International

scientific and practical conference

DECEMBER 6
2024

2024



STDF

Science technology& Digital finance

Google Scholar

The main directions of socio-economic development of New Uzbekistan: problems and solutions

MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATION OF THE REPUBLIC OF UZBEKISTAN

JIZZAKH BRANCH OF THE NATIONAL UNIVERSITY OF UZBEKISTAN NAMED AFTER MIRZO ULUGBEK

Scientific journal of Science technology & Digital finance

The main directions of socio-economic development of New Uzbekistan: problems and solutions collection of materials of the international scientific and practical conference on the topic

(December 6, 2024)

(Part 2)

Jizzakh-2024

Department of Economics and tourism of Jizzakh branch of the National University of Uzbekistan named after Mirzo Ulugbek
6.12.2024

The main directions of socio-economic development of New Uzbekistan: problems and solutions collection of materials of the international scientific and practical conference on the topic – Jizzahk: Department of economics and tourism of Jizzakh branch of the national university of Uzbekistan named after Mirzo Ulugbek, December 6, 2024, 450 pp.

Editors in charge: DSc.prof. Turakulov O.X., PhD. O'ralov A.I.

In the collection of materials of the conference, the role and role of Science, Education and production in the era of globalization, the pressing problems of the issues of interaction of these processes, feedback on their solutions were presented by mature specialists of the field.

In addition, research on the scientific and practical topic, carried out in the economics, Exact Sciences, Natural Sciences and socio-humanities during the globalization period, information is presented in the scientific and practical fields, which includes the latest innovative technologies in the fields of production.

It can be argued that this collection is one of the specific intersections of current thoughts and innovative ideas of the world of science. This scientific and practical conference was actively attended by professors and scientific researchers engaged in scientific research in Uzbekistan and foreign countries. In increasing the position of the scientific and practical conference, the professors and teachers of domestic and foreign higher educational institutions made a significant contribution.

Professors and teachers of foreign higher educational institutions who actively participated in the work of the conference made a worthy contribution to the high level of interaction with scientists of our country. The processes of international cooperation with foreign countries and exchange with them in the field of Science in the era of globalization have a positive effect on the development of Higher Education, the fields of Science and production. The materials of this conference are special in that they include a wide range of research, from theoretical developments to practical solutions, demonstrating the diversity of approaches and directions in this area.

In conclusion, it should be noted that this scientific and practical conference will be a very useful collection for everyone who is interested in modern research in the fields of further development of Higher Education, Science, Education and production in the era of globalization. The authors are responsible for the content and quality of the articles and abstracts included in the collection.

SUN’IY INTELLEKT YORDAMIDA SHAHAR TRANSPORT TIZIMINI BAHOLASH ASOSIDA TIRBANDLIKLARNI REAL VAQT REJIMIDA BARTARAF ETISH



Mirzamahmudova Madina Odiljon qizi
O‘zbekiston Milliy universiteti v.b.dotsenti, PhD,
Alfragunus Universiteti Moliya kafedrasi v.b.dotsenti, PhD
tashqi o‘rindoshlik asosida, madinabonu1311@mail.ru

Transport vositalaridan foydalanishining dolzarbligi zamonaviy hayot tarzining asosiy ustunlaridan biri hisoblanadi. Transport tizimlari nafaqat iqtisodiy rivojlanishning muhim elementi, balki aholining kundalik hayot sifatini belgilovchi omil hamdir. Transportdan foydalanishning ijtimoiy dolzarbligini shundan iboratki, u aholining masofalarni qisqa vaqt ichida bosib o‘tishini ta’minlaydi, aholining har bir qatlami uchun teng imkoniyatlar yaratadi va turmush sifatini oshiradi, masofaviy hududlardagi aholining sog‘liqni saqlash va ta’lim xizmatlaridan foydalanishini osonlashtiradi. Bir vaqtning o‘zida transport vositalari mamlakatning iqtisodiy rivojlanishiga sabab bo‘ladi. Xususan, bugungi junda iqtisodiyotning yirik tarmog‘iga aylanib bo‘lgan logistika tizimidir: yuk tashish va tarqatish tizimlarining samaradorligi milliy va xalqaro iqtisodiyotda muhim rol o‘ynaydi. Shuningdek, turizm sohasining rivoji transport infratuzilmasiga bevosita bog‘liqdir.

Bugungi kunda transport vositalari shaharlar tizimlarining kengayishiga, urbanizatsiya jarayonida aholini ish joylari, ta’lim muassasalari va ko‘ngilochar maskanlar bilan bog‘lash muhim ahamiyatga ega.

Har bir holatning ijobiy tomonlari bo‘lishi bilan birga uning salbiy tomoni ham mavjud. Jumladan, bugungi kundagi ekologik muammolarni keltirishimiz mumkin. Ushbu muammolarni bartaraf etish maqsadida ekologik toza energiya tizimiga ega bo‘lgan elektr transport vositalardan foydalanishga katta e’tibor berilmoqda. Elektr transporti va ekologik toza jamoat transportidan foydalanish havoni ifloslanishidan himoya qiladi. Optimal transport boshqaruvi tabiiy resurslarni tejash imkonini beradi.

Bugungi kundagi shahrning har bir chorrahasidagi tirbanliklar shaharning ekologik holatini yomonlashishiga sabab bo‘ladi. “Shahar atmosferasi ifloslanishi bilan tirbandliklar o‘rtasida to‘g‘ridan to‘g‘ri bog‘liqlik mavjud. Avtomobildan chiqayotgan gazlarning havoni ifloslantirish darajasi u joyida turib ishlaganda eng yuqori ko‘rsatkichga ega bo‘ladi. Bunday tartibda dvigatelda yoqilg‘i aralashmasi to‘liq yonishga ulgurmaydi va havoga chala yongan gaz chiqariladi. Bu gazning tarkibida tirik organizm hayoti uchun xavfli bo‘lgan gazlarning konsentratsiyasi yuqori bo‘ladi”.[1]

Yuqoridagilarni hisobga olgan holda, shahar transport tizimining samaradorligini oshirish va tirbandliklarni real vaqt rejimida bartaraf etish uchun

sun’iy intellekt texnologiyalaridan foydalanish dolzarb va istiqbolli yo‘nalish hisoblanadi.

Ushbu muammoni bartaraf etish maqsadida dastlab tirbandliklarni aniqlash va prognozlash lozim. Shahar transport tarmog‘idagi tirbandlik holatini baholash uchun kameralar, GPS ma’lumotlari va sensorlar yordamida real vaqt rejimida ma’lumot yig‘ilib tirbandlikni oldindan prognoz qilish uchun mashinaviy o‘qitish va chuqur o‘rganish algoritmlari qo‘llaniladi. Ular tarixiy va real vaqt ma’lumotlarini tahlil qilish orqali optimal harakat yo‘nalishlarini tavsiya etadi.

Tajribalarda tirbandlikni bartaraf etishning quyidagi texnologik yondashuvlari mavjud:

- Intellektual signal boshqaruvi. Svetoforlar vaqtini avtomatik tarzda optimallashtiruvchi sun’iy intellekt tizimlari transport oqimini teng taqsimlashga yordam beradi.
- Yo‘l harakati boshqaruvi. Sun’iy intellekt shahar infratuzilmasida mavjud muqobil yo‘llar va transport oqimini qayta yo‘naltirishni amalga oshiradi.
- Avtobus va taksi tizimlarini boshqarish. Sun’iy intellekt texnologiyalari ommaviy transport vositalarining jadvalini dinamik tarzda moslashtirib, yo‘lovchilarga eng qulay xizmat ko‘rsatishni ta’minlaydi.

Tirbandliklarni real vaqt rejimida bartaraf etishda, yo‘llarga joylashtirilgan sensorlar transport oqimi, tezlik, vaqti-vaqti bilan sodir bo‘layotgan hodisalar haqida ma’lumot beradi. Tirbandlikni kuzatish va holatni baholash uchun yuqori aniqlikdagi dronlardan foydalaniladi va yo‘lovchilarning transport harakatiga oid ma’lumotlarini yig‘ish orqali tizim aniqligi oshiriladi.

Sun’iy intelekt na’munalaridan yo‘ldagi tirbandliklarni bartaraf etishda foydalanish muhim ahamiyatga ega hisoblanadi. Jumladan, “Sun’iy intellekt texnologiyalarini 2030-yilga qadar rivojlantirish strategiyasi” ishlab chiqilgan bo‘lib unga ko‘ra, ijtimoiy soha va iqtisodiyot tarmoqlarida sun’iy intellekt texnologiyalarini joriy etish hamda ustuvor loyihalarni amalga oshirish yo‘nalishida — sun’iy intellekt texnologiyalarini keng joriy etish hamda rivojlantirish orqali yangi va yuqori qiymat qo‘shilgan mahsulotlar ishlab chiqarilishini, xizmatlar ko‘rsatilishini yo‘lga qo‘yish, sohada standartlarni takomillashtirish va xalqaro hamkorlik aloqalarini mustahkamlash yo‘nalishida milliy standartlarni xalqaro standartlarga muvofiqlashtirish va boshqa bir qator vazifalar belgilab o‘tilgan.[2]

Yuqorida olib borilgan tadqiqot transport tizimining samaradorligini oshirish, yo‘lovchilar uchun harakatlanish vaqtini qisqartirish, yo‘l infratuzilmasiga yuklamani pasaytirish, atrof-muhitga zararli ta’sirni kamaytirish imkoniyatlarini beradi.

Transport infratuzilmasi zamonaviy hayotning uzviy qismi bo‘lib, u shaharlarning rivoji, iqtisodiy o‘sish, ekologik barqarorlik va ijtimoiy farovonlikni ta’minlash uchun strategik ahamiyatga ega. Transport tizimlaridan foydalanish nafaqat bugungi kun uchun, balki kelajak uchun ham dolzarb vazifa bo‘lib qoladi.

Foydalanilgan adabiyotlar:

1. A.Nazarov. Atmosfera ifloslanishi va tirbandliklar o‘rtasidagi bog‘liqlik. O‘zbekiston Milliy axborot agentligi rasmiy sayti. https://uza.uz/oz/posts/atmosfera-ifloslanishi-va-tirbandliklar-ortasidagi-bogliqlik-video_575454
2. “Sun’iy intellekt texnologiyalarini 2030-yilga qadar rivojlantirish strategiyasi”. O‘zbekiston Respublikasi Prezidentining 2024-yil 14-oktabrdagi PQ-358-son qaroriga 1-ILOVA
3. “Механика ва технология” илмий журнали. Наманган муҳандислик-қурилиш институти. 2023 йил. 258 бет

Department of Economics and tourism of Jizzakh branch of the National University of Uzbekistan named after Mirzo Ulugbek
6.12.2024