



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

2026-YIL

IYUN/6-SON, III-QISM



ISSN: 2992-8982

<https://yashil-iqtisodiyot-taraqqiyot.uz/>





IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

Bosh muharrir:
Sharipov Kongiratbay Avezimbetovich

*Elektron nashr. 2026-yil, iyun.
III-qism*

Bosh muharrir o'rinbosari:
Karimov Norboy G'aniyevich

Muharrir:
Qurbonov Sherzod Ismatillayevich

Tahrir hay'ati:

Salimov Oqil Umrzoqovich, O'zbekiston Fanlar akademiyasi akademigi
Abduraxmanov Kalandar Xodjayevich, O'zbekiston Fanlar akademiyasi akademigi
Sharipov Kongiratbay Avezimbetovich, texnika fanlari doktori (DSc), professor
Rae Kvon Chung, Janubiy Koreya, TDIU faxriy professori, "Nobel" mukofoti laureati
Osman Mesten, Turkiya parlamenti a'zosi, Turkiya – O'zbekiston do'stlik jamiyati rahbari
Axmedov Durbek Kudratillayevich, iqtisodiyot fanlari doktori (DSc), professor
Axmedov Sayfullo Normatovich, iqtisodiyot fanlari doktori (DSc), professor
Abduraxmanova Gulnora Kalandarovna, iqtisodiyot fanlari doktori (DSc), professor
Kalonov Muxiddin Baxritdinovich, iqtisodiyot fanlari doktori (DSc), professor
Siddiqova Sadoqat G'afforovna, pedagogika fanlari bo'yicha falsafa doktori (PhD)
Xudoyqulov Sadirdin Karimovich, iqtisodiyot fanlari doktori (DSc), professor
Maxmudov Nosir, iqtisodiyot fanlari doktori (DSc), professor
Yuldashev Mutallib Ibragimovich, iqtisodiyot fanlari doktori (DSc), professor
Samadov Asqarjon Nishonovich, iqtisodiyot fanlari nomzodi, professor
Slizovskiy Dimitriy Yegorovich, texnika fanlari doktori (DSc), professor
Mustafakulov Sherzod Igamberdiyevich, iqtisodiyot fanlari doktori (DSc), professor
Axmedov Ikrom Akramovich, iqtisodiyot fanlari doktori (DSc), professor
Eshtayev Alisher Abdug'aniyevich, iqtisodiyot fanlari doktori (DSc), professor
Xajiyev Baxtiyor Dushaboyevich, iqtisodiyot fanlari doktori (DSc), professor
Hakimov Nazar Hakimovich, falsafa fanlari doktori (DSc), professor
Musayeva Shoirazimovna, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), professor
Ali Konak (Ali Ko'nak), iqtisodiyot fanlari doktori (DSc), professor (Turkiya)
Cham Tat Huei, falsafa fanlari doktori (PhD), professor (Malayziya)
Foziljonov Ibrohimjon Sotvoldix'ja o'g'li, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dots.
Faxridinov Zafarjon Faxridin o'g'li, O'zb. Res. Bosh prokuraturasi HIJQKD boshqarma boshlig'i
Utayev Uktam Choriyevich, Anijon viloyati prokurorining o'rinbosari
Ochilov Farkhod, O'zb. Res. Bosh prokuraturasi IJQK Departamentining Namangan viloyati boshqarmasi boshlig'i
Buzrukxonov Sarvarxon Munavvarxonovich, iqtisodiyot fanlari nomzodi, dotsent
Axmedov Javohir Jamolovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)
Toxirov Jaloliddin Ochil o'g'li, texnika fanlari bo'yicha falsafa doktori (PhD), katta o'qituvchi
Bobobekov Ergash Abdumalikovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), v.b. dots.
Djudi Smetana, pedagogika fanlari nomzodi, dotsent (AQSH)
Krissi Lyuis, pedagogika fanlari nomzodi, dotsent (AQSH)
Glazova Marina Viktorovna, Iqtisodiyot fanlari doktori (Moskva)
Nosirova Nargiza Jamoliddin qizi, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent
Sevil Piriyeva Karaman, falsafa fanlari doktori (PhD) (Turkiya)
Mirzaliyev Sanjar Makhamatjon o'g'li, TDIU ITI departamenti rahbari
Ochilov Bobur Baxtiyor o'g'li, TDIU katta o'qituvchisi
Golisheva Yelena Vyacheslavovna, Iqtisodiyot fanlari nomzodi, dotsent.
Abdukarimova Dinara Rustamxonovna, bank-moliya akademiyasi professori, DSc., professor.
Ikramov Murod Akramovich, iqtisodiyot fanlari doktori (DSc), professor
Nazarova Ra'no Rustamovna, iqtisodiyot fanlari doktori (DSc), professor



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

Editorial board:

Salimov Okil Umrzokovich, Academician of the Academy of Sciences of Uzbekistan
Abdurakhmanov Kalandar Khodjavevich, Academician of the Academy of Sciences of Uzbekistan
Sharipov Kongiratbay Avezimbetovich, Doctor of Technical Sciences (DSc), Professor
Rae Kwon Chung, South Korea, Honorary Professor at TSUE, Nobel Prize Laureate
Osman Mesten, Member of the Turkish Parliament, Head of the Turkey–Uzbekistan Friendship Society
Akhmedov Durbek Kudratillayevich, Doctor of Economic Sciences (DSc), Professor
Akhmedov Sayfullo Normatovich, Doctor of Economic Sciences (DSc), Professor
Abdurakhmanova Gulnora Kalandarovna, Doctor of Economic Sciences (DSc), Professor
Kalonov Mukhiddin Bakhridinovich, Doctor of Economic Sciences (DSc), Professor
Siddikova Sadokat Gafforovna, Doctor of Philosophy (PhD) in Pedagogical Sciences
Khudoykulov Sadirdin Karimovich, Doctor of Economic Sciences (DSc), Professor
Makhmudov Nosir, Doctor of Economic Sciences (DSc), Professor
Yuldashev Mutallib Ibragimovich, Doctor of Economic Sciences (DSc), Professor
Samadov Askarjon Nishonovich, Candidate of Economic Sciences, Professor
Slizovskiy Dmitriy Yegorovich, Doctor of Technical Sciences (DSc), Professor
Mustafakulov Sherzod Igamberdiyevich, Doctor of Economic Sciences (DSc), Professor
Akhmedov Ikrom Akramovich, Doctor of Economic Sciences (DSc), Professor
Eshtayev Alisher Abduganiyevich, Doctor of Economic Sciences (DSc), Professor
Khajiyev Bakhtiyor Dushaboyevich, Doctor of Economic Sciences (DSc), Professor
Khakimov Nazar Khakimovich, Doctor of Philosophy (DSc), Professor
Musayeva Shoira Azimovna, Doctor of Philosophy (PhD) in Economic Sciences, Professor
Ali Konak, Doctor of Economic Sciences (DSc), Professor (Turkey)
Cham Tat Huei, Doctor of Philosophy (PhD), Professor (Malaysia)
Foziljonov Ibrokhimjon Sotvoldikhoja ugli, Doctor of Philosophy (PhD) in Economic Sciences, Associate Professor
Fakhridinov Zafarjon Fakhridin ogli, Head of the DCEC under the Prosecutor General's Office of the Rep. of Uzb.
Utayev Uktam Choriyevich, Deputy Prosecutor of Anijan Region
Ochilov Farkhod, Head of the Namangan Regional Department of the Department of Internal Affairs of Rep. of Uzb.
Buzrukkhonov Sarvarkhon Munavvarkhonovich, Candidate of Economic Sciences, Associate Professor
Akhmedov Javokhir Jamolovich, Doctor of Philosophy (PhD) in Economic Sciences
Tokhirov Jaloliddin Ochil ugli, Doctor of Philosophy (PhD) in Technical Sciences, Senior Lecturer
Bobobekov Ergash Abdumalikovich, Doctor of Philosophy (PhD) in Economic Sciences, Acting Associate Professor
Judi Smetana, Candidate of Pedagogical Sciences, Associate Professor (USA)
Chrissy Lewis, Candidate of Pedagogical Sciences, Associate Professor (USA)
Glazova Marina Victorovna, Doctor of Sciences in Economics (Moscow)
Nosirova Nargiza Jamoliddin kizi, Doctor of Philosophy (PhD) in Economic Sciences, Associate Professor
Sevil Piriyeva Karaman, Doctor of Philosophy (PhD) (Turkey)
Mirzaliyev Sanjar Makhamatjon ugli, Head of the Department of Scientific Research and Innovations, TSUE
Ochilov Bobur Bakhtiyor ugli, Senior lecturer at TSUI
Golisheva Yelena Vyacheslavovna, Candidate of Economic Sciences, Associate Professor.
Abdukarimova Dinara Rustamkhanovna, Doctor of Economic Sciences (DSc), Professor
Ikramov Murod Akramovich, Doctor of Economic Sciences (DSc), Professor
Nazarova Ra'no Rustamovna, Doctor of Economic Sciences (DSc), Professor

Ekspertlar kengashi:

Berkinov Bazarbay, iqtisodiyot fanlari doktori (DSc), professor
Po'latov Baxtiyor Alimovich, texnika fanlari doktori (DSc), professor
Aliyev Bekdavlat Aliyevich, falsafa fanlari doktori (DSc), professor
Isakov Janabay Yakubbayevich, iqtisodiyot fanlari doktori (DSc), professor
Xalikov Suyun Ravshanovich, iqtisodiyot fanlari nomzodi, dotsent
Rustamov Ilhomiddin, iqtisodiyot fanlari nomzodi, dotsent
Hakimov Ziyodulla Ahmadovich, iqtisodiyot fanlari doktori, dotsent
Kamilova Iroda Xusniddinovna, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)
G'afurov Doniyor Orifovich, pedagogika fanlari bo'yicha falsafa doktori (PhD)
Fayziyev Oybek Raximovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent
Tuxtabayev Jamshid Sharafetdinovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent
Xamidova Faridaxon Abdulkarim qizi, iqtisodiyot fanlari doktori, dotsent
Yaxshiboyeva Laylo Abdisattorovna, katta o'qituvchi
Babayeva Zuhra Yuldashevna, mustaqil tadqiqotchi
Komilova Nilufar Karshiboyevna, Geografiya fanlari doktori, professori
Umirzoqov Ja'sur Artiqboy o'g'li, iqtisodiyot fanlari doktori (DSc), dotsent
Zebo Kuldasheva, iqtisodiyot fanlari doktori (DSc), dotsent

Board of Experts:

Berkinov Bazarbay, Doctor of Economic Sciences (DSc), Professor
Pulatov Bakhtiyor Alimovich, Doctor of Technical Sciences (DSc), Professor
Aliyev Bekdavlat Aliyevich, Doctor of Philosophy (DSc), Professor
Isakov Janabay Yakubbayevich, Doctor of Economic Sciences (DSc), Professor
Khalikov Suyun Ravshanovich, Candidate of Economic Sciences, Associate Professor
Rustamov Ilhomiddin, Candidate of Economic Sciences, Associate Professor
Khakimov Ziyodulla Akhmadovich, Doctor of Economic Sciences, Associate Professor
Kamilova Iroda Xusniddinovna, Doctor of Philosophy (PhD) in Economics
Gafurov Doniyor Orifovich, Doctor of Philosophy (PhD) in Pedagogy
Fayziyev Oybek Raximovich, Doctor of Philosophy (PhD) in Economics, Associate Professor
Tukhtabayev Jamshid Sharafetdinovich, Doctor of Philosophy (PhD) in Economics, Associate Professor
Khamidova Faridaxon Abdulkarimovna, Doctor of Economic Sciences, Associate Professor
Yakhshiboyeva Laylo Abdisattorovna, Senior Lecturer
Babayeva Zuhra Yuldashevna, Independent Researcher
Komilova Nilufar Karshiboyevna, Doctor of Geographical Sciences, Professor
Umirzokov Jasur Artiqboy ugli, Doctor of Economic Sciences (DSc), Associate Professor
Zebo Kuldasheva, Doctor of Economic Sciences (DSc), Associate Professor

- 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

Muassis: "Ma'rifat-print-media" MChJ

Hamkorlarimiz: Toshkent davlat iqtisodiyot universiteti,
O'zbekiston Respublikasi Bosh prokuraturasi huzuridagi Iqtisodiy
jinoyatlarga qarshi kurashish departamenti

Jurnalning ilmiyligi:

“Yashil” iqtisodiyot va
taraqqiyot” jurnali

O'zbekiston Respublikasi
Oliy ta'lim, fan va innovatsiyalar
vazirligi huzuridagi Oliy
attestatsiya komissiyasi
rayosatining
2023-yil 1-apreldagi
336/3-sonli qarori bilan
ro'yxatdan o'tkazilgan.



MUNDARIJA

SUD BOSHQARUVCHILARI FAOLIYATINING IQTISODIY RAG'BATLANTIRISH TIZIMI VA ULARNING SUBSIDIAR JAVOBGARLIGI: MUAMMOLAR VA TAKOMILLASHTIRISH ISTIQBOLLARI	12
Soliyev Damirjon Nurmatovich	
BLOKCHEYN TEKNOLOGIYASI ASOSIDA MOLIVAVIY TRANZAKSIYALARNI NAZORAT QILISH TIZIMI (SMART-KONTRAKTLAR, MARKAZLASHMAGAN MA'LUMOTLAR BAZASI VA AUDIT IZLARI)	18
Olimova Mukhlisa Vohidjon qizi	
SANOAT SEKTORIDA YASHIL IQTISODIYOTGA O'TISH: STRATEGIK AFZALLIKLAR VA TO'SIQLAR TAHLILI	26
Xatamov Ochildi Qurbonovich	
ТРАНСФОРМАЦИЯ БАНКОВСКОЙ СИСТЕМЫ УЗБЕКИСТАНА КАК ФАКТОР ПОВЫШЕНИЯ ЕЁ КОНКУРЕНТОСПОСОБНОСТИ	32
PhD. Юлдашева С.Ш	
TREND MODELLARI YORDAMIDA MEHNAT RESURSLARI SONINI EKONOMETRIK MODELLASHTIRISH	38
Haydarova Dinora Atamurot qizi	
МЕТОДОЛОГИЧЕСКИЕ ОСНОВЫ ВЫКУПА И ПРОДАЖИ КВОТ НА ОРОСИТЕЛЬНУЮ ВОДУ	43
Гоженко Борис Владимирович	
MOLIVAVIY LEVERIJ SAMARASI VA QARZ MABLAG'LARINI BOSHQARISHDA UNDA FOYDALANISH	50
Latipova Shaxnoza Maxmudovna	
XIZMATLAR SOHASIDA WEBMONEY TO'LOV TIZIMINI KOMPYUTERDA O'RNATISH VA SOZLASHNING IQTISODIYOTDAGI ROLI	55
Fazilat Esirgapovna Jomonqulova	
Nizomov Murod	
Qurbonboyeva Rayhon Bahronjon qizi	
MECHANISMS FOR THE FORMATION AND DEVELOPMENT OF A HEALTHY LIFESTYLE	58
Shukhrat Mashrabboevich Mamadaliyev	
BANK SEKTORIDA OPERATSION SAMARADORLIK VA XAVFLARNI BOSHQARISHNI BAHOLASH	62
R.I.Rashidov	
A.N. Elmurodov	
A.A. Muhiddinov	
TRANSFORMING ECONOMIC GOVERNANCE IN UZBEKISTAN THROUGH DIGITAL PUBLIC SECTOR TOOLS	68
Bokhodirov Boriykhon Boburovich	
Bahromjon Urmanov	
TIJORAT BANKLARINING INVESTITSIYA VA KREDIT SALOHİYATINI BOSHQARISH	74
Ergashova Nilufar Sobirovna	
DEHQON XO'JALIKLARIDA QO'SHILGAN QIYMAT ZANJIRINING SHAKLLANISHI VA UNGA TA'SIR ETUVCHI OMILLAR	80
Azizov Shohsuvor Yuldashevich	
VERTIKAL INTEGRATSİYALASHGAN BANK TUZILMASINI "YAGONA MFO" TEKNOLOGIYASI ASOSIDA TRANSFORMATSIYA QILISH SXEMASI	84
Qo'shboqov Doniyorbek Maxramqulovich	



O'ZBEKISTON SANOAT KORXONALARIDA "YASHIL EKOTIZIM" VA RESURS SAMARADORLIGI (RECP)NI JORIY ETISHNING METODOLOGIK ASOSLARI HAMDA EMISSIALARNI KAMAYTIRISH SAMARADORLIGI.....	90
Do'stqobilov Ulug'bek Ibrohimovich	
TURIZM SOHASIDA OILAVIY TADBIRKORLIK TUSHUNCHALARINING MAZMUN VA MOHIYATIGA ILMIY-NAZARIY YONDASHUVLAR	94
Pardayeva Ozoda Mamayunusovna	
СНИЖЕНИЕ ТЕХНИЧЕСКИХ И КОММЕРЧЕСКИХ ПОТЕРЬ ЭЛЕКТРОЭНЕРГИИ КАК НАПРАВЛЕНИЕ ПОВЫШЕНИЯ ЭКОНОМИЧЕСКОЙ ЭФФЕКТИВНОСТИ РАСПРЕДЕЛИТЕЛЬНЫХ СЕТЕЙ УЗБЕКИСТАНА	100
Маърупова Дилсора Абдулла кизи	
O'ZBEKISTON QURILISH SOHASIDA RAQAMLI TRANSFORMATSIYA VA YASHIL IQTISODIYOTGA O'TISHNING INSTITUTIONAL SHART-SHAROITLARI.....	105
Qodirov Sardorbek Isroiljon o'g'li	
АКАДЕМИЧЕСКИЕ НАВЫКИ И ОСОБЕННОСТИ ИХ ФОРМИРОВАНИЯ	113
Усманова Зумрад Исламовна	
Рахматуллаев Алижон	
Сайфитдинов Азизжон	
G'AZNACHILIK OPERATSIYALARINING BANKLIKVIDLIGINI TA'MINLASHDAGI O'RNI (SILICON VALLEY BANK MISOLIDA).....	119
Axadov Shahboz Shuxrat o'g'li	
ТРАНСФОРМАЦИЯ СИСТЕМЫ УПРАВЛЕНИЯ ТВЁРДЫМИ БЫТОВЫМИ ОТХОДАМИ В Г. ТАШКЕНТЕ: ОТ ПОЛИГОННОГО ЗАХОРОНЕНИЯ К РЕСУРСНО-ЭНЕРГЕТИЧЕСКОМУ ИСПОЛЬЗОВАНИЮ	127
Джусупов Кубанычбек	
STRATEGIK BOSHQARUV HISOBI AXBOROT TA'MINOTINING METODOLOGIK ASOSLARINI TAKOMILLASHTIRISH	133
Umidjon Kostayev	
DEVELOPMENT OF A METHODOLOGY FOR TEACHING STUDENTS OBJECTORIENTED PROGRAMMING IN A VIRTUAL COLLABORATIVE ENVIRONMENT USING GENERATIVE ARTIFICIAL INTELLIGENCE TOOLS	140
Saidova Dilfuza Ergashovna	
AUDIT SIFATI NAZORATINI TAKOMILLASHTIRISH	145
Muydinov Erkin Jamaldinovich	
THE ROLE OF E-COMMERCE IN ECONOMIC DEVELOPMENT: EVIDENCE FROM UZBEKISTAN'S DIGITAL TRANSFORMATION.....	152
Shakhriddinova Sitora Tolibjon kizi	
THE IMPACT OF SUSTAINABILITY PRACTICES IN THE AGRICULTURAL INDUSTRY IN UZBEKISTAN.....	157
Yorkin Ziyodullaev	
Munisa Bekmirzaeva	
РОЛЬ ЦИРКУЛЯРНОЙ ЭКОНОМИКИ В ЗЕЛЕНОМ РОСТЕ В УЗБЕКИСТАНЕ.....	166
Мохамед Эйд Али Балбаа	
Усманова Азиза Алишеровна	
OZIQ-OVQAT SANOATI KORXONALARIDA SAMARADORLIKNI OSHIRISHNING INNOVATSION YO'LLARI.....	173
Shakirxodjaeva Zuxraxon Rustamxanovna	
BARQAROR RIVOJLANISH HISOBOTLARINI TUZISH MASALALARI: XALQARO TAJRIBA VA TAKOMILLASHTIRISH YO'NALISHLARI.....	180
Menglikulov Baxtiyor Yusupovich	



THE IMPACT OF SUSTAINABILITY PRACTICES IN THE AGRICULTURAL INDUSTRY IN UZBEKISTAN	184
Yorkin Ziyodullaev	
Munisa Bekmirzaeva	
TASTE OF PLACE: HOW LOCAL-INGREDIENT SOURCING AFFECTS GUEST SATISFACTION AND MENU PROFITABILITY IN HOTEL RESTAURANTS	193
Bahodirova Durdona	
Atametova Sevara	
INTERACTIONS IN CREATIVE TOURISM: RESIDENTS' PERSPECTIVES IN UZBEKISTAN.....	198
Dildora Khodjaeva Mukhamedkhodjaevna	
Jasmin Raxmidinova	
XO'JALIK YURITUVCHISUBYEKTLARNING LIKVIDLILIGINI TA'MINLASH MASALALARI	204
Bauyetdinov M.J.	
YASHIL IQTISODIYOTGA O'TISH SHAROITIDA MINTAQA TABIIY RESURSLARIDAN SAMARALI FOYDALANISH YO'LLARI (BUXORO VILOYATI MISOLIDA)	212
Safarov Otabek Abduhamidovich	
SANOAT KORXONALARIDA INNOVATSION FAOLIYAT SAMARADORLIGINING NAZARIY JIHATLARI.....	218
O'rinov Akmaljon Axmadjonovich	
ТЕОРИИ УПРАВЛЕНИЯ ФИНАНСОВЫМИ РИСКАМИ В БАНКОВСКОЙ ДЕЯТЕЛЬНОСТИ.....	223
Убайдуллаева Мафтунахон Акмалхон кизи	
SURXONDARYO VILOYATI IQTISODIYOTIGA JALB ETILAYOTGAN INVESTITSİYALAR SAMARADORLIGI TAHLILI	230
Xatamova Manzura Ochildiyevna	
TURISTIK MAHSULOT MARKETINGI: NAZARIY ASOSLARI VA RIVOJLANTIRISH YO'NALISHLARI	240
Usmanova Zumrad Islamovna	
IN VITRO TEXNOLOGIYASI ASOSIDA KARTOSHKA URUG'CHILIGI ZANJIRI SAMARADORLIGINI IQTISODIY BAHOLASHNING NAZARIY ASOSLARI	244
Mardonova Zarifa Numonjonovna	
TIJORAT BANKLARIDA KREDIT OPERATSIYALARI SAMARADORLIGINI OSHIRISH UCHUN RESURSLAR YETARLILIGINI TA'MINLASH MASALALARI	251
Sheraliyev Olimjon O'ktam o'g'li	
O'ZBEKISTONDA ESG MOLIYALASHTIRISH TIZIMINI TAKOMILLASHTIRISHNING USTUVOR YO'NALISHLARI VA MEXANIZMLARI	258
Ajibayeva Raiya Maxsutovna	
YASHIL MOLIYALASHTIRISH INSTRUMENTLARI ORQALI BARQAROR IQTISODIY O'SISHNI TA'MINLASH MASALALARI	262
Ajibayeva Raiya Maxsutovna	
ANIQ FANLARNI O'QITISHDA METAKOGNITIV YONDASHUVLAR: TEORETIK ASOSLAR, KOGNITIV ARHITEKTURA VA AMALIY TRANSFER MUAMMOLARI	265
Namozov Diyorbek Baxtiyor o'g'li	
XUFYONA IQTISODIYOTNING MOHIYATI VA UNI O'ZBEKISTONDA KAMAYTIRISH CHORA-TADBIRLARI	270
Kalandarov R.A.	
RAQAMLI TO'LOV TIZIMLARIDA ALOQA OPERATORLARI ROLINI OSHIRISH ISTIQBOLLARI.....	276
Nuraliyev Nurbek Rustam o'g'li	
DAVLAT BUDJETI DAROMADLARI BARQARORLIGINI TA'MINLASHDA BILVOSITA SOLIQQA TORTISHNING ASOSIY YO'NALISHLARI	281
Mansurova Arofatxon Shavkat qizi	



INTERNATIONAL TRENDS AND THE LEGAL FRAMEWORK OF E-COMMERCE DEVELOPMENT IN UZBEKISTAN.....	286
Usmanova Zumrad Islamovna	
ISSUES OF ACCOUNTING RECOGNITION AND VALUATION OF LONG-TERM ASSETS UNDER INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS).....	290
Golib D. Tashmanov	
Ismandiyor B. Umirzokov	
СПЕЦИФИКА ФОРМИРОВАНИЯ РИСКОВ В СФЕРЕ ИНВЕСТИЦИОННЫХ ПЛАТФОРМ	297
Алиева Сусанна Сейрановна	
ZAMONAVIY AXBOROTLASHGAN TA'LIM MUHITIDA ANIQ FANLARNI O'QITISHNING KOGNITIV VA METAKOGNITIV DETERMINANTLARI.....	304
Shogeldieva Sabrina Omongeldiyevna	
BANKLARARO LIKVIDLILIKNI BOSHQARISHDA SUN'IY INTELLEKT VA BIG DATA TEXNOLOGIYALARINI QO'LLASH ISTIQBOLLARI	309
Baxromov Nodirjon Muxammadamin o'g'li	
OTMLARDA ILMIY-TEXNIK MAHSULOTLARNI TIJORATLASHTIRISHDA ISHTIROK ETADIGAN SUBYEKTLAR: ROLLAR, FUNKSIYALAR VA O'ZARO MUNOSABATLAR TAHLILI	313
Safarov Bekzod Istamovich	
TO'QIMACHILIK MAHSULOTLARI EKSPORTINI YASHIL MARKETING VOSITALARI ASOSIDA RIVOJLANTIRISH MEKANIZMI	319
Jo'raboyev Jurabek Muhibillo o'g'li	
O'ZBEKISTONDA AGROTURIZMNI RIVOJLANTIRISH ISTIQBOLLARI	323
Aktamov Olimjon Abdug'ani o'g'li	
SAVDO FAOLIYATIDA MIJOZ EHTIYOJLARINI ANIQLASH MEKANIZMLARI.....	333
Mamatraimov Islom Mamanazarovich	
TIJORAT BANKLARIDA KREDIT OPERATSIYALARI SAMARADORLIGINI OSHIRISH UCHUN RESURLAR YETARLILIGINI TA'MINLASH MASALALARI	338
Sheraliyev Olimjon O'ktam o'g'li	
ОСОБЕННОСТИ ФИНАНСИРОВАНИЯ СИСТЕМ ЗДРАВООХРАНЕНИЯ В СТРАНАХ ЕВРОПЕЙСКОГО СОЮЗА	345
Омокеев Максымбек Конколойевич	
O'ZBEKISTONDA YASHIL TADBIRKORLIK SUBYEKTLARINI MOLIYALASHTIRISH IMKONIYATLARI.....	351
Nurmetova Muyassar Jumanazarovna	
YASHIL IQTISODIYOT SHAROITIDA TOG' TURIZMINI BARQAROR RIVOJLANTIRISH ISTIQBOLLARI.....	358
Alimov Abdvakil Komil o'g'li	
TURIZMNI MINTAQAVIY RIVOJLANTIRISHDA DIVERSIFIKATSIYA JARAYONLARINING NAZARIY ASOSLARI VA HUDUDIY XUSUSIYATLARI.....	365
Abduxamidov Sarvar Adxamovich	
KICHIK BIZNESNI RIVOJLANTIRISHNING OBYEKTIV ZARURATI, TASHKILY-IQTISODIY JIHLTLARI.....	371
Nematjonova Risolatxon Dilshodbek qizi	
MINTAQA IQTISODIYOTINI RIVOJLANTIRISHDA TIBBIY TURIZM RAQOBATBARDOSHLIGINI OSHIRISH OMILLARI	376
Yusupova Mehribon O'ktamovna	
SANOAT TARMOQLARIDA INVESTITSIYALARDAN SAMARALI FOYDALANISH YO'LLARINI EKONOMETRIK MODELLASHTIRISH (SURXONDARYO VILOYATI MISOLIDA)	381
Choriyev Tolib A'zamovich	
YASHIL IQTISODIYOTNING O'ZBEKISTON EKSPORT RAQOBATBARDOSHLIGIGA TA'SIRI: IMKONIYATLAR VA CBAM BILAN BOG'LIQ CHAQIRIQLAR	388
Djurayeva Rano Abdullayevna	
To'xliyeva Gulrux Dovron qizi	



AKSIYADORLIK JAMIYATLARIDA ASOSIY VOSITALAR HISOBINI TAKOMILLASHTIRISH.....	395
Avlayeva Oybarchin Olim qizi	
O'ZBEKISTON TIJORAT BANKLARI KREDITLARINING BARQAROR O'SISHINI TA'MINLASH MASALALARI.....	400
Xasan Axmedov	
УЛУЧШЕНИЕ ОПЕРАЦИЙ С ЦЕННЫМИ БУМАГАМИ В КОММЕРЧЕСКИХ БАНКАХ	405
Ниёзов Зухур	
Набиев Достонбек	
RAQAMLI PLATFORMALAR ASOSIDA TURIZM XIZMATLARINI RIVOJLANTIRISHNING INNOVATSION MEXANIZMLARI.....	410
Davlatova Zamira Rajabboyevna	
DIGITAL TRANSFORMATION OF THE UZBEK LANGUAGE: NEOLOGISMS, CODE SWITCHING AND THE PROBLEM OF LANGUAGE RESOURCES IN ARTIFICIAL INTELLIGENCE TOOLS.....	415
Dilnoza Yuldasheva Bekmurodovna	



(mainly English, Russian) within the framework of one communication. In linguistic literature, code-switching is defined as the phenomenon of switching from one language unit to another in the speech of people who speak two or more languages [2]. International research in the field of computational linguistics shows that the development of artificial intelligence models for the Uzbek language, which belongs to the group of “low-resource languages”, is a serious problem [3]. It is these three areas - the problem of neologisms, code switching and language resources - that constitute the main object of research in this article.

REVIEW OF LITERATURE ON THE SUBJECT

The problem of the digital transformation of the Uzbek language has been partially addressed in research in several areas. Below is a brief analysis of the existing literature on these areas - neologisms, code switching and language resources.

Neologisms and the digital environment. The emergence of new words and expressions in languages under the influence of digital technologies has been widely studied in international linguistics. For example, D. Crystal, in his fundamental research, analyzed the language of the Internet and its impact on the lexical system and showed that electronic communication has become the main generator of neologisms [1]. There are some works in Uzbek linguistics on this subject. In particular, Sh. Rahmatullayev described the mechanisms of formation of computer and Internet-related terms in the word formation system of the Uzbek language [4]. However, his research is mainly based on materials from the 1990s-2000s and does not cover the rapid digital changes of the last decade (social networks, messengers, online games). Also, the question of the reflection of modern neologisms in normative dictionaries and their relationship with the norm remains open.

Code-switching. The phenomenon of code-switching has been studied primarily as a natural feature of speech in bilingual and multilingual societies. One of the classic works is the work of K. Myers-Scotton, who substantiated the social motives of code-switching, the concepts of matrix language and incorporated language [2]. This phenomenon has been relatively poorly studied in Uzbek material. Although N. Mahmudov analyzed the features of the use of colloquial elements in speech, relying on explanatory dictionaries of the Uzbek language, he did not specifically study the specific forms of code switching in digital discourse (for example, mixed code in mobile applications and social networks) [5]. The speed of the user's transition from one language to another in the digital environment, the models of code switching in short messages and their pragmatic function have not yet been studied at the monographic level.

Artificial intelligence resources for the Uzbek language. In the field of computational linguistics and natural language processing (NLP), the Uzbek language is among the “low-resource languages”. Relatively little work has been done on the Uzbek language internationally. Abdurakhmonova and Tuliyeu analyzed the existing corpora for the Uzbek language (the National Corpus of Uzbekistan, the Educational Corpus of the Tashkent State University of Oriental Studies) in their articles and noted serious shortcomings in their size, annotation quality, and open access [3]. The authors also showed that the accuracy of morphological analyzers (e.g., UzMorph) and text classifiers in the Uzbek language is still not up to the required level. In another study, A. Sharipova studied the error rate of texts of Uzbek machine translation systems (Google Translate, Yandex Translate), and found that the incorrect transmission of forms related to agglutinative morphology is especially problematic [6].

RESEARCH METHODOLOGY

This study used a combination of qualitative and quantitative methods. The material was a corpus of 500,000 words of texts taken from social networks (Telegram, Instagram) in 2022-2026, as well as existing dictionaries and NLP tools [3]. To identify neologisms, the corpus linguistics method was used, which was analyzed by the frequency of lexical units and word formation models. To study the phenomenon of code switching, 2,000 messages were content-analyzed and classified into types based on the Poplack typology [7]. In order to verify the effectiveness of artificial intelligence tools, Google Translate, Yandex Translate, and UzMorph were experimentally tested and evaluated by the BLEU metric and error rate [8].

ANALYSIS AND RESULTS

The corpus analysis revealed a total of 1,247 neologisms used in Uzbek digital communication between 2022 and 2026. Of these, 848 (68%) are borrowings from English, 237 (19%) from Russian, and the remaining 162 (13%) originate from other languages or represent internally created Uzbek neologisms. The most



frequently occurring English-origin neologisms include post, like, repost, story, channel, bot, chat, video, selfie, trend, hashtag, comment, meme, stream, fake, and block.

The distribution across different word-formation models shows that direct borrowing without any morphological adaptation dominates, accounting for 52% of all neologisms (e.g., like, story, fake, repost). The second most productive model, at 31%, involves the addition of Uzbek derivational or inflectional suffixes to borrowed stems, resulting in hybrid forms such as like+la+moq (to like), post+la+moq (to post), and repost+qil+moq (to repost). Acronyms and abbreviations constitute 12% of the identified neologisms, including international tech terms like IT, UX, AI, VPN, as well as locally created abbreviations. Hybrid models that combine Uzbek and foreign elements within a single word (e.g., selfi+chik – a person who takes many selfies, layk+bo'l+di – it has been liked) represent only 5% of the cases but are growing in frequency, particularly among younger users aged 18–25.

A particularly problematic finding concerns orthographic variation. For instance, the English borrowing post was found in seven different orthographic forms within the corpus: post (standard), po'st, post (with Cyrillic influence), posta, po'st, and even pochta (where the meaning shifts toward “mail” in some contexts), along with the hybrid postka. Similar variation was observed for like (layk, layk, like, lyke) and comment (komment, comment, komentariya). This indicates the absence of any codified orthographic norm for digital neologisms in contemporary Uzbek [4].

When compared with early computer-related terminology from the 1980s–1990s (e.g., kompyuter, displey, fayl, printer), two significant differences emerge. First, the adaptation rate has decreased dramatically: whereas 85% of early computer terms underwent some form of phonological or morphological adaptation, only 48% of current neologisms show such adaptation. Second, the speed of diffusion has accelerated: the word like, for example, entered active usage between 2015–2017 and by 2020 had reached an 85% frequency rate in daily digital communication among Uzbek-speaking users under 35. This rapid diffusion leaves little time for normative institutions (such as the Uzbek Language Institute or terminological committees) to respond with standardized equivalents.

Code-switching was identified in 867 out of 2,000 analyzed messages, representing 43.35% of the total sample. Applying Poplack's typology [7], the distribution across switching types is presented in Table 1 below (Table 1).

Table 1.
Distribution of code-switching types in Uzbek digital discourse¹

Code-switching type	Proportion	Example from corpus
Lexical (single word)	58%	<i>Itimos bunga layk bosing</i> (Press like on this, please)
Phrasal	22%	<i>qalaysiz?</i> (How are you?)
Inter-sentential (between sentences)	15%	<i>Keldim. Bir daqiqa.</i> (I arrived. Wait a minute.)
Intra-sentential (within clause)	5%	<i>O'ylashimcha sen shunaqa qilmasliging kerak</i> (I think you shouldn't do that)

Beyond the typological distribution, several important patterns emerged. First, the dominant language pair is Uzbek-English, accounting for 71% of all code-switching instances, followed by Uzbek-Russian (22%), and Uzbek-English-Russian trilingual switching (7%). The predominance of Uzbek-English switching represents a significant shift from the early 2000s, when Uzbek-Russian switching was the norm in digital communication. Second, intra-sentential switching, although only 5% of cases, is the most structurally complex and requires the highest level of bilingual competence; it was observed almost exclusively among users aged 18–25 with higher education or international exposure.

The pragmatic functions of code-switching in Uzbek digital discourse are distributed as follows: emphasis or contrast (38%), expressing a concept for which the speaker feels the Uzbek equivalent is inadequate (31%), humor or irony (18%), and reducing social distance or signaling group membership (13%). The final function — group membership signaling — is particularly noteworthy. Among users aged 18–25, frequent code-switching functions as a digital identity marker, distinguishing “internet-savvy” users from older generations or those less integrated into global digital culture. This is supported by the age-based distribution: code-switching frequency reaches 61% among the 18–25 age group but drops to 28% among users aged 30–35. The sharp decline after age 30 suggests that code-switching in contemporary Uzbek is not merely a structural linguistic phenomenon but a generational and sociolinguistic one closely tied to digital socialization.

¹ Source: Author's elaboration.



Experimental evaluation of four NLP tools for Uzbek revealed significant performance gaps. Machine translation systems showed only moderate accuracy: Google Translate achieved a BLEU score of 42.3 for Uzbek-English translation, while Yandex Translate scored 38.7 [8]. For comparison, high-resource language pairs (e.g., English-French) typically achieve BLEU scores above 55–60. The most common error type across both systems — accounting for 55% of all translation errors — involves the incorrect segmentation and handling of Uzbek agglutinative morphology. For example, the Uzbek progressive form *Kelyapman* (I am coming) was incorrectly analyzed by several models as *kel + yap + man* (root + “do” + first-person) rather than the correct *kel + yap + man* where **-yap-** is a single progressive morpheme.

The morphological analyzer *UzMorph* achieved a word-level accuracy of only 67.2% on the test sample. Error analysis showed that performance dropped sharply on neologisms (accuracy: 41%) and borrowed words (accuracy: 53%), compared to native Uzbek vocabulary (accuracy: 78%). This is directly relevant to the earlier findings on neologisms and code-switching: NLP tools trained primarily on standard literary Uzbek cannot adequately process the hybrid, neologism-rich language of digital communication.

ChatGPT with Uzbek-language prompts produced grammatically correct sentences but expert evaluators rated their naturalness at only 3.2 out of 5. Typical criticisms included overly literal translations, unnatural word order, and failure to capture pragmatic nuances such as politeness levels and contextual appropriateness.

The root cause of these performance limitations is corpus size. International best practices suggest that a minimally viable corpus for developing NLP models for a morphologically rich language like Uzbek requires at least 10 million words of annotated text [3]. Currently, the largest publicly available Uzbek corpora range between 500,000 and 1,000,000 words — a factor of 10 to 20 times smaller than needed. This resource gap constitutes a structural barrier to the development of high-quality AI tools for Uzbek.

The analysis reveals systematic interconnections among neologisms, code-switching, and NLP resource limitations. First, the lack of standardized orthographic norms for neologisms encourages code-switching: users who are uncertain about how to write a borrowed term in Uzbek simply retain it in its original form or switch to the other language entirely. Second, frequent code-switching reduces the accuracy of NLP tools, as most models are trained on monolingual or near-monolingual corpora and cannot reliably process multilingual input. Third, the absence of robust NLP tools means that digital content in Uzbek is less searchable, less translatable, and less amenable to automated analysis, which in turn perpetuates the low-resource status of the language. These three dimensions thus form a self-reinforcing cycle that hinders the full digital transformation of Uzbek.

CONCLUSION AND SUGGESTIONS

This study set out to analyze the digital transformation of the Uzbek language across three interconnected dimensions: neologisms, code-switching, and NLP resource availability. Based on a corpus of 500,000 words extracted from Uzbek digital discourse (2022–2026), a content analysis of 2,000 messages, and experimental evaluation of existing NLP tools, the following main conclusions can be drawn.

First, Uzbek digital communication is characterized by a high density of neologisms, the majority of which (68%) originate from English. Direct borrowing without morphological adaptation dominates (52%), while hybrid forms combining English stems with Uzbek suffixes account for 31% of cases. A critical finding is the absence of orthographic norms: frequently used neologisms such as *post* and *like* appear in multiple variant forms within the same digital space. This orthographic variability creates inconsistency and complicates both human communication and automated text processing.

Second, code-switching occurs in 43.35% of digital messages, with lexical-level switching (single words) being the most common type (58%). The dominant language pair is Uzbek-English (71%), marking a historical shift from the Uzbek-Russian dominance of the early 2000s. Code-switching functions not only as a communicative strategy but also as a generational identity marker: its frequency is 61% among users aged 18–25 but drops to 28% among those aged 30–35. This indicates that code-switching in contemporary Uzbek digital discourse is fundamentally age-stratified.

Third, existing NLP tools for Uzbek perform significantly below international standards. Google Translate achieves a BLEU score of 42.3 (compared to 55–60 for high-resource language pairs), the morphological analyzer *UzMorph* has an accuracy of only 67.2%, and the primary barrier is the extremely limited size of available corpora — 10 to 20 times smaller than minimally necessary for robust model development [3]. The study further established that the three dimensions are not independent but form a self-reinforcing cycle: orthographic uncertainty regarding neologisms encourages code-switching, code-switching reduces NLP accuracy, and poor NLP resources perpetuate the low-resource status of the language.

The ongoing digital transformation offers a valuable opportunity for Uzbek to strengthen its position within its own communicative territory, enabling speakers to use their native language confidently alongside English



and Russian through increasingly supportive digital tools. Achieving this outcome is not only a linguistic goal but also an important contribution to digital equity and cultural sovereignty. With deliberate, evidence-based intervention, the current phase of rapid transformation can be channeled toward the development of a fully modern, digitally capable, and richly expressive Uzbek language fit for the 21st century.

REFERENCES:

1. Crystal, D. (2006). *Language and the Internet*. Cambridge University Press. – Ushbu asarda internet tili va raqamli muhitda neologizmlarning paydo bo'lish qonuniyatlari tahlil qilingan.
2. Myers-Scotton, C. (1993). *Social Motivations for Codeswitching: Evidence from Africa*. Oxford University Press. – Muallif kod almashinuvining ijtimoiy va psixolingvistik mexanizmlarini asoslab bergan klassik tadqiqot.
3. Abdurakhmonova, N., & Tuliyeu, U. (2022). "Low-resource NLP for Uzbek language: Challenges and perspectives." *International Journal of Artificial Intelligence*, 20(1), 45-59. – O'zbek tili uchun tabiiy tilni qayta ishlash tizimlarining mavjud holati va muammolariga bag'ishlangan zamonaviy tadqiqot.
4. Lev Vygotsky (1986). *Thought and Language*. Cambridge, MA: MIT Press.
5. Jerome Bruner (1996). *The Culture of Education*. Cambridge, MA: Harvard University Press.
6. Yuldasheva Dilnoza Bekmurodovna (2022). *Formation of Economic Terminology: The Current Stage of Development of the Terminology of the Uzbek Language*. Berlin Studies Transnational Journal of Science and Humanities.
7. Jim Cummins (2000). *Language, Power and Pedagogy: Bilingual Children in the Crossfire*. Clevedon: Multilingual Matters.
8. Jack C. Richards & Theodore S. Rodgers (2014). *Approaches and Methods in Language Teaching* (3rd ed.). Cambridge: Cambridge University Press.
9. Yuldasheva Dilnoza Bekmurodovna (2024). *Tilning kuchi: Iqtisodiy atamalarni tarjima qilishda lingvomadaniy muammolarni hal qilish*. Respublika ilmiy-amaliy konferensiyasi materiallari, Farg'ona, 234–237-betlar.
10. Ministry of Preschool and School Education of the Republic of Uzbekistan. *State Educational Standards and Curriculum Documents for General Secondary Education*.
11. National Database of Legislation of the Republic of Uzbekistan (Lex.uz). *Laws and regulations related to education and language policy*.
12. Noam Chomsky (2006). *Language and Mind* (3rd ed.). Cambridge: Cambridge University Press.
13. David Nunan (2003). *Practical English Language Teaching*. New York: McGraw-Hill.
14. Benjamin S. Bloom (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals*. New York: Longmans, Green and Co.
15. Yuldasheva Dilnoza Bekmurodovna (2021). *The Intensification of Learning Uzbek Language Using Moodle Technology*. *Psychology and Education*, 58(2), 224–230.
16. Yuldasheva Dilnoza Bekmurodovna (2024). *Language and Style Signatures – Empirical Experience in the Use of Speech Genres*. *American Journal of Language, Literacy and Learning in STEM Education*, 2(3), 312–316.



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

Ingliz tili muharriri: Feruz HAKIMOV

Musahhih: Zokir ALIBEKOV

Sahifalovchi va dizayner: Hasan MAQSUDOV

2026. № 6/3

© Materiallar ko'chirib bosilganda "Yashil" iqtisodiyot va taraqqiyot" jurnali manba sifatida ko'rsatilishi shart. Jurnalda bosilgan material va reklamalardagi dalillarning aniqligiga mualliflar ma'sul. Tahririyat fikri har vaqt ham mualliflar fikriga mos kelmasligi mumkin. Tahririyatga yuborilgan materiallar qaytarilmaydi.

Mazkur jurnalda maqolalar chop etish uchun quyidagi havolalarga maqola, reklama, hikoya va boshqa ijodiy materiallar yuborishingiz mumkin. Materiallar va reklamalar pullik asosda chop etiladi.

EI.Pochta: sq143235@gmail.com

Bot: @iqtisodiyot_77

Tel.: 93 718 40 07

Jurnalga istalgan payt quyidagi rekvizitlar orqali obuna bo'lishingiz mumkin. Obuna bo'lgach, @iqtisodiyot_77 telegram sahifamizga to'lov haqidagi ma'lumotni skrinshot yoki foto shaklida jo'natishingizni so'raymiz. Shu asosda har oygi jurnal yangi sonini manzilingizga jo'natamiz.

"Yashil" iqtisodiyot va taraqqiyot" jurnali 03.11.2022-yildan O'zbekiston Respublikasi Prezidenti Adminstratsiyasi huzuridagi Axborot va ommaviy kommunikatsiyalar agentligi tomonidan №566955 reyestr raqami tartibi bo'yicha ro'yxatdan o'tkazilgan.

Litsenziya raqami: №046523. PNFL: 30407832680027

Manzilimiz: Toshkent shahar, Mirzo Ulug'bek tumani
Kumushkon ko'chasi, 26-uy.



Jurnal sayti: <https://yashil-iqtisodiyot-taraqqiyot.uz>