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**IMPROVING THE QUALITY OF CUSTOMER SERVICE
THROUGH THE USE OF ARTIFICIAL INTELLIGENCE
TECHNOLOGY IN BANKING** Written for an academic master's
degree in the specialty 70310106 - Information technology and
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D I S S E R T A T I O N

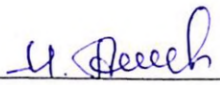
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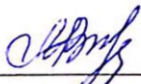
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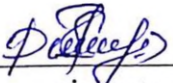
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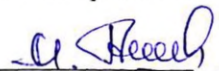
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Abstract

Today, the analysis of the situation illustrates that there are a number of systemic problems that prevent the development of the banking sector in accordance with economic reforms and the needs of society, such as high level of state intervention in the banking sector, insufficient quality of management and risk management in state-owned banks, low level of financial intermediation in the economy.

On the basis of modern service solutions, information and communication technologies (ICT), artificial intelligence (AI) technologies, financial technologies are widely introduced into the banking system, adequate provision of information security, as well as urgent measures to reduce the impact of the human factor in the provision of financial services.

During the research, we worked extensively on learning others' scientific works on the topic, as well as opinions of local and foreign scientists, scientific articles and local normative documents, literature reviews were studied. In order to increase the practical importance of scientific work, Russian banks (including Sberbank), startups and ideas developed in different parts of the world on the basis of AI and ICT were included.

With the help of analytical methods, based on scientific observations and analyzed data, scientifically and practically based conclusions, proposals and recommendations were developed on measures to reduce problems in customer service in banks.

Key words: *Digital economy, information and communication technologies, artificial intelligence technologies.*

Аннотация

На сегодняшний день анализ ситуации показывает, что существует ряд системных проблем, препятствующих развитию банковского сектора в соответствии с экономическими реформами и потребностями общества, таких как высокий уровень государственного вмешательства в банковский

сектор, недостаточное качество менеджмент и управление рисками в государственных банках, низкий уровень финансового посредничества в экономике.

На основе современных сервисных решений, информационно-коммуникационных технологий (ИКТ), технологий искусственного интеллекта (ИИ), финансовых технологий широко внедряются в банковскую систему, адекватного обеспечения информационной безопасности, а также неотложных мер по снижению влияния человеческого фактор при оказании финансовых услуг.

В ходе исследования мы активно работали над изучением чужих научных работ по теме, а также изучались мнения отечественных и зарубежных ученых, научные статьи и местные нормативные документы, обзоры литературы. В целях повышения практической значимости научной работы были включены российские банки (в том числе Сбербанк), стартапы и идеи, разработанные в разных уголках мира на основе ИИ и ИКТ.

С помощью аналитических методов, на основе научных наблюдений и проанализированных данных, выработаны научно и практически обоснованные выводы, предложения и рекомендации по мерам по снижению проблем в обслуживании клиентов в банках.

Ключевые слова: цифровая экономика, информационно-коммуникационные технологии, технологии искусственного интеллекта.

Annotatsiya

Bugungi kunga kelib vaziyat tahlili shuni ko'rsatadiki, bank sektorini iqtisodiy islohotlar va jamiyat ehtiyojlariga mos ravishda rivojlantirishga to'sqinlik qilayotgan bir qator tizimli muammolar mavjud bo'lib, ular bank sektoriga davlat aralashuvining yuqori darajasi, yetarli darajada emasligi kabilardir. davlat

texnologiyalar asosida bank tizimiga keng joriy etilmoqda, axborot xavfsizligi yetarli darajada ta'minlanmoqda, shuningdek, bank tizimida inson omilining ta'sirini kamaytirish bo'yicha kechiktirib bo'lmaydigan chora-tadbirlar amalga oshirilmoqda. moliyaviy xizmatlar ko'rsatish. .

Tadqiqot davomida biz ushbu mavzu bo'yicha boshqa odamlarning ilmiy ishlarini o'rganish ustida faol ishladik, shuningdek, mahalliy va xorijiy olimlarning fikrlari, ilmiy maqolalar va mahalliy normativ hujjatlar, adabiyotlar sharhlarini o'rgandik. Ilmiy ishlarning amaliy ahamiyatini oshirish maqsadida Rossiya banklari (jumladan, Sberbank), SI va AKT asosida butun dunyoda ishlab chiqilgan startaplar va g'oyalar kiritildi.

Tahliliy usullardan foydalangan holda, ilmiy kuzatishlar va tahlil qilingan ma'lumotlar asosida banklarda mijozlarga xizmat ko'rsatishdagi muammolarni kamaytirish chora-tadbirlari bo'yicha ilmiy va amaliy jihatdan asoslangan xulosalar, taklif va tavsiyalar ishlab chiqildi.

Kalit so'zlar: raqamli iqtisodiyot, axborot-kommunikatsiya texnologiyalari, sun'iy intellekt texnologiyalari.

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INTRODUCTION

Justification of the topic of the dissertation and its relevance

Relevance of the topic. Today, the analysis of the current situation in the banking sector shows that there are a number of systemic problems that prevent the development of the banking sector in accordance with economic reforms and the needs of society, such as high level of state intervention in the banking sector, insufficient quality of management and risk management in state-owned banks, low level of financial intermediation in the economy.

On the basis of modern service solutions, information and communication technologies (ICT), wide introduction of financial technologies to the banking system, adequate provision of information security, as well as urgent measures to reduce the influence of the human factor in the provision of financial services are required.

Decree No. PF-5992 of the President of the Republic of Uzbekistan dated May 12, 2020 "On the strategy of reforming the banking system of the Republic of Uzbekistan for 2020-2025"¹ defines such important tasks as ensuring the financial stability of the banking system through the "Creation of equal competitive conditions in the financial market, implementation of lending only on the basis of market conditions, reduction of dependence of banks on state resources, modernization of banking services, creation of efficient infrastructure of banks and automation of operations, improvement of the quality of credit portfolio and risk management, improvement of corporate governance and international practical attracting managers with experience, implementing technological solutions for assessing financial risks and introducing information technologies and software products.

Based on these tasks, measures such as improving the quality of service to the population and customers with the widespread implementation of advanced digital technologies in the activities of commercial banks of our country,

¹ Decree of the President of the Republic of Uzbekistan "On the strategy of reforming the banking system of the Republic of Uzbekistan for 2020-2025" No. PF-5992 of 2020 vfqlfub. www.lex.uz