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**“GLOBAL RAQAMLI INTEGRATSIYALASHUV:
2030-YILGACHA YASHIL IQTISODIYOTGA O'TISHDA
TEXNOLOGIK VA INDUSTRIAL SANOATNI RIVOJLANTIRISH
ORQALI MIKRO VA MAKROIQTISODIY BARQAROR
O'SISHNI TA'MINLASH DOLZARBLIGI”**

**“GLOBAL DIGITAL INTEGRATION: THE RELEVANCE OF
ENSURING MICRO AND MACROECONOMIC SUSTAINABLE
GROWTH THROUGH TECHNOLOGICAL AND INDUSTRIAL
DEVELOPMENT IN THE TRANSITION TO A GREEN
ECONOMY BY 2030”**

**«ГЛОБАЛЬНАЯ ЦИФРОВАЯ ИНТЕГРАЦИЯ:
АКТУАЛЬНОСТЬ ОБЕСПЕЧЕНИЯ УСТОЙЧИВОГО
МИКРО- И МАКРОЭКОНОМИЧЕСКОГО РОСТА ЧЕРЕЗ
РАЗВИТИЕ ТЕХНОЛОГИЧЕСКОЙ И ИНДУСТРИАЛЬНОЙ
ПРОМЫШЛЕННОСТИ В ПЕРЕХОДЕ К ЗЕЛЁНОЙ
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Bosh muharrir:

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- 05.01.00 – Axborot texnologiyalari, boshqaruv va kompyuter grafikasi
- 05.01.01 – Muhandislik geometriyasi va kompyuter grafikasi. Audio va video texnologiyalari
- 05.01.02 – Tizimli tahlil, boshqaruv va axborotni qayta ishlash
- 05.01.03 – Informatikaning nazariy asoslari
- 05.01.04 – Hisoblash mashinalari, majmualari va kompyuter tarmoqlarining matematik va dasturiy ta'minoti
- 05.01.05 – Axborotlarni himoyalash usullari va tizimlari. Axborot xavfsizligi
- 05.01.06 – Hisoblash texnikasi va boshqaruv tizimlarining elementlari va qurilmalari
- 05.01.07 – Matematik modellashtirish
- 05.01.11 – Raqamli texnologiyalar va sun'iy intellekt
- 05.02.00 – Mashinasozlik va mashinashunoslik
- 05.02.08 – Yer usti majmualari va uchish apparatlari
- 05.03.02 – Metrologiya va metrologiya ta'minoti
- 05.04.01 – Telekommunikatsiya va kompyuter tizimlari, telekommunikatsiya tarmoqlari va qurilmalari. Axborotlarni taqsimlash
- 05.05.03 – Yorug'lik texnikasi. Maxsus yoritish texnologiyasi
- 05.05.05 – Issiqlik texnikasining nazariy asoslari
- 05.05.06 – Qayta tiklanadigan energiya turlari asosidagi energiya qurilmalari
- 05.06.01 – To'qimachilik va yengil sanoat ishlab chiqarishlari materialshunosligi
- 05.08.03 – Temir yo'l transportini ishlatish
- 05.09.01 – Qurilish konstruksiyalari, bino va inshootlar
- 05.09.04 – Suv ta'minoti. Kanalizatsiya. Suv havzalarini muhofazalovchi qurilish tizimlari
- 10.00.06 – Qiyosiy adabiyotshunoslik, chog'ishtirma tilshunoslik va tarjimashunoslik
- 10.00.04 – Yevropa, Amerika va Avstraliya xalqlari tili va adabiyoti
- 08.00.01 – Iqtisodiyot nazariyasi
- 08.00.02 – Makroiqtisodiyot
- 08.00.03 – Sanoat iqtisodiyoti
- 08.00.04 – Qishloq xo'jaligi iqtisodiyoti
- 08.00.05 – Xizmat ko'rsatish tarmoqlari iqtisodiyoti
- 08.00.06 – Ekonometrika va statistika
- 08.00.07 – Moliya, pul muomalasi va kredit
- 08.00.08 – Buxgalteriya hisobi, iqtisodiy tahlil va audit
- 08.00.09 – Jahon iqtisodiyoti
- 08.00.10 – Demografiya. Mehnat iqtisodiyoti
- 08.00.11 – Marketing
- 08.00.12 – Mintaqaviy iqtisodiyot
- 08.00.13 – Menejment
- 08.00.14 – Iqtisodiyotda axborot tizimlari va texnologiyalari
- 08.00.15 – Tadbirkorlik va kichik biznes iqtisodiyoti
- 08.00.16 – Raqamli iqtisodiyot va xalqaro raqamli integratsiya
- 08.00.17 – Turizm va mehmonxona faoliyati

Ma'lumot uchun, OAK
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MUNDARIJA

ICT WEEK UZBEKISTAN 2025: MILLIY TEXNOLOGIYALAR HAFTALIGINING YAKUNLARI VA ULARNING O'ZBEKISTON IT-EKOTIZIMIGA TA'SIRI	16
Jumaboyev Akmaljon Sheraliyevich	
THE ROLE OF STATE FINANCIAL CONTROL IN THE EFFICIENT USE OF BUDGET FUNDS	20
Gulyor Akhmatovna Kasimova, Biybinaz Makhmut qizi Esenbaeva	
РОЛЬ ЦИФРОВЫХ ПЛАТЁЖНЫХ СИСТЕМ В ФОРМИРОВАНИИ ФИНТЕХ-ЭКОСИСТЕМЫ РЕСПУБЛИКИ УЗБЕКИСТАН	22
Шамахмудова Шоира Олег кизи	
UZBEKISTAN'S STRATEGY FOR TRANSITION TO A GREEN ECONOMY: LABOR MARKET TRANSFORMATION, CHALLENGES AND PROSPECTIVE OPPORTUNITIES.....	27
Akbarova Barno Shukhratovna, Chintemirova Diyora Shukhratovna	
MODELS FOR MANAGING EDUCATIONAL REFORMS IN THE CONTEXT OF CULTURAL DIFFERENCES.....	32
Abdulmajeed Nabeel Azouz	
4-SANOAT INQILOBINING RAQAMLI TURIZMGA TA'SIRINI VAHOLASH	38
Sevinchova Nilufar Ne'mat qizi	
КОНЦЕПТУАЛЬНАЯ МОДЕЛЬ ИНТЕГРИРОВАННОЙ СИСТЕМЫ ESG-ТРАНСФОРМАЦИИ ПРОМЫШЛЕННОГО ПРЕДПРИЯТИЯ КАК ДРАЙВЕР ИНВЕСТИЦИОННОЙ ПРИВЛЕКАТЕЛЬНОСТИ.....	41
Ташпулатов Дильмурад Рустамович	
RAQAMLI IQTISODIYOTDA FOIZSIZ MOLIYA MEKANIZMLARINING RIVOJLANISH ISTIQBOLLARI.....	44
Adilov Zuxriddin Marip o'g'li	
XIZMAT KO'RSATISH TARMOG'INI RIVOJLANTIRISH VA BOSHQARISHNI TAKOMILLASHTIRISH	47
Tadjimirzayev Anvar Abduvaxidovich	
RAQAMLI IQTISODIY DINAMIKANI KOMPLEKS FUNKSIYALAR YORDAMIDA MODELLASHTIRISH.....	52
Ibrohimova Nilufar Qahramon qizi	
SANOAT SEKTORIDA BARQAROR RIVOJLANISHNI TA'MINLASHDA "YASHIL" INVESTITSIYALARNING IQTISODIY AHAMIYATI.....	55
Ibragimov Zaxid Taxirovich	
LOGISTIKA PROVAYDERLARI XIZMATLARIDAN FOYDALANISH ASOSIDA TEMIR YO'L TRANSPORTI RAQOBATBARDOSHLIGINI OSHIRISH.....	59
Raximov Xasan Shukurjonovich	
СОВРЕМЕННЫЕ ПОДХОДЫ К ИСПОЛЬЗОВАНИЮ ИНСТРУМЕНТОВ УПРАВЛЕНИЯ ПРОЕКТАМИ В РАЗЛИЧНЫХ ОТРАСЛЯХ ЭКОНОМИКИ	64
Сидиков Зиёдулло Равшанович, Холиярова Шохиста Кахрамоновна	
SUG'URTA TASHKIOTLARINING BOZOR IQTISODIYOTIDAGI AHAMIYATI	68
Azamatova G.I.	
DON MAHSULOTLARINI YETISHTIRISH VA QAYTA ISHLASHDA INVESTITSIYALAR SAMARADORLIGINI OSHIRISH YO'LLARI.....	71
Po'latova Sug'diyona, S.Y.Xamidova	
MAHALLIY BUDJETLARNING DAROMAD BAZASINI KENGAYTIRISH ASOSIDA XARAJATLAR BARQARORLIGINI TA'MINLASH (SURXONDARYO VILOYATI MISOLIDA).....	74
Safarmurodova Marjona To'raqulovna	
O'ZBEKISTONDA INVESTITSIYA FAOLIYATINI RIVOJLANTIRISHDA SOLIQ IMTIYOZLARI VA PREFERENSIYALARINING IQTISODIY AHAMIYATI.....	77
Allaberganova Kumush Javlonbek qizi, Beknazarova N.T.	



DAVLAT SEKTORIDA RAQAMLI TRANSFORMATSIYA JARAYONLARI VA ULARNING IQTISODIY AHAMIYATI	80
Abdullayev Bobirjon Mamurjanovich	
O'ZBEKISTON RESPUBLIKASI DAVLAT MOLIIYASI TIZIMINING ZAMONAVIY HOLATI TAHLILI.....	84
Berdibekov Adhamjon Ilhomjon o'g'li	
MOLIYAVIY NAZORATNI TASHKIL ETISHNING ZAMONAVIY MEXANIZMLARI.....	87
Ashirov Jasur Dilshod o'g'li	
SUN'IY INTELLEKT YORDAMIDA MOLIIYAVIY INKLYUZIYANI OSHIRISH IMKONIYATLARI.....	90
Lazizbek Ravshanov Baxtiyor o'g'li	
NOMODDIY AKTIVLAR AUDITIDA RISKLARNI BAHOLASH VA AUDITORLIK DALILLARINI TO'PLASH USLUBIYOTINI TAKOMILLASHTIRISH	93
Ishanqulov Izzatilla Nurillayevich	
MEHNAT HAQI AUDITINING NAZARIY-USLUBIY ASOSLARI VA XALQARO AUDIT STANDARTLARI (ISA) KONTEKSTIDAGI TALQINI	96
Nomozov Ilhomjon Ziyodullo o'g'li	
INNOVATSION RIVOJLANISHDA MEHNAT RESURSLARINING O'RNI VA AHAMIYATI	98
Artiqova O'g'iljon Zafar qizi	
THE IMPACT OF INFLATION AND EXTERNAL ECONOMIC SHOCKS ON THE NATIONAL ECONOMY.....	102
Suvonov Tolmasjon Faxritdinovich	
REWARD SYSTEMS AND EMPLOYEE PRODUCTIVITY IN HIGHER EDUCATION.....	105
Sultonboyeva Munira Bahodirovna, Sultanova Kamila Muktorali Kizi	
THE DIGITAL CATALYST: HOW TECHNOLOGICAL ACCESSIBILITY DRIVES GLOBAL TOURISM.....	110
Freshta Qayoumi	
BIZNES JARAYONLARINI MODELLASHTIRISH ORQALI KORXONA SAMARADORLIGINI OSHIRISH YO'LLARI	112
Qarshiyeva Moxinur Olim qizi	
ASSESSMENT AND ANALYSIS OF INVESTMENT EFFICIENCY BY REGION IN UZBEKISTAN	115
Otajonova Charoskhon Polvonkuli qizi	
УЯЗВИМОСТИ АРІ В ЦИФРОВЫХ ПЛАТЕЖНЫХ СЕРВИСАХ И ИХ ВЛИЯНИЕ НА ОНЛАЙН ТРАНСГРАНИЧНЫЕ ДЕНЕЖНЫЕ ПЕРЕВОДЫ	120
Садыков Азиз Миршарапович	
РАЗВИТИЕ БУХГАЛТЕРСКОГО УЧЁТА В УСЛОВИЯХ СТРУКТУРНЫХ ИЗМЕНЕНИЙ В ЭКОНОМИКЕ РЕСПУБЛИКИ УЗБЕКИСТАН	124
Валижонов Х.А.	
O'YINCHOQ ISHLAB CHIQRARISHDA IMPORTGA QARAMLIKNI KAMAYTIRISHNING TASHKILIY-IQTISODIY USULLARI (O'ZBEKISTON MISOLIDA)	127
Aminov Anvarxon Kazimovich	
ФАКТОРЫ И ПРОБЛЕМЫ ОСУЩЕСТВЛЕНИЯ УСТОЙЧИВОГО РАЗВИТИЯ МЕЖДУНАРОДНЫХ ДЕНЕЖНЫХ ПЕРЕВОДОВ В УЗБЕКИСТАНЕ.....	130
Гимранова О. Б.	
TRANSFORMATSIYALASHUV SHAROITIDA INVESTITSİYALAR VA INVESTITSION JOZIBADORLIKNI BAHOLASH	134
To'rayev Jasurali To'rayevich	
РОЛЬ СИТУАЦИОННОГО ЦЕНТРА В РАЗВИТИИ ЦИФРОВОГО ЗДРАВООХРАНЕНИЯ: МЕЖДУНАРОДНЫЙ ОПЫТ И ПЕРСПЕКТИВЫ ДЛЯ УЗБЕКИСТАНА.....	137
Омонов Олим Муродуллаевич	



IMPROVEMENT OF MANAGEMENT MECHANISMS FOR INCREASING THE INVESTMENT ATTRACTIVENESS OF REGIONS.....	140
To'rayev Jasurali To'rayevich	
DEVELOPMENT OF MODERN METHODOLOGICAL APPROACHES IN THE MANAGEMENT OF THE ACTIVITIES OF SMALL INDUSTRIAL ZONES	144
Shodmonkulov Kamoliddin Murodillayevich	
ISSUES OF IMPROVING THE MANAGEMENT OF THE INVESTMENT ENVIRONMENT.....	147
To'rayev Jasurali To'rayevich	
ISSUES OF IMPROVING THE METHODOLOGY OF MANAGEMENT OF SMALL INDUSTRIAL ZONES.....	150
Shodmonkulov Kamoliddin Murodillayevich	
IQTISODIY XAVFSIZLIK INDIKATORLARINING CHEGARAVIY QIYMATLARINI BELGILASH MASALALARI.....	153
Islamov Anvar Ashirqulovich	
ARTIFICIAL INTELLIGENCE AND BIG DATA APPLICATIONS IN UNIVERSITY MANAGEMENT: EVIDENCE FROM UZBEKISTAN	156
Berdiyev Temurbek Makhmudullo ugli	
ASSESSING DIGITAL MATURITY IN HIGHER EDUCATION INSTITUTIONS: AN INTEGRATED FRAMEWORK APPROACH	160
Berdiyev Temurbek Makhmudullo ugli	
ANALYSIS OF THE CURRENT STATE OF PRODUCTION COMPETITIVENESS IN TEXTILE ENTERPRISES AND THE ECONOMIC MECHANISMS OF ITS FORMATION.....	164
Xushvaqto'v Shuhrat Abduraufovich	
FOREIGN EXPERIENCE IN ORGANIZING COMMERCIAL BANK AUDITS AND ITS APPLICATION IN UZBEKISTAN.....	166
Ibragimov Nodirbek Baxodir ugli	
PROBLEMS IN COMMERCIAL BANK AUDIT PRACTICE AND DIRECTIONS FOR THEIR SOLUTION.....	168
Ibragimov Nodirbek Baxodir ugli	
IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT PRINCIPLES IN ECO-FRIENDLY HOTELS.....	170
Dilfuza Igamberdievna Abidova	
OPPORTUNITIES FOR APPLYING NATURAL RESOURCE CONSERVATION TECHNOLOGIES IN HOTEL MANAGEMENT.....	173
Dilfuza Igamberdievna Abidova	
TO'QIMACHILIK KORXONALARIDA STRATEGIK REJALASHTIRISHNI AMALGA OSHIRISH MEKANIZMLARINI TAKOMILLASHTIRISH.....	177
A.Y. Mardanov	
РОЛЬ ИННОВАЦИЙ И МАРКЕТИНГОВЫХ ИССЛЕДОВАНИЙ В РАЗВИТИИ ХИМИЧЕСКОЙ ПРОМЫШЛЕННОСТИ УЗБЕКИСТАНА(НА ПРИМЕРЕ АО «МАХАМ-ШИРЧИҚ»)	180
Хайдарова Камола Ахинжанована	
O'ZBEKISTONDA UY-JOY QURILISHINI RIVOJLANTIRISH TIZIMINI TAKOMILLASHTIRISH YO'NALISHLARI	183
Usmonov Mirumar Abdulla o'g'li	
ВНЕДРЕНИЕ ЦИФРОВЫХ ТЕХНОЛОГИЙ В РАСЧЕТ ЭКОНОМИЧЕСКИХ ЗАТРАТ НА СТРОИТЕЛЬНЫХ ПРЕДПРИЯТИЯХ.....	185
Асадова Мафтуна Саъдуллаевна	



IMPROVING THE ECONOMIC POTENTIAL OF OIL AND GAS INDUSTRY ENTERPRISES IN UZBEKISTAN: MODERN CHALLENGES AND DEVELOPMENT PROSPECTS	188
Bekmuhamedova Malika Iskandarbekovna	
ПЕРСПЕКТИВНЫЕ НАПРАВЛЕНИЯ РАЗВИТИЯ ПРЕДПРИЯТИЙ НЕФТЕГАЗОВОЙ ПРОМЫШЛЕННОСТИ В УСЛОВИЯХ ЦИФРОВОЙ ТРАНСФОРМАЦИИ.....	191
Бекмухамедова Малика Искандарбековна	
РОЛЬ ИНВЕСТИЦИЙ И ИННОВАЦИЙ В ПОВЫШЕНИИ ЭФФЕКТИВНОСТИ ПРЕДПРИЯТИЙ НЕФТЕГАЗОВОЙ ПРОМЫШЛЕННОСТИ	193
Бекмухамедова Малика Искандарбековна	
РАЗВИТИЕ СИСТЕМЫ ГОСУДАРСТВЕННОЙ ФИНАНСОВОЙ ПОДДЕРЖКИ ВОВЛЕЧЕНИЯ МАЛООБЕСПЕЧЕННЫХ СЕМЕЙ В ПРЕДПРИНИМАТЕЛЬСКУЮ ДЕЯТЕЛЬНОСТЬ	195
Ережепов Куанышбай	
KORXONALAR DAROMADLARI VA XARAJATLARINI BOSHQARISHNI TAKOMILLASHTIRISH.....	198
Aymuxammedova Amina Kakajanovna	
KICHIK BIZNESNI MOLIYALASHTIRISHNING ZAMONAVIY USULLARI	201
Jubanova Bayramgul Aymuratovna	
KNOW YOUR CUSTOMER MECHANISMS AS A TOOL FOR ENHANCING RISK MANAGEMENT SYSTEMS IN COMMERCIAL BANKS	204
Sherzod Fayziyev	



KNOW YOUR CUSTOMER MECHANISMS AS A TOOL FOR ENHANCING RISK MANAGEMENT SYSTEMS IN COMMERCIAL BANKS

Sherzod Fayziyev

**Researcher at Tashkent State University of Economics
Tashkent, Uzbekistan**

Abstract. The article examines the role of the “Know Your Customer” (KYC) mechanism as a key instrument for strengthening risk management systems in commercial banks. The main types of banking risks — credit, operational, and compliance risks — are analyzed, and their interrelation with the effectiveness of customer identification procedures is substantiated. The structural stages of the KYC policy — customer identification, ongoing monitoring of transactions, and reporting of suspicious operations — are examined within the framework of the “prevent–detect–report” model. Based on the study, an integrated compliance control mechanism is proposed, combining AML/CFT monitoring, KYC procedures, sanctions screening, and operational risk indicators within a single digital platform, with the use of artificial intelligence, big data, and blockchain technologies to increase the accuracy of risk assessment. The findings can be applied in improving the risk management and compliance control systems of commercial banks.

Keywords: risk management, commercial banks, Know Your Customer (KYC), compliance risk, anti-money laundering (AML/CFT), customer due diligence, digital platform, artificial intelligence.

Аннотация. В статье рассматривается роль механизма «Знай своего клиента» (Know Your Customer, KYC) как ключевого инструмента укрепления системы управления рисками в коммерческих банках. Проанализированы основные виды банковских рисков — кредитный, операционный и комплаенс-риск, а также обоснована их взаимосвязь с эффективностью процедур идентификации клиентов. Структурные этапы политики KYC — идентификация клиента, постоянный мониторинг операций и сообщение о подозрительных операциях — рассмотрены в рамках модели «предотвратить — выявить — сообщить». На основе исследования предложен интегрированный механизм комплаенс-контроля, объединяющий AML/CFT-мониторинг, процедуры KYC, санкционный скрининг и показатели операционного риска в рамках единой цифровой платформы с использованием технологий искусственного интеллекта, больших данных и блокчейна для повышения точности оценки рисков. Полученные результаты могут быть использованы при совершенствовании систем управления рисками и комплаенс-контроля в коммерческих банках.

Ключевые слова: управление рисками, коммерческие банки, «Знай своего клиента» (KYC), комплаенс-риск, противодействие отмыванию денег и финансированию терроризма (AML/CFT), надлежащая проверка клиента, цифровая платформа, искусственный интеллект.

INTRODUCTION

Credit risks constitute the main part of the total risk portfolio of commercial banks. The expansion of microloans, factoring, and other credit products for individuals imposes an additional risk burden on banks. In particular, insufficiently developed credit scoring systems may lead to an increase in the share of problem loans. Therefore, effective credit risk management is of great importance in ensuring banking stability.

Operational risks are related to internal processes, the human factor, information systems, or external factors, and unlike credit risks, they are not directly associated with customers' solvency. In the context of accelerated digitalization processes, ensuring cybersecurity, improving employees' qualifications, and cautiously introducing new technologies are considered highly relevant. Otherwise, technological failures, cyberattacks, and errors related to the human factor may increase operational losses.

Compliance risks are associated with financial and reputational losses arising as a result of banks' non-compliance with current legislation and regulatory requirements. In particular, failure to comply with international standards, including anti-money laundering requirements, may lead to fines, transaction restrictions, and



reputational damage. Therefore, strengthening compliance control is an important factor in increasing the reliability of the banking system.

A comprehensive approach is required in assessing and managing these risks. In this regard, methods such as credit policy analysis, SWOT analysis, the implementation of advanced scoring models, operational event monitoring, and KPI-based assessment of compliance efficiency are applied. At the same time, the use of artificial intelligence, machine learning, big data, and blockchain technologies significantly increases the accuracy of risk identification and forecasting.

In the context of the increasing importance of preventing financial misconduct, particularly money laundering and financing of terrorism-related activities, banks need to develop effective risk assessment and management models. In this regard, the “Know Your Customer” (KYC) principle is of great importance. It involves in-depth customer identification, analysis of their transactions, and identification of beneficial owners. This system helps reduce legal and reputational risks, reduces the likelihood of banks’ exposure to financial misconduct risks, and creates a solid basis for identifying and controlling risks affecting assets and liabilities as an integral element of the overall risk management system.

When establishing new business relationships with bank customers or when it becomes necessary to verify the reliability of previously established relationships, customer due diligence should be carried out in accordance with the “Know Your Customer” policy (Figure 1).

The customer due diligence process consists of four main structural components, including: recording the necessary information to identify the individual or legal entity carrying out the transaction; recording information for the purpose of identifying the recipient of funds and their representative; verifying their signatures and confirming compliance; and continuously studying the transactions carried out by the customer, as well as regularly reviewing existing business relationships.

The objectives of the “Know Your Customer” policy are expressed in three main stages: prevention, detection, and reporting, as shown in Figure 1.

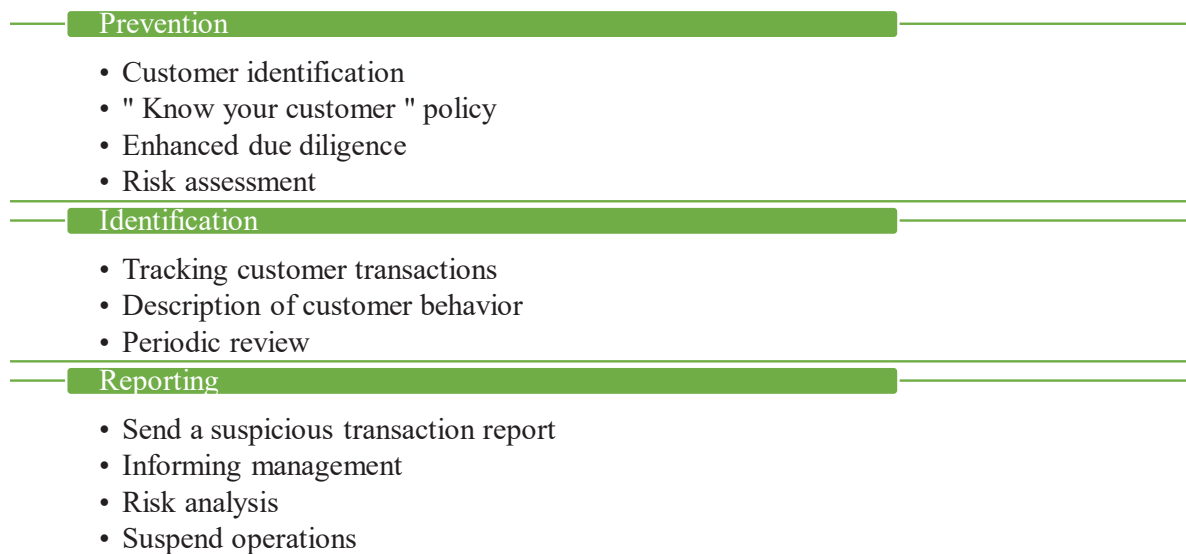


Figure 1. Goals of the “Know Your Customer” Policy¹

Measures are taken to reject transactions involving monetary funds and/or other property and to suspend suspicious operations.

Stage 1 — “Prevention” consists of the following steps: customer identification, implementation of the “Know Your Customer” policy, enhanced due diligence, and risk assessment.

Stage 2 — “Detection” includes the following: monitoring customer transactions, describing customer behavior, and conducting periodic reviews.

Stage 3 — “Reporting” includes sending notifications about suspicious operations, informing management, analyzing risks, and suspending operations.

It was considered appropriate to widely implement real-time transaction monitoring, risk profiling based on artificial intelligence and big data, automated AML/CFT control, sanctions screening, remote identification, and

¹ Source: Developed by the author based on FATF and Basel Committee guidelines.



the “three lines of defense” model as promising areas for improving the compliance control system in commercial banks. The compliance control system may be improved through an integrated management mechanism. Within this mechanism, it is proposed to monitor AML/CFT, “Know Your Customer” (KYC), sanctions monitoring, and operational risk indicators through a single digital platform.

CONCLUSIONS AND SUGGESTIONS

The comprehensive analysis conducted in this study demonstrates that, under the conditions of global financial integration and increasing structural volatility, traditional risk management frameworks require further improvement.

To achieve institutional resilience, banks are expected to gradually move toward dynamic, technology-driven control mechanisms, where “Know Your Customer” (KYC) policies serve as the key foundational element. The research provides a systemic harmonization of credit, operational, and compliance risks, establishing that enhanced customer due diligence and ongoing monitoring of transaction patterns directly mitigate potential financial and reputational exposures.

The primary scientific and practical contributions of this research are summarized as follows:

Quantification of Compliance Risks (KR Index). The study enhances the methodology for compliance risk assessment by introducing an integral risk index (KR). By transforming qualitative behavioral and operational metrics into structured quantitative parameters bounded within a $[0; 1]$ range, the framework establishes actionable risk tiers: low ($0 \leq KR < 0.30$), medium ($0.30 \leq KR < 0.60$), high ($0.60 \leq KR < 0.80$), and very high ($0.80 \leq KR \leq 1$). This grading system acts as an objective, scientifically grounded early-warning mechanism for executive boards to initiate calibrated corrective actions.

Structural Optimization via the KYC “Prevent–Detect–Report” Model. Based on international standards, the operational stages of the KYC architecture have been optimized into a continuous three-tiered lifecycle. The prevention stage solidifies multi-level customer onboarding and deep identification; the detection stage leverages real-time transaction monitoring and behavioral profiling; and the reporting stage automates the internal and external escalation of suspicious transactions. This systematic continuum ensures that risk management shifts from reactive compliance to proactive asset protection.

Conceptualization of a Unified Digital Compliance Platform. To reduce operational inefficiencies and information asymmetry, this paper proposes the integration of AML/CFT monitoring, automated sanctions screening, KYC procedures, and operational risk metrics into a single, unified digital platform. Based on advanced technologies such as artificial intelligence (AI), big data analytics, and blockchain, this centralized infrastructure significantly enhances data accuracy, stabilizes credit scoring, minimizes human error, and optimizes real-time transaction auditing.

Strategic Macroeconomic Projections (ARIMA 2030). The empirical validation of the ARIMA forecasting model, using data from JSCB “Asia Alliance Bank” and “Aloqabank”, underscores a steady upward trend in the financial mobilization indicators of Uzbekistan’s banking sector. Projections indicate that by 2030, aggregate deposits will reach 438,473 billion UZS, while small business loan balances will increase to 509,245 billion UZS. These metrics emphasize the importance of introducing scalable compliance controls capable of securing expanded asset volumes without compromising institutional stability.

In conclusion, the proposed organizational and economic mechanism, anchored by automated KYC execution and the “Three Lines of Defense” governance model, provides a strategic framework for commercial banks. The practical implementation of these findings may contribute to strengthening financial security, enhancing regulatory transparency, increasing investor confidence, and fostering the long-term sustainable development of the national banking ecosystem in an increasingly complex international financial landscape.

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