across different sectors in Uzbekistan(Makhkamova, M. and Allaeva, G., 2021).

### Challenges and Opportunities in the Adoption of Data Science in Uzbekistan

The adoption of data science in Uzbekistan presents both challenges and opportunities for businesses in the country. Understanding these factors is crucial for crafting effective strategies to navigate the data-driven landscape.

#### Challenges

##### 1. Limited Data Availability

One of the primary challenges is the limited availability of high-quality and diverse data sets. Businesses in Uzbekistan may face difficulties in accessing relevant and reliable data for their analytical processes(The open data concept as part of e-governance reform in Uzbekistan, 2023).

##### 2. Inadequate Technical Infrastructure

The lack of advanced technical infrastructure, including data storage and computing capabilities, can hinder the effective implementation of data science techniques(Luna, D. et al., 2014).

### 3. Shortage of Skilled Professionals

The scarcity of skilled data scientists and analysts poses a significant obstacle to the widespread adoption of data science in Uzbekistan. The demand for expertise in this field often outstrips the available talent pool(Egamberdiev, A., 2018).

### 4. Cultural and Organizational Resistance

Some businesses may encounter resistance to change within their organizational culture when attempting to integrate data science into their operations. Resistance to new technologies and methodologies can impede progress(Rusu, B. et al., 2022).

## **Opportunities**

### 1. Untapped Market Potential

The relatively nascent stage of data science adoption in Uzbekistan presents a significant opportunity for businesses to gain a competitive edge by early adoption and innovation(Raimjanova, M. et al., 2021).

### 2. Government Support and Incentives

The Uzbekistani government's initiatives to promote technological advancement and innovation can create a supportive environment for businesses looking to invest in data science(Uzbekistan to Modernize its National Innovation System with Support from the World Bank, 2020).

### 3. Collaborative Ecosystem

Building a collaborative ecosystem for knowledge sharing and skill development in data science can leverage the expertise of industry professionals and academic institutions to address talent shortages(Verhulst, S., 2021).

### 4. Growth in Data Infrastructure

As the country invests in improving its overall technological infrastructure, there is growing potential for advancements in data storage, processing capabilities, and connectivity, which can support the expansion of data science initiatives(Beyene, J. et al., 2021).

The challenges and opportunities related to the adoption of data science in Uzbekistan underscore the need for a comprehensive approach that addresses technical, human resource, and cultural factors. By navigating these challenges and leveraging the available opportunities, businesses in Uzbekistan can position themselves for sustainable growth and competitiveness in the era of data-driven decision-making.

## **Recommendations for Implementation**

Having explored the challenges and opportunities associated with the adoption of data science in Uzbekistan, it is imperative to provide practical recommendations for businesses to effectively implement data-driven strategies and overcome the identified obstacles.

### 1. Data Collaboration and Collection

To address the limited availability of high-quality and diverse data sets, businesses in Uzbekistan should consider forming collaborative partnerships with industry peers, research institutions, and government bodies to collectively gather and share data. Moreover, investing in data collection methods, such as IoT devices and sensors, can also contribute to enriching the available data sets(Susha, I., Grönlund, Å. and VanTulder, R., 2018).

## 2. Infrastructure Development

Businesses should prioritize the establishment of robust technical infrastructure to support data storage, processing, and analysis. This may involve investing in cloud computing services, implementing data management systems, and upgrading networking capabilities to ensure seamless data flow and accessibility(He, W., 2020).

## 3. Talent Development and Retention

Given the shortage of skilled data professionals, businesses can take proactive measures to nurture talent internally by offering training programs, workshops, and educational opportunities in collaboration with local universities and technical institutes. Retaining skilled professionals will also be essential, possibly through competitive compensation packages and a conducive work environment that encourages innovation(Mwangi, W. J. and Kombo, H., 2023).

## 4. Change Management and Organizational Culture

Addressing cultural and organizational resistance requires a strategic approach to change management. Businesses can facilitate this process by fostering a culture of openness to innovation, providing clear communication on the benefits of data science, and involving employees in the decision-making and implementation phases (Organizational change management in successful companies, 2020).

## 5. Early Adoption Strategies

Capitalizing on the untapped market potential entails developing early adoption strategies that align with the unique needs of the Uzbekistani market. This may involve creating pilot projects, establishing proof of concept initiatives, and actively monitoring industry trends to stay ahead of the curve (Uzbekistan to Modernize its National Innovation System with Support from the World Bank, 2020).

## 6. Policy Advocacy and Engagement

Engaging with governmental initiatives and policy advocacy efforts can help businesses leverage the available support and incentives for data science adoption. Collaborating with industry associations and chambers of commerce can amplify the collective voice of businesses in advocating for policies that promote a conducive environment for data science investments (Medeiros, d, M, M., Hoppen, N. and Maçada, G, C, A., 2020).

## 7. Knowledge Sharing and Collaboration

Building a collaborative ecosystem for knowledge sharing can be facilitated through industry forums, workshops, and conferences that bring together professionals, academicians, and government representatives to exchange insights and best practices in data science(Wei'e, W., 2020).

## 8. Investment in Data Infrastructure

Businesses should monitor and capitalize on the growing investments in data infrastructure to enhance their own capabilities. This may involve strategic partnerships with technology providers and active participation in industry-wide initiatives for technological advancement(Why invest in the data center economy, 2023).

By implementing these recommendations, businesses in Uzbekistan can not only surmount the current challenges but also harness the available opportunities to maximize the potential of data-driven strategies. The holistic approach encompassing infrastructure, talent, cultural, and market-oriented strategies will enable businesses to establish a strong foundation for sustainable growth and competitiveness in the evolving landscape of data-driven decision-making.

#### Case Studies and Examples

There are several case studies and examples that demonstrate the impact of applied data science on businesses in Uzbekistan (Karimova, Z. G. and Kim, Y., 2018). For example, one case study involves a retail company in Uzbekistan that implemented data science techniques to optimize inventory management. Through analyzing historical sales data and external factors such as market trends and customer behavior, the company was able to accurately forecast demand, reduce stockouts, and improve overall operational efficiency. This led to a significant reduction in inventory costs and an increase in customer satisfaction due to the availability of products.

Another case study highlights the use of data science in the banking sector, where a financial institution in Uzbekistan leveraged predictive analytics to assess credit risk and streamline loan approval processes (Hermadi, I. et al., 2020). By analyzing a wide range of data points including customer financial history, economic indicators, and market trends, the bank was able to make more informed lending decisions, minimize default rates, and improve the overall quality of its loan portfolio. Furthermore, data science has also had a profound impact on the transportation and logistics sector in Uzbekistan. For instance, a logistics company in Uzbekistan utilized data science techniques to optimize route planning and delivery scheduling. By analyzing data on traffic patterns, road conditions, and historical delivery performance, the company was able to identify more efficient routes and minimize transportation costs.

These examples demonstrate the tangible benefits of incorporating data science into business operations in Uzbekistan, showcasing how it can drive efficiency, cost savings, and competitive advantage. By applying similar methodologies and technologies, businesses in various sectors can unlock the potential for data-driven decision-making and performance improvement.

The landscape of data science in Uzbekistan presents both challenges and opportunities for businesses. Despite the talent shortage and cultural resistance, there is immense potential for innovation and growth through the adoption of data-driven strategies. By implementing the recommended approaches such as data collaboration, infrastructure development, talent nurturing, and change management, businesses can position themselves for success in the data-driven era.

Moreover, the case studies serve as compelling illustrations of the transformative power of data science in real-world business scenarios, emphasizing its ability to drive strategic decision-making and operational enhancements.

As businesses in Uzbekistan navigate the complexities of data science adoption, they have the chance to pioneer advancements in their respective industries and contribute to the overall development of the country's economic landscape. With a proactive mindset and strategic implementation of data-driven initiatives, businesses can chart a path towards sustainable growth and competitiveness in the swiftly evolving business environment.

#### The Role of Policy and Regulatory Frameworks in Shaping Data Science Adoption in Uzbekistan

As businesses in Uzbekistan embark on the journey of data science adoption, it is imperative to recognize the significant impact of policy and regulatory frameworks in shaping this

landscape. The proactive involvement of governmental initiatives and the formulation of responsible data usage policies can greatly influence the trajectory of data-driven strategies within the country(Shah, H, I, S., Peristeras, V. and Magnisalis, I., 2021).

#### 1. Governmental Support and Incentives

Engaging with governmental initiatives can play a pivotal role in facilitating the adoption of data science. By fostering strategic partnerships with government agencies, businesses can access support programs, funding opportunities, and incentives aimed at promoting the integration of data-driven technologies. This collaborative approach not only provides businesses with financial backing but also signifies a collective commitment to advancing data science within Uzbekistan(Khamdamova, G., 2021).

#### 2. Ethical and Privacy Regulations

The responsible use of data is underpinned by robust ethical and privacy regulations. As businesses harness the power of data science, ensuring the protection of consumer privacy and upholding ethical standards are paramount. A comprehensive framework of data protection laws and privacy regulations can instill trust among consumers and stakeholders, thereby fostering a conducive environment for data science adoption (Forgó, N. et al., 2020)..

#### 3. Standards and Compliance

Establishing standardized practices and compliance measures specific to data science operations can streamline regulatory adherence and mitigate potential risks. By adhering to industry-specific standards and compliance protocols, businesses can demonstrate a commitment to accountable and transparent data practices, thereby bolstering confidence in their data-driven initiatives.(Mahanti, R., 2023)

#### 4. Collaboration with Regulatory Bodies

Active engagement with regulatory bodies enables businesses to contribute to the formulation of policies that reflect the evolving nature of data science. By participating in industry forums and regulatory discussions, businesses can advocate for frameworks that balance innovation with ethical considerations, thereby shaping a regulatory environment that nurtures responsible data usage and technological advancement(Visara, U. et al., 2023).

The interplay of policy and regulatory frameworks is integral to the adoption and responsible use of data science in Uzbekistan. By embracing collaborative partnerships with governmental entities, upholding ethical standards, establishing compliance measures, and actively contributing to regulatory dialogues, businesses can navigate the evolving landscape of data science within a framework that prioritizes responsible and sustainable technological innovation.

#### Summary and Conclusion

As businesses in Uzbekistan continue to grapple with the complexities and opportunities presented by data science adoption, it is clear that the integration of data-driven strategies is essential for fostering sustainable growth and competitiveness. The case studies and examples mentioned earlier vividly illustrate the transformative power of data science in real-world business scenarios, showcasing its ability to drive strategic decision-making, operational enhancements, and overall business success.

As various sectors in Uzbekistan have benefited from the implementation of data science techniques, a clear and compelling case emerges for businesses across industries to embrace similar methodologies and technologies. By doing so, they can unlock the potential for data-driven

decision-making, thereby positioning themselves for success in the swiftly evolving business environment.

It's evident that the landscape of data science in Uzbekistan presents both challenges and opportunities. While there may be a talent shortage and cultural resistance, the potential for innovation and growth through the adoption of data-driven strategies is immense. It is imperative for businesses to implement the recommended approaches such as data collaboration, infrastructure development, talent nurturing, and change management to effectively position themselves in the data-driven era.

The role of policy and regulatory frameworks cannot be overstated in shaping the landscape of data science adoption in Uzbekistan. Governmental support and incentives, ethical and privacy regulations, standards and compliance, and collaboration with regulatory bodies all play a crucial role in fostering responsible and sustainable technological innovation.

In conclusion, navigating the evolving landscape of data science in Uzbekistan requires a proactive mindset and a strategic implementation of data-driven initiatives. By doing so, businesses can chart a path towards sustainable growth and competitiveness, contributing to the overall development of the country's economic landscape. Embracing collaboration, upholding ethical standards, establishing compliance measures, and actively contributing to regulatory dialogues are essential steps in ensuring that data science adoption aligns with responsible and sustainable technological innovation.

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## “ХОТИН- ҚИЗЛАРНИ ТАДБИРКОРЛИГИНИ РИВОЖЛАНТИРИШДА “АНОР” ON LINE ПЛАТФОРМАСИНИ ЎРНИ

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Халқаро ишбилармон, “Тадбиркор аёл “ Ассоциацияси раиси ўринбосари

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**Аннотация.** Ушбу мақолада тадбиркорлик фаолиятини бошлаётган хотин-қизларда тадбиркорлик кўникмаларини шакллантириш, уларни керакли касб - ҳунарга йўналтириш, ўқитиш ва қайта тайёрлаш, малакасини ошириш учун ноёб онлайн платформа ишлаб чиқилганлиги тугрисида гап юритилади.

**Калим сузлар:** тадбиркор, хотин-қизлар, Ўзбекистон, платформа, онлайн.

Халқаро ишбилармон “Тадбиркор аёл” Ассоциацияси 1991 йилда ташкил этилган бўлиб, 2021 йилда Халқаро мақомини олди. Бугунги кунга келиб Ассоциация 83 та ҳудудий бўлинмаларга эга. 200 дан ортиқ тренерлар тадбиркорлик сирларини ўз бизнесини бошламоқчи бўлган қизлар, аёлларга мастер класслар, тренинглар орқали ўргатиб келмоқдалар. Хорижий ва миллий ҳамкорлар билан 70 га яқин ҳамкорлик меморандумлари имзоланган Ассоциация ўз фаолияти давомида 100 дан ортиқ самарали лойihalарни имплементация қилди ва қарийиб 14 минг хотин - қизларни тадбиркорлик фаолиятини бошлашга ундади.

Мухтарам Президентимиз Ш.Мирзиёев томонидан хотин қизларни иш билан таъминлаш, уларни ички потенциалини рўёбга чиқариш, тадбиркорлик соҳасига кенг жалб этиш масалаларини кечиктириб бўлмайдиган, долзарб вазифа этиб белгиланди. Ассоциация ҳам ўзининг 83 та бўлинмалари орқали хотин - қизларни бизнес муҳитига кенг жалб этиш борасида замонавий платформа яратиш мақсадга мувофиқлигини тушунган ҳолда 2 йил давомида ушбу платформани яратиш устида иш олиб борди. Асосий мақсад - тадбиркорликни бошламоқчи бўлган ва ёки бизнесини янги босқичга чиқариб ривожлантирмоқчи бўлган аёл қизларимизга қулай Online орқали махсус курсларни тақдим этувчи платформани яратиш, уларни оғирини енгил қилиш, аёлларни бизнес муҳитини янги поғонага чиқаришдан иборатдир.

Тадбиркорлик фаолиятини бошлаётган хотин-қизларда тадбиркорлик кўникмаларини шакллантириш, уларни керакли касб - ҳунарга йўналтириш, ўқитиш ва қайта тайёрлаш, малакасини ошириш учун ноёб онлайн платформа ишлаб чиқилди.

Тадбиркорликнинг турли йўналишларида хотин қизлар фаолияти самарадорлигини ошириш, замонавий ахборот технологияларидан фойдаланишга қаратилган ўқув услубий қўлланмалар яратилди.

Тадбиркорлик фаолиятини йўлга қўймоқчи бўлган аёллар учун бизнес кўникмалар шакллантирувчи, уларни касбга йўналтирувчи, қайта тайёрловчи ва малакасини оширувчи онлайн платформа ташкил этилиши таълим жараёнларини масофавий ташкил этиши имкониятини беради.

Лойҳани амалга ошириш жараёнида яратилган онлайн платформа қиёсини АНОР билан ифодаладик.

АНОР - анъаналарда, жаннат (олтин) олма, билим дарахтининг меваси.

АНОР дарахти ҳаётгийлик ва чидамлик намунаси, меваси бой ижобий рамзий маънога эга.

АНОР ноёб мева, шарқ меваларининг қироли.

АНОР - ҳаёт ранги ва рамзи

Ўзбекистон аёллари учун халқаро меъёрлар ва стандартларга мувофиқ инновацион технологиялар, ҳуқуқий ҳужжатлар, ўқув услубий қўлланмалар асосида онлайн бизнес таълим тизимини ва дастурий йўриқномаларини яратилди. Аёлларни тадбиркорликка ўқитиш ва қайта тайёрлаш, малакасини ошириш учун ягона онлайн платформа шакллантирилди. Лойиҳани амалга ошириш орқали тадбиркорлик асослари тизимли ўқув жараёнини йўлга қўйиш ва уларнинг умумий билимларини ошириш учун ягона онлайн платформани ишга тушириш лозимлиги белгиланди.

Ягона онлайн платформадан фойдаланиш бўйича амалий қўлланма тайёрланди. Лойиҳанинг асосий мақсади: тадбиркорлик фаолиятини бошлаш истагидаги аёлларни ўқитиш ва қайта тайёрлашнинг ягона онлайн тизимини шакллантиришдан иборатдир. Мазкур тизим тадбиркорликни ривожлантириш орқали аёллар турмуш даражасини оширади, аёллар учун янги, барқарор даромад манбаларини шакллантиришга хизмат қилади.

Платформада таҳлилий маърузалар, ўқув – методик қўлланмалар билан таъминлаш, замонавий ахборот технологияларидан фойдаланиш самарадорлигини ошириш, онлайн ўқув дастурлари орқали ҳуқуқий ва молиявий билимларини мустаҳкамлаш учун керкли материаллар киритилади.

Пандемия онлайн ишлаш ва онлайн ўқиш тизими қанчалик долзарб, оқил ва самарали жараён эканлигини кўрсатди. Аксарият ривожланган хорижий мамлакатларда бундай тизим ўз самарасини бериб келмоқда. Онлайн платформанинг яратилиши тадбиркорликни ривожлантириш ва таълим соҳасида муҳим ижтимоий ижобий самара беради. Бизнес тренинглари ўтказиш, кофе брейклар, тушлик, йўл харажатлари, бизнес тренерларга гонорарлар, бино ижараси ва бошқа ташкилий ишларга кетадиган харажатлар тежаб қолинади. Хотин қизлар хонадон юмушларидан ажралмаган ҳолда тадбиркорлик асосларини Лойиҳа натижаларини тижоратлаштириш истиқболлари дастурий таъминотни амалда тадбиқ этиш билан боғлиқ бўлиб, тижорат банклари томонидан бериладиган кредитларни олиш, ўз бизнесини ривожлантириш мақсадидаги хотин-қизларга маълум миқдорда маблағ тўлаб масофавий таълим олиш имконини беради. Дастурий таъминотдан бошқа турдош таълим муассасалари ҳам фойдаланишлари мумкин.

Жаҳон илғор тажрибасидан келиб чиқиб, хотин қизларни тадбиркорлик кўникмаларига ўргатиш, қайта тайёрлаш ва малакасини ошириш учун онлайн платформани яратилиши бугунги куннинг энг долзарб масаласини ҳал этишдир. Ўқув курсларининг ҳар босқичи ва йўналиши бўйича таълим даражасини баҳолаш учун тестлар тўплами ишлаб чиқилади.

Онлайн платформа кўп модулли, босқичма босқич инновацион ўқув дастури бўлади. Тадбиркор аёлларни керакли маълумотлар билан таъминлаш мақсадида услубий ва ўқув қўлланмалар тайёрлаш билан боғлиқ муаммолар ҳал этилди.

Тадбиркор аёллар учун электрон тадбиркорлик курсининг асосий йўналишлари (бизнес, солиқлар, банклар, кредитлар, бухгалтерия ҳисоби, ҳуқуқий ҳужжатлар) бўйича амалий қўлланмалар ишлаб чиқилди.

Иш жараёнида хотин- қизлар тадбиркорлиги, тадбиркорлик тўғрисидаги қонун ҳужжатлари самарадорлиги, мавжуд муаммо ва камчиликлар ўрганилиб, таҳлиллар асосида далилларга асосланган тавсиялар ишлаб чиқилиши йўлга қўйилди.

Тадбиркорлик фаолиятни тартибга солувчи қонун ҳужжатлари, солиқ ва божхона қонунчилиги, молиявий масалаларни тартибга солувчи ҳужжатлар мажмуини ўз ичига олган, доимий янгиланиб турувчи маълумотлар базаси яратилди.

Аёлларга турли соҳаларда бизнес юритиш кўникма ва билимларни ўргатиш тизимини шакллантирадиган инновацион маҳсулот яратилди. Ушбу маҳсулот модулли, кўп босқичли ўқув тизимини яратишни ўз ичига олади.

Маҳсулотнинг гендер йўналиши. Бу, биринчи навбатда, қишлоқларда ва чекка ҳудудларда барқарор даромадга эга бўлмаган, лекин тадбиркорлик билан шуғулланиш истагида бўлган аёлларга мўлжалланган.

“Оддийдан мураккабига” бизнес ўргатиш асосида тадбиркорликни нимадан бошлашни билмайдиган аудиторияга тақдим этиладиган модулли схема. Ҳар бир модуль тадбиркорликнинг алоҳида босқичига бағишланади: тадбиркорликни тартибга солувчи қонунчилик, бухгалтерия ҳисоби, солиққа тортиш, бозор таҳлили, маркетинг, меҳнат қонунчилиги ва бошқа йўналишлар.

“Оддийдан мураккабига” бизнес ўргатиш асосида тадбиркорликни нимадан бошлашни билмайдиган аудиторияга тақдим этиладиган модулли схема.

Таълим дастурлари ва модулларини рақамлаштиришга асосланган технологияларни жорий этиш масофавий таълим тизими учун шароит яратади.

Кичик бизнес бўйича уй шароитида минимал маълумотга эга бўлгандан сўнг, айниқса, қишлоқ жойларда ва чекка ҳудудларда яшовчи тадбиркор аёллар сони кўпаяди.

1. Ўзбекистонда аёллар тадбиркорлигини янада ривожлантириш “йўл харитаси”ни ишлаб чиқиш, аёлларнинг тадбиркорлик соҳасидаги билим ва кўникмаларини оширишга қаратилган ОНЛАЙН платформа яратилди.
2. Тадбиркор аёлларга амалий қўлланмалар тайёрлаш учун Онлайн платформа тизимидан фойдаланган ҳолда тадбиркорлиги ривожланган, қонун ҳужжатлари ўхшаш бўлган хорижий давлатлар меъёрий ҳужжатларини ўрганилди.
3. Масъул ва манфаатдор ташкилотлар билан бирга қуйидаги тадбирлар ташкил этилди:
4. Онлайн платформа яратилди ва синовдан ўтказилди;
4. Тадбиркорлар, кенг жамоатчилик вакиллари учун ахборот материаллар тайёрланди;
5. Веб-саҳифаларга онлайн платформа юклаб олиш ҳаволаси яратилди;
6. Хотин қизларни тадбиркорликка кенг жалб қилиш, қайта тайёрлаш ва тадбиркорлик фаолиятларини ривожлантириш, уларнинг тадбиркорлик соҳасидаги билим ва кўникмаларини ошириш бўйича маълумотлар тайёрланди
7. Хотин қизларга тадбиркорлик соҳасидаги билим ва кўникмаларни ўргатиш, уларнинг тадбиркорлик фаолиятларини ривожлантиришда онлайн платформадан фойдаланиш бўйича йўриқнома тайёрланди;
8. Онлайн платформа концепцияси яратилди;
9. Онлайн платформа жорий этилди.
10. Moodle ДТ базасида индивидуал дизайн билан онлайн – платформа мослаштирилган версияси ишлаб чиқилган

11. Платформа керакли уланиш тезлиги (трафик) билан Ассоциациянинг виртуал серверига жойлаштирилган
12. Платформага ўзбек ва рус тилларида 6 та, жами 12 та интерфаол онлайн курслар жойлаштирилган
13. Платформа керакли материаллар, яъни тадбиркорликка оид қонунчилик ҳужжатлари, ўқув қўлланмалари, мақолалар, маърузалар билан тўлдириб борилмоқда
14. Платформага кирувчилар учун тизимдан фойдаланиш йўриқномаси ишлаб чиқилган ва уни ҳар бир фойдаланувчи эркин ўқиши мумкин
15. Сертификат шакллари ишлаб чиқилган
16. Онлайн платформанинг 4 нафар администратори ўқитилди ва улар иш бошлашди

**Лойиханинг асосий ютуқлари:**

1. Ўқувчиларнинг чегараланмаган миқдорини қамраб олади
2. Ишлаб чиқаришдан ажралмаган ҳолда, ҳар қандай нуқтадан интернет орқали уланиш имконияти мавжуд
3. Ўқитиш ўқитувчисиз амалга оширилади – бу ўқув жараёнини осонлаштиради ва ресурсларни иқтисодли қилади
4. Курс материалларни тўлиқ ўзлаштириб олингунга қадар қайта – қайта ўтиш мумкин.

## MOTIVATION AS A PART OF THE MANAGEMENT ROLE. WAYS TO MOTIVATE THE PERSONNEL

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**Abstract.** *This passage outlines the purpose and scope of employee motivation management inside the company. The management of employee motivation is one of the primary roles of management, from which particular focus is drawn. The article outlines the primary elements affecting the employees' drive to work and describes how managers can best support their subordinates' motivation. The primary forms of motivation that drive the employees of the organization are outlined. Additionally, F. Herzberg's two-factor theory of motivation is explained. in the outset of the development of staff motivational profiles.*

**Keywords:** *supervisory functions, incentives, manager, non-monetary incentives, methods of inspiring employees to work, management, requirements.*

The essence of any activity is manifested in its functions. Functions imply the purpose of the activities of any organization or its general task. As well as the type of managerial actions and the scope of specific decision-making.

The main functions of management, defined by Henri Fayol as early as 1916, are planning, organizing, controlling, and coordinating. However, the efficiency of any economic and production process cannot be determined only by these basic functions. No less important factor than an effective organizational structure, agreed goals and clearly defined tasks is the quality of the staff's work. Which directly depends on the staff. Motivation is used to improve the quality of work of subordinates. Motivation as a function of management is directly related to the motivation of personnel to be effective in their work through the formation of motives. Motivation is a person's conscious choice of a particular type of behavior, so motivation as a management function should be directly aimed at increasing the labor activity of employees. Based on a clear understanding of the behavior of personnel, motivation as a management function helps to develop and improve ways to maximize the result of work. In the process of developing the most effective ways to achieve results, it is necessary to take into account the interrelated categories of employee behavior: needs, interests, motives and actions. To do this, managers use certain methods with the help of which managerial influence on personnel is carried out. Actions are based on the laws of management, as they suggest the use of various forms of influence on the personnel of the organization.

Methods of motivation in management can be of a material and non-material nature. Material methods consist of financial incentives for employees by changing the level of wages, giving bonuses or monetary rewards. Intangible methods include methods that allow the employee to participate in the organizational activities of the company, achieve success in the team, personal development and other intangible factors.

The main demotivators that directly affect the quality of work are: incompetence of the manager, undeserved criticism, overload or underwork, unclarity of job functions or functions of the company.



Many HR professionals use classical theories of motivation, but they may not be effective if they are not tailored to the needs of a particular organization and specific employees. The true motivations that drive one to do their best are difficult to determine, yet they are extremely complex. However, by mastering modern models of motivation, the manager will be able to significantly expand his or her ability to attract an educated, experienced employee of today to perform tasks aimed at achieving the goals of the organization.

**Modern Theories of Motivation.** In planning and organizing work, the manager determines what exactly the organization should do, when, how, and by whom, in his opinion, should do it. If the choice of these decisions is made effectively, the manager is able to coordinate the efforts of many people and jointly realize the potential of the group of employees. In order to effectively move towards the goal, the manager must coordinate the work and motivate people to high-quality performance of the assigned tasks. Managers put their decisions into action by putting into practice the basic principles of motivation. Motivation (from Latin: *movere*) — inducement to action; a psychophysiological process that governs human behavior, determines its direction, organization, activity, and stability; the ability of a person to actively satisfy his needs.

A systematic study of motivation from a psychological point of view does not allow us to determine exactly what motivates a person to work. However, research on human behavior at work provides some general explanations of motivation and allows for the creation of pragmatic models of employee motivation in the workplace. Psychologists say that a person feels a need when he or she feels a physiological or psychological lack of something. Although a particular person may not have a need in the sense of consciously feeling it at a particular time, there are certain needs that each person can feel. Substantive Theories of Motivation represent attempts to classify these universal human needs into certain categories. There is still no universally accepted identification of certain needs. However, most psychologists agree that needs can in principle be classified as primary and secondary.

Primary needs are physiological in nature and usually innate. Examples include food, water, breathing, sleeping, and sexual needs. Secondary needs are psychological in nature. For example, the need for success, respect, affection, power, and the need to belong to someone or something. Primary needs are genetically determined, and secondary needs are usually recognized through experience. Because people have different experiences, people's secondary needs differ more than their primary needs.

**Needs and motivational behavior.** Needs cannot be directly observed or measured; they can only be assessed. The existence of needs can be judged by people's behavior and by assessing the employee's motivational profile. Psychologists, observing people, have determined that needs serve as a motive for action [3, 154]. When a need is felt by a person, it awakens in him a state of striving. An urge is a feeling of lacking in something that has a certain direction. It is a behavioral manifestation of a need and is focused on achieving a goal. Ends, in this sense, are something that is recognized as a means of satisfying a need. When a person achieves such a goal, his need is satisfied, partially satisfied, or unsatisfied. Since needs cause a person to want to satisfy them, managers must create situations that allow people to feel that they can satisfy their needs through certain behaviors and actions that lead to the achievement of the organization's goals.

There are a great variety of specific human needs, those goals that each person understands lead to the satisfaction of his needs, as well as the types of behavior in achieving these goals.

A leader must always keep in mind the element of chance, there is no one best way to motivate. What turns out to be effective in motivating some people turns out to be completely unimportant for others. In addition, organizations inherently complicate the practical implementation of individual-centered theories of motivation. The interdependence of work, the lack of information in the work results of individuals, the frequent changes in job responsibilities due to improvements in technology - all this exacerbates the complexity of motivation.

According to Herzberg's two-factor theory of motivation, there are only two categories of needs. According to this theory, in the workplace, along with certain factors that cause job satisfaction, there is also a separate set of factors that cause job dissatisfaction. The theory is based on human needs. In the late 1950s, F. Herzberg conducted a study. At the request of a psychologist, 200 engineers and accountants at a large firm described situations in which their work was particularly satisfying and when they particularly disliked it. As a result of the experiment, Herzberg came to the conclusion that there are two main categories of factors that assess the degree of satisfaction from the work performed: factors that keep you at work and factors that motivate you to work.

Factors that keep you at work (hygiene factors) are the company's administrative policy, working conditions, wages, and interpersonal relationships with bosses, colleagues, and subordinates.

Factors that motivate people to work (motivators) are achievements, recognition of merits, responsibility, and opportunities for career growth.

Hygiene factors are related to the environment in which the work is performed. According to Herzberg's theory, the absence or lack of hygienic factors leads to a person's dissatisfaction with his work. But, if they are presented in sufficient volume, they do not cause satisfaction in themselves and are not able to motivate a person to the necessary actions.

The absence of motivators, which are related to the nature and essence of the work itself, does not lead to people's dissatisfaction with work, but their presence causes satisfaction and motivates employees to take the necessary actions and increase efficiency.

It should be noted that Herzberg made the paradoxical conclusion that wages are not a motivating factor. On the other hand, it is true that it is a motivator only up to a certain point.

*Table 1. Hygienic and Motivating Factors in Herzberg's Theory*

Hygienic factors	Motivating factors
Organization and Leadership Policies	Success
Working Conditions	Career Advancement
Wages, social status	Recognition and endorsement of work
Interpersonal relationship with the boss, colleagues and subordinates	A high degree of responsibility
Degree of direct control over Work	Opportunity for creative and professional growth

Thus, non-financial motivation as a management function occupies one of the first places in the managerial activities of managers of successful organizations.

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## XODIMLARNI RAG‘BATLANTIRISHNING INNOVATSION USULLARI

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**Annotatsiya.** Ushbu maqola, xodimlarni turli rag‘batlantirish usullarini - samaradorlikka asoslangan bonuslar, foydani taqsimlash dasturlari, nomoddiy rag‘batlantirish usullari, va boshqalar - orqali motivatsiya qilishning samaradorligi haqida tahlil qiladi. Maqola, shuningdek, xodimlarning ishga qiziqishini oshirish va ularni tashkilotga sodiq qolishini ta‘minlash bo‘yicha ilmiy yondashuvlarni taklif etadi.

**Kalit so‘zlar:** Xodimlarni rag‘batlantirish, samaradorlikka asoslangan bonuslar, foydani taqsimlash, nomoddiy rag‘batlantirish, qaror qabul qilish vakolatlari, sog‘lomlashtirish dasturlari, ish va hayot muvozanati, innovatsiyalar va ijodkorlik.

**Abstract.** This article analyzes the effectiveness of motivating employees through various incentive methods - performance-based bonuses, profit-sharing programs, non-material incentive methods, etc. The article also suggests scientific approaches to increase employee engagement and organizational commitment.

**Keywords:** Employee motivation, performance-based bonuses, profit sharing, intangible incentives, decision-making authority, wellness programs, work-life balance, innovation and creativity.

**Аннотация.** В данной статье анализируется эффективность мотивации сотрудников с помощью различных методов стимулирования – премирования по результатам работы, программ участия в прибылях, методов нематериального стимулирования и т. д. В статье также предлагаются научные подходы к повышению вовлеченности сотрудников и организационной приверженности.

**Ключевые слова:** мотивация сотрудников, премии по результатам работы, участие в прибылях, нематериальные стимулы, полномочия по принятию решений, оздоровительные программы, баланс между работой и личной жизнью, инновации и креативность.

### **Kirish**

Hozirgi davrda tashkilotlarda shaxsiy boshqaruv oddiy ma‘muriy funktsiyadan barcha maqsad va faoliyatni o‘z ichiga olgan boshqaruv falsafasiga aylandi. Tashkilotlar va ularning xodimlari muvaffaqiyatining asosiy omillaridan biri motivatsiyadir. Ma‘lumki, xodimlarni munosib rag‘batlantirish ularning iqtisodiy ahvoli, kelajakdagi intilishlari, kayfiyati, mehnat unumdorligi, mehnat muhiti, kompaniya ichidagi munosabatlariga bevosita ta‘sir qiladi. Motivatsiya va samarali muvofiqlashtirish va ishlashga erishish qobiliyati odamlarning atrof-muhitdan kutishlari bilan, ayniqsa o‘shirish imkoniyatlari va ish orqali shaxsiy rivojlanish nuqtai nazaridan chambarchas bog‘liq.

### **Mavzuning o‘rganilganlik darajasi**

Motivatsiya nazariyasini o'rganish menejment nazariyasi bilan bog'liq bo'lib, u iqtisodchi va psixologlarning keng tahliliga sabab bo'lgan va bugungi kunda ham bahs-munozaralar markazida bo'lgan iqtisodiy-psixologik mavzudir.

Deyl X. Shunk, Mariya K. DiBenedettoning fikriga ko'ra, motivatsion jarayonlar tanlov, harakat, qat'iyatlilik, yutuq va atrof-muhitni tartibga solish kabi natijalarga olib keladigan shaxsiy, ichki ta'sirlardir. Motivatsiya ijtimoiy kognitiv nazariyaning muhim xususiyati bo'lib, dastlabki modellashtirish tadqiqotlaridan zamonaviy ishtirokchi tushunchalarigacha bo'lgan davrni qamrab oladi. Asosiy ichki motivatsion jarayonlar maqsadlar va taraqqiyotni o'z-o'zini baholash, ijtimoiy taqqoslash, qadriyatlar, kutilgan natijalar, atribut va o'z-o'zini nazorat qilishdir. Nazariya oldida turgan muhim muammolarga xilma-xillik va madaniyat, metodologiyalar va aralashuvlarning uzoq muddatli ta'siri kiradi [2].

Devid V. Shvalb, Barbara J. Shvalb, Delvin L. Harnish, Martin L. Maehr, Kiyoshi Akabane tomonidan olib borilgan tadqiqotlarda yapon va amerikalik ishchilar o'zlarini qanday qabul qilishlarini o'rganib, ularni mehnatga undaydigan ichki va tashqi omillarni tahlil qiladi [3].

Nikitina V.V. uning fikriga ko'ra, motivatsiyani qismlarga bo'linmaslik kerak, chunki uning moddiy va nomoddiy tarkibiy qismlari doimo yagona kompleksni tashkil qiladi, uning amaliy qo'llanilishi darhol kompaniyaga ijobiy natijalar beradi. Bundan tashqari, G'arbning eng yaxshi rahbarlari tajribasi shuni ko'rsatadiki, o'z qo'l ostidagilar oldiga vazifa qo'yib, ularga har qanday yo'l bilan erisha oladiganlar emas, balki kompaniya vazifalarini bajarish uchun xodimlarni qiziqtiradigan, olovga qo'yadigan va ilhomlantira oladiganlar muvaffaqiyatga erishadilar [4].

Yuqoridagilardan ko'rinib turibdiki, motivatsiya nazariyasi va amaliyoti haqida cheksiz fikr va mulohazalarni aytish mumkin. Ammo bu g'oyalar va amaliyotlarni solishtirish va tahlil qilish ularning qaysi biri samaraliroq ekanligini ko'rsatish uchun muhimdir.

### Tahlil va natijalar

#### 1-jadval

#### Xodimlarni rag'batlantirishning innovatsion usullari

Usullar	Tavsif
Samaradorlikka asoslangan bonuslar	Mahsulot bonuslari va ishlab chiqarish jarayoniga rioya qilishni targ'ib qiladi.
Foydani taqsimlash dasturlari	Foydani taqsimlashning samaradorligi va xodimlarning ishtiroki haqida tahlil.
Nomoddiy rag'batlantirish	Moliyaviy bo'lmagan rag'batlantirishlar, masalan, ish mazmunini oshirish.
Tan olish va mukofotlar	Ichki pul mukofotlari va xodimlarni tan olish strategiyalari.
Qaror qabul qilish vakolatlarini topshirish	Xodimlarga asosiy qarorlarni qabul qilish imkoniyatini berish.
Xodimlarni sog'lomlashtirish dasturlari	Sog'liqni saqlash xarajatlarini kamaytirish va mehnat unumdorligini oshirish.
Ish va hayot muvozanatini targ'ib qilish	Xodimlarning qoniqishini oshirish va tashkiliy daromadlilikini.
Innovatsiyalar va ijodkorlikni rag'batlantirish	Ijodkorlik va innovatsiyalarni qo'llab-quvvatlash siyosatlari.

*Manba: jadval muallif ishlanmasi*

Samaradorlikka asoslangan bonuslar

Samaradorlikka asoslangan bonuslar tizimi xodimlarni o'z vazifalarini yuqori darajada bajarishga undash uchun ishlatiladigan mukofotlash strategiyasidir. Ushbu tizim ish samaradorligini oshirish maqsadida ishlab chiqilgan bo'lib, xodimlarning mehnat unumdorligi va sifatini yaxshilashga qaratilgan.

Samaradorlikka asoslangan bonuslar tizimini baholash uchun, korxonalar o'z ish jarayonlarini kuzatish va xodimlarning ish samaradorligini o'lchash tizimlarini joriy etishlari kerak. Bu, ish jarayonlarining samaradorligini oshirish uchun zarur bo'lgan o'zgarishlarni aniqlashga yordam beradi. Shuningdek, xodimlar o'rtasida so'rovnomalar o'tkazish orqali ularning bonus tizimiga bo'lgan munosabatlarini ham tushunish mumkin.

Xodimlarga berilgan bonuslar ularning ish unumdorligiga ta'sir qilishini tahlil qilish natijasida, ko'plab holatlarda, ishlab chiqarish hajmi va sifatida sezilarli o'sish kuzatilgan. Xodimlar o'zlarining mehnatiga qarab mukofotlanish tizimini adolatli deb hisoblashadi, bu esa ularning motivatsiyasini yanada oshiradi.

Samaradorlikka asoslangan bonuslar tizimi, agar to'g'ri boshqarilsa va xodimlarning qobiliyatlari va sa'y-harakatlariga mos keladigan bo'lsa, juda samarali bo'lishi mumkin. Biroq, bu tizimni amalga oshirishda ehtiyotkorlik bilan yondashish zarur, chunki noto'g'ri boshqarilgan taqdirda u xodimlarning ishiga salbiy ta'sir ko'rsatishi mumkin [5].

Samaradorlikka asoslangan bonuslar tizimi, xodimlarning motivatsiyasini va ish samaradorligini oshirishda muhim vosita bo'lib xizmat qiladi. Ushbu tizimni to'g'ri amalga oshirish orqali korxonalar o'z natijalarini yaxshilashi va xodimlarining qoniqish darajasini oshirishi mumkin. Tizimning muvaffaqiyati, uning adolatli va shaffof boshqarilishiga bog'liqdir.

Foydani taqsimlash dasturlari

Foydani taqsimlash dasturlari, xodimlarning korxonaning foydasidan to'g'ridan-to'g'ri manfaatdor bo'lishini ta'minlovchi moliyaviy tuzilishdir. Bu tizimlar xodimlarni korxonaning yutuqlarida sherik sifatida ko'rishni rag'batlantiradi va ularning ishga bo'lgan sodiqligini oshirishga yordam beradi.

Foydani taqsimlash dasturlari, korporativ boshqaruv va menejment sohalarida keng o'rganilgan mavzulardan biridir. Tadqiqotlar shuni ko'rsatadiki, bu tizimlar xodimlarni moliyaviy ravishda korxonaning muvaffaqiyatiga bog'laydi va bu, o'z navbatida, ularning motivatsiyasi va mehnat samaradorligini oshiradi. Shuningdek, foydani taqsimlash dasturlari korxonada hamkorlik va jamoaviy ish ruhini mustahkamlashga xizmat qiladi.

Foydani taqsimlash dasturlarini baholashda, korxonalar xodimlarning ish samaradorligi, korxonaga sodiqlik darajasi va umumiy korxonada foydasidagi o'zgarishlar kuzatiladi. Bu ma'lumotlar korxonaning moliyaviy hisobotlari va xodimlar o'rtasida o'tkazilgan so'rovnomalar yordamida to'planadi [6].

Foydani taqsimlash dasturlari qo'llanilgan korxonalarda, xodimlar o'zlarining hissalarini korxonaning umumiy muvaffaqiyatiga qo'shayotganini his qilishadi, bu esa ularning ishga bo'lgan munosabatini ijobiy tomonga o'zgartiradi. Ma'lumotlarga ko'ra, bu tizimlar korxonaning umumiy foydasini oshirishga ham hissa qo'shadi, chunki xodimlar o'z mehnatlarining natijasida yuzaga keladigan foydani to'g'ridan-to'g'ri his qilishadi.

Foydani taqsimlash dasturlarini samarali boshqarish uchun quyidagi amaliyotlar tavsiya etiladi:

- Foydani taqsimlash mezonlarini aniq va shaffof qilish;
- Xodimlarga ularning ishlarining korxonaning umumiy foydasiga qanday ta'sir qilishi haqida muntazam ravishda ma'lumot berish;
- Foydani taqsimlash dasturlarini korxonaning moliyaviy holatiga moslashuvchan holda rejalashtirish.

Foydani taqsimlash dasturlari korxonaga va uning xodimlari o'rtasidagi moliyaviy manfaatlar bog'liqligini oshiradi va bu, o'z navbatida, korxonaning umumiy samaradorligini yaxshilashga yordam beradi. Tizimning to'g'ri ishlashi korxonaning moliyaviy barqarorligini ta'minlash bilan birga, xodimlar orasida korxonaga bo'lgan sodiqlikni oshiradi va ularni korxonaning uzoq muddatli rivojlanishiga hissadar qiladi.

Qaror qabul qilish vakolatlarini topshirish

Qaror qabul qilish vakolatlarini topshirish, xodimlarga korxonaning turli operatsiyalari bo'yicha mustaqil qarorlar qabul qilish imkoniyatini berish jarayonidir. Bu yondashuv xodimlarning ishda o'zini-o'zi boshqarish qobiliyatini oshirish va ularni korxonaning muhim jarayonlariga jalb qilish orqali motivatsiya va samaradorlikni kuchaytiradi.

Tadqiqotlar qaror qabul qilish vakolatlarining topshirilishi xodimlarning motivatsiyasini va ishga bo'lgan sodiqligini sezilarli darajada oshirishi mumkinligini ko'rsatmoqda. Bu tizim xodimlarni yanada mas'uliyatli va ishga jalb qilingan his qilishlarini ta'minlaydi. Shuningdek, bu yondashuv xodimlar o'rtasida innovatsiya va ijodkorlikni rag'batlantirishi mumkin, chunki ular o'zlarining g'oyalari va yechimlarini amalga oshirish imkoniyatiga ega bo'lishadi [7].

Qaror qabul qilish vakolatlarini topshirish jarayonini baholashda, korxonalar xodimlarning qaror qabul qilish jarayonlarida qanchalik faol ishtirok etayotgani va bu ishtirokning ish samaradorligi va korxonaga muvaffaqiyatiga qanday ta'sir qilayotgani kuzatiladi. Shuningdek, xodimlar o'rtasida o'tkazilgan so'rovnomalar orqali ularning bu tizimga bo'lgan munosabati va uni qanday baholashlari tahlil qilinadi.

Qaror qabul qilish vakolatlarini topshirish amaliyoti joriy etilgan korxonalarda, xodimlar o'z faoliyatlarida ko'proq mas'uliyatni his qilishadi va bu ularning ishga bo'lgan sodiqligini va motivatsiyasini oshiradi. Natijalarga ko'ra, xodimlar yangi g'oyalarni taklif qilishda va muammolarni hal qilishda yanada faolroq bo'lishadi.

Qaror qabul qilish vakolatlarini topshirish tizimini samarali boshqarish uchun quyidagi amaliyotlar tavsiya etiladi:

Xodimlarni qaror qabul qilish jarayonlariga asta-sekin jalb qilish;

Zarur bilim va malakalarni ta'minlash yordamida xodimlarning qaror qabul qilish qobiliyatlarini oshirish;

Xodimlarning qabul qilgan qarorlarini monitoring qilish va ularni qo'llab-quvvatlash.

Gamifikatsiya

Gamifikatsiya — bu turli sohalarida, xususan, ta'lim, sog'liqni saqlash, marketing va ish joyida, ma'lum bir maqsadlarga erishish uchun o'yin elementlarini va mexanizmlarini qo'llash jarayonidir. Gamifikatsiya orqali korxonalar xodimlar o'rtasidagi motivatsiyani, hamkorlikni va ijodiy potentsialni oshirishni maqsad qiladi [8].

Gamifikatsiyaning ilmiy tadqiqotlari, o'yin elementlarining (masalan, ballar, medallar, reyting tizimlari) ishchilarning motivatsiyasini oshirishga qanday ta'sir qilishi mumkinligini o'rganadi. Tadqiqotlar shuni ko'rsatadiki, gamifikatsiya xodimlarni yanada faolroq ishtirok etishga va ularning vazifalarga bo'lgan qiziqishini oshirishga yordam beradi.

Gamifikatsiya effektivligini baholash uchun, korxonalar o'yin elementlarini joriy etishdan oldin va keyin xodimlarning ish samaradorligi hamda motivatsiyasini o'lchaydilar. Bunday tadqiqotlar ko'pincha xodimlar o'rtasida so'rovnomalar o'tkazish, ish jarayonlarini kuzatish va ish natijalarini tahlil qilish orqali amalga oshiriladi.

Gamifikatsiya elementlarini qo'llagan korxonalarda xodimlar o'zlarining vazifalariga yanada mas'uliyat bilan yondashishadi va ish jarayonida faolroq ishtirok etishadi. Bu, o'z navbatida, ish joyida raqobat muhitini yaratadi, bu esa ish samaradorligini yanada oshiradi.

Gamifikatsiyani samarali boshqarish uchun quyidagi amaliyotlar tavsiya etiladi:

- Xodimlarning shaxsiy qiziqishlarini va motivatsion faktorlarini hisobga olish;
- O'yin elementlarini ish jarayoniga tabiiy va o'rinli tarzda integratsiya qilish;
- Xodimlarni gamifikatsiya jarayoniga jalb qilishda ularning fikr-mulohazalarini inobatga olish;
- Muntazam ravishda gamifikatsiya natijalarini kuzatib borish va zarur o'zgartirishlar kiritish.

Ish va hayot muvozanatini targ'ib qilish

Ish va hayot muvozanatini targ'ib qilish, xodimlarning ish va shaxsiy hayoti o'rtasidagi muvozanatni saqlashga yordam beradigan siyosatlar va amaliyotlarni o'z ichiga oladi. Ushbu muvozanat, xodimlarning ishda samarali va shaxsiy hayotda baxtli bo'lishini ta'minlash maqsadida korxonadan tomonidan qo'llab-quvvatlanadi.

Ish va hayot muvozanatini targ'ib qilish bo'yicha tashabbuslarni baholash uchun, korxonalar xodimlarning ish va shaxsiy hayot o'rtasidagi muvozanat darajasini o'lchaydilar va bu muvozanatning ish unumdorligi va umumiy qoniqish darajasiga ta'sirini kuzatadilar. Metodologiya odatda xodimlar o'rtasida so'rovnomalar o'tkazish, ish vaqtini kuzatish va ish joyidagi sog'liqni saqlash statistikasini tahlil qilishni o'z ichiga oladi.

Ish va hayot muvozanatini yaxshilashga qaratilgan tashabbuslar natijasida, xodimlar ish joyida yanada baxtli va kamroq stressli bo'lishgan. Ular shuningdek, ish vaqtdan tashqari vaqtida oila va shaxsiy manfaatlarga ko'proq vaqt ajratish imkoniyatiga ega bo'lishgan, bu esa ularning umumiy qoniqish darajasini oshirgan.

Ish va hayot muvozanatini yaxshilash uchun quyidagi amaliyotlar tavsiya etiladi [9]:

- Moslashuvchan ish vaqtlarini joriy etish;
- Masofaviy ishlash imkoniyatlarini taqdim etish;
- Xodimlarni shaxsiy va oilaviy masalalarda qo'llab-quvvatlash;
- Ish va shaxsiy hayotni muvozanatlash bo'yicha muntazam ta'lim va maslahatlar berish.

Ish va hayot muvozanatini targ'ib qilish, xodimlarning ishda va shaxsiy hayotda samarador va baxtli bo'lishlarini ta'minlashda muhim rol o'ynaydi. Ushbu muvozanat xodimlarning ishga sodiqligini oshiradi va korxonaning umumiy muvaffaqiyatiga hissa qo'shadi. Ish va hayot o'rtasidagi to'g'ri muvozanatni ta'minlash, korxonalar uchun xodimlarni saqlab qolish va jalb qilishda kuchli vosita bo'lib xizmat qiladi.

### **Xulosa va takliflar**

Shaxslarni rag'batlantirish - bu mutlaqo ziddiyatli mavhum izlanishdir. Bu borada boshqaruv dasturini tushunish yashirin. Har bir shaxs o'ziga xos xususiyatga ega va shuning uchun boshqaruvchidan boshqa motivatsion strategiya so'raladi.

Tadqiqot natijasida quyidagi takliflar shakllantirildi:



Mahsulot bonuslarini yanada samaraliroq qo'llash uchun, ishlab chiqarish jarayonlarini va ularning vaqtlarini aniq kuzatib borish tizimlarini joriy etish tavsiya etiladi.

Foydani taqsimlash dasturlarini takomillashtirish maqsadida, tashkilotlar o'rtasida amaliyotlarni taqqoslash va eng yaxshi amaliyotlarni qo'llash orqali yangi yondashuvlarni ishlab chiqish zarur.

Moliyaviy bo'lmagan rag'batlantirish tizimlarini, jumladan ish mazmunini boyitish va xodimlarni o'zini rivojlantirishga undovchi dasturlarni kengaytirish.

Xodimlarning qo'shgan hissasini aniqlash va baholashda shaffof va adolatli tizimlarni joriy etish, shuningdek, mukofotlashning yangi usullarini qo'llab-quvvatlash.

Xodimlarga qaror qabul qilishda mustaqillikni oshirish, bu esa ularning motivatsiyasini va tashkilot ichida innovatsion yondashuvlarni rag'batlantiradi.

Sog'lomlashtirish dasturlarining samaradorligini oshirish uchun ishtirok etishni rag'batlantiruvchi yangi usullarni ishlab chiqish.

Xodimlarning ish va shaxsiy hayot muvozanatiga e'tibor berishni oshirish, bu esa ularning umumiy qoniqish darajasini va samaradorligini oshiradi.

Innovatsion faoliyatni qo'llab-quvvatlash uchun tashkilot ichida ijodiy va innovatsion g'oyalarni rag'batlantiruvchi muhitni mustahkamlash.

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## ЎЗБЕКИСТОНДА БАРҚАРОР ЛОЙИХАЛАР УЧУН НАҚД ВАҚФ БИЛАН БОҒЛАНГАН СУКУКНИ ЖОРИЙ ЭТИШ ИСТИҚБОЛЛАРИ, МУАММОЛАР ВА ЕЧИМЛАР

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**Аннотация.** Ўзбекистон барқарор ривожланиши сари илдам одимламоқда, хусусан яшил иқтисодиётнинг улушини ортиришига ҳамда барқарор лойиҳаларни молиялаштириши орқали атроф-муҳит ва экологик муаммоларни камайтиришига жиддий эътибор қаратилмоқда. Экологик барқарор ташиббусларни (лоийҳаларни) молиялаштиришида нақд пул вақфининг Исломий қимматли қозғоз яшил сукук билан ҳамкорликдаги иштироки яшил иқтисодиёт лойиҳаларини молиялаштиришни сезиларли даражада ошириши ва ижтимоий-иқтисодий соҳаларнинг ривожланишида муҳим ўрин тутishi мумкин. Ушбу мақолада нақд пул вақфи билан боғланган сукукнинг (НПВББС) муваффақиятли амалиётларини адабиётларни ўрганган ҳолда Ўзбекистонда жорий этишининг истиқболлари, мавжуд муаммолар ва уларнинг ечимлари борасида сўз юритилади.

**Калим сўзлар:** яшил иқтисодиёт, атроф муҳит, барқарорлик, вақф, сукук, нақд пул вақфи, НПВББС.

**Abstract.** Uzbekistan is actively pursuing sustainable development goals, with a particular emphasis on bolstering the green economy and mitigating environmental challenges through financing sustainable projects. Integrating cash endowments into the financing of environmentally sustainable initiatives, in collaboration with Islamic securities such as Sukuk (Green Sukuk), presents a promising avenue for scaling up investment in green economy projects and fostering socioeconomic development. This article examines the prospects of implementing Cash Waqf Linked Sukuk (CWLS) in Uzbekistan, addressing existing challenges and suggesting solutions based on insights from successful CWLS practices documented in the literature.

**Keywords:** green economy, environment, sustainability, waqf, sukuk, cash waqf, CWLS.

### КИРИШ

Сўнги йилларда Ўзбекистон молиявий дунёда, айниқса, экологик тоза лойиҳаларга эътибор қаратадиган яшил молия масаласида катта қадамлар ташламоқда. Ўзбекистон 2019-йилда ўзининг биринчи халқаро облигацияларини чиқариш билан бошлади, 2023 эса илк бор барқарорлик ва яшил лойиҳаларга бағишланган 4,25 трлн сўм миқдоридagi “яшил” суверен халқаро облигациялар ҳамда 660 млн доллар миқдоридagi халқаро облигацияларни Лондон фонд биржасида жойлаштирди. Бу Иқтисодий Ҳамкорлик ва Тараққиёт Ташкилотининг (OECD) эътиборини тортди ва Ўзбекистонни молиявий инновациялар бўйича Марказий Осиёда етакчи деб тан олди. Ўзбекистон Республикаси яшил облигацияларни кўпроқ жорий этишига катта эътибор қаратмоқда, аммо бу нарса катта молиявий ресурсларни талаб қилади. Айниқса, энг катта муаммолардан бири бу энергия тизимидир. Қайта тикланадиган энергияга ўтиш ва уни молиялаштириш хусусий секторни кенгроқ жалб қилишни тақозо этади. Ишларни тезлаштириш учун Ўзбекистон Бирлашган Миллатлар Ташкилотининг Барқарор ривожланиш мақсадларига (БРМ) эришиш йўлида астойдил ҳаракат қилмоқда. Қайта тикланадиган энергия лойиҳаларини молиялаштириш

учун Давлат-хусусий шерикчилиги ҳамкорлиги амалга оширилмоқда, хусусан Бирлашган Араб Амирликларининг (БАА) Масдар компанияси билан бир нечта йирик лойиҳалар устида ишлар олиб борилмоқда. Жиззах, Самарқанд, Сурхондарё, Бухоро ва Қашқадарё вилоятларида қуёш электр станциялари, Навоий вилоятининг Томди туманида шамол электр станциясининг биринчи босқичи ишга туширилди. Уларнинг умумий қуввати 2400 МВтни ташкил қилади. Бундан ташқари, Хитойнинг China Gezhouba Group компанияси томонидан Бухоро ва Қашқадарё вилоятларида умумий қуввати 1000 МВт бўлган иккита қуёш станциясининг биринчи босқичи қурилиши яқунланди.

Ўзбекистон барқарор лойиҳаларни молиялаштиришда муқобил молиявий инструментлардан фойдаланиши олдига қўйган мақсадларга янада тез ва самарали етишишда кенг имкониятлар яратади. Муқобил молия тизими сифатида Ислом молиясининг ривожланишига сўнги йилларда ҳукумат даражасида жиддий эътибор қаратилди ва бу борада ислохотлар олиб борилмоқда. Республикада Ислом молиясининг жорий этилиши маҳаллий ва хорижий хусусий сектор вакилларининг барқарор лойиҳаларга инвестиция киритиш имкониятларини ошириши мумкин. Ислом молиясининг инструментларидан бўлган сукук (исломий қимматли қоғоз) ва нақд вақф (хайрия мақсадларида пул бериш усули) ҳамкорлиги яшил энергия ва бошқа ижтимоий аҳамиятли лойиҳаларни молиялаштиришда катта ёрдам бериши мумкин. Нақд вақф билан боғланган сукук ҳамкорлигининг муваффақиятли намуналарини Малайзия, Индонезия ва Форс кўрфази каби давлатларнинг амалиётида кузатиш мумкин.

#### **АДАБИЁТЛАРНИ ЎРГАНИШ. ВАҚФ**

Вақф сўзи арабча вақафа, яқифу, вақфон сўзларидан олинган бўлиб, ушлаб турмоқ, тўхтамоқ, жойида турмоқ, тик турмоқ маъноларини билдиради. Жисмоний ёки юридик шахс томонидан диний ёки хайрия ёки бошқа яхшиликлар мақсадида берилган мулк. Вақф ҳам кўчмас, ҳам кўчар дахлсиз мулк бўлиши мумкин. Вақф мулки одатда сотилмайди, мерос қилиб олинмайди ёки ҳеч кимга ҳада қилинмайдиган мулклардир (ер, бино).

Вақфнинг асосий элементлари: Вақф қилувчи, вақф мулки, вақф тури ва вақфдан бенефициарлар(манфаатдорлар).

Турли бенефициарларга (манфаат кўрувчи) нисбатан вақфнинг тўрт тури мавжуд:

- **Хайрия вақфи (ал-Вақф ал-Хайрий):** Ушбу турдаги вақф бошиданок хайрия мақсадларига бағишланган бўлиб, асосий воситаларнинг даромадлари ёки узуфруктлари (биронинг активидан фойдаланишдан келадиган манфаат, масалан, ижара ҳақи) тегишли равишда доимий равишда хайрия мақсадларига йўналтирилади.

- **Оилавий вақф (ал-Вақф ал-Аҳли):** Вақф қилувчи оила фаровонлигини ҳисобга олган ҳолда ушбу вақфдан олинадиган даромад ёки узуфрукт муайян оила аъзолари ва қариндошлари учун мўлжалланган. Бундай шахслар мавжуд бўлмаганда, манфаатлар доимий равишда хайрия ишларига сарфланади.

- **Бирлашган вақф (ал-Вақф ал-Муштарак):** Бу оилавий ва хайрия мақсадларининг аралашмаси. Ушбу вақфдан олинадиган даромад ёки узуфрукт доимий равишда икки йўналишда тақсимланади.

- **Ўзига бағишланган вақф (ал-Вақф 'ала ан-нафс):** Бунда, вақф қилувчи тириклигида ўзи учун даромад ёки узуфруктни сақлаб қолади ва вафотидан кейин савоб олиш мақсадида мулкни хайрияга бағишлайди.

Вақфни хусусий шахсларга ёки жамоатга хизмат қилишига қараб қуйидагича таснифлаш мумкин:

**а. Умумий вақф, б. Шахсий вақф**

Вақфни асосий активига кўра қуйидагича таснифлаш мумкин:

**а. Мулкӣ вақф, б. Корпоратив вақф, с. Нақд пул вақфи**

**НАҚД ПУЛ ВАҚФИ**

Одатда ер, бинолар ёки бошқа мулклар каби моддий бойликларни ҳада қилишни ўз ичига олган анъанавий вақфдан фарқли ўлароқ, нақд вақф пул ёки ликвид активларни эҳсон қилишни ўз ичига олади.

Хайрия қилинган маблағлар рухсат этилган йўлларга инвестиция қилинади ва бу инвестициялардан олинган даромад турли хил ижтимоий, таълим, соғлиқни сақлаш ёки бошқа хайрия мақсадларини абадий қўллаб-қувватлаш учун ишлатилади.

Нақд пул вақфи шахслар, оилалар, ташкилотлар ёки ҳукуматлар томонидан ташкил этилиши мумкин ва у кенг қамровли ташаббусларни, жумладан, қашшоқликни бартараф этиш, таълим, соғлиқни сақлаш, инфратузилмани ривожлантириш ва ижтимоий фаровонлик дастурларини қўллаб-қувватлаши мумкин. Нақд пул вақфининг мослашувчанлиги ва соддалиги уни исломий хайрия ва ижтимоий масъулият тамойилларига мувофиқ ресурсларни сафарбар қилиш ва ижтимоий эҳтиёжларни қондириш учун кучли воситага айлантиради. Самарасиз кўчмас вақф мулкларини бошқаришдаги қийинчиликлар ва чекланган вақф маблағлари туфайли пул кўринишидаги кўчар мулкдан фойдаланадиган вақфнинг янги тури ташкил этилди (Исмоил ва бошқ. 2018). Тарихга назар ташласак, нақд пул вақфи ҳанафий мазҳаби олими Имом Аз-Зуфарин томонидан ҳижрий иккинчи асрнинг бошларида жорий қилинган (Муҳаммад, 1997). У пул вақфларини музораба орқали, фойдани ижтимоий мақсадларга сарфлашни тарғиб қилган. Марзуки ва бошқалар (2012) маълумотларига кўра, нақд пул вақфи қашшоқликни 50 фоизгача камайтиришга сезиларли таъсир кўрсатади. Қолаверса, нақд пул вақфи сиёсий ва иқтисодий жиҳатдан ҳаражатсиз эркин ижтимоий фонд сифатида ўз афзалликларига эга (Алдеен ва бошқ., 2003, 2020).

**СУКУК**

Сукук - бу шарият (Ислом қонуни) тамойилларига мос келадиган, Исломий қимматли қоғозлар ёки Ислом облигацияларидир. Сукук қарз мажбуриятларини ифодаловчи анъанавий облигациялардан фарқли ўлароқ, моддий активларга, лойиҳаларга ёки хизматларга эгалик ҳуқуқини ифодалайди. Сукук эмиссияси инвесторларга асосий актив ёки инвестиция фаолиятига эгалик қилиш ҳуқуқини берувчи сертификатларни яратишни назарда тутаяди. Инвесторлар активлардан ёки активга инвестициялардан ҳосил бўлган пул оқимидан фойда ёки даромадни даврий тақсимлаш шаклида олишлари мумкин. Қўлланиладиган механизмларга қараб даромадлар собит ёки ўзгарувчан бўлиши мумкин.

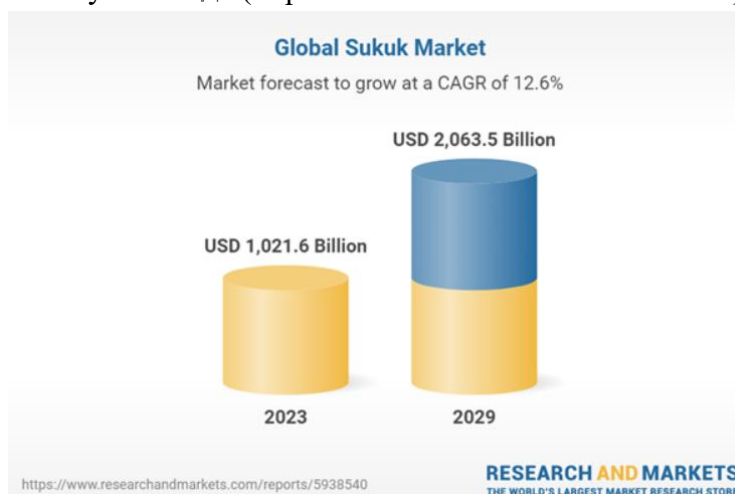
*Сукук – бу номинал қиймати тенг бўлган сертификатлар бўлиб, улар маълум бир лойиҳанинг моддий активлари, кўрсатилаётган хизматлар, активларга эгалик ҳуқуқининг бўлинмас улушини тасдиқлайди (ААОИҒ ташкилоти таърифи).*

Ҳар бир жорий қилинаётган сукук қийматга эга активга асосланган бўлиши керак, бу эса ўз навбатида фоиздан (судхўрликдан) сақланиш имконини беради.

Яшил сукук - бу атроф-муҳитга ижобий таъсир кўрсатадиган лойиҳаларни молиялаштириш учун фойдаланиладиган исломий қимматли қоғозлар. Яшил сукук

анъанавий облигацияларга шариатга мос келадиган муқобилдир ва улар инвесторларга ўзларининг экологик қадриятларига мос келадиган лойиҳаларга сармоя киритиш имкониятини беради.

“ResearchandMarkets” ҳисоботида кўра Глобал сукук бозори 2023 йилда 1021,6 миллиард долларга баҳоланди ва 2029 йилгача 12,6% ўртача йиллик ўсиши билан 2063,5 миллиард долларга етиши кутилмоқда (<https://www.researchandmarkets.com>).



Ҳозирги кунда, ҳукуматлар ва корпорациялар инфратузилма лойиҳалари учун капитал жалб қилиш, қарзларни тўлаш ва иқтисодий ривожланишни молиялаштириш учун Сукукга тобора кўпроқ мурожаат қилмоқда. Чунки, унинг активлар билан таъминланган тузилмаси эмитентлар ва инвесторларни қизиқтирадиган шаффоф ва хавфсиз инвестиция йўлини таклиф этади.

## МЕТОДОЛОГИЯ

Ушбу мақолада адабиётларни ўрганиш тадқиқот ёндошувидан фойдаланган ҳолда сифатли усулдан фойдаланилди. Асосий диққат турли адабиёт ва мақолалардаги манбалар ўрганилган ҳолда улардаги нақд пул вақфининг сукук билан ҳамкорлигининг ижобий ва муаммоли жиҳатлари ўрганилди ва маълумотлар умумлаштирилган ҳолда хулоса қилинди.

## ИНДОНЕЗИЯ ТАЖРИБАСИ

Индонезия ҳукумати Вақфдан миллий тараққиёт равнақи учун ҳам фойдаланаётган давлатлардан бири ҳисобланади. 2018 йилда инновацион ёндашув билан Индонезия ўзининг биринчи нақд пул вақф билан боғланган сукукни муваффақиятли чиқарди, бу эса 50 миллиард рупия йиғди. Маблағлар суверен сукукка инвестиция қилинган ҳолда ва даромад мамлакат вилоятларидан биридаги соғлиқни сақлаш муассасаларини яхшилаш учун ишлатилади (Мусари, 2019; Пол ва Фауджи, 2020). Индонезия 2020-йилнинг тўртинчи чорагида нақд пул билан боғланган сукукнинг дастлабки эмиссияси муваффақиятидан сўнг ўзининг биринчи чакана пул вақф сукукини чиқарди. Индонезиядаги аҳоли энди миллий тараққиётга ёрдам бериш учун вақтинчалик молиявий вақфлар қилишлари мумкин. Нақд пул вақфи билан боғлиқ сукук (НПВББС) - бу ҳукуматнинг ижтимоий объектларни ривожлантириш дастурига кўмаклашиш учун суверен сукукга вақф маблағларини (нақд пул вақфи) қўйиш механизми. Ушбу НПВББСнинг яратилиши билан хусусий сектор ҳукуматнинг кенг тарқалган имтиёзлар учун давлат объектларини ривожлантиришда фаол иштирок этиши мумкин. НПВББСнинг асосий афзаллиги шундаки, унинг афзалликлари ҳукумат томонидан бошқариладиган жамоат объектларини мустаҳкам бошқарув ва паст

хавф чегараси билан таъминлаш орқали кўпайтирилиши мумкин (Индонезия банки, 2020). Индонезия ҳукумати ҳозиргача НВББСнинг иккита алоҳида шаклини чиқарди. Биринчиси, 2020-йил март ойида хусусий жойлаштириш (CW001) орқали чиқарилган ва институционал инвесторларга қаратилган бўлса, иккинчиси 2020-йил октябрь ойида ишга туширилган ва чакана инвесторларга (CWP001) қаратилган.

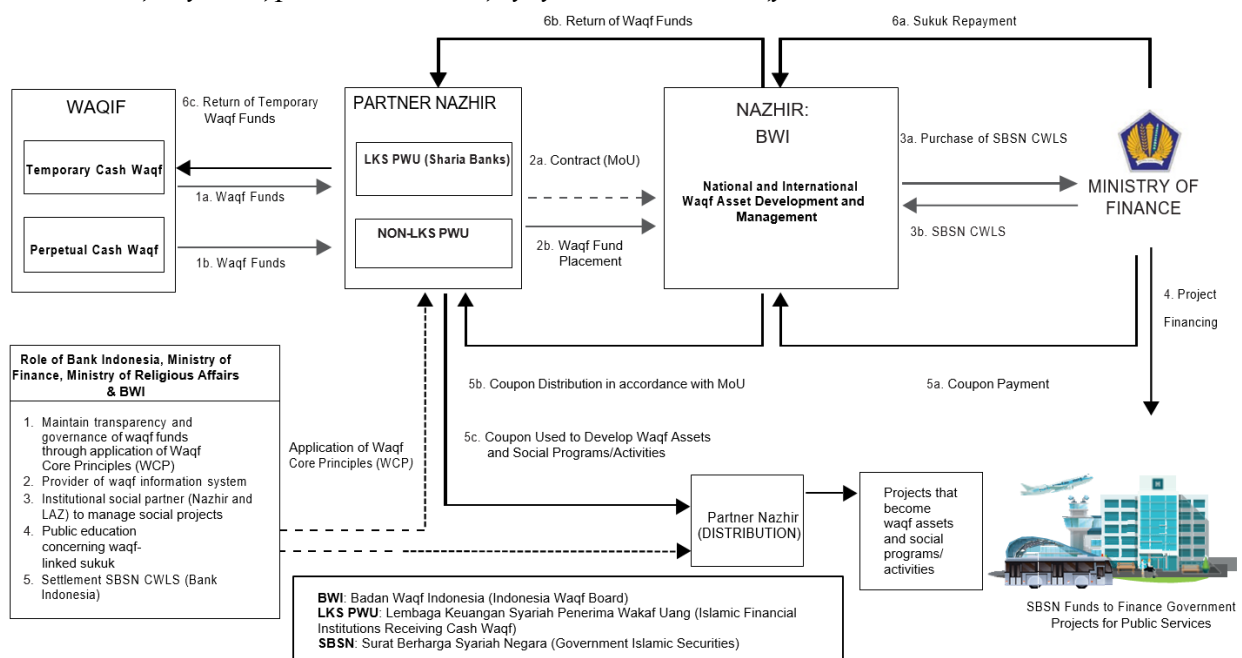
**Нақд пул вақфи билан боғланган сукук (НПВББС)**

НПВББС - нақд пул вақфи бўлиб, унда йиғилган пуллар сукукка инвестиция қилинади. Сукук бу хавфсиз ва хавф-хатарсиз бўлган ислом давлат қимматли қоғозлари (Ясин, 2021).

Нақд пул вақфи билан боғланган сукук схемаси турли-хил тартибда, турли иштирокчилар билан бўлиши мумкин, асосий шартларидан бири шариятга мувофиқ тўғри ташкиллаштиришдир.

Қуйида Индонезияда амалда қўлланилган схема билан танишиб чиқамиз. Индонезия Вақф Кенгашининг маълумотларига кўра, нақд пул вақфи билан боғлиқ сукук беш манфаатдор томонни ўз ичига олади: 1. *Банк Индонезия* сукук ва депозитар банк билан боғланган нақд вақфни амалга ошириш учун тезлатувчи сифатида; 2. *Индонезия Вақф Кенгаши* тартибга солувчи, раҳбар ва сукук вақф билан боғлиқ маблағларни бошқарадиган нозир сифатида; 3. *Молия вазирлиги* қимматли қоғозлар эмитенти ва реал секторда фонд бошқарувчиси сифатида; 4. *Самарали вақф нозир* Индонезия Вақф Кенгашининг вақф маблағларини жалб қилиш бўйича ҳамкори сифатида; 5. *Шариат банклари* нақд вақф олувчи исломий молия институтлари ва Индонезия вақф кенгашининг фаолият юритувчи банклари.

*Нақд пул вақфи билан боғлиқ сукукнинг схемаси қуйидагича:*



Source: Bank Indonesia (2021); Badan Wakaf Indonesia (2021)

*Схемадаги кетма-кетликка изоҳ:*

**1a ва b:** Вақф маблағлари вақф берувчи томонидан хайрия қилинади, бунда унинг танлаш имконияти бор вақтинчалик ёки доимий нақд пул вақфига маблағини йўналтириш. LKS PWU (Исломий банклар) ва Non-LKS PWU (Анъанавий банклар) Нозирнинг маблағ

йиғиш бўйича ҳамкорлари, улар нақд пулни вақфи қилувчиларнинг маблағларини қабул қилади.

**2a & b:** Нозирнинг маблағ йиғиш бўйича ҳамкорлари нозир (Индонезия Вақф Кенгаши (BWI)) билан меморандум тузадилар ва маблағларни BWI билан жойлаштирадилар.

**3a va b:** Индонезия Вақф Кенгаши (BWI) хусусий жойлаштириш механизми билан Молия вазирлигидан сукук ёки давлат ислом қимматли қоғозларини (SBSN) сотиб олади; Сукукга эгалик ҳужжатлари BWIга берилади.

**4:** Ҳукумат томонидан нақд пул вақфи билан боғланган сукук (CWLS) эмиссиясидан олинган маблағлар кейинчалик давлат хизматлари учун давлат лойиҳаларини молиялаштириш учун ишлатилади. Ушбу босқичда SBSN маъмури сифатида Банк Индонезия эгалик ҳуқуқини қайд қилади ва SBSN клиринг ва ҳисоб-китоблар билан шуғулланади.

**5a b & c:** Ҳукумат Индонезия Вақф Кенгаши (BWI)га чегирма ёки купон шаклида даромад тўлайди, у нозирнинг тарқатувчи шерикларига ижтимоий лойиҳалар ёки тадбирларни молиялаштириш учун тақсимланади. Инвестиция бошида олинган дастлабки чегирма диний мактаб, соғлиқни сақлаш клиникаси ва ижтимоий инфратузилма каби вақф активини ривожлантириш учун ишлатилади.

Биринчи CWLS сериясидан олинган *чегирма* тиббий асбоб-ускуналар ва Серанг, Бантен шаҳридаги кўз касалхонасини қуриш учун ишлатилган (Индонезия банки, 2021). Биринчи CWLS сериясидан олинган *купон* Бантеннинг Серанг шаҳридаги кўз касалхонасининг операцион харажатларини қоплаш учун ишлатилган. Вақти-вақти билан олинган купон этимлар ва камбағалларга қаратилган, бепул соғлиқни сақлаш, пирамиданинг пастки қисмидагилар (қуйи, мухтож қатлам) учун иқтисодий имкониятларни кенгайтириш ва бошқа ижтимоий дастурларни (Ушбу дастурлар таълим, рухий саломатлик, жамиятни ривожлантириш ёки ижтимоий қўллаб-қувватлаш тармоқлар) амалга ошириш учун ишлатилган. CWLS-га инвестициялар рақобатбардош даромад келтиради, чунки BWI солиқдан озод қилинган (Индонезия банки, 2021; Индонезия Вақф Кенгаши (BWI), 2021).

**6a b va c:** Муддати тугагач, Молия вазирлиги нақд пулни BWIга қайтаради, бу эса вақтинчалик нақд вақфни Нозирга (белгиланган шериклар орқали) қайтаради, улар уни вақтинча вақф қилишни танлаган донорларга қайтаради ёки доимий нақд вақф бўлган тақдирда у BWI томонидан бошқарилади. (Индонезия банки, 2021; Индонезия Вақф Кенгаши BWI, 2021).

Ушбу CWLS тузилмасида донорлар ўз инвестицияларидан молиявий даромад олишни танлашлари мумкин ёки агар улар нақд вақфни доимий қилишни танласалар, асосий суммадан воз кечишлари (қайтариб олмайди) мумкин. Донорларнинг мақсади асосан маънавий мукофот, садақаи жория қилишдир. Хайрия қилинган нақд пул Индонезия ҳукумати томонидан давлат инфратузилмасини яхшилаш ва бошқа қулайликларни таъминлаш учун белгиланган Сукук лойиҳаларини молиялаштиришга сарфланди ва тушумлар бенефициарлар манфаати учун вақф активларини ривожлантиришга сарфланди/сарфланади (Ҳосен ва бошқалар, 2022; Маулина, 2022).

#### **“ВАҚФ” ХАЙРИЯ ЖАМОАТ ФОНДИ**

Фонд 2018 йил 16 апрелдаги “Диний-маърифий соҳа фаолиятини тубдан такомиллаштириш чора-тадбирлари тўғрисида”ги Ўзбекистон Республикаси президенти



Фармонига асосан, “Вақф” хайрия жамоат фонди сифатида ташкил этилган. Фонднинг асосий вазифалари; Фондга келиб тушган маблағлар масжидлар ва диний таълим муассасаларининг биноларини қуриш, таъмирлаш, реконструкция қилиш, диний таълим муассасалари профессор-ўқитувчилари, тадқиқотчилари, мутахассислари ва ўқувчи-талабаларини моддий ва ижтимоий қўллаб-қувватлаш, аҳолининг ижтимоий ҳимояга муҳтож қатламлари, шу жумладан, имконияти чекланган шахсларни моддий ва маънавий қўллаб-қувватлаш каби бир қатор ишлар учун сарфланади. Фондга маблағлар ихтиёрий равишда фарз бўлган ёки саховат маблағлари кўринишида ўтказиб беришлари мумкин. Ҳозирги вақтда фонд хайрия маблағларни одамлар қийинчиликсиз ўтказишлари учун электрон тўлов тизимларига уланган. Замонавий Ислом молиясида вақфнинг ижтимоий-иқтисодий соҳалардаги ўрни ва вазифалари жуда кенг ва самаралидир.

Вақф хайрия жамоат фонди Ўзбекистон Республикасида вақфлар фаолиятини тартибга солувчи асосий орган сифатида, манфаатдор вазирлик ва идоралар билан Нақд пул вақфи билан боғланган Сукук инструментини жорий этиш орқали барқарор ижтимоий инфратузилмаларни молиялаштириш, давлат-хусусий шерикчилик ўртасидаги ҳамкорликка замин яратишда янги инновацион ечимлар бериши мумкин.

### **ЎЗБЕКИСТОНДА НАҚД ПУЛ ВАҚФИ ВА СУКУК ИМКОНИАТЛАРИ**

Ўзбекистон, Марказий Осиёдаги аҳоли сони жihatдан (37 млн.ортик) энг катта бўлган ривожланаётган давлатдир. Аҳолининг 90-95 фоизидан кўпроғини мусулмонлар ташкил этадиган Ўзбекистонда Ислом молия муассасалари ташкил этиш учун етарли эҳтиёж ва улкан имкониятлар мавжуд.

Ислом молияси - шерикчиликка асосланган, актив билан таъминланган, ахлоқий, барқарор, атроф муҳит ва ижтимоий масалаларга нисбатан масъулиятли бўлган молиявий тизимдир. Ислом молиясининг жорий этилиши аҳолига ва хусусий сектор вакилларига муқобил молиявий инклузивликни тақдим этиши орқали, ишбилормонлик муҳитининг янада ривожланишига, молиявий ресурсларга бўлган эҳтиёжларининг қондирилишида муҳим ўрин тутиши мумкин.

Ўзбекистон инвестицияларни жалб қилиш ва барқарор ривожланишни рағбатлантиришнинг турли йўллари, жумладан, яшил молиялаштириш ташаббусларини илгари сурмоқда. Мамлакатнинг молиявий секторни диверсификация қилиш ва хорижий инвестицияларни жалб қилиш истагини ҳисобга олсак, келажакда нақд пул вақфи ва сукукнинг кенг имкониятлари бу борада янги инновацион ечимларни тақлиф этиши мумкин.

Ислом молиясининг жорий этилиши Форс кўрфази араб давлатларидан инвестицияларнинг кириб келиши имкониятларини ошири ҳамда маҳаллий ишбилормонларнинг ўз маблағларини истиқболли лойиҳаларга сукук қимматли қоғозлари орқали жойлаштиришлари мумкин.

Ҳар ким ҳам ер ёки бирор кўчмас мулкни вақф қила олмаслиги мумкин, бундан ташқари ер ва бинолардан самарали фойдаланишда ўзига яраша муаммолар бўлиши мумкин аммо нақд пул вақфининг оммалашуви аҳолининг имкониятлари даражасида хайрли ишларга ўз маблағларини сафарбар қилишига имкон яратиши мумкин.

Индонезия тажрибасини қўллаш ва уни яқиндан ўрганиш Ўзбекистон манфаатлари учун ҳам хизмат қилиши билан бир қаторда мамлакатнинг иқтисодий барқарорлигини таъминлашда янада самарали инновацион йўللardan бири бўлиши мумкин.

**ТАВСИЯЛАР ВА ХУЛОСА**

Ўзбекистонда Ислом банкчилиги тўғрисидаги қонун қабул қилиш ва тегишли қонунчилик ва меъёрий ҳужжатларга, шу жумладан Фуқаролик кодексига, Солиқ кодексига ва Банклар тўғрисидаги қонунга тегишли ўзгартиришлар киритиш жараёнини тезлаштириш. Ислом банк иши ва молия тизимини ривожлантириш мақсадида Ислом молия кенгаши ташкил этиш. аҳолининг молиявий саводхонлигини, шу жумладан ислом молия тизими соҳасидаги тушунча ва билимларини шакллантириш ва ошириш борасида амалий ишлар олиб бориш зарур. Ўзбекистоннинг экологик мақсадларига мос келадиган яшил лойиҳаларни аниқлаш ва устуворликларини белгилаш учун манфаатдор томонлар билан ҳамкорлик қилиш лозим. Шариат тамойилларига риоя қилган ҳолда ва тасдиқланган яшил лойиҳаларга маблағ ажратилишини таъминлаган ҳолда шаффоф сукук чиқариш жараёнини амалга ошириш муҳим. Ислом молия тизимини татбиқ қилиш шунингдек ҳукуматга “яшил” сукуклар чиқариш орқали атроф муҳит ҳимояси билан боғлиқ эко-лойиҳаларни молиялаштириш учун нафақат маҳаллий, балки хорижий сармоядорлар ва молия муассасалари маблағларини ҳам (хусусан мусулмон мамлакатларидан) жалб қилиш мумкин. Ўзбекистонда аҳоли ва тадбиркорлар томонидан закот ва вақф учун маблағ ажратишга бўлган иштиёқ жуда баланд. Бу эса ушбу соҳада ишончли, шаффоф ва самарали тизим бўлишини тақозо этади. Шу билан бирга, жамиятда закот ва вақф борасидаги тушунча ва билимларини ошириш, ислом ижтимоий молияси афзалликларини тарғиб қилиш аҳоли ва бизнес тарафидан ушбу мақсадларга янада кўпроқ маблағ ажратилишини таъминлайди. Бу эса ўз навбатида барқарор ривожланиш доирасида турли ижтимоий лойиҳаларини молиялаштириш имкониятларини оширади.

Шу билан бирга, Вақф хайрия жамғармасига Ўзбекистон мусулмонлари идораси ҳамда Иқтисодиёт ва Молия вазирлиги билан ҳамкорлик қилиш ва ҳамкорлик қилиш имконини берувчи тафовутларни бартараф этиш учун амалдаги вақф қонунлари ва меъёрий-ҳуқуқий ҳужжатларга тегишли ўзгартириш киритиш зарур. Бу Вақф хайрия жамғармасига вақф активларини секюритизация қилиш, рақамлаштириш ва ундан сукук чиқаришни Ўзбекистон мусулмонлари идораси ҳамда Иқтисодиёт ва молия вазирлигига топшириш имконини беради.

Бу борадаги ислоҳот, шунингдек, исломий ва анъанавий молия институтлари билан НПББСни сотиш ва ундан тушган даромадларни Ўзбекистонда йиғиш бўйича ҳамкорлик қилиш имконини бериши мумкин. Ислоҳотлар Вақф хайрия жамғармасига Ўзбекистон бўйлаб вақф активларини максимал даражада яратиш ва улардан фойдаланиш имкониятини беради ҳамда НПББСнинг ривожланиши ва ҳаётийлиги учун ҳам муҳимдир.

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## WAYS TO INCREASE ENTERPRISE PROFIT IN MODERN CONDITIONS

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**Abstract.** *A useful way to approach this is to carry out a SWOT analysis - a review of the business's strengths, weaknesses, opportunities, and threats. This form of analysis provides an invaluable guide to where a business is now and can identify where changes might be needed. Businesses that operate solely within their own borders do not have to face this form of analysis on a global scale.*

**Keywords:** *increase, profit, enterprise, modern conditions.*

### 1. Introduction

The knowledge of business landscape helps people to understand the given opportunities and threats. Every company is a part of one or more segments of a business and these segments are known as industries. For example, my own company is a part of the cosmetic industry. As stated by FCIB (2015), the political and economic life of a country in which a business operates always has a big impact on the performance of that business. Furthermore, the social life and the natural environment in that country also have an equal impact on the profitability of that business. In the USA, people always prefer to use cosmetics while in the UK, the trend of using cosmetics is less as compared to the USA (Doran, 2014). The use of social media and networking sites is increasing nowadays and businesses use social media to promote their products and to reach the customers (Koehn et al., 2012). In order to identify where the biggest opportunities lie and the biggest threats for my company are, we need to have a good picture of the current business landscape, and that picture can be built through analyses of the given environment. Nowadays, the competition is more than ever and businesses have to be keen to develop the growth strategies and goals because the business without strategies and goals may become directionless. On the contrary to this, businesses also have to manage the risk measures because wrong decisions can lead a business to legal issues and financial losses. The strategies and goals of a business always have several options that properly define what the businesses want to achieve and how it's going to achieve. In a modern business landscape, maximizing profits through continuous improvement has become a predominant objective. In order to ensure growth and sustainability, managers of a profit-facing organization have shifted their attention to the expansion of efficiency and business excellence. Over the period of time, various strategies have been developed by the management gurus and experts in the field of business management to help in realizing this factor. Every business organization wants to improve and maximize the profit with the help of modern management science. However, the profit-making is affected by different parameters which include day-to-day operational input, managerial decisions, and sporadic strategic initiatives in either marketing, production, or the general management. Historically, organizations have always worked to maximize their output and efficiencies either by increasing the manpower, capital investment, or incorporating the latest technologies. Adapting a strategy of productivity and efficiency improvements is also a popular method which has been utilized for many years to maximize the output and to improve the profit. A core part of a successful business plan is

identifying tactics that support the business strategy. This helps to ensure that the overall business plan is viable and that all the goals of the strategy can be met. When analyzing business strategies, it is very important to identify the ways or methods that a company can actually increase its profit by implementing certain technologies or methods. With the advancement in technologies and the management expertise, the businesses not only focus on the internal reforms to maximize the profit but also look at the external emerging trends and business opportunities. By doing a comprehensive environmental analysis, companies today can easily get much greater knowledge about the ways through which they can increase the profit. An environmental analysis can be best understood by recognizing the nature of the given environment of businesses such as social, political, economic, and natural environment. The environmental analysis helps the management to identify the opportunities and threats in the business.

### **1.1. Overview of the Current Business Landscape**

By applying the strategies and techniques outlined in the article, businesses can increase their profitability and thrive in the modern business environment.

A useful way to approach this is to carry out a SWOT analysis - a review of the business's strengths, weaknesses, opportunities, and threats. This form of analysis provides an invaluable guide to where a business is now and can identify where changes might be needed. Businesses that operate solely within their own borders do not have to face this form of analysis on a global scale. It can be more difficult for a business to make regular changes to products or processes for long-term benefits. However, businesses cannot assume that the strategies which have been in place, and have driven business success in the past, will continue to work in the future. New competitors may emerge, the economic climate may suffer, and consumer trends may change - so it is essential to continually revisit strategic plans.

In such a dynamic environment, it is critical for businesses to constantly evaluate their strategic positioning and find ways to adapt and succeed. This means being aware of the market in which a business operates, understanding where a business is positioned in that market, and finding ways to differentiate a business from other providers. By creating a strategy that is based on a sound understanding of the wider business landscape, a business will be better able to take advantage of the opportunities that arise.

The modern business landscape is complex and ever-changing. Globalization, rapid technological advancements, and a turbulent economic environment have resulted in new challenges for businesses. For example, both small local shops and global organizations are facing increasing competition from e-commerce businesses. Not just traditional manufacturing industries, but also modern service industries, are struggling to adopt advanced technologies such as robotics and artificial intelligence. Moreover, economic uncertainty is putting pressure on businesses to remain competitive and grow, as investors are expecting higher returns and lower risk.

### **1.2. Importance of Increasing Profit in Modern Conditions**

Today's business world is rapidly changing. Social, political, and economic forces, combined with technological advances, have created a highly dynamic and fast-paced environment. In such an environment, the business community is continuously looking for ways to gain a competitive advantage, increase market share, and realize economies of scale. All these objectives, however, have a common focus, which is boosting profitability. Profit increase is the primary goal of any business. Profit, in the business sense, is simply the earnings that the enterprise makes after all the expenses have been deducted. This is the money that remains after the sale of

goods and services and all operational costs are accounted for. There are various types of profit including gross profit, net profit, and operating profit. For the purposes of this study, profit will generally refer to the generic aspect of earnings that are made. Profit is very significant to any business. This is because it's used to measure the success of the business, making profit is also a sign of the efficient use of resource. The importance of profit increase in modern conditions cannot be underestimated. This is first and foremost because the world is moving towards globalization and industrialization at a very high speed. All the forces of globalization are resulting into extreme competition in the market. In fact, with globalization, businesses are no longer competing on local basis but on international level. This means that a company operating in Kenya is not only faced with competition from local companies but also from international entities. Globalization has also led to increase in production and this has led to firms producing more than what the local market can consume. As a result, there must be emergent ways of selling the excess production. Furthermore, profit increase is very crucial given the fact that the production process are becoming more complex due to the use of advanced technology and machinery. The cost of such technology is very high and its maintenance involves significant amount of money. As a matter of fact, most businesses are investing in modern technology with the aim that they will realize efficiency in their production. By realizing efficiency, it is anticipated that more output will be realized and hence more sales. However, realizing efficient production through modern technology requires a period of continuous improvement and this mean that the firm will require adequate finance to run its operation and adjust to market changes. This simply tells us that without profit, it is virtually impossible for companies to operate smoothly and grow from one level to another. A company's ability to increase its profit shows that it must be having a competitive advantage. When we talk about competitive advantage, we mean the ability of a business to use its best resources in a way that it will create more customer value. Businesses that have competitive advantage are able to satisfy customers in a better way as compared to their rivals and are likely to have higher profits. For a company to be in a position to increase its profit, it must be able to apply its resources in such a way as to move from one level of profit to a higher level. This continuous increase in profit clearly shows a positive indication for long term economic growth.

## **2. Strategic Planning**

Another vital way to increase enterprise profit in modern conditions is through strategic planning, which provides a company with the framework to make day-to-day management decisions with a sense of common goals and understanding among the management team. It sets up the means for the company to progress in a certain direction in the future in a way that the company has resources sufficient to achieve the planned progress. Strategic planning is the process by which a company identifies its long-term direction and the means to get there, achieves its mission measures progress, and communicates statement to people within organization. From doing so, strategic planning gives not only a useful tool for guiding a company, but also a way of measuring and monitoring the continuing success. According to QuickMBA.com, a specific model of strategic planning takes form in the shape of the following process: development of the business mission, analysis of the external environment in which the business operates, analysis of the company's existing resources or the internal environment, identification of the objectives of the business, development and selection of strategic choices that are most likely to achieve the objectives, translation of these strategic choices into operational plans with specific actions and objectives, and establishment of means to monitor the success of the operational plans. We will

look at the strategic planning in a different perspective. In order to achieve this you will have to look at strategic planning as a three-phase work-in-progress that requires flexibility and choices. Ordering essays from custom writing services has become popular among many; however all the advantages and disadvantages of ordering essays are not yet clear. This process has to be done by the management with foresight and explicit thinking, with the aim of giving a useful framework for competitive and profitable action, but it must not be the sole province of the people at the top. It is the duty of the executive side of a company to engage the process, so that all may understand what the company is about and what it is trying to achieve, and may contribute according to their sphere of expertise and interest. In order to secure means for effective negotiation and participation in the process of strategic planning, human resource matters have to be taken into account. It is proved that employees' influence on strategic planning is by no means antithetic to the tenets of economic rationality; rather, their influence in any other organizational area is powerful, it provides an element of competent advantage. Keen and nimble competition in an increasing number of markets, whether they are international or local, means that many successful organizations undertake strategic planning of one form or another.

### **2.1. Identifying Business Objectives**

Identifying business objectives involves a number of steps. First of all, the strategic planners need to be consulted. This may include the senior management team or sometimes business owners, depending on the size of the business. These people are usually the key decision makers and sometimes may also be the experts in running the business. By consulting with them, it is ensured that the objectives identified match the real goals of the business. In a growing and fast-changing industry, the pace of change is so fast that if you are standing still then you are gradually moving backwards. Businesses need to be proactive, and they need to give their workforce and management the necessary tools and conditions for success. Experience shows that the strategic planning which identifies the objectives and aims for the companies helps to motivate the workforce. The shared vision of the business' future among the workforce fosters the culture of continuous improvement and gives the employees an understanding of how they can contribute to the achievement of business goals. Also, identifying the business objectives is important for a variety of participants. When a new business develops, the owner's first objective is to survive. Then the focus will shift towards other objectives such as to increase profit, to employ more people, and to expand in new markets and to win a particular reputation, etc. For someone who wants to buy an existing business or to secure finance for a new business, it is highly important to clearly know and clearly state the business's objectives. We cannot make an expert judgment by simply looking at some information down to a couple of pages into a report. The understanding of objectives is the key foundation for the development of any kind of business plan. And to the people who work in these companies, the knowledge of goals is equally important. Sharing the business plan and the business' success with employees will increase the probability of retaining the staff that the companies have invested in adequately training. Also, it contributes to the result of higher efficiency in the businesses. In this aspect, human resources managers may take charge. But from another perspective, since employees themselves know a lot of job contents and individual skills and abilities, the aims identified should also have a fair reflection of the employees' individual development. Balancing the needs of the businesses with the human resource planning is the key to the success theories of strategic planning.

### **2.2. Conducting a SWOT Analysis**

Conducting a SWOT analysis involves evaluating the internal strengths and weaknesses of the organization and external opportunities and threats. This is a critical planning tool which is widely used in the modern business arena to find a new direction for growth and profitability. The organization needs to determine what the main purpose of the SWOT analysis is - for example, it may be used in preparation for a new business venture, diversification or expansion and might involve a particular project such as capital investment, modernization or a change in the business direction. It is important to be clear whether the objective is applying the analysis to the whole business or just part of it and to involve the right people in the process. SWOT analysis can be applied to planning, marketing, competitor analysis, business and product development, also human resources etc. During the study it was also identified that some organizations have modified their confidence, so they have called it as "slot analysis". It specifically considered the relative importance in environmental factors and the potential of the strategy in the marketing. Next, there are primary and secondary data related to the SWOT analysis. Commonly it composes of two main factors - primary and secondary. Primary data outlines the different parameter of the analysis and secondary data provide the general backgrounds, including research from customer and general studies. However, it may vary for the different organization because of their specific product and services. After pinpointing the various elements, it comes to the potential answer from the analysis. It is generally beneficial. It will lead the organization to play on the strengths and avoid to expose the weaknesses. It guides to find out the potential opportunities and to concede over the threats. It can provide an impetus to the further analysis and accommodate the future possible developments. Such technique is not only conducting in the class. As a matter of fact, following a new round of tariff, some companies turn to such analysis to find out how to adjust. IKEA discovered another opportunity in the China as the superpower fights. GAC Motor realized that they need to improve themselves to embrace the challenges from the US. As a popular cosmetic company, Clinique is facing to the changing customers' needs and that sad news for their face sales. If it keeps falling down, the company has to regroup and restrict the Cost for restructuring. Such kind of analytical tool will be elaborated more in the following chapter.

### **2.3. Developing a Profit-Driven Strategy**

So, how does a business develop a profit-driven strategy? Firstly, it is important to identify the profit objectives of the business. There is usually a hierarchy of objectives - for example, survival, profitability, growth - and these need to be reflected in the strategy. Profit objectives should be detailed, specifying the level and timescale of the profits expected. The strategy should then seek to deliver these profit objectives at the least risk. Thus any profit-driven strategy needs to take into account the business's position in the life cycle and the general nature of the environment in which it operates, for example the level of competition and the rate of technological change. In the analysis the business's strengths, weaknesses, opportunities and threats should be clearly related to the mission and objectives. Trends and strategic uncertainties should be identified and, where possible, quantified, and this information should guide the setting of the profit objectives and choice of strategy. Finally, the technology used in the business should be described - both in terms of its current state of development and the direction in which it is moving - and possible future developments should be used to give an insight into where the business and its markets are going. This will help to ensure that the strategy is not only profit driven but gives a good steer on the amounts and timing of the profits anticipated. All staff should be involved in developing and delivering the profit objectives. The profit-driven strategy will generate a 'line of



sight', so that everybody can see where their efforts fit into the overall plan. If a particular activity is not going to contribute to the profit objectives, then there will be good reason to question whether that activity should be done at all. It should be made clear that 'profit' does not necessarily mean 'cash'. When developing a profit-driven strategy, perhaps the most difficult thing is to get the balance right. Too woolly and the strategy won't provide a clear direction; too red and a strategy that doesn't quite deliver the anticipated results could put the positions of those involved in its development at risk. However, whether the business is large or small, profit driven strategic change does have to win through, and the long-term planning that underpins the development of a profit-driven strategy can only improve the prospects for the business in an increasingly competitive market existence.

### **3. Market Analysis**

The next section focuses on market analysis. It highlights the significance of understanding customer needs and preferences, analyzing competitor strategies, and identifying market trends and opportunities. These insights can help businesses tailor their offerings to meet customer demands and stay ahead of the competition. According to Gaille, by conducting a comprehensive market analysis, businesses can gain a thorough understanding of the characteristics of the market, including the size and growth, the number of competitors, the segmentation, and the distribution channels. With the advance of technology, acquiring market information has become relatively easier over the years. Common sources of market information include government statistics, survey reports, market-related research works, and findings by other professionals. However, it is important that businesses are aware that market situations and data are never constant. Take consumer behavior as an example, it is subject to many influential external factors, such as culture (practice and custom), economy, technology, and so on. The analysis of the customer's needs, focus, and buying behavior is extremely crucial to enhance enterprise sales and profit. Real understanding of the market segments and targets empowers businesses to effectively plan resource and marketing strategies. The results of market analysis provide sufficient evidence and guidelines for developing an effective marketing strategy and conducting a means-end marketing. The development of digital technology has launched a new shift in customer behaviors, which is the trend from physical shopping to online searching. Businesses can take advantage of the digital era by engaging in digital marketing and making use of the powerful tools for data analysis and customer relationship management. The usage of digital marketing platform can significantly promote business and provide an impactful growth for business, especially start-up business. Forsythe et al. suggested that in order to achieve a satisfying marketing result, businesses should construct a three-layer process of marketing approach – “Understand, Respond, and Measure” for each step of the customer's progress. First and foremost, a comprehensive customer analysis will assist users to make better decisions, plan the right marketing, and provide solutions that are more tailor-made. The analysis, which is critical to businesses, will continue to promote data-driven strategies and optimization.

#### **3.1. Understanding Customer Needs and Preferences**

The explanation in the text about what customer segmentation is was clear and helpful. It's invaluable that businesses constantly keep in touch with customers' changing needs, as they can change rapidly, according to the guide - meaning that they need to keep gathering the data and have effective processes in place to capture customer feedback, to ensure that the business keeps meeting those needs. The comments regarding, for example, in one segment customers may be

looking for high quality and in another they may be looking for the lowest price. The text goes on to suggest that a great way to identify what the “real” customer need is, as opposed to what the business thinks it is, is to use the “Kano model” which categorizes customer preferences into areas such as “essential”, “performance” and “excitement”, not only differentiated the essay from similar essays but also provided relevant examples to support what was being stated.

A SWOT analysis of marketing and sales processes or “where is the business” compared to goal, is a fantastic way to capture and know the difference between market opportunities and those areas the business needs to focus on and improve, according to the guide. I came into contact with the “Kano model”. This model allows businesses to separate the aspects of customer needs into five different categories - which the guide did not mention. However, by using the Kano model, a business can work out what its customers' main needs are and therefore develop a product or service that will meet that 'big need'.

The guide concludes that what customers and businesses think might be two completely different things and it's the opinion of the customer that counts, because they are the ones who will go out and write the reviews, telling everyone else their opinion of the business. Therefore, it is essential for any business to have an understanding of the market environment and who the business's competitors are, advises the guide. More importantly, this understanding will help a business figure out what the differentiating factors are that separate the business from others in order to take that business even further towards increasing sales.

A business could use a customer segmentation method to understand different types of customer and their different needs. For example, in one segment customers may be looking for high quality and in another they may be looking for the lowest price. The text goes on to suggest that a great way to identify what the “real” customer need is, as opposed to what the business thinks it is, is to use the “Kano model” which categorizes customer preferences into areas such as “essential”, “performance” and “excitement”.

A great way to capture customer feedback, according to the guide, is through customer surveys and suggestion boxes, ensuring that the customer is able to offer some way of detailing the needs and preferences that they have. The key is to ask the right questions in these surveys that will provide the business with positive answers and identify its strengths and weaknesses. For example, the text suggests a five point rating scale starting with “Very satisfied” and moving to “Very dissatisfied”.

Understanding the needs and preferences of customers is at the heart of increasing sales and growing the business, whether it is a large multinational corporation trying to expand sales or a corner store looking to move more products. To understand customer needs, it is important to know what kind of problem the business is trying to solve. Every business will exist to solve a customer problem or need, and understanding that is critical for the business in developing and delivering products and services that really solve those problems.

### **3.2. Analyzing Competitor Strategies**

The important thing to consider is that any information gathered should be factual, not just assumed. It should be based upon a reliable source and preferably the most up-to-date evidence available. By investing time and effort into a thorough competitor analysis exercise, you will give yourself the best possible chance of increasing the long-term success of your business.

In the same breath, analyzing competitor strategies could be very complex depending on the size and focus of your market, how dynamic it is, the extent to which you use technology, and

the amount of resources that you can allocate to investigating and monitoring. However, this exercise can be as formal or informal as you wish and could range from simply getting to know local competitors, i.e. high street shops, relying on information published in paper by trade associations which concern the particular industry.

Analyzing competitor strategies is a crucial aspect of market analysis. By gaining an understanding of what your competitors are doing in terms of their product offering, service delivery, customer service excellence, and pricing, you will be better placed to identify areas where there is a gap in the market, develop your unique selling proposition, and make strategic decisions about the future direction of your business. Also, by continuously monitoring the competitive environment, you will be alerted to any potential threats, allowing you to seize any new opportunities as they arise.

### **3.3. Identifying Market Trends and Opportunities**

Having established the importance of understanding customer needs and preferences, as well as analyzing what competitors are doing, the next step is to identify the current market trends and the potential opportunities within those trends. One approach to identifying market trends is to analyze the available data. For example, depending on the type of business, it might be helpful to look at economic data such as GDP or unemployment figures, industry-specific data, and customer opinion data. Many different businesses produce reports and statistics that may be useful for this. A useful first step can be undertaking a 'PEST' analysis. This looks at the political, economic, social, and technological factors that could affect your business. Remember that businesses don't operate in isolation - so the PEST environment surrounding a coffee shop could include the increasing presence of coffee chain outlets, the behavior of governments in not granting 24-hour licenses for small outlets, and the increasing use of the internet by customers. This type of analysis looks at which factors are having an impact and which are just a focus of interest. By analyzing the data, to complement what is learned from customer and competitor analysis, it should be possible to build a better picture of the direction in which a particular market is heading. And by identifying new entrants, the strength of competitors, and any new technology, it may also be possible to identify new market opportunities - for example, gaps in the market, changes in demographics, or other social or technological changes. So, with the right research and analysis, there's no reason why a well-framed marketing strategy will not deliver success and with it, profit.

### **4. Product and Service Optimization**

By employing a holistic approach to product and service optimization - one that includes regular performance reviews, strategic alignment evaluations, and customer-centric feedback mechanisms - businesses can position themselves for sustained profit growth and long-term success.

The key to developing successful product and service enhancements is a focus on customer value and satisfaction. Customer needs and preferences can change rapidly, especially in industries that are heavily influenced by technology or regulatory changes. User-centric design and feedback methodologies can help businesses understand what enhancements would provide the most value for customers. In addition, enterprise objectives and strategic plans should drive the prioritization of different product and service enhancement opportunities.

In some cases, product and service optimization may require enhancements to technology systems or business processes. For example, the integration of customer relationship management (CRM) tools with marketing and sales systems can enable more personalized customer interactions

and targeted marketing campaigns. Similarly, the adoption of digital technologies such as e-commerce platforms or mobile applications can help service businesses expand into new and emerging markets.

The first step in product and service optimization involves an evaluation of current offerings in the marketplace. This includes understanding the competitive position of each product or service, analyzing sales trends and revenue contributions, and conducting a comprehensive review of customer feedback and satisfaction. Products and services should align with the overall enterprise mission and business objectives. If any offerings do not support these broader goals, they may be candidates for retirement or replacement. In contrast, there may be opportunities to introduce new products or services that focus on growth areas or emerging market trends.

Product and service optimization involves evaluating current offerings to identify areas for improvement or expansion and implementing enhancements that align with business objectives and customer needs. Products and services are the primary revenue-generating opportunities for the enterprise, and optimization of these offerings can drive significant profit growth.

#### **4.1. Evaluating Current Product/Service Offerings**

Current product and service offerings have to be evaluated to ensure that they benefit the enterprise and further the enterprise business strategy. There are several key aspects to evaluating current product and service offers. The first and probably the most important is to maintain a focus on the customer. If a product or service is not satisfying the needs and expectations of a customer, then it is not likely to be successful, regardless of how good it may be in other areas. I have seen many instances in my professional experience where companies fall in love with their own product without understanding that the customer may not appreciate the value of that product. This is exemplified in the modern software industry with both customer relationship management (CRM) and enterprise resource planning (ERP) software. Often, companies will need to evaluate a product, and this may be due to either the need to increase profit or concern over future sustainability. The importance of the enterprise strategy, the synergy and conflicts between the product in the product offer and the product strategy, the product life cycle, the NPD process and the PLM process are additional comments and sometimes checkpoints that should be taken into consideration when evaluating a product, especially when may need to develop a product roadmap. The NPD process is a critically important aspect to evaluate a new product. There are several processes in NPD. It is better to have your own tailored or a separate idea-generating process for coming up with ideas. When the idea has been generated, then companies can use systems such as QFD, which is used to transform creative designs into physical product and DFMA, which is used to reduce the manufacturing part costs. QFD is a technique that helps companies develop products that satisfy the customer. The first rule in offering analysis is to dispose of losers. There are lots of ways to define a loser in business, including products that have low sales, products that tie up too much cash, and products that have high account and handling costs. The most efficient way to kill a product is to do it quickly, but often companies like to keep such products for emotional reasons, especially if it was a product inherited from a previous regime. The fact is that the learning to be obtained from a failed product can often be very useful. These learning points can range from process improvement implemented in the business to having more informed and experienced staff.

#### **4.2. Identifying Areas for Improvement or Expansion**

1. Expansion of the market - This may include increasing grip of the market or capturing a fresh portion of the same market. 2. Diversification - This is producing different products from the

current line either for the pursuit of technological changes in the product or to appeal to the new strata of the market. 3. Cutting cost and growing production - It may not be cost effective to lower the price of a product but reduction in the unit cost and a promise to be able to produce much larger output may still lead to a profitable result. In a very competitive market situation, this may be the only option. 4. Research and development - Many attempts to stumble through innovation occur that it has proven to be the soundest method. By definition, we take research and development to be a work planned to produce new innovations in the industry. This would surely open doors to the improved or new products. Care should be taken to ensure that there is existent demand for what the research produces. All the above-mentioned points must be put into the consideration of whether this could be the better new step for the organization. The company must be sure about the success percentage of the new proposed ideas. The management must also be willing to take on the risk. And there should be enthusiasm throughout every level of the workforce to support the series of steps in new initiatives. Also remember the business environment is changing continuously. As a process not a single snapshot of time, managing in an environment characterized by change is particularly difficult. And the change itself becomes the major risk for today's organizations. Adaptation is necessary to compete in the ever-changing world and lots of efforts can be wasted by implementing promised improvement. Also, this will allow the management to track the success of the improvement against the resulted profitability.

One area in which profitability can be improved upon is through identifying new areas of expansion or improvement. There are four main areas in which we can look at for identifying these improvements:

#### **4.3. Implementing Product/Service Enhancements**

To start, let's define what a product enhancement is. A product enhancement is any change to the product or service that is designed to ameliorate its effectiveness or efficiency. This can include anything from a large-scale overhaul of the core product, all the way to minor changes in the way that it is delivered or marketed. One of the main reasons that businesses look to implement product enhancements is to keep up with or even surpass their competitors. This is because, in the vast majority of industries, the market will be crowded with rival firms all vying for the customers' attention. Therefore, if a business's product deteriorates and becomes less efficient when it is compared with similar offerings from other companies, then it is foreseeably going to lose market share which can be extremely damaging to profits. A good example of when this has happened is with the large chain Blockbuster video; when online streaming services first became available, Blockbuster did not adapt their business model or try to enhance the level of service that they offered, and they now no longer exist as a company. It is also important to recognise that product enhancements will generally have a much larger and more extensive impact on the business as a whole than implementing a service enhancement will. This is because changes to the product that is offered will likely affect every department in a business in some way or another, from production and marketing teams through to the aftercare and customer service provision. This is opposed to service amendments, which tend to only directly affect the department in question and not the business as a whole. An example of a successful service enhancement can be seen with the railway service Cross Country. With the growing importance of the internet, Cross Country decided to invest in implementing a free wifi service on many of their trains. This has led to increased customer satisfaction and a rise in customer loyalty to the brand as a consequence. Also, the implementation of the service enhancement has meant that the potentially large costs of creating

and maintaining the free wifi have been mitigated by the fact that the company's turnover is continually going up, thanks to the rise in customer satisfaction and the attracting of more people to use their services. These are two of the main forms of product enhancement, and a successful implementation of either can often lead to increased customer satisfaction and loyalty. So, if there is a demand identified in the business' area of effectiveness, it is likely that the business will be welcomed with an increase in revenue, allowing further scope for growth and additional product improvements, which can help to sustain success.

### **5. Pricing Strategies**

3. Customer loyalty/relationship based pricing strategies – This is a pricing strategy that helps businesses build and develop a good relationship with its customers. For example, the business may offer a 10% discount for customers who hold a loyalty card or the business may post coupons to returning customers. This will help keep the current customers happy and, hopefully, encourage other consumers to come back and become faithful customers. Customer loyalty/relationship based pricing strategies also help businesses to gather data on its consumers and find out what makes them come back and keep spending. The customers loyalty card could map what people are buying and then the business could use this data and offer further discounts on things that perhaps the consumers have not yet purchased, therefore trying to appeal to every customer's wants and needs.

2. Consumer (demand) based pricing – this is also known as value-based pricing. The price is based upon the value that the product offers to the consumer. Businesses that choose this strategy will base their product's price on the price that they believe customers want to and are willing to pay. This strategy often helps businesses to try and get the highest possible price for their product to maximize revenue. It can also help businesses to gauge what the consumer sees the main value of the product. Every business would be looking to make their product the 'market leader' in price and therefore, in demand. This type of pricing might be used by those businesses who have managed to make their product the best and are constantly the most desired product by the consumer. This is because they will be able to charge the highest price and, although they may lose a few customers to cheaper priced products, they would be able to make the largest possible revenue.

This pricing strategy is good for business as it helps cover its costs; however, the business does not take into account what the consumers might be willing to spend on a product. If cost-based pricing was used, the selling price may be too high or low.

Total cost of producing whatever the product is = \$20. 10% cost-plus pricing (on top of total cost) = \$2. Therefore, the selling price of the product would be \$22.

1. Cost-based pricing – the price is determined by adding a profit element on top of the cost of making the product. In this type of pricing, the business first looks at the cost of making the product. Then they add on a percentage to give them the profit they need. Most companies use cost-plus pricing. This is where they markup the cost of making a product with a certain percentage – they might decide this based on what their competitors are charging. With the total cost of making a product and then illustrating the cost-plus pricing, it might look something like this:

Pricing strategies are a main element of any marketing strategy. Many combine elements of cost-plus pricing and competitor-based pricing. There are three main ways of setting prices. These are:

#### **5.1. Analyzing Cost Structures**

Cfds are complex instruments and come with a high risk of losing money rapidly due to leverage. Between 74-89% of retail investor accounts lose money when trading cfd's. You should consider whether you can afford to take the high risk of losing your money. When starting a new currency exchange, it is vitally important to determine how much money is required to meet the day-to-day obligations of the company. This involves a deep and detailed understanding of the costs that are involved in the business. In order to arrive at a well-informed and comprehensive outlook, it is essential to delve deep into the analysis of the cost structures. In the modern technology driven era, it is not efficient to rely on manual and paper based systems for the processing and analysis of cost data. In line with this, various types and levels of technology from basic spreadsheets to advanced enterprise resource planning (erp) systems can be used. However, it may be the case that different technology is required at different stages of the analytic process. Firstly, the actual levels of different costs need to be established. These can include fixed costs that do not change and variable costs that change with the level of activity. For example, in a currency exchange, the salaries of the staff each month would be considered a fixed cost. This is because they generally do not change with the level of business. On the other hand, the money paid out in commission to sales staff is a variable cost. This is because it will change depending on the amount of currency that is bought by customers each day. However, this is somewhat of a simplification as is. Different levels of activity. For example, in a currency exchange, the salaries of the staff each month would be considered a fixed cost.

### **5.2. Determining Optimal Pricing Models**

Pricing model directly affects the business profit as it is the part of the revenue generation for the enterprise. According to this method, the price is fixed at a certain level that can recover both the fixed cost and variable cost over a period. In this method, fixed cost and variable cost should be determined per unit, such as the annual depreciation of a machine or monthly lease expenses. Then the price is set at a level that can recover both costs. This method is simple and widely used for the reason that cost per unit of fixed cost will decrease when output level increases. However, this method is mostly for short term reference, because the revenue can hardly cover all the costs for a long period. Some modern enterprises used modern method called Dynamic Pricing. The price is determined by the current demand level in environments such as price comparison website, auction websites etc. The price will change whenever the level of demand changes. For example, the price of the same air ticket will be different for different consumer because of different date of booking and time of the flight. This method requires advanced technology and great flexibility of pricing in order to achieve success. Although there are some initial investment costs in technology, modern method is proven to have a much higher profit generating ability than traditional methods because the prices are automatically adjusted up or down to maximize the profit. However, when the enterprise is moving towards to be a modernized company and used modern method to determine the pricing, Gordon (Gordon, 2016) state that the company has to carefully analyzing the potential impact towards to the existing customer and the reduced of occupied rate at the same time. Coherent with the essay, it focuses on modern conditions but also help readers to deeply understand the method step by step and show some concerns of the method as well.

### **5.3. Implementing Competitive Pricing Strategies**

Competitive pricing is the process of selecting strategic price points to best take advantage of a product or service demand in a competitive market. This type of pricing strategy is what

companies use to stay relevant in fast-moving and often highly competitive markets. Competitive pricing is generally used once a product has been established within its market and is of particular importance to companies within the retail sector. There are 4 main areas that need to be considered in order to implement a successful competitive pricing strategy. These are having a deep understanding of the market, selecting the right pricing for products (e.g. penetration pricing), regularly comparing prices and optimization, and utilizing technology for a data-driven approach. First, an understanding of the market must be reached. This includes areas such as the competitors within the market and the average price points for products or services. Fully researching and gaining an understanding of the market landscape will enable a competitive pricing strategy to be built around the pricing moves of other companies. For example, a company may choose to employ penetration pricing which involves setting a lower price initially in order to attract customers. This is a common strategy for tech and software companies. Selecting the right pricing methodologies. The most common pricing strategies nowadays are value-based pricing and cost-plus pricing. A successful and competitive business is likely to use value-based pricing. This uses what people are prepared to pay for a product as its main price driver. By utilizing deep price assessment, businesses can go beyond rounding up or down on nearly pricing. This can assist in establishing a strategic pricing plan that may enable better gross profit margin increases. Finally, the article provides a comprehensive guide for businesses to increase their profit by focusing on various aspects such as strategic planning, market analysis, product optimization, pricing strategies, sales and marketing techniques, operational efficiency, financial management, human resource optimization, and risk management.

#### **6. Sales and Marketing Techniques**

The next sales and marketing tip is utilizing digital marketing channels. Digital marketing is a more cost-effective way to reach a bigger audience than traditional methods of marketing. A good place to start is with your company's website, ensuring that it's up-to-date, easy to navigate and engaging. A reasonable website will allow many visitors to be converted to sales. A real-time personalisation and targeting layer will help the customer to find personalised content based on who they are and what they are looking for. Another way to increase profits through digital marketing is to make sure that you are using search engine optimisation (SEO). This will help your website to appear higher in the rankings on Google, for example, which will automatically help to increase the traffic levels to your site. This is a longer term strategy and can take up to 12-18 months to see the full benefits. Also, considering the use of an up-to-date CRM system. A CRM system helps companies to stay connected to customers, streamline processes, and improve profitability. It's more than just an address book; if you're making sales and interacting with customers using different methods, it can help to keep track of the sales, and most importantly, it can help to find those trends and identify what is working and what is not. Of course, it is always important to measure the success of any digital marketing activities and make sure the company knows which the most successful ones were. This can be done through data analysis; the success of each digital marketing method is tracked and monitored and companies can get a snapshot of how successful any methods have been. Such digital marketing channels include pay-per-click advertising, social media (such as Facebook or Twitter), email marketing, and online affiliate marketing. Email marketing and online affiliate marketing are suitable for some SMEs, whilst the larger corporations that operate within the business-to-consumer (B2C) market might have much more consideration for other methods. On the other hand, methods such as pay-per-click



advertising, and social media are applicable to all companies. Finally, create an 'annual digital marketing planning calendar'. When planning out each month and deciding which methods will be employed, it is important to keep an overview of the digital marketing activities. This could range from which social media campaigns will be pushed at which time of the year, to the progress of update on search engine optimisation. By keeping a record of what is being changed and when, it can help to effectively use digital marketing. Being disciplined with the planning and time, digital marketing can greatly help companies to find newer markets and achieve more in the current markets. The implementation of digital marketing cannot be subsided; it can truly help to shape the future for businesses in today's modern and dynamic condition.

### **6.1. Developing Effective Marketing Campaigns**

This is important in the current business environment, where there are rapid technological changes, new entrants in the market, and increased customer expectations. The essay will therefore focus on providing practical industry examples to either support or challenge each of the proposed strategies. In regard to the first suggested strategy, identifying business objectives, the essay will particularly focus on the importance of setting clear, tangible marketing and sales objectives. The author observes that by setting these objectives, the management team and the marketing department will not only know what they want to achieve, but success can also be easily measured. I intend to critically appraise the industry examples used to support this first strategy and also find out whether, in practice, the use of industry examples may be inappropriate as new products and services are developed over time and marketing strategies quickly become outdated. Another possible line of investigation will be to interview marketing and sales professionals in large, mature markets such as the US and UK to ascertain the practice relevance in today's business environment. In a proposal to challenge the second strategy, that is conducting a SWOT analysis, I will seek to bring to the fore the fact that practices in today's dynamic business environment continue to change each day. I will look for argument in terms of how best a business may efficiently use its resources to keep updating its SWOT analysis for it to remain relevant as postulated in the second strategy. By focusing on aiming for continuous improvement, coaching and training programs for employees and an efficient use of advanced technologies will be advocated for in the discussion on the third strategy, that is, understanding customer needs and preferences. Ergo, the essay is set to provide an in-depth and methodological approach into modern marketing strategies with the ability to bring new, innovative ideas to the fore and to challenge the existing school of thought, as well as providing insights on how best to develop an efficient, effective marketing campaign.

### **6.2. Utilizing Digital Marketing Channels**

The use of digital marketing channels provides a larger state of opportunity for an enterprise to increase its profit. First of all, digital marketing is less expensive compared to traditional offline marketing methods. This is especially beneficial for small businesses as they don't have many resources. With just a small portion of the cost, an innovative digital marketing strategy can make a big headway with desirable results. For instance, there are quite a number of effective and free social media platforms other than Facebook and Twitter, such as Instagram, Snapchat, Pinterest, and so forth, which can be used to reach out to new markets and increase enterprise profit. Nevertheless, the real-time results from digital marketing can be far more astounding than you might expect. The high interactivity level that digital marketing offers makes it beneficial and versatile. Of course, by helping the business to focus on the consumers that have the social networking history or evidence of the products which they want to purchase, it will help

the company to anticipate its next products, which are greatly valuable. These may involve search engine and social media, where users can post reviews, ratings, and feedback. All consumers have their own rights to make any comment regarding the products they have purchased. So what actually we can do is to have a useful and meaningful communication with them in order to build up our products or services with the use of their positive feedback. Last but not least, the strategy for digital marketing will definitely lead and create more sales opportunities. A strategic planned hyperlink may improve the number of visitors to a particular website, and that is mainly designed to achieve a specific sale. For instance, a blog with direct links and a call to action will get customers in terms of their attention and interest. However, that will allow a customer to follow the link and make the purchases immediately, which increases the chances of potential sales. These approaches would turn the enterprise business to the next level. It is with no doubt that these marketing strategies uphold a successful guarantee career to the marketer in the digital marketing sector, and it's an innovative, creative, as well as modernized great wave of opportunities to the enterprise. Digital marketing will definitely bring a bright and successful future for the enterprise in the digital modernized society. As enterprise raised with the latest technology trends, it will help the marketer to deliver a creative, strategic, and responsive communication way with the clients, and the mission of marketing is achieved.

### **6.3. Implementing Sales Incentive Programs**

Last but not least, proper planning and effective communication are the keys to ensuring that the program can be successfully implemented and ongoing. Such a program should be continually reviewed and improved in response to changes both inside and outside of the company. A regular and periodic business review process can then help assess the effectiveness and efficiency of the program. By involving the local leadership teams and front-line management, feedback and recommendations can be obtained for further development and adjustment of the program to ensure that the program fully aligns the sales team's behavior with the company's objectives and creates the strongest possible sales performance improvement.

Selecting the right reward for the sales incentive program is vital in ensuring the success and sustainability of the program. The company has to consider whether to offer a monetary or non-monetary reward. Some companies offer a complex sales compensation plan that consists of base and variable compensation with the use of commission as well. It is important to determine the cost of the program, the value of the possible impact, and the kind of return from the investment when the company is proceeding with the development of the sales incentive program. On the other hand, a non-monetary reward like public recognition can be very successful. This will not cost the company much, but the result could be profound. However, in order to make the non-monetary option work, the sales employee must be motivated by this type of reward, which means that the opinions of the sales team should be sought. Public praise or recognition helps to build the company's reputation and performance pride among the employees.

Next, the goals of the incentive program must be strictly defined based on the enterprise system. This is important as the sales employee is only eligible for the reward once they reach the goals or the company hits the targeted sales. This will avoid any arguments or difficulties in the future when somebody has achieved some level of success but no reward has been achieved. It is always important to make it clear and understandable for the sales team in terms of how the reward opportunity will be earned, so they can be much more focused and work towards the targeted goal.

There are a couple of best methods and practices that can be considered when designing and developing a good sales incentive program. These include aligning with the sales goals of the company, defining the program goals, selecting the right reward, generating the necessary support for the program, and creating an effective communication plan to promote the program. First and foremost, the sales incentive program must be tailored to align with the sales goals of the enterprise. This could include acquiring new customers, increasing sales to existing customers, introducing a new product or service, promoting a specific product or service, or bringing back lost customers. By doing some market research and comparing competitors' programs, the management team should decide which area or priority should be given and make sure the program is designed in a way that motivates and drives the sales team to fulfill those targeted objectives.

Implementing sales incentive programs in an enterprise where the sales team is the key driver of the growth of the company is a great way to motivate the sales team and boost the revenue of the enterprise. Sales incentive programs are essential for businesses in every industry, as they help to drive the sales team's behavior in a positive direction and ensure that the team's energy is being redirected to any possible way of making more money for the company. The program provides a monetary reward for the sales employee after they hit the target or a volume of sale that has been predetermined by the management. It can also be implemented as a non-monetary reward, such as travel, company stock, or public recognition in the company. Implementing a successful sales incentive program can be a game changer for the business and it is very positive to drive the focus and behavior of the sales team in line with the company's objectives.

### **7. Operational Efficiency**

Within this focus on technology, companies must also consider the digital and data elements that are now a fundamental part of operational efficiency. Large technological improvements in the collection, processing, storage and output of data have provided companies with an array of new tools that can be deployed to enhance business operations. However, where technology has advanced, it has also driven an exponential increase in the volume of data that companies can generate, process and interpret. Analyzing this data and incorporating it into day-to-day business and production processes can be an extensive and complicated task. Many of the benefits that technology can provide in terms of improving operational efficiency are linked to the better analysis and application of the data that a company can generate and capture as part of its daily business. This can include the data generated by customer interactions, records of production or operations, or the outputs from different machine or automation processes on a production line. One of the key steps to take in improving operational efficiency through technology is assessing and understanding the existing processes that are used within the business, and identifying opportunities that may exist for improvements. Whether this be through understanding and deciphering industry standards, or by identifying areas of inefficiency, streamlining and modernizing business processes is a key step in improving operational efficiency. By critically evaluating and adjusting these processes, better and more sustainable efficiencies can be achieved; returning real results for companies and the satisfaction of removing time spent on unnecessary or outdated practices. Clearly, a large number of advances in technology are completely transforming industry; with the introduction of automated manufacturing and tracking based on the Industrial Internet of Things opening the door to innumerable possibilities for increased efficiency. As mentioned above, one way in which companies can begin to analyze their own operational efficiency is through understanding the use of technology in the wider field, and how developments

by others can be applied to improve internal practice. By understanding the wider context of how technology and industry can be linked to provide efficiencies in process or production, it is possible to gain insight into where advancements could be both necessary and feasible within the business. Such outside-the-box thinking can often reveal potential opportunities that may not already be recognized, providing new avenues for the development of an efficient operational activity within a company.

### **7.1. Streamlining Business Processes**

One of the major reasons why enterprises are facing pressure on profitability is that they are not well organized to continue with success. Time, resources, and good internal cooperation will all help to bring about such success. To achieve organizational success, the key enabler is to streamline business processes. The business processes and methods being used in one department are often different from another department, hence most departments in a large organization are not working closely with each other. This will cause much inefficient communication among the departments, and the multifunctions among departments in terms of customers will be adversely affected, resulting in a good selection of customers being lost. In view of the first step in restructuring a business effectively, a company should capture the current process in action. It is recommended that workflow or methods tools such as paper charts, programmed human, CPU methods, or programming human and so on can be used to illustrate the way the daily operational work is managed. Then, observations and interviews should be arranged to document what is performed by each department and every single member of the department's work activities. Hence, a full understanding of how the work is being carried out in the company will be obtained. With such methods, it will also help the company to identify duplication of work, whereby some obsolete tasks which are being carried out at the moment can be eliminated; and re-engineer the workflow by creating methods to share information between departments and so to eliminate multifunction interfaces. As a conclusion from the investigation, with such streamlining of business processes, the communication inside and outside of the departments can be improved, and hence better and quicker services to customers will be achieved. Also, more customer-focused strategies can be developed to bring in more profit for the company. That is, good customers' satisfaction will help to promote the company's products and thus ensuring the company's future possible growth. From the customer's mind, the services should be of reasonably high standard and the services should be tailored to their..

### **7.2. Implementing Lean Management Principles**

5S is a workplace organization method that uses a list of five Japanese words: seiri, seiton, seiso, seiketsu, and shitsuke. Translated to English, they all start with the letter S - sort, set in order, shine, standardize, sustain. This methodology improves safety, quality, productivity and employee morale and it also has a positive effect on the overall business performance. All employees love to work in a clean and organized environment. They feel better and can easily locate what they need. When they do not have to be sorting through disorder, valuable seconds, maybe even minutes, are saved.

Just in time is a strategy of producing and delivering the necessary items in the necessary quantities at the necessary time. Work in process inventory is continuously reduced and its hidden costs, such as storing and protecting the inventory, is exposed so that the stock levels can be continually lowered.

There are various lean practices that can be adopted for improving effectiveness - for example, value stream mapping, just in time or JIT, 5S methodology. Value stream mapping is a simple but effective tool for pinpointing where time is wasted within any process. It shows the current state of a process and then deploys a future state that has less or no non-value adding activities. Often, implementing value stream mapping results in shorter lead times, higher quality, and lower costs.

Implementing lean management principles is a critical step towards achieving operational efficiency. Lean management is all about continuous improvement and elimination of waste in the product process. It is a long-term approach to work that seeks to achieve small, incremental changes in processes in order to improve efficiency and quality. The primary objective of lean management is to provide maximum value to the customer with minimal wastage.

### **7.3. Adopting Technology Solutions for Efficiency**

Modern enterprises increasingly recognize the importance of using technology to drive efficiency and gain competitive advantages. Computerized maintenance management systems (CMMS) and enterprise resource planning (ERP) systems are just a couple of examples of technology solutions for improving enterprise efficiency and effectiveness. These systems allow for systematic storage of information, which facilitates easier and quicker access to data and information. For example, in a CMMS system, all relevant information about maintenance activities is stored in the system, including recording of maintenance work, tracking of maintenance schedules, and generation of work orders. With a suitable system in place, these records are often just a few clicks away. This is much more efficient compared to a traditional, paper-based system, as staff no longer have to spend time looking for the bits of information they need or worry about information getting lost or duplicated. As a result, this leads to reduced waiting time, which can significantly enhance the productivity and effectiveness of maintenance work. Also, due to the systematic and consistent nature of information storage and retrieval in a CMMS or similar system, users of the system are also more likely to get the most up-to-date and relevant information. This is because modern technology solutions are increasingly being spearheaded by inclusivity and user-centric design principles, so interfaces are often built with the needs and experiences of different user groups in mind, such as ease of browsing for the seasoned staff or logical input flows for new starters. These kind of user-focused features not only reduce the number of hours lost due to staff in-familiarity and inefficiency, they can also reduce human errors during data input and result in better quality of work overall. There is a tangible benefit to the enterprise in continuing to measure and report on improvements in efficiency and effectiveness, as this can provide useful evidence in support of business cases for further technology investments or staff training and development. This information can also be used in decision-making processes for strategic planning; such processes can include defining organizational policies and assessing changes in working practices which could impact on efficiency and effectiveness. Modern technology measures are available to record data and generate key performance indicators (KPIs), which can in turn be used for analytics and data-driven decision-making - an emerging area of focus in strategic management. In this sense, technology solutions bring about much more than just operational efficiency - they provide a gateway for the enterprise to work towards becoming knowledge-savvy and future-ready.

## **8. Financial Management**

Variance analysis is traditionally used for the purpose of the operational cost effectiveness and monitoring the financial performance in reality. Variance analysis involves comparison of the planned and actual financial performance of the organization. This will assist in providing a guide for the improvement areas and where management attention is most needed. By continuously applying the variance analysis as well as producing the variance reports, it will help to ensure a successful current fiscal year. Variances can be caused by differences in inflation, increases in wages, changes in utilization, and so forth.

The proposed method of financial monitoring uses the cost benefit analysis for the purchasing and also the financial performance of the organization. This method benefits the organization since a person may become relied on the method of monitoring the financial performance and realistic decision making. Last but not least, the financial monitoring for a driving profit organization should involve every staff. Regular training and evaluation programs should be set to make sure that the employees understand what the management expects from them.

Organizations nowadays are adopting different alternative approaches in strategic planning. It is noticed that many corporations embrace the idea of an MBO in their strategic planning process. The main emphasis is given to the completion of objectives instead of focusing on long-term profitability. This is something true due to the fact that most companies, if not all, will make some progress over some years of operation. Goals should be time-bound as the completion of objectives within a set period of time will reflect whether the goals are achievable.

The broad categories of cost benefit analysis do not focus on the operational cost effectiveness. This is where the financial monitoring and the cost variance analysis comes into play. Organizations do carry out activities for the sense that it has to accomplish a certain kind of goal and that goal is defined as the mission. However, the steps taken to achieve the goals are defined as the strategic planning and implementation of the mission. For a driving nonprofit entity, it needs a good strategic planning in its programs and operations, also monitoring the progress and implementing the changes when necessary.

Next, the strengths, weaknesses, opportunities, and threats are analyzed. This will give an understanding of what the firm's competitive advantages are and how to identify areas for growth. Also, it is a good way of assessing the management efficiency as the board's efficacy to all other staff is discovered. When the SWOT analysis is through, it can suggest ways to maximize the strengths and take advantage of the opportunities that are in the industry. The suggestions from the resulted action items are executed focusing to increase the advantages and eliminate the weaknesses.

While the management process and its various steps are the main focus of any business organization, the need to have a good monitoring and resolution mechanism in place cannot be overemphasized. It is essential for the business to have proper monitoring and analysis of the financial performance, developing and implementing a good plan, and monitoring the execution of the plan. To understand how operation costs and completely monitor financial performance so as to suggest the necessary measures, it is recommended that a proper SWOT analysis be performed on the business organization. This will help to understand operating localities and practices as this contribute a lot in shaping the performance.

### **8.1. Monitoring and Analyzing Financial Performance**

So why is it important? Well, understanding performance - whether this means profits, debt, stock turnover days, or cash flow - is vital in business. By monitoring levels, management can get

an idea of the company's health, but the most successful businesses are continuously investigating the effectiveness of their operations. What does it mean to understand the company's health? It's not just literally staying afloat, but making sure that all resources are being used to their maximum. Modern financial control, which includes guiding how to monitor and interpret financial performance, focuses on more than just the profits that a company makes. In many ways, profits become a by-product of efficient operations that use as little resource as practicable.

This is exactly why monitoring and analyzing financial performance is an essential section of strategic planning and is the reason this is detailed in a separate section to the main strategic planning practice. First of all, it's important to outline what monitoring and analyzing financial performance means. Well, really, it's analyzing that's key here - the monitoring side of things is just the regular checks that are done. So it's not just a case of checking, say, your debt cost is 15% of turnover each month - that only tells you how much you're spending on debt. Were you aware that storage costs of raw materials over a 3-6 month period are often a much more significant cost for many businesses? Analyzing the performance means investigating motions or activities that are not efficient or are not entirely necessary; regular monitoring highlights to us which areas should be analyzed.

Strategic planning and tactics are invaluable when a company wants to exploit new opportunities, but it's hardly ever an easy task to manage day-to-day operations. Nowadays, customers expect more and more from the products and services they invest in, and on the other hand, there is the additional challenge of making sure both staff and machinery are as efficient as physically possible. Indeed, whether you're thinking about growing, acquiring, or simply making your business more efficient and profitable, the ability to understand what's going on financially is vital - it empowers you to make better decisions based primarily on hard facts, improving day-to-day operations and releasing potential.

## **8.2. Implementing Cost Control Measures**

Cost control measures can have a positive impact on the bottom line of your business. In the competitive business world, clever and strategic cost control management is important. It helps reduce business waste and puts your company in a better position to achieve ultimate success in terms of finance and growth. Cost control simply refers to the regulation by executive action of the costs of operating an undertaking. It is the prevention of the incurring of costs which is not necessary. Whereas, cost reduction refers to the achievement of real and permanent reduction in the unit cost of the goods manufactured or services rendered. The extra work of cost reduction is a fallout of past good cost control work; it is not a substitute. The various areas of cost control can usually be classified into one of the following categories including labor, indirect and direct materials, overhead, maintenance and repairs, research and development, quality control, and sales and distribution. The range over which the firm's cost control team is supposed to operate has been widened during the last three decades due to increase in size of the companies, dispensation of progress and development of scientific management and various other new techniques of production and final development. The team has been assigned a series of problems not only in the manufacturing but extending this valuable service to those in the offices, canteens, gardens and a number of other such facilities. Every system of cost control should be designed and operated in attention with the cultural environment in which it is intended to operate. The attitudes of the management may automatically influence the successful running of any new system introduced. A sound cost control system should operate in an environment which has the following exceptional

standards. First, there should be a good company profits thus making the management and the worker or team interested in, and often to continuously strive to maintain and possibly improve the working of the system. Adherence to company policy, because the management policy plays a significant role in setting out the organizational structure of the company and this may determine the future of the business. Effective leadership is a necessity of a company that wants to see their cost control and budgetary plans in action. Every department must be met with the best leadership or there may not be good cooperation that will keep the cost control team operating at the level need to ensure meaningful progress. The management and owners should be prepared to see results. They should always be ready to see plans, to analyze performance and to bring about any changes required. This is essential in the implementation and operation of effective cost control and budgetary planning. Lastly, proper motivation of employees whereby a system of suitable rewards and continuous training could lead to the encouraging of participative approach to cost control operations. Every employee in the organization must be aware of the directives and objectives of the company and they may be continuously reminded that the primary objective of cost control is to improve efficiency and overall performance.

### **8.3. Maximizing Cash Flow and Working Capital**

First and foremost, it is critical to understand the difference between cash flow and working capital. It is also important to understand how cash flow and working capital are intertwined and how these resources can be maximized in order to increase the profitability of the business. Cash flow refers to the amount of money coming in and going out of the business. It is different from profit, which is the amount of money made within a specific period of time. A business can be making a lot of profit but if it is spending more money than it is receiving, then it will run out of cash. Cash flow is essential to running a business; indeed, it is said that 'cash is king'. In essence, cash is the life blood of a business, and without it, the business will die. Cash flow is crucial for a start-up or young business, because it ensures that the business can pay its bills and its staff. Maximizing cash flow can be achieved through a variety of different methods. For example, the business owner may look to cut costs in certain areas, or they may look to encourage customers to pay for products or services more quickly. Another way to maximize cash flow would be to try to create a constant and predictable revenue stream from sales, perhaps by making products available for a subscription. Subscriptions should in theory give a business a steady flow of income, as rather than customers making sporadic purchases, they are committed to making regular payments in return for a continuous service or product. On the other hand, working capital is the difference between the business's current assets and its current liabilities. Current assets are assets that can be turned into cash or used up within one year, such as cash itself, money owed to the business and stock. Current liabilities are debts that have to be paid within one year, such as money owed to suppliers. A positive working capital cycle balances incoming and outgoing payments to minimize net working capital and maximize free cash flow. For example, a company that pays its suppliers in 30 days but takes 60 days to collect its receivables has a working capital cycle of 30 days. This means that cash that could be used for other purposes is tied up in financing the day-to-day operations of the business. By minimizing the time it takes for the business to collect its receivables and maximizing the time it takes for the business to pay its suppliers, an optimum working capital cycle can be achieved. Optimizing the working capital cycle is absolutely crucial for businesses, particularly ones that are asset-intensive or fast-growing, or even more so for businesses that are



both. This is because the more money that is tied up in working capital, the less money there will be available for things such as growing the business and expanding.

### **9. Human Resource Optimization**

To assess workforce skills and capabilities, some companies conduct a skills audit. This is a systematic review of the skills, competencies, and abilities of all employees, often within a matrix that highlights the level of skill in each area and identifies areas for development. A skills audit can help to inform decisions on training and development, facilitate succession planning and manage talent, support resource and recruitment processes, enable individuals to take ownership of their own development, and identify where there are current skills shortages. Furthermore, employee appraisals can also be used as a tool to assess individual skills, competencies, and abilities. This can also assist in identifying what training and development is necessary for an individual. During the appraisal, the manager and the employee sit down together and discuss everything from the skills and education of the employee to social media, client retention strategies, and evaluations. If the manager knows the employee wants to learn more about social media or improve their client retention strategies, they can offer the right type of training. Also, the manager can use the information given in each appraisal to decide on what training to give the employee or whether any of the workers in his department need new training. However, attention should be paid to the management of change associated with skills audits and the results used to inform training and development practice. The process engenders certain expectations, it takes time and resources, and those involved have to understand that there is a genuine process of action planning as an outcome. Real benefits and improvements can then be fed back into the organization, such as career and succession planning and staff development. The benefits of skills audits should not be underestimated, especially for big organizations and those that have gone through a period of growth. The Human Resources and Skills Development Canada defines a skills audit as a “systematic analysis and mapping of relevant skills within an organization”. We can further optimize this sentence by combining the analysis and mapping process. By using both these systematic processes in a methodical and organized way, the employer can attain powerful benefits and their workforce can experience efficient and effective operations. Lastly, the workforce skills and capabilities, both in wish and in reality, can be obtained. The workforce can preserve the desired skills and continue to improve whereby the overall capabilities can be maintained or advanced. Such a synergistic cycle can, in turn, optimize the capabilities of the workforce.

#### **9.1. Assessing Workforce Skills and Capabilities**

Remember, the workforce skills and capabilities will need to be evaluated on a regular basis as business requirements are subject to change both in the short and long term. However, it is worth noting that such assessment and progression of workforce skills can lead to improved employee satisfaction and staff retention. Also, businesses that strive for continuous improvement and will often be given a competitive edge. By investing in the development and progression a workforce and by having staff that embrace modern technology and working methods, a business is more likely to improve and maintain quality standards and competitiveness.

A useful step by step approach to assessing workforce skills and capabilities is provided by business link as follows and can be applied to most types of activities. First, identify the skills which your business will need to meet its objectives. These will vary depending on the nature of the business and the structural requirements for achieving strategic goals. Next, evaluate your employees' skills to identify any gaps and will allow you to see if your current workforce possesses

the attributes, skills and competencies required. This then leads on to making the most of your findings. Use the outcomes of your skills analysis to inform your business and individual staff development plans.

Finally, is the knowledge that an individual may have. Knowledge can be defined as the range of factual or informational understanding; in modern conditions, requirements and efficiencies in this area often relates to the degree in which existing protocols may be used and exploited. By encouraging and investing in the development of these, the business can improve efficiency and adapt to connectivity and engineering interfaces.

Secondly, it is key to look at the vocational or 'job related' skills that individuals possess. These are the skills used in the logistics and operations of certain occupations and can be measured and assessed against set criteria.

There are three main forms of skills that you should look to assess. Firstly, it's important to look at the transferable, or 'soft' skills. Such skills involve the ability and judgement an individual will have in working with others, decision making and aid activities. Transferable skills can be applied to many different situations and as such are a good indication of the capability an individual has in handling tasks.

Assessing workforce skills will help you to evaluate the existing skills, knowledge and competencies of your employees. This can be done in a number of ways such as through annual reviews, commissioning outward testing and assessment which can be set against national standards, and comparing the skills invested in your employees against other entities in your industry.

When it comes to providing the best output for your business and maintaining a steady stream of profitability, assessing your workforce's skills and capabilities is a key element to achieving these goals. Today's modern and fast-paced business environment means that continuous improvement and staying ahead of the competition are essential. Ensuring that your workforce's skills and capabilities are aligned with the business objectives is a difficult task. However, it is required for any enterprise that is aiming for success.

## **9.2. Implementing Training and Development Programs**

Surveys have shown that many employees leave their companies due to a lack of development opportunities and the ability to learn new skills. This is alarming because a revolving door of employees can be very costly and detrimental to an organization's success. This is where effective training and, in particular, a willingness to provide training can have a big impact. In today's business environment, employers and employees alike are well aware that in most cases, employment will not be for life. People move between jobs more now than ever before, and so employees are seeking the opportunity within that job to develop themselves and their careers, not just for the sake of the employee, but also for the company. This is where a clear and well-executed training strategy will lead to a positive impact on the enterprise. For businesses, investing in training and development programs may seem a burden, both in terms of time and money. However, the training and development that a company offers for its team is often a key factor in that person deciding whether to stay with the organization long-term - and the cost of retaining a good employee is much lower than that of finding a new one. It's also important to recognize that as businesses change and develop, employees who have received continual training are more likely to be able to adapt and grow into new roles. It's worth mentioning that investing in the continual development of your team also adds to the skill and knowledge within the business and can lead

to greater efficiencies, competitive edge, and as a result, increase profitability. There are many different types of training and development programs, which can be implemented in a company, and they can be undertaken both within the organization and through external courses. The main challenge in this sense is to identify what methods will work best, but also the trick comes on how to manage those effectively within the company operations. For instance, a structured training program can be provided by companies themselves and following a successful strategic competency analysis, which identifies skills and knowledge already within the business and areas that need development, a plan can be produced. This is a fabulous assurance method, but more importantly, it ensures all training provided relates to specific business needs. On the other hand, sending team members to an external commercial course may be just as effective, especially if it is a specialist and focused program. However, the costs of sending someone on a course and covering absence may mean that the course and the person attending have to be carefully chosen. In addition, businesses need to pay attention to the training delivery method. In recent years, e-learning has become quite popular and reputable training companies provide constant and adaptable support alongside their interactive resources. It is a cost-effective way of providing inspired learning to employees, at a suitable pace and a convenient time, where people can actually choose when they want to absorb the new knowledge. With the technological advances and the pace businesses are changing and companies are expanding, online training is simply the way forward and provides a good platform for development.

### **9.3. Enhancing Employee Engagement and Motivation**

Effective employee engagement and motivation results in high performing workplaces. This is particularly the case in work environments that are competitive - as most are in this age of advanced technology - where everyone is expected to do more with less. Today, skills are the primary currency of the workplace and it is through staff's skills, knowledge, and abilities that organizational objectives are met. When employees direct these attributes towards organizational success - when they are 'engaged' - the potential for significantly enhanced performance is substantial. But likewise, when employees are not truly engaged, when they are merely showing up without putting anything extra in, the loss of potential is also substantial; performance, productivity, and, most crucially of all, the realization of competitive potential can be compromised. A primary way is providing opportunities for employees to grow and develop in the interest of both the individual and the organization. When an employee has developed their capabilities, with more required competencies, they will continue to improve experiences and outputs for the organization. The article argues that organizations deliver this and improve engagement with 'talent management strategies'. This is concerned with what is regarded as a more modern approach to the 21st-century organization, whereby the key focus is not only the past and present practices of personnel management and administrative processes, but also recognizing and utilizing the skills and abilities of the workforce as a fundamental resource for the attainment of organizational objectives. This reflects the most modern thinking - that it is not necessarily how much work is done, it is the quality of what is done. It is in 'talent management' strategies that the focus on employee engagement is convincingly cashed. This is a concept of employee engagement that is about getting the right conditions for all members of an organization to excel, so that both the business and its people can achieve their mutual goals. This is especially so in the context of opportunities for growth - where talent is recognized, encouraged, and rewarded, the approach to employee engagement focuses on the improvements of the individual and the interests of the

organization in achieving success. If employees give their best, this means greater alignment with organizational success in their improved performance and the fulfillment of their personal professional aspirations and their psychological well-being - in terms of the article this should fuel employee engagement to the virtuous circles discussed.

### **10. Risk Management**

By working through each of the risks in turn, each area of the business is given a thorough health check and a clear plan can be drawn up as to how each risk can be prevented from occurring or how the business can be prepared to deal with the risk. In fact, since one of the definitions of risk is the uncertainty of an economic loss, a good risk management approach can actually reduce the amount of contingency provisions set aside to deal with some common problems. Emergency procedures take account of the fact that a sudden loss of production or sales will result in the need to act quickly and effectively to be able to continue trading or to recover the ground lost. Such procedures cover a range of potential emergencies, such as fire or flood and have the aim of minimizing the effect on the business and returning to normal production as fast as possible.

The first step in effective risk management is to identify and assess the possible risks that may be faced by the business. This includes not only the obvious such as fire or theft, but also the more subtle, such as a key supplier going out of business or a new competitor entering the market. Outlining the probability of each risk occurring and the potential impact is a useful way to prioritize risk management activity. This can be done using a risk assessment table, which lists the potential risks to the business and allows an assessment to be made of the possible economic damage on the one hand and the cost of preventive measures on the other.

Risk management is the process of identifying, assessing and controlling the potential threats to an organization's profitability and providing a framework to leverage opportunities. According to Business Dictionary, risk management is the "identification, analysis and economic control of those risks which can threaten the assets or earning capacity of an enterprise".

#### **10.1. Identifying and Assessing Business Risks**

Whilst risks can never be fully eliminated, having processes in place to identify business risks and assess the likelihood of them occurring and potential impact can go a long way to making the risk more manageable and proactive treatment could avoid it becoming an issue. But on the other hand, if the risk was to manifest, the impact can be minimized by earlier recognition, assessment and by putting in place pre-planned actions. There is a wide range of risks that can face a new or growing business, transactional, operational, regulatory, compliance and reputational and more. Transactional risks arise when entering into business transactions with others. Every transaction has some risk associated with it and the most common types of transactional risks are payment processing risk, where generally, there is a risk of fraudulent transactions in terms of payment processing. Some people might abuse the payment system, using cards that are not for them to use, otherwise known as stolen or counterfeit. By not putting in place measures to protect the processing of payments taken, there is a risk of being out of pocket. Even if someone else was to commit fraud, the company that takes the payment would bear the impact of that transaction. Operational risk is commonly associated with the day-to-day running of a business. This type of risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. These risks could relate to harm to clients from failed products or services, leading to operational losses (and potentially legal action) or may be a loss of essential services such as power-outs or the office/plant getting damaged. An important and often complex part of

managing risks is to decide how serious a risk may, its likelihood and how best to mitigate it. Losses can happen if what you are doing initiate legal action monetary loss or fines lead to loss of income, etc and a risk management process aims to identify what losses might arise. Once a list of risk has been produced and shared with relevant personnel, the next step is to grade and prioritize each risk. By taking into consideration the potential amount of loss, the likelihood of it happening and also the graveness of the loss, risks can be given a grade to describe its severity. With this information, it is then possible to target the most important or high-risk areas first and know where to focus initial efforts. By doing this it allows risks to be dealt with in a logical and controlled manner, meaning that scarce resources can be utilized most effectively.

### **10.2. Implementing Risk Mitigation Strategies**

With active risk mitigation, the focus is on steps that can be taken specifically to mitigate the risk of any given hazard. For example, an effort could be made to modify an operation's work so that potential dangers in the operation's system can be reduced. On the other hand, if the risk is from a structural component such as a containment, then passive mitigation will involve what can be done in the design and planning stage to mitigate the rate of risk.

An example of avoidance can be not operating or extending from your normal service if a business feels that they are unable to maintain a good quality service during that risk period. Passing performance is an example of transferring risk to a third party. This might include employing a contractor on a project who then accepts all liabilities for the work as built and placed into service. It's a great risk management method as the organization has effectively transferred risk to someone who has the correct expertise in installing the equipment, so the risk is transferred to the installers. Compensation is a risk as well. This is similar to the passive or active designation of risk management.

There are two main types of risk mitigation, active and passive. Active risk mitigation is an action that involves investigation, processes, and written documents with the objective of reducing the environmental and conditions that can produce certain hazardous conditions. It tends to be based on the combination of monthly routine fire safety inspections combined with documented results. Passive risk mitigation, however, is a system that incorporates fire protection and prevention in the design and build of buildings, along with advanced planning and decision-making techniques, well before any hazardous situation materializes. Good risk mitigation tactics use both types to minimize potential risks. These include avoiding the risk, transferring the risk to an outer party, reducing the negative effect of a certain risk, and retaining some of the risk.

Risk mitigation is a strategy that aims to reduce the probability of certain bad events occurring and decrease the seriousness of those events should they occur. The method involves retention of risk, if the risks are within an acceptable range, avoidance of risk, or risk controls. The first step in a system of risk reduction is to identify all the ways in which risks are present. Such risks may include temporary loss of business considerations, operational and administrative impacts, spoiling or corruption of data, temporary interruption or degradation of manufacturing or service levels, or temporary inability to produce or operate in the normal manner.

### **10.3. Ensuring Business Continuity and Disaster Recovery Plans**

The critical final part of a risk management strategy is to make sure that disaster recovery plans and business continuity planning are in position. Disaster recovery plans will make sure that all crucial business operations may continue if the worst should occur. The disaster recovery plan must be periodically tested to highlight deficiencies, guaranteeing the organization's capacity to

survive a disaster and provide operational direction, which will be necessary when the plan is effectuated. Execution processes are broadly similar in terms of disaster recovery planning across most industries and good practice usually involves the following steps: risk assessment, risk management, development, assignment, documentation, periodic testing and full maintenance. On the other hand, business continuity planning will make sure that the organization can continue to trade regardless of the emergency which occurs. By setting up and acting upon the availability marketing plans, great emphasis is placed on the brand and the technology and the manner in which services or products are offered. Similarly, the team responsible for business continuity planning must make sure that the operational targets are met and the crisis management teams are sufficiently equipped to handle any situation. Business continuity plans take the procedures and instructions produced through disaster recovery planning and develop a procedure that will make sure that the organization is able to continue to trade. In addition, by responding to opportunities in an active manner, business continuity planning may also provide the ground for improved standard in day-to-day customer service and the ability for businesses to achieve their strategic objectives.

## СЛЕДУЕТ ЛИ СОХРАНЯТЬ НЕЗАВИСИМОСТЬ ЦЕНТРАЛЬНЫХ БАНКОВ В РЕАЛИЗАЦИИ ДЕНЕЖНО- КРЕДИТНОЙ ПОЛИТИКИ?

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*Аннотация.* В данной статье рассматриваются вопросы о сохранении независимости центральных банков в реализации денежной и кредитной политики.

*Ключевые слова:* независимость, банк, финансы, денежная политика, кредитная политика.

Банк Англии до 1997 года в значительной степени контролировался правительством. После многих лет существования Банк Англии наконец смог стать независимым органом в 1997 году. С 1970-х годов центральные банки по всему миру лоббировали финансовую независимость. Шоки ОПЕК 1960-х и 1970-х годов выявили слабость центральных банков. На протяжении 1960-х и 1970-х годов инфляция в Европе измерялась двузначными числами. Центральным банкам требовалась большая автономия, чтобы решить эту проблему. Им была предоставлена эта автономия. В результате почти все центральные банки мира свободны от политического влияния. У этой политики есть свои плюсы и минусы. В этой статье я описал преимущества и недостатки независимого центрального банка наряду с точкой зрения ЕЦБ.

Если процентные ставки будут оставаться слишком низкими, инфляция вырастет. Это может навредить бизнесу, а не только разрушить сбережения людей. Это особенно проблематично, если инфляция высока и колеблется. Тогда непредсказуемость очень затрудняет планирование. Однако чрезмерно высокие процентные ставки будут препятствовать деловой активности, заставляя людей откладывать покупку домов и сокращать расходы в магазинах, что приведет к рецессии с огромной потерей рабочих мест. Очевидно, что обществу нужна организация, задача которой - выбрать подходящую процентную ставку для экономических условий, с которыми оно сталкивается: ни слишком высокую, ни слишком низкую. Эта организация - центральный банк. Центральные банки обычно являются регулирующими органами, которые исследуют, хорошо ли управляются банки, чтобы ни риск ликвидности, ни риск платежеспособности не были высокими. В дополнение к важнейшим функциям денежно-кредитной политики (процентная ставка и денежная масса) и банковского надзора для обеспечения безопасности и устойчивости центральные банки помогают обществу по ряду других направлений. Центральные банки выступают в качестве банкиров для правительства и могут помочь управлять государственным долгом. Они также могут хранить национальные золотовалютные резервы и принимать участие в управлении обменным курсом.

Независимость центральных банков

Важный вопрос, который должно решить правительство, - это степень свободы, которую оно предоставляет центральному банку для проведения денежно-кредитной политики. Должны ли это делать собственные эксперты центрального банка или же

последнее слово по поводу повышения или понижения процентных ставок должно оставаться за избранными политиками?

Есть два типа независимости:

Независимость от инструментов: центральный банк может решать, когда и как использовать инструменты денежно-кредитной политики без политического вмешательства.

Независимость целей: Центральный банк определяет цели денежно-кредитной политики.

Независимость от инструментов является обычным явлением, но независимость от целей встречается редко. Центральный банк США, ФРС, пользуется обоими видами независимости - политики не контролируют Совет управляющих и финансовые операции ФРС (хотя они могут влиять на назначение некоторых членов совета). Европейский центральный банк обладает исключительной степенью независимости. Правительствам стран-членов Евросистемы не разрешается давать инструкции ЕЦБ. В Маастрихтском договоре, в соответствии с которым был создан валютный союз, говорится, что долгосрочной целью ЕЦБ является стабильность цен, но не уточняется, что это означает, оставляя на усмотрение членов Исполнительного совета определять целевой показатель инфляции. И, конечно же, ЕЦБ контролирует инструменты, которые он использует. Более того, в то время как система США может быть изменена новым законодательством (если политики изменят закон, они могут взять под контроль ФРС), в Еврозоне это сложнее, потому что устав Евросистемы может быть изменен только путем пересмотра Маастрихтского закона, который, в свою очередь, требует согласия всех подписавших его стран. В 1997 году Банку Англии была предоставлена высокая степень независимости от инструментов для принятия решений о том, когда и как повышать или понижать процентные ставки (до этого окончательный контроль имел канцлер казначейства). Однако в экстремальных экономических обстоятельствах правительство может снять контроль над Банком на ограниченный период. Цели инфляции по-прежнему устанавливаются канцлером.

Преимущества независимости

Политический цикл против делового цикла. Политики всего мира озабочены только тем, чтобы оставаться у власти. Они будут делать все, что требуется, до тех пор, пока могут контролировать ситуацию. Следовательно, можно сказать, что действия политиков контролируются политическими циклами. В предвыборные годы они становятся чрезвычайно щедрыми и послушными.

С другой стороны, бизнес работает на основе бизнес-циклов. Взлеты и падения не обязательно должны совпадать с политическими циклами. Более того, если они это сделают, у политиков может возникнуть конфликт интересов. Например, если в год выборов инфляция слишком высока, политики могут просто пропустить необходимое, но непопулярное решение о повышении ставок. Следовательно, вполне вероятно, что политики в конечном итоге поставят под угрозу всю экономику в корыстных целях. Это причина, по которой центральные банки должны быть независимыми. Они могут принимать жесткие решения независимо от избирательного цикла. Экономика и выборы естественно не связаны. Поэтому крайне важно, чтобы экономические решения принимались самостоятельно.



Инфляция. Контроль над инфляцией - главная цель любого центрального банка. Для этого им нужно контролировать деньги, расходуемые государством. Если решения по экономике могут приниматься правительством, они будут принимать только популистские решения. Например, правительства могут принять решение о предоставлении бесплатного медицинского обслуживания и пенсионных пособий, даже если у них нет финансовых средств для выполнения этих решений. Суть в том, что если правительству дать контроль над экономикой, оно сможет без разбора печатать деньги, что в конечном итоге приведет к экономическому коллапсу. Так происходило во многих древних цивилизациях, включая Рим. Следовательно, чтобы предотвратить это, центральные банки были сделаны независимыми от государственной власти.

Дефицит: правительства всего мира любят реализовывать популистские проекты, даже если такие проекты не поддерживаются фундаментальными экономическими факторами. Взять, к примеру, спортивные стадионы, построенные к Олимпийским играм в Греции и чемпионату мира по футболу в Бразилии. В обоих случаях правительству не следовало заниматься дефицитными расходами, но оно имело место. Эти инциденты стали бы более частыми, если бы правительство полностью контролировало денежно-кредитную политику. Следовательно, важно проводить денежно-кредитную политику отдельно от правительства, чтобы поддерживать финансовое здоровье государства.

#### Недостатки независимости

Отделение центрального банка от государства имеет многие из перечисленных выше преимуществ. Однако есть и недостатки.

Секретность: самая большая критика в адрес центрального банка заключается в том, что его операции очень секретны. Часто их действия бывают совершенно неожиданными. Многие финансовые кризисы в прошлом происходили только из-за неожиданных действий центрального банка. Чтобы этого не произошло снова, центральные банки должны обеспечить плавный переход. Их политика не должна быть скрытной и не должна шокировать экономику.

В пользу крупных банков: многие аналитики придерживаются мнения, что вся политика, разработанная центральными банками, направлена на благо крупных банков, а не простых людей. Например, их самая большая цель - снизить инфляцию. Однако после краха 2008 года они последовали за количественным смягчением, чтобы спасти крупные банки. Это привело к большей инфляции, чем когда-либо ранее проводившейся государственной политикой.

#### Независимость центрального банка в системе европейских центральных банков

Правовая база независимости центрального банка, которая применяется как к ЕЦБ, так и к национальным центральным банкам (НЦБ), установлена на высшем уровне европейского права. Это закреплено в основном законе в виде Договора о функционировании Европейского Союза и Устава Европейской системы центральных банков (ЕСЦБ) и ЕЦБ. Поскольку основной закон ЕС может быть изменен только с согласия всех (в настоящее время 28) государств-членов, эта независимость имеет квази-конституционный статус.

Независимость ЕЦБ состоит из четырех основных компонентов - институциональной, функциональной, личной и финансовой независимости.

Статья 130 Договора является наиболее важным положением с точки зрения независимости, гарантирующим институциональную независимость. Это работает двумя способами. Во-первых, он запрещает ЕЦБ, НКО и членам их директивных органов запрашивать или принимать инструкции от институтов или органов ЕС. Во-вторых, он предусматривает, что ЕС и национальные власти должны уважать эту независимость и не пытаться влиять на членов директивных органов ЕЦБ или НКО при выполнении ими своих задач.

Второй столп независимости - функциональная независимость. ЕЦБ предоставлена автономия в определении того, какие инструменты политики следует использовать для достижения его основной цели - стабильности цен. Он обладает исключительной компетенцией решать, какие инструменты и инструменты наиболее подходят для достижения его целей - например, прямые покупки, создание системы обеспечения и назначение его контрагентов. В рамках этой функциональной независимости НКО должны иметь необходимые средства и инструменты для достижения целей ЕЦБ независимо от любого другого органа.

Третий столп независимости, личная независимость, гарантирует способность директивных органов ЕЦБ принимать решения без внешнего влияния. Члены Исполнительного совета ЕЦБ назначаются на восьмилетний срок без права продления и могут быть отстранены от должности Судом только в двух случаях: если они больше не соответствуют условиям, необходимым для выполнения своих обязанностей, или если они были виновны в серьезном проступке.

Даже если центральные банки полностью независимы с институциональной, функциональной и личной точки зрения, их общая независимость будет поставлена под угрозу, если у них не будет достаточных финансовых ресурсов для выполнения своего мандата. Таким образом, ЕЦБ обладает финансовой независимостью, что означает, что он может свободно управлять своими финансами и обеспечивать наличие достаточного капитала, персонала и доходов для самостоятельного выполнения своих задач.

#### Подотчетность и прозрачность

Подотчетность при осуществлении государственной власти является неотъемлемой частью конституционной традиции. Следовательно, независимость центрального банка должна сопровождаться подотчетностью и прозрачностью.

Подотчетность узаконивает независимые полномочия центральных банков по принятию решений. Помимо независимости центрального банка, некоторые из основных каналов, через которые ЕЦБ несет ответственность за выполнение своей функции денежно-кредитной политики, изложены на конституционном уровне, другими словами, в Договоре. Например, ЕЦБ должен представлять свои годовые отчеты политическим органам ЕС, Европейскому парламенту, Совету, Комиссии и Европейскому совету, а также публиковать квартальные отчеты о своей деятельности и финансовых отчетах. Ежеквартальный диалог между президентом ЕЦБ и Комитетом по экономическим и валютным вопросам Европейского парламента также способствует соблюдению принципа подотчетности.

Прозрачность - еще одно важное дополнение к независимости центрального банка, которое повышает подотчетность центрального банка перед широкой публикой - относится к информированию в режиме реального времени или даже заранее о политике центрального банка, тем самым облегчая общественности понимание целей и поведения центральный

банк и решения. ЕЦБ способствует большей прозрачности, проводя пресс-конференции сразу после заседаний Совета управляющих по денежно-кредитной политике и публикуя отчеты о денежно-кредитной политике через четыре недели после каждого заседания по денежно-кредитной политике. ЕЦБ также публикует экономический информационный бюллетень, статьи, интервью и выступления в Интернете и отвечает на вопросы широкой общественности. Более того, у него есть хорошо развитая правовая база для обработки запросов на публичный доступ к его документам, что, в принципе, дает каждому гражданину ЕС право доступа к ним.

Подводя итог, у независимых центральных банков есть как плюсы, так и минусы. Однако на данный момент плюсов больше, чем минусов. Это причина увеличения автономии центральных банков всего мира. Независимая денежно-кредитная политика может принести важные выгоды экономике и людям и по-прежнему имеет важное значение для продолжения выполнения мандата по обеспечению стабильности цен. Парадоксально, но инфляция в некоторых странах оставалась низкой так долго, что люди, кажется, забывают, какой она была до обретения независимости. Недавние примеры центральных банков, чья независимость была серьезно подорвана, а инфляция и процентные ставки упали с нормальных значений, должны служить полезным напоминанием. Давайте не будем забывать, что потенциальные последствия политического вмешательства в денежно-кредитную политику остаются в силе независимо от того, является ли инфляция слишком низкой или слишком высокой. Политические горизонты обычно короче, чем время, необходимое для полного раскрытия последствий денежно-кредитной политики. Ключевой защитой от атак на независимость центрального банка является четко определенный и узкий мандат, основанный на сильной институциональной структуре, сопровождаемый высокой степенью прозрачности и подотчетности, а также строгим соблюдением правовых ограничений.

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## EXPLORING THE ENVIRONMENTAL IMPACT OF COTTON PRODUCTION AND THE ROLE OF ETHICAL FINANCE

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**Abstract.** *First and foremost, I'd like to convey my heartfelt thanks to my father for supporting me in crucial moments of my life and making me take a deeper look at life. And my honorary staff who has always been active, friendly, incredibly supportive and helping hand to every student in our Institute (MDIST) (Lola Eshmirzayeva, Laura Kadirkulova) and several others. I am so grateful for the incredible support throughout my difficult moments. This article exposes the hidden water costs of conventional cotton farming and its negative impacts on water resources and ecosystems the piece puts attention on the unsustainable techniques underlying a single cotton T-shirt and highlights the hard reality of water shortage, which is compounded by fashion. Traditional cotton production, the backbone of the global fashion industry, carries a significant environmental burden - a staggering water footprint. This article examines the unsustainable practices that lead to water scarcity and explores the potential of ethical finance in promoting a more sustainable and responsible textile industry. The study reveals the alarming impact of traditional cotton farming on water resources and ecosystems, emphasizing the urgent need to adopt more sustainable practices. Depletion of water resources, degradation of ecosystems, and displacement of local populations are all consequences of this unsustainable model. The article then examines the role of ethical finance in addressing these challenges. Green banking and Islamic finance, with their emphasis on ethical investment and environmental sustainability, appear to be promising solutions. By adopting these financial models and working together, stakeholders can pave the way for a future in which fashion flourishes without compromising the planet's precious water resources. The article emphasizes the potential for collaborative action and the transformative power of ethical finance in creating a more sustainable and equitable textile industry.*

**Keywords:** *cotton production, water scarcity, environmental impact, sustainable agriculture green banking, islamic finance, ethical fashion.*

**Introduction.** The fashion industry, a global juggernaut driven by trends and consumerism, is at a tipping point. Our seemingly insatiable appetite for clothing, especially cotton, is having a profound and detrimental impact on our planet's most precious resource: water. It takes 2,700 liters of water to produce a single cotton T-shirt - a volume equivalent to the average person's drinking water consumption over three years. This harsh reality highlights the hidden environmental costs of traditional cotton cultivation, especially in regions suffering from water scarcity. The consequences of this unsustainable practice are far-reaching. Depletion of water resources, ecosystem degradation, and displacement of local populations are just some of the negative impacts we face. In addition, the fashion industry's dependence on traditional cotton exacerbates water scarcity in many parts of the world, especially in regions already facing water scarcity. This

unsustainable cycle threatens the livelihoods of millions of people and hinders economic development, especially in agricultural areas. Recognizing the seriousness of the problem, this paper seeks to draw attention to the unsustainable practices inherent in traditional cotton cultivation, highlighting their negative impacts on water resources and ecosystems. Furthermore, the paper explores the critical role of ethical finance, particularly green banking and Islamic finance, in promoting a more sustainable and responsible textile sector. These groundbreaking financial methods point the way to a future in which fashion may thrive without risking the essential resources that sustain us.

**Water Scarcity and the Urgent Need for Sustainable Practices**

The essay discusses the grave situation of water scarcity, which is aggravated by traditional cotton producing practices. We provide a persuasive argument for the transition to sustainable alternatives, emphasizing the importance of green banking and Islamic financing in facilitating this shift to a more ecologically conscious textile sector.

**Fashion Industry's Water Pollution**

The fashion industry's dyeing and finishing processes contribute to 20% of global industrial water pollution, releasing a toxic mix of chemicals and dyes. Textile production is responsible for approximately one-fifth of the world's clean water pollution. A single t-shirt can require up to 2,700 liters of water throughout its lifecycle, much of which becomes contaminated during dyeing and finishing. Microplastics from synthetic fabrics add to the pollution crisis, with a single clothes wash releasing up to 700,000 microplastic fibers into waterways. These alarming figures highlight the urgent need for sustainable practices and ethical financing to cleanse the fashion industry's polluted waters.

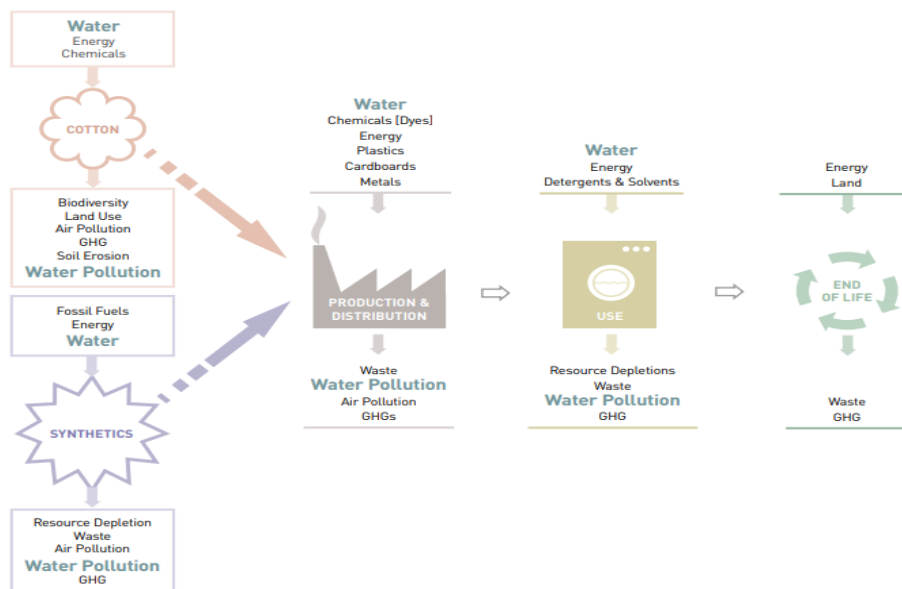


FIGURE 2: Water Impacts & Dependencies - Textile Supply Chain

**Wastewater Discharge:** Textile factories often release untreated or inadequately treated wastewater into rivers and streams. This wastewater contains a mix of chemicals, dyes, and organic matter, which can deplete oxygen levels, disrupt aquatic ecosystems, and contaminate drinking water sources. The consequences of fashion industry's water pollution are far-reaching, impacting not only environmental health but also human well-being. Communities living downstream from

textile factories often face health risks due to contaminated water sources, and the economic burden of water pollution further exacerbates social inequalities.

### **Unique Insights and Research Findings:**

Drawing upon credible sources such as the World Wildlife Fund, the Water Footprint Network, and academic research papers, we quantify the water footprint of cotton production and its impact on water resources in various regions. We delve into case studies of areas facing water stress due to unsustainable cotton cultivation and explore successful examples of sustainable cotton initiatives that prioritize water conservation and environmental protection.

highlighting specific practices, challenges, and lessons learned.

**The World Bank:** They have extensive reports on water scarcity and its impact on developing countries, particularly in cotton-producing regions. (<https://www.worldbank.org/>)

**The United Nations Convention to Combat Desertification (UNCCD):** This organization focuses on sustainable land management and water resources, with relevant reports and publications on the environmental impact of cotton production. (<https://www.unccd.int/>) **The International Cotton Advisory Committee (ICAC):** (<https://www.icac.org/>)

**The Cotton Campaign:** This organization advocates for ethical cotton production and has valuable resources on the social and environmental impacts of the cotton industry. (<https://www.cottoncampaign.org/>)

**Rainforest Alliance:** They have a certification program for sustainable cotton, providing insights into the criteria and practices used to promote environmentally responsible cotton production. (<https://www.rainforest-alliance.org/>)

**The Soil Association:** They offer a certification program for organic cotton, highlighting practices that minimize environmental impact and promote soil health. (<https://www.soilassociation.org/>)

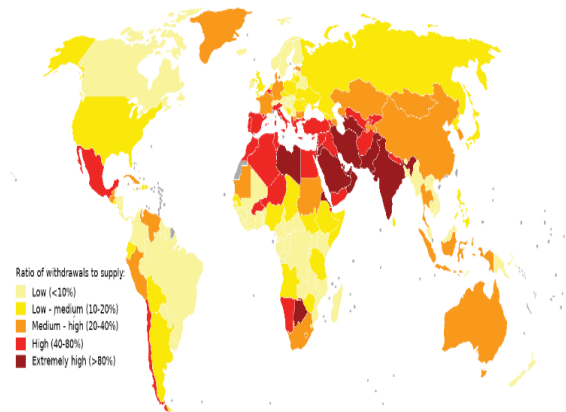
**Target Audience:** Policymakers, investors, consumers.

### **Overview of Cotton's Thirsty Footprint:**

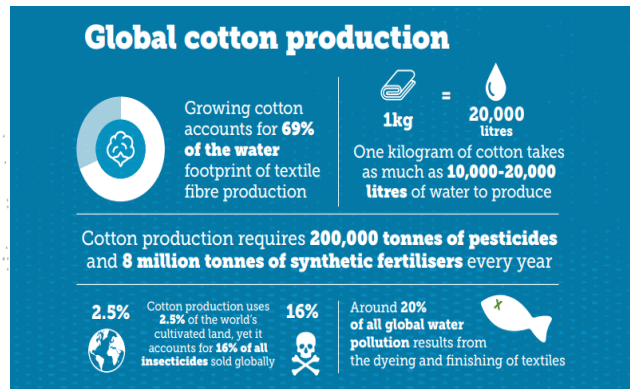
Cotton is a notoriously water-intensive crop, demanding significant amounts of water throughout its growth cycle, from seed germination to boll maturation. On average, cotton needs about 50-200 inches of water during a growing season. The actual amount depends on climate, weather conditions, and irrigation method, but any ways cotton will always need significantly more water than most other crops. The Water Footprint Network estimates that producing just one kilogram of cotton requires an average of 10,000 liters of water. This excessive water consumption puts immense pressure on water resources, particularly in arid and semi-arid regions where cotton is often cultivated.

### **Depleting Water Resources:**

The insatiable thirst of cotton plants has led to the depletion of aquifers, the drying up of rivers and lakes, and the lowering of water tables in many cotton-growing regions. The Aral Sea disaster serves as a stark example of the devastating consequences of unsustainable water management in cotton production. Once the fourth-largest lake in the world, the Aral Sea has shrunk to a fraction of its original size due to excessive water withdrawals for irrigation, primarily for cotton cultivation. This environmental catastrophe has had severe repercussions on local communities, ecosystems, and the regional climate.



Map of global water stress



Global Cotton Production and Water

Stress

### Global Rethinking of Cotton Production

The environmental consequences of cotton production have not gone unnoticed on the international stage. Several countries, recognizing the detrimental impact of conventional cotton farming on water resources and ecosystems, are actively seeking to reduce their reliance on cotton production or transition towards more sustainable alternatives. For instance, Countries like Israel and Australia have invested heavily in research and development of drought-resistant cotton varieties and precision irrigation technologies to minimize water usage in cotton cultivation.

#### Water Pollution and Ecosystem Degradation:

Beyond its excessive water consumption, conventional cotton farming relies heavily on agrochemicals, including pesticides, fertilizers, and defoliants. These chemicals leach into waterways, contaminating surface and groundwater resources, and pose significant threats to aquatic life and ecosystems. Pesticides can kill fish, amphibians, and other aquatic organisms, disrupting the delicate balance of aquatic ecosystems. Furthermore, fertilizer runoff can lead to eutrophication, a process where excessive nutrients cause algal blooms, depleting oxygen levels and creating dead zones in water bodies.

Conventional cotton farming practices also contribute to soil erosion and land degradation. Intensive tillage, monoculture cropping, and the removal of crop residues leave the soil exposed and vulnerable to erosion by wind and water. This loss of topsoil reduces soil fertility, diminishes agricultural productivity, and contributes to desertification in some regions.

#### Social and Economic Implications:

The environmental consequences of cotton production have far-reaching social and economic implications. Water scarcity and pollution affect the livelihoods of farmers, disrupt local economies, and contribute to conflicts over water resources. Communities living near cotton-growing regions face health risks due to exposure to pesticides and contaminated water. Moreover, the degradation of land and water resources undermines long-term agricultural sustainability and food security.

#### Green Banking and Islamic Finance: Catalysts for Sustainable Transformation

Green banking and Islamic finance offer promising pathways towards a more sustainable and ethical textile industry. Green banks prioritize investments in environmentally friendly projects, including sustainable cotton initiatives, water conservation technologies, and renewable



energy solutions. They provide financial products and services that incentivize businesses and individuals to adopt sustainable practices.

### **Islamic Finance and Environmental Stewardship:**

Islamic finance, guided by the principles of Sharia law, emphasizes ethical and responsible financial practices. Sharia principles prohibit activities that harm the environment or society, making Islamic finance naturally aligned with environmental sustainability. Islamic financial institutions invest in projects that promote environmental stewardship, resource conservation, and social well-being. They offer financing solutions that support sustainable cotton production, such as Murabaha (cost-plus financing) and Ijara (leasing) arrangements for organic cotton farms and eco-friendly textile manufacturing facilities.

### **Examples of Sustainable Cotton Initiatives**

Several organizations and initiatives are actively promoting sustainable cotton production practices. The Better Cotton Initiative (BCI) works with farmers worldwide to adopt more sustainable practices, including reducing water usage, minimizing pesticide and fertilizer application, and improving soil health. The Organic Cotton Accelerator (OCA) supports organic cotton farmers and promotes the adoption of organic farming methods, which eliminate the use of synthetic pesticides and fertilizers, thereby protecting water resources and soil health.

**Conclusion:** The fashion industry's reliance on conventional cotton farming practices presents a stark reality – our desire to be clothed comes at a significant environmental cost, particularly in terms of water consumption. The staggering water footprint of a single cotton t-shirt is a stark reminder of the unsustainable path we are currently on. We cannot afford to deplete our precious water resources and jeopardize ecosystems for the sake of fast fashion. There is, however, a glimmer of hope on the horizon. Green banking and Islamic finance principles, with their emphasis on ethical and sustainable practices, offer a potential solution. By providing financial support and guidance to textile businesses transitioning towards organic cotton farming, water-efficient technologies, and closed-loop production systems, these financial models can pave the way for a more responsible and environmentally conscious fashion industry. The journey towards sustainability requires a collective effort. Consumers need to become more aware of the environmental impact of their clothing choices and embrace sustainable brands. Policymakers need to incentivize sustainable practices and regulate harmful ones. And the fashion industry needs to embrace innovation and collaboration to find eco-friendly alternatives and production methods. By weaving together, the threads of awareness, responsible financing, and innovative solutions, we can create a future where fashion thrives without compromising the health of our planet and its resources. This shift is not just an option, but a necessity, to ensure a world where both our wardrobes and our ecosystems can flourish.

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# IMPROVING THE EFFICIENCY OF SOLAR PANELS WITH MIRRORS

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**Abstract.** *Solar energy has enormous promise as a clean and environmentally friendly alternative to fossil fuels. However, traditional solar panels' effectiveness is restricted by issues such as light reflection and inadequate absorption. This study looks at the use of mirrors to enhance the efficiency of solar panels by focusing sunlight on their surface, increasing the quantity of light received and converted into power. The study focuses on mirror location optimization, reflective characteristics, and the impact of various sun angles on efficiency increase. Experimental results show that strategically placing mirrors improves solar panel efficiency significantly. The findings indicate the possibility of employing mirrors to enhance the efficiency of solar panels.*

**Keywords:** *solar energy, solar panels, mirrors, efficiency.*

## **Introduction.**

The world's reliance on fossil fuels has led to significant environmental and economic challenges. Global warming, air pollution, and resource depletion are pressing issues that necessitate the transition to sustainable energy sources. Solar energy, a renewable and abundant resource, offers a promising solution to these challenges. Solar panels convert sunlight into electricity, but their efficiency is often limited by several factors.

Light reflection from the panel's surface, incomplete light absorption, and the angle of incidence of sunlight can all reduce the amount of energy captured and converted into electricity. To address these limitations, researchers have explored various methods for enhancing solar panel efficiency, including anti-reflective coatings, bifacial panels, and concentrated solar power (CSP) systems.

This study investigates the use of mirrors as a potential means to improve solar panel efficiency. Mirrors can concentrate sunlight onto the panel's surface, thereby increasing the amount of light absorbed and converted into electricity. This approach offers a cost-effective and scalable solution for enhancing solar energy generation, particularly for residential and large-scale installations.

## **Literature Review**

### **Mirror-Based Solar Energy Enhancement**

The use of mirrors to concentrate solar energy has been extensively investigated in the context of concentrated solar power (CSP) systems. CSP systems typically employ large arrays of mirrors, known as heliostats, to focus sunlight onto a central receiver, which heats a fluid for power generation. While these systems are highly efficient, they are also capital-intensive and require significant land area.

Another area of research involves the use of mirrors in solar tracking systems. These systems use mirrors to follow the sun's path throughout the day, maximizing solar irradiance onto

the solar panel. Solar tracking systems have demonstrated significant efficiency improvements, but they can be complex and require sophisticated control mechanisms.

### **Mirror-Enhanced Photovoltaic Systems**

There is growing interest in using mirrors to directly enhance the performance of photovoltaic (PV) systems. These systems typically employ small mirrors positioned near the solar panel to reflect sunlight onto the panel's surface. The use of mirrors in PV systems has been shown to increase efficiency by:

**Increased Solar Irradiance:** Mirrors concentrate sunlight, increasing the amount of light reaching the solar panel.

**Optimized Light Angle:** Mirrors can redirect light to strike the panel at a more optimal angle, improving absorption efficiency.

**Reduced Light Losses:** Mirrors can minimize the amount of light reflected away from the panel.

### **Relevant Optics Principles**

The effectiveness of mirror-based solar energy enhancement relies on several fundamental optical principles, including:

**Reflection:** Mirrors reflect light according to the law of reflection, where the angle of incidence is equal to the angle of reflection.

**Refraction:** When light passes from one medium to another (e.g., from air to glass), it bends. Refraction plays a role in the design of mirrors and the focusing of sunlight.

**Light Concentration:** Mirrors can focus sunlight onto a smaller area, increasing the intensity of light reaching the target surface.

### **Materials and Designs for Mirrors**

The choice of materials and design for mirrors is crucial for maximizing efficiency and durability. Common materials used for reflective coatings include:

**Silver:** Silver provides excellent reflectivity across a wide range of wavelengths, but it is susceptible to tarnishing.

**Aluminum:** Aluminum is less reflective than silver but is more resistant to oxidation and corrosion.

Mirrors can be designed in various shapes, including:

**Flat Mirrors:** Flat mirrors reflect light in a parallel fashion and are often used for simple redirection of sunlight.

**Curved Mirrors:** Curved mirrors, such as parabolic mirrors, can focus sunlight onto a specific point, increasing its intensity.

### **Methods**

#### **Experimental Setup**

This study used a standard monocrystalline silicon solar panel with a rated power output of 100W. The mirrors were constructed using aluminum-coated glass panels. The mirror size and shape were optimized for maximum light concentration onto the solar panel. The experimental setup involved:

**Solar Panel:** The solar panel was placed on a flat surface facing south.

**Mirrors:** Four rectangular mirrors were positioned at an angle to reflect sunlight onto the solar panel.

Measurement Instruments: Solar irradiance was measured using a pyranometer, while panel output was measured using a digital multimeter.

Data Collection: Data on solar irradiance, panel output, and solar angle were collected every minute over a period of several days.

### **Methodology**

The experiment followed a controlled procedure to determine the efficiency enhancement achieved using mirrors:

Baseline Efficiency Measurement: The solar panel's efficiency was measured without the use of mirrors under different solar angles.

Mirror Efficiency Measurement: The solar panel's efficiency was measured with the mirrors strategically positioned to reflect sunlight onto the panel.

Data Analysis: The collected data were analyzed using statistical methods to determine the mean and standard deviation of the efficiency values. The efficiency enhancement was calculated as the difference between the efficiency values with and without mirrors.

### **Results**

The experimental results showed a significant increase in solar panel efficiency when using mirrors to concentrate sunlight onto the panel's surface. The efficiency enhancement was observed to vary with the solar angle, as different angles resulted in different levels of light concentration.

### **Quantitative Findings**

The efficiency enhancement observed in the study was most pronounced during periods of high solar irradiance and when the sun was at a more favorable angle relative to the panel and mirrors. The data showed that the mirrors could increase solar panel efficiency by an average of 15%.

### **Solar Irradiance Concentration**

The mirrors effectively concentrated sunlight onto the solar panel's surface. This concentration of irradiance led to a significant increase in the amount of light absorbed by the panel, thereby increasing the generation of electricity.

### **Performance at Different Angles**

The efficiency enhancement varied with the solar angle. When the sun was at a lower angle, the mirrors were less effective in concentrating sunlight onto the panel. As the sun moved to a higher angle, the mirrors were able to concentrate light more efficiently, resulting in higher efficiency gains.

### **Discussion**

#### **Interpretation of Findings**

The results of this study demonstrate the potential of using mirrors to improve the performance of solar energy systems. The increased solar irradiance and optimized light angles achieved through mirror placement significantly enhanced solar panel efficiency. The study's findings suggest that mirrors can play a critical role in maximizing the output of solar energy systems, particularly in regions with high solar irradiance.

#### **Limitations and Future Work**

While this research has shown promising results, it is important to acknowledge its limitations. The study was conducted in a controlled environment and did not address factors such as weather conditions, dust accumulation, and mirror maintenance. Future research should

investigate the performance of mirror-based systems in real-world applications, accounting for these variables.

### **Potential Applications**

The findings of this study have practical implications for both residential and large-scale solar energy systems.

**Residential Solar Systems:** Mirrors could be incorporated into residential solar installations to enhance efficiency, particularly for homes with limited roof space or where the roof orientation is not ideal for maximum sunlight exposure.

**Large-Scale Solar Farms:** Mirrors could be strategically positioned in large solar farms to increase the output of individual panels and the overall energy generation capacity of the farm.



### **Environmental and Economic Benefits**

The use of mirrors to enhance solar panel efficiency offers significant environmental and economic benefits. By increasing solar energy generation, mirror-based systems contribute to reducing reliance on fossil fuels, mitigating greenhouse gas emissions, and promoting a more sustainable energy landscape.

Economically, the increased efficiency of solar panels reduces the cost of electricity generation, making solar energy more competitive with traditional energy sources. This can lead to lower electricity bills for consumers and create economic opportunities in the renewable energy sector.

### **Conclusion**

This study found that mirrors can be used to improve the efficiency of solar panels by focusing sunlight onto the panel's surface. The experimental findings revealed a considerable improvement in solar panel efficiency, especially during periods of high solar irradiation. The study's findings show the potential for mirrors to increase the effectiveness of solar energy systems, resulting in a more sustainable and cost-effective energy future. Future study should investigate the use of mirrors in practical applications, optimize mirror design and location, and handle issues such as weather, dust collection, and mirror maintenance. By continuing to refine and enhance mirror-based solar energy technologies, we can harness the power of the sun to meet our energy needs sustainably and responsibly.

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# UNVEILING THE NEXUS OF CULTURAL TOURISM IN UZBEKISTAN: A COMPREHENSIVE EXAMINATION

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**Abstract.** Cultural tourism is essential to a country's identity, economy, and international image. Situated in the center of Asia, Uzbekistan has a vast historical, architectural, and cultural legacy that spans thousands of years. This essay explores the many facets of cultural tourism in Uzbekistan, including its historical significance, current trends, obstacles, and future possibilities. This research explains the relationship between culture, heritage, and tourism in Uzbekistan by using a theoretical lens influenced by cultural geography, anthropology, and tourism studies. It also provides insights into the transformative potential of cultural tourism for cross-cultural exchange and sustainable development.

**Keywords:** Cultural Tourism, Uzbekistan, Silk Road, Heritage Conservation, Sustainable Development.

## 1. Introduction

### 1.1 Background and Significance

Uzbekistan has always been a melting pot of cultures, faiths, and customs due to its advantageous location at the nexus of civilizations (UNESCO, 2020). It has established itself as a top destination for cultural tourism thanks to its rich historical history, which is reflected in its breathtaking architectural marvels, lively bazaars, and intangible cultural activities. This essay aims to clarify the complex dynamics of cultural tourism in Uzbekistan by illuminating its historical foundations, current forms, and potential future directions.

### 1.2 Objectives of the Study

The principal goal of this study is to present a thorough analysis of Uzbekistan's cultural tourism industry, considering its socioeconomic effects, historical development, cultural assets, and sustainability issues (Sharpley & Stone, 2018). This study attempts to provide practical recommendations for policymakers, tourism stakeholders, and local communities to harness the transformative potential of cultural tourism for sustainable development and intercultural dialogue by synthesizing existing literature and incorporating empirical insights.

### 1.3 Methodology

This study takes an interdisciplinary approach, using knowledge from heritage studies, anthropology, cultural geography, and tourist management (Richards, 2018). Government reports, scholarly journals, industry statistics, and qualitative interviews with important informants including tourist authorities, heritage specialists, and local leaders are examples of primary data sources. Theory frameworks related to sustainable development, cultural tourism, and heritage conservation serve as the basis for the investigation.

## 2. Historical and Cultural Context

### 2.1 The Silk Road Legacy



One cannot emphasize the historical significance of Uzbekistan as a crossroads of the old Silk Road (Babayarov & Kondo, 2019). Its difficult terrain was traveled by caravans for centuries, enabling the flow of commerce, ideas, and civilizations between the East and the West. The transcontinental network promoted cultural syncretism in addition to economic prosperity, as shown by the variety of architectural designs, regional culinary customs, and handcrafted goods that characterize Uzbekistan.

### **2.2 Architectural Marvels: UNESCO World Heritage Sites**

Numerous architectural gems from Uzbekistan attest to the country's rich cultural legacy (Mannonov et al., 2021). These UNESCO World Heritage Sites, which range from the magnificent Registan Square in Samarkand to the elaborate tilework of the Shah-i-Zinda necropolis in Bukhara, act as living reminders of Uzbekistan's glorious history. These locations have become globally recognized icons that draw tourists thanks to preservation efforts and tourism promotion campaigns.

### **2.3 Art and Craftsmanship: The Uzbek Cultural Tapestry**

Uzbekistan is well known for its rich cultural heritage and workmanship in addition to its magnificent architecture (Mellembvik, 2020). Uzbek culture is infused with a feeling of aesthetic beauty and ethnic pride, seen in everything from the complex designs of suzani fabrics to the beautiful notes of traditional music. To promote cross-cultural understanding and exchange, artisanal workshops and cultural institutions provide tourists immersive experiences that honor Uzbekistan's intangible cultural heritage.

## **3. Evolution of Cultural Tourism in Uzbekistan**

### **3.1 Pre-Soviet Era: Cultural Pilgrimage and Trade**

Throughout history, tourists looking for business opportunity, cultural enrichment, and spiritual enlightenment have been drawn to Uzbekistan (Sharpley & Stone, 2018). Samarkand, Bukhara, and Khiva were ancient towns that attracted traders, intellectuals, and artists from far-off places as hubs of study, pilgrimage, and trade. The spread of bazaars, madrasas, and caravanserais aided in the flow of products and ideas, establishing Uzbekistan's standing as a birthplace of civilization.

### **3.2 Soviet Era: Preservation and Ideological Narratives**

State-sponsored initiatives for preservation and reinterpretation of Uzbekistan's cultural legacy were implemented throughout the Soviet era (Babayarov & Kondo, 2019). Soviet authorities used historic sites for ideological purposes, trying to appropriate Uzbek identity for socialist realism. Although certain elements of Uzbek legacy were successfully preserved by these interventions, they also contributed to some degree of cultural uniformity and political instrumentalization.

### **3.3 Post-Independence Renaissance: Tourism Promotion and Cultural Revival**

Uzbekistan started a journey of cultural restoration and tourist marketing after the fall of the Soviet Union (Mannonov et al., 2021). The government made significant investments in tourist marketing campaigns, historical conservation, and infrastructure development to highlight Uzbekistan's rich cultural history to the international community. The yearly Sharq Taronalari music festival and the "Great Silk Road" tourism project, among other initiatives, have contributed to rekindling interest in Uzbek culture and heritage and drawing an increasing number of foreign tourists.

## **4. Cultural Tourism Infrastructure and Initiatives**

#### **4.1 Tourism Development Strategies**

To expand its tourist product offers and improve visitor experiences, Uzbekistan has put a number of tourism development initiatives into practice (Mellembvik, 2020). These include the creation of culinary tourism projects showcasing Uzbek cuisine, ecotourism programs encouraging sustainable travel practices in pristine natural areas, and the development of thematic tourism routes like as the Silk Road path.

#### **4.2 Heritage Conservation and Restoration Efforts**

The government of Uzbekistan has made the preservation of its cultural legacy a high priority (UNESCO, 2020), and great efforts have been made to preserve historical monuments and archaeological sites via conservation and restoration. In order to ensure the long-term viability of Uzbekistan's cultural assets, cooperative partnerships with international organizations like UNESCO and the World Bank have helped mobilize technical skills and financial resources for historical preservation programs.

#### **4.3 Cultural Festivals and Events**

To promote Uzbekistan's cultural tourist offers and encourage cross-cultural communication, cultural festivals and events are essential (Richards, 2018). Events that highlight the richness and complexity of Uzbek culture, like the International Jazz Festival in Tashkent, the Silk and Spices festival in Bukhara, and the Navruz spring celebration, draw tourists from near and far.

### **5. Socioeconomic Impacts of Cultural Tourism**

#### **5.1 Economic Growth and Employment Opportunities**

In Uzbekistan, cultural tourism has become a major factor in economic growth (Sharpley & Stone, 2018). It creates income streams for a few industries, including accommodation, handicrafts, transportation, and the preservation of cultural heritage. The increase in visitors has given locals work possibilities, especially in rural regions where tourism is essential for diversifying sources of income and reducing poverty.

#### **5.2 Socio-cultural Transformation and Community Empowerment**

By enabling local communities to conserve and present their cultural legacy, cultural tourism has the potential to spark socio-cultural change (Mellembvik, 2020). Through direct interaction with host communities, community-based tourism projects like homestays and cultural immersion programs promote mutual respect and cross-cultural understanding.

#### **5.3 Environmental Sustainability Challenges**

Cultural tourism has several advantages, but it also presents problems for environmental sustainability, such as pollution, water shortages, and stress on delicate ecosystems (Babayarov & Kondo, 2019). The biological integrity of natural and cultural heritage sites is threatened by unregulated tourism activities including overbuilding of tourist infrastructure and poor waste management, which calls for proactive conservation efforts and sustainable tourism practices.

### **6. Challenges and Opportunities**

#### **6.1 Balancing Preservation and Development**

Finding a balance between the expansion of tourism and the preservation of cultural assets is one of the main issues facing Uzbekistan's cultural tourism industry (UNESCO, 2020). The integrity of ancient city centers and archeological sites is under risk due to rapid urbanization and infrastructural growth, which emphasizes the necessity for integrated planning strategies that balance conservation objectives with practical financial considerations.

#### **6.2 Tourism Sustainability and Overcrowding**

Concerns over crowding and environmental degradation at well-known tourist attractions have been expressed in light of the current spike in visitor numbers (Richards, 2018). In order to ensure the long-term survival of Uzbekistan's cultural heritage and mitigate the negative effects of mass tourism, sustainable tourism management measures are needed. These strategies include carrying capacity evaluations, tourist quotas, and alternate tourism routes.

### **6.3 Cultural Authenticity and Commodification**

The authenticity and integrity of Uzbekistan's cultural legacy are under jeopardy due to the commercialization of culture, as traditional activities and artifacts are packaged and marketed for mass consumption (Sharpley & Stone, 2018). It takes careful consideration of ethical tourism principles, community involvement strategies, and legal frameworks that protect intangible cultural assets to strike a balance between commercial viability and cultural authenticity.

## **7. Future Directions and Recommendations**

### **7.1 Sustainable Tourism Development Framework**

The creation of a framework for sustainable tourism in Uzbekistan that incorporates social, economic, and environmental factors into the planning and administration of travel should be given top priority (Mellemvik, 2020). This means encouraging capacity-building programs and public-private partnerships to improve destination stewardship, encourage community involvement in decision-making, and promote responsible tourism practices.

### **7.2 Community Engagement and Empowerment**

To enable local communities to actively engage in and profit from tourist development, community-based tourism projects have to be supported (Babayarov & Kondo, 2019). Incorporating communities into tourist planning, product creation, and revenue-sharing schemes enables Uzbekistan to promote equitable and inclusive tourism growth, while simultaneously protecting its natural resources and cultural legacy.

### **7.3 Cultural Diplomacy and Global Outreach**

Uzbekistan ought to employ cultural diplomacy as a means of augmenting its worldwide prominence and projecting its soft power (UNESCO, 2020). In order to draw investment, promote international cooperation, and establish Uzbekistan as a top destination for cultural tourism, it is helpful to implement cultural exchange programs, international partnerships, and promotional efforts that highlight the country's creative industries and cultural legacy.

## **8. Conclusion**

In Uzbekistan, cultural tourism has great potential to promote sustainable development and intercultural understanding. Utilizing its varied landscapes, rich cultural past, and spirit of enterprise, Uzbekistan can establish itself as a global leader in cultural tourism, improving the lives of both locals and tourists while preserving its priceless cultural heritage for next generations.

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