

INNOVATION SCIENCE AND TECHNOLOGY



Scopus || Electronic journal specializing in Scopus

ISSUE 12



Acceptance of papers **December, 2025**



**Acceptance of
papers**

Published monthly



Topics

economics,
technology, social
sciences



ISSN 3060-5229

**EDITOR-IN-CHIEF:**

Mirzaliyev Sanjar Makhamatjon ugli

DEPUTY EDITOR-IN-CHIEF:

Makhmudov Nosir Makhmudovich
DSc., Prof., Academician

DEPUTY EDITOR-IN-CHIEF:

Ochilov Bobur Bakhtiyor ugli – Senior
lecturer at TSUI

THE SCIENTIFIC-POPULAR ELECTRONIC
JOURNAL **"INNOVATION SCIENCE AND
TECHNOLOGY"** HAS BEEN REGISTERED
UNDER THE NUMBER **C-5669633** BY THE
AGENCY FOR INFORMATION AND MASS
COMMUNICATIONS (AOKA) OF THE
REPUBLIC OF UZBEKISTAN, EFFECTIVE
FROM OCTOBER 9, 2024.

CONTACTS

Phone: **+998 50 737 87 88**

Website: <https://ist-journal.uz>

Email: innovationist2025@gmail.com

The scientific electronic journal "Innovation Science and Technology" has been included in the list of scientific publications recommended for the publication of main scientific results of dissertations for the award of PhD and DSc degrees in economics and technical sciences, in accordance with the Resolution No. 370 of the Presidium of the Higher Attestation Commission of the Republic of Uzbekistan, dated May 8, 2025.

Electronic publication, Issue 12. 630 pages.
Approved for publication on December, 2025.

Editorial board:

Sharipov Kongiratbay Avezimbetovich,
Doctor of Technical Sciences (DSc), Professor



Abdurakhmanova Gulnora Kalandarovna, Doctor of
Economic Sciences (DSc), Professor



Cham Tat Huei,
Doctor of Philosophy (PhD), Professor (Malaysia)



Muhammad Imran Sadiq
Doctor of Philosophy in Economics (PhD), Professor,
Malaysia



Ahmed Aziz Ismail
Doctor of Technical Sciences (DSc),
Professor (Egypt)



Lee Chin
Doctor of Philosophy in Economics (PhD), (Malaysia)



Asongu Simplicie
Doctor of Philosophy in Economics (PhD), Cameroon



Rui Dang
Doctor of Chemistry (DSc), Professor, China



Zahoor Ahmed
Doctor of Philosophy in Economics (PhD), Turkey



Shujaat Abbas
Doctor of Philosophy in Economics (PhD), Russia



Tina A Coffelt
Doctor of Philosophy in Educational Sciences (PhD),
USA



Abdikarimova Dinara Rustamxanovna
Doctor of Economic Sciences (DSc), Professor

Kurbonbekova Mohichehra Turobjonovna
Doctor of Economic Sciences (DSc), Professor

Alimardonov Ilkhom Muzrabshokovich
Doctor of Economic Sciences (DSc), Professor



Razakova Barno Sayfiyevna
Doctor of Philosophy in Economics (PhD)



Khasanov Sarvar Ulugbek ugli
Doctor of Philosophy in Economics (PhD)

CONTENTS

THE THEORETICAL FOUNDATIONS OF APPLYING TAX INCENTIVES FOR INVESTMENTS DIRECTED TOWARD HUMAN CAPITAL	14
Quliyev Begimqul Melikovich	
ECONOMETRIC MODELS OF CASHLESS SETTLEMENTS AMONG ECONOMIC ENTITIES.....	21
Ruzimuradov Shukhrat Khusanovich	
PROSPECTS FOR THE DEVELOPMENT OF TOURISM BRAND MARKETING IN MODERN CONDITIONS (UAE: DUBAI ON THE EXAMPLE OF A CITY).....	26
Ibodova Dilsora Ibodovna	
CREDIT DEFAULT SWAPS AS A WAY TO HEDGE AGAINST FORTHCOMING FUTURE UNCERTAINTIES IN THE DEBT MARKET OF UZBEKISTAN	31
Abduganiev Abdulaziz Alisher o'g'li	
SHOULD THE REGULATION OF THE E-COMMERCE MARKET IN THE REPUBLIC OF UZBEKISTAN BE CARRIED OUT BY THE NATIONAL AGENCY FOR PERSPECTIVE PROJECTS OR THE CENTRAL BANK?	39
Sadikov Aziz Mirsharapovich	
MECHANISM FOR IMPLEMENTING ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN THE OPERATIONS OF COMMERCIAL BANKS IN UZBEKISTAN.....	46
Bakhriddin Berdiyarov	
INNOVATIVE APPROACHES OF SMALL BUSINESSES IN THE INDUSTRY AND CONSTRUCTION SECTORS AND THEIR IMPACT ON EMPLOYMENT.....	53
Ergasheva Nigora Abdigapparovna	
AI-BASED NORMALIZATION METHODOLOGY FOR COLLECTING AND PROCESSING KPI INDICATORS.....	56
Shuhratov Mamurjon Shuhrat o'g'li	
REFORMS AND PROSPECTS FOR THE DEVELOPMENT OF THE PARTICIPATORY BUDGETING INITIATIVE IN UZBEKISTAN	63
Khamidov Khabibullo Hikmatulla ugli	
PROBLEMS OF THE INWARD PROCESSING CUSTOMS REGIME AND WAYS TO ELIMINATE THEM.....	70
Abdullaev Shakhzodbek	
FINANCIAL ANALYSIS OF SMALL BUSINESS AND PRIVATE ENTREPRENEURSHIP IN CONSTRUCTION	74
Musayeva Shoirazimovna	
MEASURES TO ENHANCE THE ROLE AND EFFECTIVENESS OF SMALL BUSINESS IN REGIONAL ECONOMIC DEVELOPMENT.....	80
Ergashev Jamshid Jamoliddinovich	
THEORETICAL AND METHODOLOGICAL FOUNDATIONS FOR IMPLEMENTING INNOVATIVE TECHNOLOGIES IN EDUCATION	84
Alijonova Marjonabonu Jaxongir qizi	
INDIA'S EXPERIENCE IN ENHANCING PUBLIC WELFARE THROUGH THE DEVELOPMENT OF ENTREPRENEURIAL ACTIVITY	88
Aripov Oybek Abdullayevich	
GREEN STRUCTURAL TRANSFORMATION IN UZBEKISTAN: GREEN FINANCE AND ECO-INNOVATION FOR SUSTAINABLE INDUSTRIAL AND AGRICULTURAL DEVELOPMENT.....	93
Egamberdiev Khumoyun	
AGRICULTURAL MANAGEMENT BASED ON INNOVATIVE TECHNOLOGIES AT THE INTERNATIONAL LEVEL: THE EXAMPLE OF UZBEKISTAN.....	101
Bustonov Komiljon Kumakovich	
ANALYSIS OF THE FINANCIAL CONDITION OF ENTERPRISES: ASSESSMENT OF EQUITY EFFICIENCY	110
Umurkul Shukhratovich Fayziev	

IMPROVING THE QUALITY OF ECONOMIC GROWTH THROUGH THE TRANSITION TO THE DIGITAL ECONOMY.....	118
Mamadaliyev Akmaljon	
МЕТОДЫ И МЕХАНИЗМЫ ИССЛЕДОВАНИЯ ПОТРЕБИТЕЛЬСКОГО ПОВЕДЕНИЯ НА ТУРИСТСКОМ РЫНКЕ.....	124
Нурматова Ситора Шавкатовна	
ANALYSIS OF INNOVATION ACTIVITIES.....	133
Alieva Elnara Ametovna	
METHODS AND MECHANISMS FOR STUDYING CONSUMER BEHAVIOR IN THE TOURISM MARKET.....	139
Nurmatova Sitora Shavkatovna	
ALGORITHMS AND METHODS FOR CALCULATING THE AREA OF A GASTRIC ULCER DEFECT USING MODERN MATHEMATICAL TECHNIQUES.....	145
Yusupov Ibrohimbek XXX, Abdusamatova Munira Sultonbek qizi	
UTILIZATION OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN ENTERPRISE MARKETING ACTIVITIES.....	151
Sadikov Shohrux Shukhratovich	
ENSURING THE FINANCIAL SUSTAINABILITY OF HIGHER EDUCATION INSTITUTIONS: STRATEGIC DIRECTIONS, GLOBAL TRENDS, AND POLICY IMPLICATIONS.....	156
Inomiddin Imomov	
THEORETICAL FOUNDATIONS OF THE STRUCTURE OF THE NATIONAL ECONOMY.....	161
Bustonov Mansurjon Mardonakulovich	
IMPORTANT CHARACTERISTICS OF THE DEVELOPMENT OF E-COMMERCE SERVICES.....	169
Jurakulov Shohruh Bahtiyorovich	
AGRICULTURE PROMOTION AND DEVELOPMENT IN MOUNTAIN AND MOUNTAIN REGIONS.....	173
Abdulxayeva Gulshan Maxmudovna	
IMPROVING MECHANISMS FOR ENHANCING ECONOMIC EFFICIENCY IN SERVICE ENTERPRISES.....	178
Seytimbetov Kabul Serimbetovich	
INTEGRATION OF INTELLIGENT CONTROL IN DRYING SYSTEMS: PROCESS OPTIMIZATION THROUGH SENSORS, ARTIFICIAL INTELLIGENCE, AND MODULAR DRYING.....	184
Yangiboyeva Raxbaroy Mashrabboy qizi	
THEORETICAL MODELS AND CONCEPTS OF ECONOMIC DEVELOPMENT IN THE ENERGY SECTOR.....	190
Nigmatullaeva Gulchekhra Nurullaevna	
STATISTICAL ANALYSIS OF REGIONAL ECONOMIC POTENTIAL (A CASE STUDY OF NAMANGAN REGION).....	196
Tursinbayev Azizbek Nabijon o'g'li, Sirojiddinov Kamoliddin Ikromiddinovich	
DIRECTIONS FOR DEVELOPING INVESTMENT AND EXPORT IN REMOTE SERVICE ENTERPRISES.....	203
Uzakov Ortik Shaymardanovich	
SPECIFIC FEATURES OF ENTREPRENEURSHIP IN INCREASING THE INCOME OF THE POPULATION IN THE REGION.....	207
Kuldasheva Maftuna Musurmon kizi	
KEY FACTORS OF ATTRACTING INVESTMENT THROUGH SUBSIDIES AND INVESTMENTS TO INCREASE AGRICULTURAL CROP PRODUCTION IN UZBEKISTAN.....	211
Mamatkulova Nadira Makkamovna	
RAQAMLI MARKETING VA INNOVATSION TEXNOLOGIYALAR ASOSIDA EKOTIZIM SAMARADORLIGINI OSHIRISH USULLARI.....	216
Sobirov Azizbek Avazbekovich	
WAYS TO IMPROVE THE STATISTICAL ASSESSMENT OF FRUIT AND VEGETABLE PRODUCTION PROCESSES AND EXPORT POTENTIAL IN THE REPUBLIC OF UZBEKISTAN.....	223
Anorboeva Bakhtijamol Daniyar kizi	

THE IMPACT OF DEGRADATION ON THE OPERATIONAL CHARACTERISTICS OF PHOTOVOLTAIC MODULES UNDER SHARPLY CONTINENTAL CLIMATIC CONDITIONS	229
Qurbanov Yunus Murtaza o'g'li	
INTEGRATED NEW MEDIA OPERATION MODEL FOR INTELLIGENT TALENT ASSESSMENT PLATFORMS: THE PATH OF QR CODE ACTIVATION AND CONTENT-DRIVEN ENGAGEMENT.....	235
Wang Biao	
METHODOLOGICAL FOUNDATIONS FOR SHAPING THE CREATIVE ACTIVITY OF YOUNGER PUPILS IN SOLVING MATHEMATICAL PROBLEMS	239
Dzhurakulova Adolat Khalmuratovna	
SOLIDWORKS-BASED MODELING OF AN AIR-BLOWING SYSTEM TO ENSURE HIGH-QUALITY FIBER REMOVAL FROM SAW TEETH	247
Mirzakarimov Mirsharoffiddin Mirzaabdurahimovich	
THEORETICAL STUDY OF TEMPERATURE AND THERMAL PHENOMENA IN MECHANICAL CUTTING OF WHITE CAST IRON.....	256
Allanazarov Akmal Abdulxaqovich	
THEORETICAL AND METHODOLOGICAL FOUNDATIONS OF SUSTAINABLE DEVELOPMENT OF THE REGIONAL ECONOMY	262
Turdiyev Ulug'bek Qayumovich	
THE INTERRELATIONSHIP BETWEEN MIGRATION AND THE INDUSTRIAL ECONOMY	266
Khusanbek Begmatov	
THE IMPACT OF ESG PRINCIPLES ON THE HOTEL INDUSTRY	271
Khusenova Mekhrangiz	
CURRENT STATUS OF INDUSTRIAL PRODUCTION AND SERVICES MARKET IN KASHKADARYA REGION.....	276
Norov Murodjon Makhmudovich	
DEVELOPMENT OF AN ARTIFICIAL INTELLIGENCE-BASED CYBERSECURITY SYSTEM FOR THE AUTOMATIC DETECTION OF FAKE FINANCIAL RECEIPTS, PHISHING URLS, AND MALICIOUS APK FILES.....	284
Shermatov Axlidin Sharobiddin o'g'li	
WAYS TO INCREASE REVENUES IN COMMERCIAL BANK OPERATIONS	287
Ostonaqulova Gulchehraxon Muhammadyoqub qizi	
РОЛЬ СВОБОДНЫХ ЭКОНОМИЧЕСКИХ ЗОН В РЕГИОНАЛЬНОМ РАЗВИТИИ И ЗАРУБЕЖНЫЙ ОПЫТ	301
Файзиева Ширин Шодмоновна	
RAQAMLI IQTISODIYOTGA O'TISH SHAROITIDA IQTISODIY O'SISH OMILLARINING TA'SIRINI BAHOLASH METODOLOGIYASI.....	307
Bustonov Mansurjon Mardonakulovich	
FINTECH TRENDS: NEW TOOLS FOR ATTRACTING FINANCING IN THE CONTEXT OF DIGITAL TRANSFORMATION	313
Madjitova Lolakhon Lazizovna	
CHALLENGES AND PROSPECTS FOR THE DEVELOPMENT OF E-COMMERCE IN UZBEKISTAN.....	317
Toshpulatov Akhror Tukhtamurod ugli	
STRATEGIC DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN UZBEKISTAN	326
Rustamov Foziljon	
TYPES AND MEANS OF ADVERTISING IN THE FIELD OF TOURISM	335
Bahriyeva Zarina Nasimovna	
INTELLECTUALIZATION OF TECHNICAL MEANS FOR CONTROLLING TECHNOLOGICAL REFINING PROCESSES.....	340
Ruziyev Umidjon Abdimajitovich	
NECESSITY OF ENSURING AND INCREASING THE COMPETITIVENESS OF PLACEMENT MEANS	349
Sherkulov Dilshod Jurakulovich	
YASHIL IQTISODIYOT VA MOLIYAVIY INKLYUZIYANING O'ZARO BOG'LIQLIK NAZARIYALARI.....	354
Adashaliyev Baxtiyorjon Valisher o'g'li	

THE IMPORTANCE OF THE AUDIT OF LEASING OPERATIONS ON FARMS OF THE REPUBLIC OF UZBEKISTAN	359
Tursunov Ulugbek Sativoldievich	
METHODOLOGY DEVELOPMENT RETAIL MARKETING AND TRADING SYSTEM.....	365
Makhmatkulov Golibjon Kholmuminovich	
NECESSITY OF ENSURING AND INCREASING THE COMPETITIVENESS OF PLACEMENT MEANS	369
Sherkulov Dilshod Jurakulovich	
ENVIRONMENTAL FISCAL POLICY AS A DRIVER OF GREEN GROWTH AND EMPLOYMENT IN CENTRAL ASIA: EMPIRICAL EVIDENCE	374
Rakhmatova Zilola Yurevna	
ON THE ISSUE OF CALCULATING THE POWER REQUIRED TO HEAT THE EDGES OF THE PIPE BILLET TO THE WELDING TEMPERATURE.....	379
Zairkulov Elyor Yoqubjon o'g'li	
STATISTICAL ASSESSMENT OF REGIONAL ELECTRICITY GENERATION VOLUMES	385
Doliev Shokhabbos Kulmurat ugli	
ANALYSIS OF ICT APPLICATION IN UZBEKISTAN'S TOURISM BASED ON EMPIRICAL RESEARCH	389
Nazarov Khusanbek Avazbek ogli	
METHODOLOGY FOR FORECASTING AND ANALYZING MANAGEMENT ACCOUNTING INDICATORS AT AN ENTERPRISE	395
Minutdinova Liliya Tagirovna	
WELLNESS TOURISM AS AN ESSENTIAL COMPONENT OF HEALTH TOURISM	402
Tashtayeva Saida Kahharovna	
THE EXPERIENCE OF GERMANY IN DEVELOPING SMALL AND MEDIUM ENTERPRISES.....	409
Annaklichev Saxi Saparmuxamedovich	
ANALYSIS OF THE APPLICATION OF THE INTERNATIONAL STANDARD ON AUDITING "ANALYTICAL PROCEDURES" IN NATIONAL AUDIT ACTIVITIES	416
Tajekeev Ziyatdin Kobeyzinovich	
ORGANIZATIONAL AND ECONOMIC FOUNDATIONS OF GREEN ENTERPRISE DEVELOPMENT IN ENSURING REGIONAL ENVIRONMENTAL SAFETY	421
Khamidillo Odilov	
A REALIST-POSITIVIST FRAMEWORK FOR ANALYSING MERGERS AND ACQUISITIONS UNDER ECONOMIC POLICY UNCERTAINTY	429
Zakhidov Azizbek Rustamovich	
DEVELOPING MATHEMATICAL MODELS TO SIMULATE THE DYNAMIC BEHAVIOR OF SEPARATION PROCESSES, CONSIDERING THE IMPACT OF EXTERNAL FACTORS	436
Abdulleva Kamola Rustamovna	
THEORETICAL FOUNDATIONS OF IMPLEMENTING DIGITAL TECHNOLOGIES IN THE TRANSFORMATION OF BANKS.....	445
Umarova Malika Baxtiyarovna	
ON THE ISSUE OF RESEARCH AND DEVELOPMENT OF A SLAG-FORMING BASE FOR ELECTRODE COATINGS FOR WEAR-RESISTANT SURFACING.....	451
Sadikov Jaxongir Nasidjanovich	
MODELING OF HEAT FLOWS IN GAS-FIRED CHAMBER FURNACES.....	456
Rajabov Azamat Toirovich	
DEVELOPMENT OF A MIMO MODEL OF AZEOTROPIC DISTILLATION	462
Shamsutdinova Vinera Khafizovna	
THEORETICAL FOUNDATIONS OF THE INTERACTION OF A COTTON TUFT WITH A SCREW CONVEYOR AND A MESH SURFACE.....	468
Matyaqubova Jumagul Bakhtiyarovna	
FORECASTING LIQUIDITY AND SOLVENCY INDICATORS BASED ON ARTIFICIAL INTELLIGENCE	473
Zaynutdinov Ismoil Samariddin o'g'li	
MODELS FOR PREDICTING THE MANAGEMENT OF COMPLEX TECHNOLOGICAL PROCESSES AND PRODUCTIONS	477
Gulyamov Shukhrat Mannapovich	

WAYS TO ADJUST LAND RESOURCE USE MECHANISMS FOR FARMERS BASED ON THE EXPERIENCE OF FOREIGN COUNTRIES.....	482
Akhmatov Abutolibkhon Ochilkhon oglu	
STATE SUPPORT MECHANISMS FOR THE DEVELOPMENT OF THE MACHINE-BUILDING INDUSTRY	487
Xursandov Komiljon Makhmatkulovich	
EMPIRICAL ANALYSIS OF TOURISM FLOW FORECASTING IN CENTRAL ASIA BASED REGRESSION MODELS	491
Suratova Mokhirakhon Shavkat Kizi	
THE ROLE OF LOANS IN THE DEVELOPMENT OF THE REGIONAL ECONOMY.....	498
Meylikov Fazliddin Abduhalim o'g'li, Valiev Oybek Shukhrat ugli	
PROPAGATION OF SMALL MOTIONS IN A TWO-LAYER DISPERSE MEDIA FLOW.....	503
D. S. Yakhshibaev	
FURTHER IMPROVEMENT OF THE AUTOMATION SYSTEM OF ELECTRONIC SERVICES AND TOURIST PERMITS.....	511
Najmiddinov Sultan Nurali ugli	
THE NECESSITY OF DISCLOSING INFORMATION ON SELLING EXPENSES IN ACCOUNTING REPORTS OF PHARMACEUTICAL ENTERPRISES	516
Xudaynazarova Dilnoza Gafurovna	
INVESTMENT FINANCIAL MECHANISMS AND THEIR ROLE IN THE NATIONAL ECONOMY	521
Karjavova Khurshida Abdumalikovna	
WESTERN COUNTRIES' EXPERIENCES IN ENSURING THE FINANCIAL PERFORMANCE OF BANKING ACTIVITIES.....	526
Alimjanova Dilrabo Sobirjanovna	
MAIN FEATURES OF DIVIDEND POLICY IN COMMERCIAL BANKS.....	530
Aliyev G'ulomnozir Maxamatjonovich	
OPTIMIZATION OF THE DESIGN OF AN ENERGY- AND RESOURCE-EFFICIENT PRESSING DEVICE FOR CONVERTING DRIED LEAVES, FALLEN FOLIAGE, AND PLANT RESIDUES INTO LOCALLY PRODUCED ORGANIC FERTILIZERS.....	536
Toirova Nuriya Abdiyevna, Toirov Murtoza Shavkidinovich, Urinova Xulkar Shokirovna	
FUNDAMENTALS OF FORMING ACCOUNTING POLICIES FOR LEASING COMPANIES BASED ON INTERNATIONAL FINANCIAL REPORTING STANDARDS	540
Baxadirov Alisher Komilovich	
THE USE OF DUE DILIGENCE PROCEDURES TO ENSURE TRANSPARENCY OF FINANCIAL REPORTING IN JOINT-STOCK COMPANIES	545
Prokudina Kristina Aleksandrovna	
INTERNATIONAL EXPERIENCE: EXAMPLES OF HISTORICAL CITIES (FLORENCE, LVIV, GRANADA, AND OTHERS)	550
Radjabova Mavluda Ergash qizi	
APPLYING LINEAR PROGRAMMING TO ANALYZE THE STATE OF COMMODITY AND RAW MATERIAL RESOURCES IN INDUSTRIAL ENTERPRISES	554
Beknazarov Farxod Abduvaxidovich, Usmanov Shakhzod Shokhrukhovich	
INTEGRATED EDUCATION MODEL IN TEACHING WATER-SAVING IRRIGATION TECHNOLOGIES.....	561
Shokhimardanova Niginabonu Shavkatovna	
IMPACT OF INFLATIONARY PROCESSES ON PROBLEM LOANS.....	566
Tojiyev Sardor Dilmurod ugli	
DIRECTIONS FOR ORGANIZING EFFECTIVE MANAGEMENT IN GRAIN PRODUCT ENTERPRISES.....	572
Kurbanova Dildora Abduraxmanovna	
THE OIL AND GAS INDUSTRY AS A BACKBONE SECTOR OF UZBEKISTAN'S ECONOMY	576
Salomova Sarvinoz Salimovna	
BEHIND THE BENCH: THE CURRENT SITUATION OF PURCHASING LABORATORY EQUIPMENT IN UZBEKISTAN	581
Kabashev Tairjon	

ISSUES OF IMPROVING AGRICULTURAL INSURANCE IN UZBEKISTAN	586
Shennayev Xo'jayor Musurmanovich	
THE LENDING SYSTEM IN COMMERCIAL BANKS AND THE CAUSES OF NON-PERFORMING LOANS.....	590
Shokhista K. Kholiyorova, Marjona O. Barnoqulova	
INNOVATIVE FINANCIAL INSTRUMENTS FOR FINANCING RENEWABLE ENERGY AND GREEN PROJECTS: CONCEPTUAL FOUNDATIONS	595
F. Nishonov	
DATA TRANSMISSION CONFIDENTIALITY CHALLENGES IN THE INTERNET OF THINGS.....	604
Mardiyev Ulugbek	
CURRENT ISSUES IN ADAPTING THE ACCOUNTING SYSTEM OF UZBEKISTAN TO INTERNATIONAL FINANCIAL REPORTING STANDARDS	612
Xudoyberdiyev Odiljon Egamberdi o'g'li	
COST ANALYSIS IN FRUIT AND VEGETABLE PROCESSING PLANTS.....	618
Rahmatullayev Mirjalol Khatam ogli	
ANALYSIS OF EXPERIENCE IN ORGANIZING AND OPERATING STUDENT INNOVATION DEVELOPMENT CENTERS IN DEVELOPED COUNTRIES	624
Mirzaliev Sanjar Makhamatjan ogli	
INTRODUCTION OF A NEW SYSTEM OF WORKING ACCOUNTS FOR LIABILITY ACCOUNTING IN ICT SECTOR ENTERPRISES BASED ON INTERNATIONAL STANDARDS	629
Amirov Askar Aktamovich	
USING TAX ADMINISTRATION INSTRUMENTS TO REDUCE THE TAX ON BUSINESS ENTITIES.....	632
Azizbek Khurramov	

USING TAX ADMINISTRATION INSTRUMENTS TO REDUCE THE TAX ON BUSINESS ENTITIES

Azizbek Khurramov

PhD, Independent researcher

Research Center "Scientific bases and issues of economic development Uzbekistan" under Tashkent State University of Economics

Abstract: This article examines the role of tax administration instruments in reducing the tax burden on business entities and improving the overall entrepreneurial environment. In modern economic conditions, the efficiency of tax administration is not limited to tax collection, but also includes simplifying tax procedures, reducing compliance costs, increasing transparency, and encouraging voluntary tax compliance. The study focuses on the importance of digital tax services, risk-based tax control, electronic reporting systems, tax incentives, and information exchange mechanisms between taxpayers and tax authorities. The article argues that the effective use of these instruments can reduce administrative pressure on businesses, improve the predictability of tax obligations, and create favorable conditions for sustainable business development. Special attention is given to the need for balancing fiscal interests of the state with the financial capacity of business entities. The findings suggest that improving tax administration mechanisms contributes not only to reducing the tax burden, but also to strengthening tax discipline, expanding the tax base, and increasing trust between the state and entrepreneurs.

Keywords: tax administration, tax burden, business entities, digital taxation, tax compliance, tax incentives, risk-based tax control, entrepreneurial environment, tax policy, electronic reporting.

Annotatsiya: Mazkur maqolada soliq ma'muriyatchiligi instrumentlarining tadbirkorlik subyektlari zimmasidagi soliq yukini kamaytirish va umumiy tadbirkorlik muhitini takomillashtirishdagi o'rni tahlil qilinadi. Zamonaviy iqtisodiy sharoitda soliq ma'muriyatchiligining samaradorligi faqat soliqlarni yig'ish bilan cheklanib qolmay, balki soliq tartib-taomillarini soddalashtirish, soliq majburiyatlarini bajarish bilan bog'liq xarajatlarni kamaytirish, shaffoflikni oshirish hamda ixtiyoriy soliq intizomini rag'batlantirishni ham o'z ichiga oladi. Tadqiqotda raqamli soliq xizmatlari, riskga asoslangan soliq nazorati, elektron hisobot tizimlari, soliq imtiyozlari hamda soliq to'lovchilar va soliq organlari o'rtasidagi axborot almashinuvi mexanizmlarining ahamiyatiga alohida e'tibor qaratilgan. Maqolada ushbu instrumentlardan samarali foydalanish biznes subyektlariga nisbatan ma'muriy bosimni kamaytirishi, soliq majburiyatlarining prognoz qilinishini yaxshilashi hamda tadbirkorlik faoliyatining barqaror rivojlanishi uchun qulay sharoit yaratishi asoslab berilgan. Shuningdek, davlatning fiskal manfaatlarini bilan tadbirkorlik subyektlarining moliyaviy imkoniyatlari o'rtasida muvozanatni ta'minlash zarurligi ta'kidlangan. Tadqiqot natijalari shuni ko'rsatadiki, soliq ma'muriyatchiligi mexanizmlarini takomillashtirish nafaqat soliq yukini kamaytirishga, balki soliq intizomini mustahkamlashga, soliq bazasini kengaytirishga va davlat hamda tadbirkorlar o'rtasidagi ishonchni oshirishga ham xizmat qiladi.

Kalit so'zlar: soliq ma'muriyatchiligi, soliq yuki, tadbirkorlik subyektlari, raqamli soliqqa tortish, soliq intizomi, soliq imtiyozlari, riskga asoslangan soliq nazorati, tadbirkorlik muhiti, soliq siyosati, elektron hisobot.

Аннотация: В данной статье рассматривается роль инструментов налогового администрирования в снижении налоговой нагрузки на субъекты предпринимательства и совершенствовании общей предпринимательской среды. В современных экономических условиях эффективность налогового администрирования не ограничивается только сбором налогов, но также включает упрощение налоговых процедур, сокращение издержек соблюдения налоговых требований, повышение прозрачности и стимулирование добровольного соблюдения налогового законодательства. В исследовании особое внимание уделено значению цифровых налоговых услуг, риск-ориентированного налогового контроля, систем электронной отчетности, налоговых льгот и механизмов информационного обмена между налогоплательщиками и налоговыми органами. В статье обосновывается, что эффективное использование данных инструментов способствует снижению административного давления на бизнес, повышению предсказуемости налоговых обязательств и созданию благоприятных условий для устойчивого развития предпринимательства. Особое внимание уделяется необходимости обеспечения баланса между фискальными интересами государства и финансовыми возможностями субъектов предпринимательства. Результаты исследования показывают, что совершенствование механизмов налогового администрирования

способствует не только снижению налоговой нагрузки, но и укреплению налоговой дисциплины, расширению налоговой базы и повышению доверия между государством и предпринимателями.

Ключевые слова: налоговое администрирование, налоговая нагрузка, субъекты предпринимательства, цифровое налогообложение, соблюдение налоговых обязательств, налоговые льготы, риск-ориентированный налоговый контроль, предпринимательская среда, налоговая политика, электронная отчетность.

INTRODUCTION

In a market economy, the effective operation of business entities directly depends not only on the level of tax rates, but also on the simplicity, transparency and predictability of the process of fulfilling tax obligations. Therefore, tax administration is an important institutional element of the business environment. Practice shows that even a relatively moderate tax burden can create significant administrative costs for business activities if the process of submitting tax reports, preparing documents, passing inspections and communicating with tax authorities is complicated.

Although the main task of tax administration is to ensure stable revenues to the state budget, modern approaches interpret its role much more broadly. In particular, tax administration should serve to increase taxpayers' legal awareness, increase voluntary compliance, reduce tax disputes, bring economic activity into the formal sector, and strengthen trust between business and the state. Such an approach does not deny the control function of tax authorities, but rather requires its organization on a purposeful, fair, and analytical basis.

The quality of tax administration for business entities is reflected in several dimensions. First, the time and costs spent on fulfilling tax obligations should be as low as possible. Second, tax legislation and practical requirements should be understandable for the entrepreneur. Third, the criteria for control measures applied by tax authorities should be known in advance, consistent and transparent. Fourth, the taxpayer should be guaranteed the opportunity to correct errors, obtain explanations and appeal.

In Uzbekistan, in recent years, the modernization of the tax system, the expansion of electronic services, the strengthening of digital communication with taxpayers, and the reduction of administrative pressure on business have become urgent issues. Electronic invoices, online cash registers, personal accounts, automated reporting systems, and data exchange mechanisms are taking tax administration to a new level. However, if the external appearance of digitalization is not reinforced by its internal functional coherence, convenience for the entrepreneur will not be sufficiently formed.

The purpose of this article is to scientifically substantiate the priority areas for improving tax administration in the business environment. The study theoretically reveals the impact of tax administration on the business environment, analyzes modern approaches used in international experience, summarizes existing problems in the conditions of Uzbekistan, and develops proposals for the formation of a business-friendly, transparent, and effective tax administration model.

REVIEW OF LITERATURE ON THE SUBJECT

Tax administration is increasingly recognized not only as a mechanism for revenue collection, but also as an important instrument for improving the business environment, reducing administrative tax burdens, and supporting sustainable economic growth. In recent years, international organizations and scholars have paid significant attention to the modernization of tax administration systems through digitalization, risk-based management, and simplified compliance procedures aimed at reducing costs for business entities.

Aslett, González, Hamilton, and Pecho (2024) emphasized the growing importance of analytical tools in modern tax administration systems. Their study highlighted that the use of compliance risk management, big data analytics, and digital monitoring technologies allows tax authorities to improve control efficiency while simultaneously reducing unnecessary administrative pressure on compliant taxpayers. The authors argued that risk-based tax administration systems contribute to lower compliance costs and reduce the time businesses spend dealing with tax procedures.

Begiashvili (2020) analyzed the main elements of improving tax administration and examined the impact of electronic services, transparency, and institutional efficiency on entrepreneurial activity. According to the author, simplifying administrative tax procedures increases voluntary tax compliance among business entities and contributes to reducing the shadow economy. The study also stressed the importance of strengthening communication and information exchange mechanisms between taxpayers and tax authorities.

Corbacho, Cibils, and Lora (2013) investigated the role of taxation and tax administration in economic development. The authors argued that effective tax administration creates a balance between the fiscal interests of the state and the financial capacity of businesses. Their research interpreted tax administration not only as a revenue collection mechanism, but also as a tool for improving the investment climate, supporting

entrepreneurship, and stimulating economic growth. The study further demonstrated that electronic filing systems, automated monitoring, and service-oriented tax administration significantly reduce administrative costs for firms.

Dabla-Norris, Misch, Cleary, and Khwaja (2017) provided empirical evidence on the relationship between tax administration and firm performance in emerging and developing economies. Their findings showed that complicated and inefficient tax administration negatively affects business productivity and investment activity. In contrast, transparent and digitalized tax systems reduce compliance costs and improve the operational efficiency of firms. The authors particularly emphasized that reducing administrative burdens for small and medium-sized enterprises plays an important role in encouraging business activity and improving economic performance.

The International Monetary Fund (2015) analyzed current challenges in revenue mobilization and improving tax compliance. The report highlighted that the introduction of user-friendly electronic tax services, integrated databases, and risk-based audit systems can substantially improve the effectiveness of tax administration. It was also noted that reducing the cost of tax compliance positively influences business development and increases voluntary compliance among taxpayers.

The OECD (2022) provided comparative information on tax administration systems in both advanced and emerging economies. The report demonstrated that countries with highly digitalized tax administration systems tend to achieve higher efficiency in tax collection while significantly reducing administrative costs for businesses. According to the OECD, electronic reporting systems, automated control mechanisms, and remote tax services are among the most important instruments for improving the business environment and enhancing the effectiveness of tax administration.

Overall, the reviewed literature demonstrates that modern tax administration instruments play a significant role not only in strengthening fiscal capacity, but also in reducing the administrative tax burden on business entities and creating a more favorable entrepreneurial environment. In particular, digitalization, risk-based control, electronic services, and integrated information systems are considered key directions for improving tax administration efficiency and supporting sustainable business development.

RESEARCH METHODOLOGY

The research used the methods of scientific-abstract, systematic analysis, comparative analysis, institutional approach and logical generalization. Tax administration was studied as an institutional system inextricably linked with the business environment. In this case, the activities of tax authorities, taxpayer obligations, electronic services, control mechanisms, voluntary compliance and tax risk management were interpreted as an interconnected system.

The information base of the study was formed by scientific and practical sources published by the OECD, IMF, World Bank and international tax administration. These sources cover a wide range of issues such as digitalization of tax administration, management of compliance risks, reduction of taxpayer costs, improvement of service quality and optimization of audit selection. The study analyzed these approaches from the perspective of practical needs related to the business environment of Uzbekistan.

The analysis in the article was conducted mainly qualitatively. The impact of tax administration on the business environment was assessed based on the following criteria: ease of fulfilling tax obligations; degree of digitization of tax reports and payments; risk-based control and inspections; legal certainty for the taxpayer; quality of information exchange between tax authorities and entrepreneurs; opportunities to reduce tax disputes and administrative costs.

The comparative analysis examined elements such as service-oriented management, segmented taxpayer policies, early warning mechanisms, automated compliance checks, e-advisory services, and risk profiles, which are widely used in countries with developed tax administrations. These elements were assessed in relation to the characteristics of business entities' activities, information capabilities, and accounting capacity.

The institutional approach has made it possible to view tax administration as a system that regulates trust, commitment, and cooperation between the state and business. According to this approach, the tax authority is not only a regulatory entity, but also an institution that helps entrepreneurs form the right tax behavior, prevents errors in advance, and encourages legal activity.

ANALYSIS AND RESULTS

The results of the study show that the effectiveness of tax administration in the business environment depends on three main factors: first, the simplicity of the tax compliance process; second, the fairness and risk-based nature of the control system; and third, the service-oriented activities of tax authorities. These factors

are directly related to each other, and a problem in any of them creates additional costs, uncertainty and legal risks for business entities.

The first conclusion is that digitalization is central to improving tax administration. Digital tax services simplify the processes of reporting, making payments, issuing invoices, tracking tax debts, and communicating with tax authorities. However, digitalization should not be limited to simply converting existing complex processes into electronic form. It should ensure functional integration between business processes, banking information, accounting systems, and tax authorities' databases.

- tax control the transition to a risk- based model will significantly improve the business environment. In the traditional approach, almost the same control measures can be applied to all taxpayers. This creates an excessive administrative burden even for disciplined entrepreneurs. In the risk-based approach, tax authorities focus inspection resources on high-risk transactions, suspicious documents, inconsistent calculations, and activities with a high probability of tax evasion.

- tax administration as the service function increases, voluntary tax discipline increases. In order for an entrepreneur to properly fulfill his tax obligations, he must understand the legislation, quickly obtain the necessary information, conveniently use electronic services, and have the opportunity to correct errors before they are punished. Therefore, modern tax authorities must become not only a supervisory agency, but also an institution that advises, explains, and cooperates with taxpayers.

- electronic invoicing, online cash register techniques, and automated data exchange increase transparency in the business environment. Such systems provide near-real-time information on turnover, the value-added tax chain, and purchase and sale transactions. As a result, it is possible to reduce fraudulent transactions, identify cases of tax base evasion, and strengthen discipline in settlements between business entities.

- entrepreneurship in the environment for tax administration to be effective, it is necessary to move from a 'single control' model to a 'segmented approach' model. It is not effective to apply the same administrative requirements to large enterprises, small businesses, individual entrepreneurs, newly established entities and high-risk sectors. Each group has different tax risks, information capabilities, accounting capacity and administrative costs.

- tax administration entrepreneurship the impact on the environment is both direct and indirect. The direct impact is reflected in the costs of filing tax returns, making payments, undergoing inspections, and processing documents. The indirect impact is reflected in the investment decisions of entrepreneurs, their desire to expand their businesses, their motivation to work in the formal sector, and their trust in government institutions.

- tax administration the human factor is also important in improving the quality of tax administration. Digital systems help to identify complex situations, sort out risks and reduce errors. However, understanding the specifics of business activities, communicating with taxpayers, resolving disputes amicably and exercising professional judgment are determined by the qualifications of tax authorities. Therefore, technological modernization must be carried out in parallel with increasing human resources capacity.

Based on the results of the analysis, the main areas of tax administration impacting the business environment are summarized as follows (Table 1):

Table 1. Main Directions of Tax Administration Improvement and Their Impact on the Business Environment¹

Direction	Impact on the business environment	Expected result
Digitization	Reduces reporting, payment, and document management costs	Time savings and increased transparency
Risk-based control	Focuses investigations on high-risk cases	Reduction of unreasonable administrative pressure
Service approach	Strengthens taxpayer advice and explanation	Increased voluntary tax discipline
Segmented management	Provides a tailored approach to different business groups	Fair and flexible administration

The issue of improving tax administration in the business environment is not just a technical or organizational issue. It is, first of all, a question of institutional trust between the state and business. If an entrepreneur perceives the tax authority only as a punitive and inspecting body, then compliance with tax obligations often becomes mandatory. On the contrary, if the tax authorities operate in a transparent, predictable and consultative manner, a culture of voluntary compliance among entrepreneurs will be strengthened.

In the conditions of Uzbekistan, the digitalization of tax administration can bring significant positive

¹ Source: Author's own elaboration.

results. Electronic services and automated information exchange reduce time costs for businesses. However, digitalization alone is not enough. If electronic systems are complex, incomprehensible, or have frequent technical failures, they will become an additional burden for business entities, not a relief. Therefore, user experience, system stability, data protection, the convenience of personal accounts, and the possibility of two-way communication with the taxpayer are important in digitalization.

The development of risk-based control in tax administration is also relevant. A risk-based system protects entrepreneurs from unreasonable inspections and helps to effectively direct the resources of tax authorities. However, the risk criteria must be transparent, understandable and fair. An entrepreneur must know why he fell into a high-risk category, have the opportunity to correct mistakes and prove that he is a disciplined taxpayer. Otherwise, the risk system can become a source of uncertainty for business.

Another aspect of tax administration in the business environment important aspect - the quality of tax legislation explanations. Small businesses often have difficulty interpreting complex tax regulations on their own. This can lead to errors, fines, or excessive costs for informal consulting services. Therefore, tax authorities should develop simple-language guides, interactive calculators, video guides, industry-specific question-and-answer databases, and quick consultation channels.

Taxpayer incentives are also important in improving tax administration. For example, reducing the number of inspections for compliant entrepreneurs, expediting tax refunds, automatic recognition of overpayments, and early warning and advice mechanisms for tax arrears will increase voluntary compliance. This approach is based on the principle of prevention rather than punishment.

According to the scientific approach developed in the article, improving tax administration in the business environment in Uzbekistan should be carried out in several integral directions. First, it is necessary to gradually transition tax administration from a 'control-oriented model' to a 'service and compliance incentive model'. Second, it is necessary to expand risk-based analysis in tax control, but make risk criteria and results understandable for entrepreneurs. Third, it is necessary to form a single tax information space by integrating electronic invoices, online cash registers, bank data and customs information.

Fourth, simplified reporting, automatic reminders, advance error detection and self-correction mechanisms for small businesses should be introduced. Fifth, it is necessary to improve the skills of tax authorities in digital analytics, communication, understanding of business processes and professional ethics. Sixth, pre-trial resolution of tax disputes, appeal mechanisms and systems for protecting the rights of entrepreneurs should be strengthened.

Based on the results of the discussion, the final effect of improving tax administration should be assessed not only by increasing budget revenues, but also by the legalization of the activities of business entities, increased investment activity, reduction of the shadow economy, and strengthening business confidence in state institutions. In this sense, tax administration is not only an administrative tool of fiscal policy, but also an institutional factor of economic development.

CONCLUSIONS AND SUGGESTIONS

Improving tax administration in the business environment is one of the important conditions for ensuring economic growth, budget stability and business activity. The results of the study showed that the effectiveness of tax administration is determined not by tax rates or the strictness of fiscal control, but by the simplicity, transparency, fairness and digital convenience of the tax compliance process.

Modern tax administration should not be focused on punishing entrepreneurs, but on facilitating their correct and timely fulfillment of tax obligations. To this end, the principles of a service approach, risk-based control, data analytics, digital services, taxpayer segmentation, and legal certainty should be a priority in the activities of tax authorities.

The most important areas for improving tax administration in Uzbekistan include improving the quality of electronic services, simplifying tax obligations for business entities, making the risk-based audit system more transparent, strengthening understandable advice and support mechanisms for small businesses, ensuring fair use of electronic invoicing and data exchange systems, and developing procedures for quick and impartial resolution of tax disputes.

In general, improving tax administration is a direct institutional tool for improving the business environment. Effective tax administration provides the state with stable revenues, and for entrepreneurs it provides legal certainty, reduced administrative burdens, and the opportunity to conduct competitive business. Therefore, tax administration reforms should always be carried out in harmony with the real needs of business entities, the capabilities of digital infrastructure, and the principles of fair supervision.

REFERENCES:

1. Aslett, J., González, G., Hamilton, S., & Pecho, M. (2024). Tax Administration: Essential Analytics for Compliance Risk Management. International Monetary Fund.
2. Begiashvili, R. (2020). Improving tax administration important elements. *Globalization and Business*, 9, 104-110.
3. Corbacho, A., Cibils, V., & Lora, E. (2013). Making the Most of Tax Administration. In *More than Revenue: Taxation as a Development Tool*. Palgrave Macmillan.
4. Dabla-Norris, E., Misch, F., Cleary, D., & Khwaja, M. (2017). Tax Administration and Firm Performance: New Data and Evidence for Emerging Markets and Developing Economies. IMF Working Paper.
5. International Monetary Fund. (2015). Current Challenges in Revenue Mobilization: Improving Tax Compliance. Washington, DC: IMF.
6. OECD. (2022). Tax Administration 2022: Comparative Information on OECD and other Advanced and Emerging Economies. Paris: OECD Publishing.
7. OECD. (2024). Tax Administration 2024: Comparative Information on OECD and other Advanced and Emerging Economies. Paris: OECD Publishing.
8. OECD. (2025). Tax Administration 2025: Comparative Information on OECD and other Advanced and Emerging Economies. Paris: OECD Publishing.
9. Torgler, B. (2007). Tax Compliance and Tax Morale: A Theoretical and Empirical Analysis. Cheltenham: Edward Elgar Publishing.
10. World Bank. (2021). Tax Administration Reform Project in Uzbekistan (P173001). Washington, DC: World Bank.

Proofreader: Zokir ALIBEKOV

Layout and Designer: Oloviddin Sobir ugli

2025. № 12

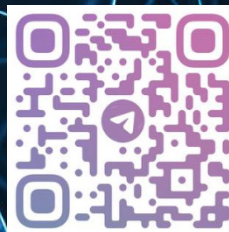
© When materials are reproduced, the INNOVATION SCIENCE AND TECHNOLOGY journal must be cited as the source. Authors are responsible for the accuracy of the information in materials and advertisements published in the journal. Editorial opinions may not always align with those of the authors. Submitted materials will not be returned to the editorial office.

To publish articles in this journal, you may submit articles, advertisements, stories, and other creative materials through the following links. Materials and advertisements are published on a paid basis.

You may subscribe to the journal at any time using the following details. Once subscribed, please send a screenshot or photo of your payment confirmation to our Telegram page @iqtisodiyot_77. Based on this, we will send the latest issue of the journal to your address each month.

“The journal “INNOVATION SCIENCE AND TECHNOLOGY” has been registered by the Agency for Information and Mass Communications under the Administration of the President of the Republic of Uzbekistan from 09.10.2024 under the registration number №390637. License number: C-5669633. PNFL: 30407832680027

Our address: Tashkent city, Yunusobod district, 19th block,
House 17.



Acceptance of articles

Published every
monthly



Directions

Social, economic, political,
technological, scientific



Scopus || Scientific electronic journal specializing in Scopus

CERTIFICATE NUMBER: №390637

**ORDER NUMBER ACCORDING TO
THE LICENSE REGISTER: C-5669633**

CONTACT:



Contact us
+998 50 737 87 88



Telegram channel
t.me/scopus_IST2100



Journal official website
<https://ist-journal.uz/index.php/IST>