

14. LJUBLJANA FORUM 2024



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FUTURES OF CITIES

SUSTAINABLE – SMART – INCLUSIVE – RESILIENT

ARTIFICIAL INTELLIGENCE

*The MODEL of IDEAL CITY
for THE FUTURES*

AI

Synthesis Report

Conference

October 3rd - 4th 2024 • Ljubljana Castle, Slovenia

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Introduction

The Ljubljana Forum 2024, held at Ljubljana Castle and the Rog Centre, brought together a diverse range of city leaders, policymakers, urban planners, industry experts, and academics to discuss the future of urban development under the theme of "Sustainable, Smart, Inclusive, and Resilient Cities". Special attention was given to the challenges of Z generation and their view on future developments with appeal for concrete actions today.

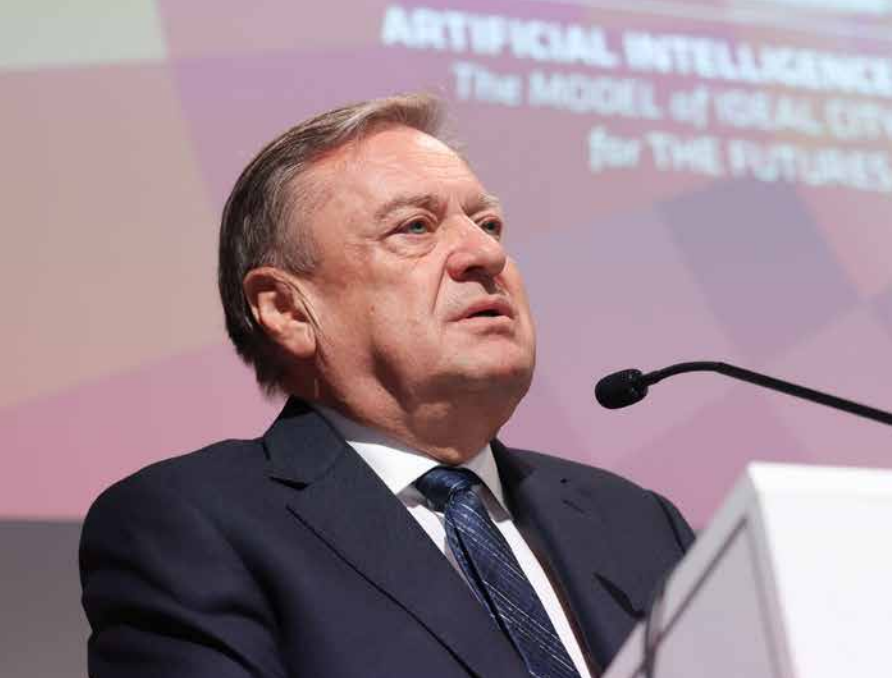
The discussions at the forum centred on the transformative role of artificial intelligence (AI) in tackling pressing global challenges such as climate change, digital transformation, and urban sustainability. There was a strong emphasis on the need for collaboration between public and private stakeholders, including city governments, financial institutions, and technology innovators, to drive these changes. These partnerships were viewed as essential for improving the quality of life in urban settings.

One of the highlights of the second day was the visit to the Rog Centre, a leading hub for creativity and innovation. Participants had the opportunity to witness first-hand how modern makerspaces and creative industries are fostering urban resilience and contributing to community development.

A major moment during the event was the presentation of the Millennium Project's "State of the Future Report 20.0" and announcement of Slovenia's membership in the international scientific research organisation CERN – European Organisation for Nuclear Research, which offered critical foresight into global trends shaping future urban environments and opportunities for new research discoveries and new business developments. This report reinforced the forum's key message: that cities must embrace technology, creativity, and strong collaborative networks to become more resilient, inclusive, and prepared for future challenges.

Blaž Golob
Chairman of Ljubljana Forum





Mr. Zoran Janković (Mayor of Ljubljana)

Mayor Zoran Janković focused on the importance of quality of life as the core principle for building the ideal city.

After 18 years of leadership, he emphasized Ljubljana's achievements as one of the safest and greenest cities in the world, attributing much of this success to the city's inclusive policies and respect for diversity. Janković emphasized that urban development is not just about physical infrastructure but about ensuring that all residents experience improvements in their daily lives. He underlined the importance of creating a strong and effective team to carry out necessary projects and initiatives that enhance the well-being of the city's citizens. Mayor Janković encouraged the audience to continue building on these achievements and to collaborate on further enhancing the city's future while enjoying Ljubljana's atmosphere as an inclusive, thriving community.

Ms. Tanja Fajon emphasized that quality of life must be at the centre of urban development, linking this core idea to global challenges such as clean water, clean air, and resilience.

Drawing on her experience during Slovenia's presidency of the United Nations Security Council, she underlined the importance of the recently adopted "Pact for the Future", which sets out goals for peace, security, and sustainable development. Ms. Fajon also highlighted Slovenia's commitment to innovation, particularly in artificial intelligence (AI) and climate diplomacy, with the establishment of the Centre for Artificial Intelligence in Ljubljana under UNESCO's auspices. She raised concerns about the misuse of AI and the need for responsible governance, stressing that it is critical to involve public engagement in managing these technologies. Ms. Fajon concluded by calling for the positive use of AI and encouraging the exchange of best practices to ensure future cities focus on the needs of the next generation, with youth as key stakeholders in shaping the future.



Ms. Tanja Fajon (Minister for Foreign & European Affairs, Slovenia)



Mr. Simon Savšek (Director, European Investment Bank Slovenia)

Mr. Simon Savšek highlighted the critical role of cities in tackling climate change, pointing out that urban areas are responsible for over two-thirds of global CO2 emissions.

He reaffirmed the European Investment Bank's (EIB) commitment to financing resilient urban development, noting that the EIB allocates 20-30% of its annual lending to urban projects, such as social housing, energy efficiency, and sustainable urbanization. In the past year, the EIB financed €21 billion in sustainable urban projects. He also mentioned the new ELENA initiatives in Ljubljana, aimed at improving green mobility and energy efficiency, focusing on decarbonizing urban transport and improving air quality. Although Mr. Savšek acknowledged the challenge of directly financing smaller municipalities, he expressed optimism for future opportunities, particularly in affordable housing and energy projects, driving sustainability in European cities.



Mr. Blaž Golob underscored the importance of technology and innovation in enhancing urban quality of life, especially through long term planning with the use of foresight and new emerging technologies such as artificial intelligence and smart city solutions.

He highlighted the complexity of aligning the perspectives of diverse stakeholders—policymakers, urban planners, business community and technology innovators—to create real, tangible solutions. While many groups are discussing urban challenges, they often speak different “languages,” making collaboration difficult. The progress depends on bridging these gaps and ensuring technologies are not just theoretical tools, but practical solutions that serve citizens’ needs. Encouraging participants to engage actively, Mr. Golob stressed the necessity of transforming complex urban concepts into meaningful projects that genuinely improve citizens’ quality of life, urging alignment of city stakeholders and good communication to achieve these goals.



Mr. Blaž Golob (Chairman, Ljubljana Forum; Director, GFS Institute)



City Leaders at Ljubljana Forum 2024



**Mr. Zoran
Janković**
Mayor of the City
of Ljubljana



**Ms. Olivera
Injac**
Mayor of Podgorica



**Ms. Sabina
Popit**
City of Ljubljana



**Mr. Frane
Šesnić**
City of Zagreb



**Mr. Danijel
Antičić**
City of Rijeka



**Mr. Tomaž
Lanišek**
City of Kranj






Z Generation presenting their challenges



Mr. Omar Smajlović Founder & Co-President of YBG - Youth Business Group Slovenia

Z Generation Challenges:

-  **Economic Uncertainty and Limited Access to Creative Workspaces:** Generation Z is experiencing challenges related to economic instability and limited availability of spaces that foster creativity and collaboration. This limits opportunities for entrepreneurship and innovation, making it difficult for Gen Z to engage fully in the economy and develop new ventures.
-  **Rising Living Costs and Wellbeing Pressures:** Increased living expenses and the pressures of modern urban life affect Generation Z's mental and physical wellbeing. Cities are encouraged to provide access to public spaces, green areas, and social infrastructure that support a healthy work-life balance to counteract these challenges.
-  **Representation in Decision-Making Processes:** Many from Generation Z feel their voices are inadequately represented in urban governance. They advocate for more inclusive governance models, such as youth councils and public consultations, to ensure their perspectives and needs are considered in city planning and policies.

Speakers at Ljubljana Forum 2024



Blaž Golob
Chairman of Ljubljana
Forum



Sindre Wimberger
WienBot - AI Vienna



Simon Savšek
Head of European
Investment Bank Group
Office in Slovenia



Ciaran O'Sullivan
AIT Research Engineer



Maja Bogataj Jančič;
PhD, LL.M
CEO of Open Data and
Intellectual Property
Institute, Ljubljana



Zoran Aralica; prof.
Faculty of Economics,
Zagreb University



Tit Neubauer
Senior official at Ministry
of Higher Education,
Science and Innovation

Sabina Stadler
H.E. Ambassador,
Head of Department,
Ministry of Foreign and
European Affairs



Katarina Pogačnik
CEO Envirodual Ltd
Slovenia & Croatia



**Miha
Ernstschneider**
Head of Digital
Transformation
Department T – 2
company



Theresa Fink
Business Manager AIT,
Austrian Institute of
Technology, Center for
Energy



Jernej Vidmar
Founder & CEO,
Agilicity, Ljubljana



Babšek Matej; PhD
Faculty of Public
Administration-
University of Ljubljana



Mohit Mishra
CEO Automicle;
Netherlands



Moderators



Damir Medved
CEO Edihadria; EU



Leonardo Pacher
Data Scientist, Start-up
initiative, Amsterdam



Omar Smajlović
Founder & Co-President
YBG - Youth Business
Group Slovenia



Miha Murn
Painter - President AAMI
Corporation

Anuša Gaši
Moderator &
media lead



Jan Künne
Digital Nomad
EDG USA /
Germany



**Jadranka
Jezeršek**
Turnes; Institute
Kontekst



Frane Šesnić
CEO Zagreb
Development
Agency



About the agenda

Thursday, 3rd October 2024

Place of venue: **Ljubljana Castle**

Welcome speeches & official Opening of Ljubljana Forum 2024

Moderated by: Ms. Anuša Gaši

9.15 - 9.30	Mr. Zoran Janković, Mayor of the City of Ljubljana, Ms. Tanja Fajon, Vice President of the Government of the Republic of Slovenia and Minister of Foreign and European Affairs, Mr. Simon Savšek, European Investment bank - Head of EIB Group Office in Slovenia, Mr. Miha Murn, President & CEO of AAMI International
	Introduction to Ljubljana Forum 2024 – Futures of Cities Mr. Blaž Golob, Chairman of Ljubljana Forum

Session I: **Keynote speech**

9.30 - 9.45	Mr. Sindre Wimberger, WienBot - AI Vienna
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Session II: **Round Table of Mayors & City leaders – Cities in 2030 - Challenges & City Strategies – Projects**

Moderated by: Mr. Jan Künne, Digital Nomad EDG USA / Germany

9.45 - 10.45	Ms. Olivera Injac – Mayor of Podgorica; Ms. Sabina Popit – Senior Consultant City of Ljubljana; Mr. Frane Šesnić – CEO at Zagreb Innovation Centre; Ms. Alexandra Wurz-Stadler - Councilor – City Graz; Mr. Danijel Antonić – Deputy ICT City of Rijeka
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Session III: **Cities for the futures**

Moderated by: Mr. Jan Künne, Digital Nomad EDG USA / Germany

Time	Session	Speaker
11.15 - 12.00	European Investment Bank EIB finances for Cities	Mr. Simon Savšek, Head of EIB Slovenia
	Developing Smart and Climate Neutral City Strategies	Mr. Ciaran O'Sullivan, AIT Research Engineer
	Fear and Prosperity of AI – Opportunities of City Data for creation of common goods – citizens services	Ms. Maja Bogataj Jančič; PhD, LL.M, CEO of Open Data and Intellectual Property Institute, Ljubljana Slovenia
12.00 - 12.30	Launch of the Millennium Project 2024 State of the Future Report 20.0 & Presentation of opportunities of CERN (European Organization for Nuclear Research)	Mr. Blaž Golob, GFS; GoForesight Institute – Millennium project, Global Futures Society, Mr. Zoran Aralica, prof. Faculty of Economics, Zagreb University, Croatia, Mr. Tit Neubauer, Senior official at Ministry of Higher Education Science and Innovation, H.E. Ms. Sabina Stadler, Ambassador; Head of Department; Ministry of Foreign Affairs Moderated by: Ms. Jadranka Jezeršek Turnes, Institute Kontekst

Session IV A: **City Challenges and AI & Industry solutions for cities**

Moderated by: Mr. Frane Šesnić, CEO Zagreb Development Agency

14.00 - 15.00	NetZeroCities EU Project Challenges & Opportunities for AI solutions	Ms. Katarina Pogačnik, CEO Envirodual Ltd Slovenia & Croatia
	Smart City Platform & AI for city projects	Mr. Miha Ernstschneder, Digital Transformation Product Manager, T-2
	AI and Digital Technologies Enablers for Co-Creation in Urban Development	Ms. Theresa Fink, Business Manager AIT, Austrian Institute of Technology, Center for Energy
	AgiliCity - Modelur	Mr. Jernej Vidmar, Founder & CEO, Agilicity, Ljubljana

Session IV B: **Finances & Knowledge for Cities & Industry solutions for cities**

Moderated by: Mr. Jan Künne, Digital Nomad EDG USA / Germany

15.00 - 16.00	Hermes project – Tools for managers for successful digital transformation	Mr. Aleksander Aristovnik, prof. dr, Faculty of Public Administration -University of Ljubljana
	Seamless smart parking solutions and mobility services based on interoperability	Mr. Mohit Mishra, CEO Automicle; Netherlands
	Smart renewable Energy Grids for communities and municipalities - from consumer to the prosumer a seamless journey	Mr. Damir Medved, CEO Edihadria, EU
	EMILIA – An AI Platform to Help Citizens Obtain City Permits & Information	Mr. Leonardo Pacher, Data Scientist, Start-up initiative, Amsterdam
	Z Generation & Entrepreneurship in cities for the future	Mr. Omar Smajlović, Founder & Co-President of YBG - Youth Business Group Slovenia

16.00 - 16.15 **Ljubljana Forum 2024 Award & Concluding remarks**

Friday, 4th October 2024

Place of venue: **Center Rog**

10.00 **Study visit to selected Green Capital of Europe site: Center Rog, one of Europe's largest makerspaces on the river bank of Ljubljana – dedicated hub to foster cultural and creative industries**

Art Expo and Ljubljana Forum 2024



Artist Miha Murn highlighted the essential role of art in discussions on urban futures, especially through his organizations's collaboration with the Ljubljana Forum.



Mr. Miha Murn (President, AAMI - Institute Atelier Art Murn International)

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Session I:

Keynote speech



Mr. Sindre Wimberger - Botfather - WienBot

Game Changer AI for Smarter Cities

Generative AI enables each of us to create incredible things on our own. This is the superpower of AI, which leads to the empowerment of everyone. Every employee in the organization becomes an innovator and can digitize themselves. As smart cities, we must utilize this opportunity and this potential to become innovative cities. The City of Vienna shows how this can be achieved with its AI Compass and the KITT training and inspirations format. With the help of AI as an assistant, everyone can become a leader. Because as a leader, you must ask the right questions and be able to check them. With the incredible possibilities of generative AI, users must therefore take responsibility for the results of AI. In this way, we can minimize the risks of generative AI, which is necessary for responsible use.

Key take aways messages from Sindre's presentation at Ljubljana Forum

"Empowering Smart Cities through Generative AI"

Key Points:

- **Empowerment through AI - Generative AI as a tool for individuals to innovate independently.**
- **Transformation of Employees - Every employee can digitize themselves, becoming innovators and contributors to smart city development.**
- **City of Vienna as an Example - Highlighting Vienna's use of AI (AI Compass, KIT training) to showcase practical steps towards innovation.**
- **Leadership and Responsibility - With AI as an assistant, everyone can become a leader, but they must also take responsibility for AI's outcomes to ensure ethical use**

Session II:

Round Table of Mayors & City leaders



Mr. Danijel Antonić – Deputy ICT City of Rijeka; Ms. Olivera Injac – Mayor of Podgorica; Ms. Sabina Popit – Senior Consultant City of Ljubljana

City of Podgorica, Montenegro

Ms. Olivera Injac, Mayor

Ms. Injac, the mayor of Podgorica, spoke about the city's initial steps toward adopting a smart city concept, which involved the creation of several e-services. The city introduced an AI-based administrative assistant and other e-services like senior and youth cards, which have proven useful for different demographics in accessing municipal services. Podgorica has also started a smart traffic management system as part of their green agenda, with plans to improve it in the coming months. The mayor highlighted the importance of starting with smaller projects to gradually build a more ambitious and comprehensive smart city infrastructure.

City of Ljubljana, Slovenia

Ms. Sabina Popit, Senior Advisor

Ms. Popit highlighted Ljubljana's mission to support climate-neutral and smart cities using integrated data systems. The challenge for Ljubljana is to unify existing data platforms that have operated as silos, and to provide useful data at different levels—for decision-makers, scientists, and the general public. Ljubljana is implementing a comprehensive platform that combines various urban data, such as traffic and energy, to provide insights into key metrics like CO2 emissions. This integration aims to support both real-time visualization and long-term modeling of environmental impacts, with the goal of creating actionable data for a greener future.

City of Zagreb, Croatia

Mr. Frane Šesnić, CEO

Šesnić discussed Zagreb's efforts to address urban issues such as traffic congestion, power supply, and waste management. The role of the Zagreb Innovation Center is to help connect the community, startups, and investors to find innovative solutions for these challenges. Zagreb has started public accelerators to test and implement new technologies and is currently creating a city sandbox, which allows the testing of innovations in a controlled environment before city-wide deployment. Šesnić highlighted the importance of public procurement for innovation, aiming to support startup growth by involving them in solving urban problems.



Mr. Tomaž Lanišek – Head of Kranj; Frane Šesnić – CEO Zagreb Development Agency; Jan Künne – Digital Nomad EDG USA / Germany

City of Kranj, Slovenia

Mr. Tomaž Lanišek, Manager

Mr. Lanišek presented the ongoing digital transformation projects in Kranj, such as the implementation of a smart city card, a comprehensive data platform, and digital sensors for smart city management. The smart city card is designed to change citizens' behavior towards a greener lifestyle through incentives like loyalty rewards. Kranj's digital transformation also focuses on data integration, forming a unified data pool that helps in managing various aspects of city services, such as transport and public amenities. Kranj recently received €3 million from the European Commission for developing data spaces for smart cities, as part of a larger consortium, which highlights the significance of partnerships in driving urban innovation.

City of Rijeka, Croatia

Mr. Daniel Antoniċ, Senior Advisor

Mr. Antoniċ, who also serves as the Chief Security Officer, discussed the challenges of cybersecurity in an increasingly digital urban environment. Rijeka collects large amounts of data from various urban systems, such as traffic, water distribution, and heating plants, leading to a complex data lake. With this, the risk of cyberattacks grows as the "attack surface" expands. Addressing cybersecurity is critical, particularly due to the lack of skilled personnel, and Rijeka is focusing on implementing stronger security features to protect digital infrastructures. The importance of trust was emphasized, particularly regarding the use of citizen data, and how municipalities need to be transparent about data ownership and usage.

Conslusions from panel discussions:

-  **Data as the New Oil** - Cities like Kranj and Ljubljana emphasized the critical role of data in city management. There is a need to gather, analyze, and use data effectively for decision-making, with a focus on transparency and security.
-  **Cybersecurity Challenges** - As cities digitize, ensuring robust cybersecurity measures becomes increasingly vital to protect urban infrastructure and citizen data.
-  **Cross-Sector Collaboration and EU Funding** - Many cities are leveraging European Union funding to implement innovative solutions and pilot projects. Collaborative efforts across cities, startups, and public entities are crucial for scaling smart city initiatives.
-  **Citizen-Centric Solutions** - The panelists stressed the importance of engaging citizens, whether through participatory decision-making or by designing smart tools that directly improve residents' quality of life.
-  **Sandbox Approach for Innovation** - Cities like Zagreb are adopting sandbox approaches to test new technologies in a controlled manner, reducing risks while fostering urban innovation.

The city leaders emphasized the importance of balancing ambitious technological visions with tangible and achievable projects that address the needs of citizens. Collaboration, both across sectors and internationally, was seen as a critical component in achieving these goals.

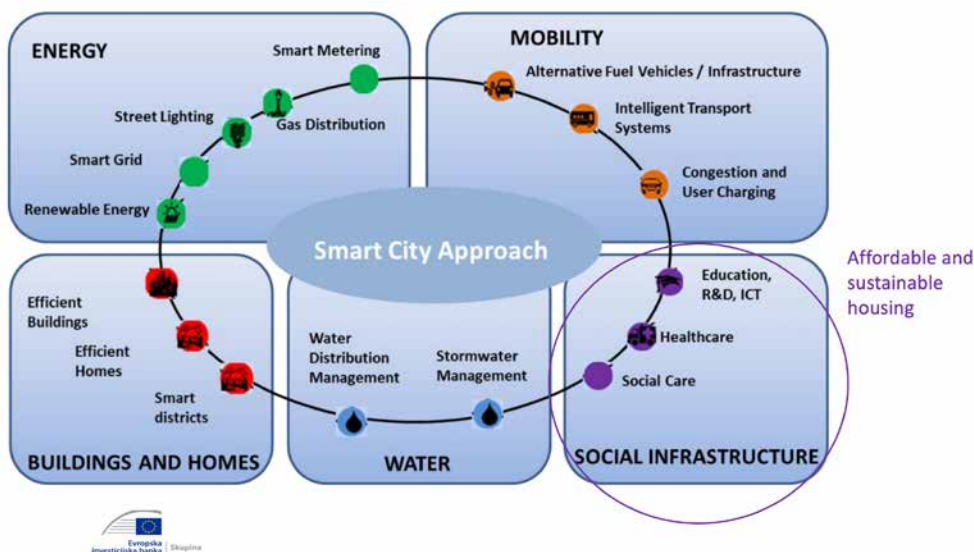
Session III:

Cities for the futures - Redefining cities for the future - from concept to practice & finances

European Investment Bank EIB finances for Cities

The presentation by Simon Savšek, PhD, Head of the EIB Group Office in Slovenia, focused on the European Investment Bank's (EIB) role in financing affordable and sustainable housing as part of smart city development. Highlighting the critical importance of affordable housing for the UN's 2030 Agenda and climate goals, it discussed the EIB's support for social housing projects, innovative financing structures, and advisory services. The EIB has invested €13.4 billion over the last five years to support sustainable housing projects across Europe, demonstrating a significant impact in building resilient, climate-friendly urban communities.

Mr. Simon Savšek, Head of EIB Slovenia



Key messages:

- Affordable housing is key to achieving sustainability and is essential for delivering on the UN's 2030 Agenda.
- The EIB plays a major role in supporting smart and sustainable cities through significant financial investments and advisory support.
- Improving energy efficiency in social housing is crucial to addressing climate change and enhancing the quality of life for urban residents.

Developing Smart and Climate Neutral City Strategies - Pg18



**Mr. Ciaran
O'Sullivan**
AIT Research
Engineer

The presentation by Ciarán O'Sullivan from the Austrian Institute of Technology (AIT) focused on developing strategies for smart and climate-neutral cities. It highlighted the challenges that cities face today, including energy inefficiency, carbon emissions, and the need for resilient urban infrastructure. The presentation emphasized the importance of contextual understanding when planning for city transformation, noting that each city has unique challenges and opportunities. Key approaches include leveraging digital technologies, fostering energy resilience, and integrating climate smart urban planning to support sustainable development. The AIT's work aims to contribute to the creation of cities that are not only climate-neutral but also adaptive and resilient, ensuring sustainable urban development and improved quality of life for all citizens.

BENEFITS OF DEVELOPING SMART AND CLIMATE NEUTRAL CITY STRATEGIES – WHY SHOULD WE DO THIS?



Urban strategies can promote sustainability, economic growth, and resilience. By focusing on clean energy, efficient infrastructure, and innovative technologies, cities can reduce emissions, lower operational costs, and enhance quality of life for residents.

Attract investment

Unlock the potential of smart technologies

Create green jobs

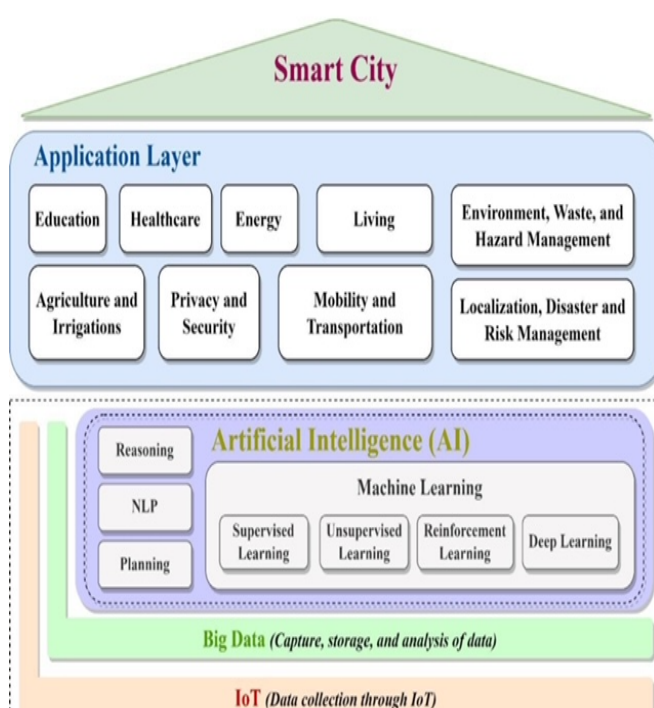
Key messages:

- Developing smart and sustainable urban strategies enables the use of digital technologies and promotes energy resilience, both essential for creating sustainable urban infrastructure.
- Leveraging digital technologies and fostering energy resilience are key components for building sustainable urban infrastructure.
- Climate-smart urban planning is essential to achieve long-term sustainability and enhance the quality of life in cities.

Fear and Prosperity of AI - Opportunities of City Data for creation of common goods – citizens services

The presentation by Maja Bogataj Jančič, PhD, focused on the role of artificial intelligence (AI) and data in creating smart cities, with a special emphasis on governance and intellectual property challenges. It highlighted the opportunities presented by open data and smart city technologies in generating common goods and improving citizen services. A key point of discussion was the various forms of AI—from algorithms to AI ecosystems—and their role in managing big data to support urban decision-making. The presentation emphasized the need for good data governance to ensure effective use of AI in smart cities, addressing issues such as data protection, security, and compliance with legislation. Ultimately, it underscored the importance of responsible AI and data justice to achieve equitable outcomes for all citizens.

➔
Maja Bogataj Jančič, PhD, LL.M., CEO of Open Data and Intellectual Property Institute, Ljubljana Slovenia



Key messages:

- 🔴 **Open Data as a Driver of Innovation** - Leveraging open data and proper data governance is crucial to utilizing AI effectively for smart city development and enhancing citizen services.
- 🔴 **Big Data and AI in Smart Cities** - AI and big data are vital tools for smart cities, providing insights that help improve decision-making and public service delivery, though challenges in governance and resources remain.
- 🔴 **Data Governance and Justice** - Effective governance of AI and data is essential to ensure fair outcomes, protect citizens' rights, and support sustainable smart city initiatives.

CHALLENGES

Challenges and fears of Artificial Intelligence

- 1. Uncertainty and Development Risks** - While AGI (Artificial General Intelligence) aims to be as good as humans at nearly all cognitive tasks, there is significant uncertainty about when it will be achieved. Experts like Jeffrey Hinton acknowledge that even those at the forefront of AI research are unsure about the timeline, which creates concerns around preparedness and regulation.
- 2. Data and Privacy Issues** - Development of AGI requires an enormous amount of data. This leads to challenges in terms of data collection, privacy, and copyright issues. Generative AI tools often scrape vast amounts of internet data, raising concerns about whether this is ethical or just. The fear is that the use of massive data pools without proper governance could lead to misuse or exploitation.
- 3. Potential Misuse** - There is also a fear that AGI could be used for purposes beyond the control of cities and societies, leading to issues such as data exploitation, loss of privacy, or centralization of power in certain commercial entities. In respect of the governance of AGI it is important to ensure that data and AI developments are used for the collective good, not just commercial gain.
- 4. Equitable Development** - According to the panelists there is a need for a democratic approach to AI and data governance, noting that AGI should not only be driven by profit motives. Without inclusive decision-making, AGI might be deployed in ways that do not consider the needs or welfare of all community members, potentially leading to a digital divide.

Mr. Simon Savšek, Head of EIB Slovenia; Mr. Ciaran O'Sullivan, AIT Research Engineer; Ms. Maja Bogataj Jančič, PhD, LL.M, CEO of Open Data and Intellectual Property Institute, Ljubljana Slovenia



OPPORTUNITIES

Opportunities for City Projects supported by Artificial Intelligence

- 1. Public and Private Collaboration** - At the presentation of panelists various opportunities for financing prosperity projects through public-private partnerships. The EIB is committed to funding smart and sustainable city projects, including affordable housing, green mobility, and renewable energy. These projects often require a combination of public funds, commercial loans, and private investments, emphasizing the importance of collaboration across sectors.
- 2. Diverse Financial Products** - During the panel presentation it was highlighted the availability of various financial products, such as venture debt, equity, guarantees, and loans, that could be used to support prosperity projects. The EIB has considerable lending power and works with intermediaries, such as national banks and funds, to enable financing for cities and small enterprises.
- 3. Focus on Value Addition** - Financing is not just about financial viability; projects must also add social value. It was emphasized that EIB's financing must contribute to public welfare, aligning with goals such as the UN's Sustainable Development Goals. This is an opportunity for cities to propose projects that focus not only on economic growth but also on enhancing citizens' quality of life.
- 4. Supporting Smaller Municipalities** - One of the challenges highlighted was that smaller municipalities often struggle with accessing financing due to a lack of capacity or expertise. To overcome challenges advisory services are offered by the EIB to assist smaller municipalities in preparing bankable projects, thereby providing an opportunity to scale prosperity projects in underserved areas.
- 5. Portfolio of Actions** - In order to get an access to funding for prosperity projects, cities should develop a clear strategy that includes a portfolio of actionable items. By setting specific objectives and activities, cities can align their needs with appropriate funding streams, making it easier to secure financial support.
- 6. Leveraging Existing Initiatives** - Cities do not need to start from scratch when developing prosperity projects. Instead, they can leverage existing urban strategies and policies, and align them with available funding opportunities from entities like the EIB, European Commission, and national institutions.
- 7. Aligement of AI Projects to Societal Goals** - While AGI brings potential risks around privacy, ethical use, and equitable development, there are significant opportunities for financing prosperity projects, particularly through collaboration, diverse financial products, and value-driven initiatives. The key is to ensure that projects are well-aligned with broader societal goals, making them attractive for funding while addressing challenges such as equity and capacity in smaller municipalities.

Session IV:

Launch of the Millennium Project 2024 State of the Future Report 20.0 & Presentation of opportunities of CERN (European Organization for Nuclear Research) cooperation



H.E. Ms. Sabina Stadler Ambassador; Head of Department; Ministry of Foreign Affairs, Mr. Tit Neubauer; Senior official at Ministry of Higher, Education Science and Innovation, Mr. Blaž Golob; GFS; GoForesight Institute – Millennium project, Global Futures Society, Mr. Zoran Aralica prof. Faculty of Economics, Zagreb University, Croatia

Presenting The Millennium Project 20.0 Report, Positioning Southeastern Europe Node, and Slovenian Membership in CERN

The debate during the session at the Ljubljana Forum focused on the presentation of The Millennium Project's 20.0 report, the positioning of the Southeastern Europe Node of the Millennium Project, and Slovenia's evolving role in the European Organization for Nuclear Research (CERN). The key points discussed were as follows:

1. Presentation of The Millennium Project 20.0 Report

The Millennium Project 20.0 Report, known as the "State of the Future" report, provides foresight into global trends, including the 15 major global challenges such as technology governance, sustainable development, and the future of artificial intelligence. The Southeastern Europe Node of the Millennium Project, which includes Bosnia & Herzegovina, Slovenia, Croatia, Montenegro,

"This is one of the largest, broadest, most detailed publications on future issues and possibilities ever produced."

*By Jerome C. Glenn;
Director of the Millennium
project*

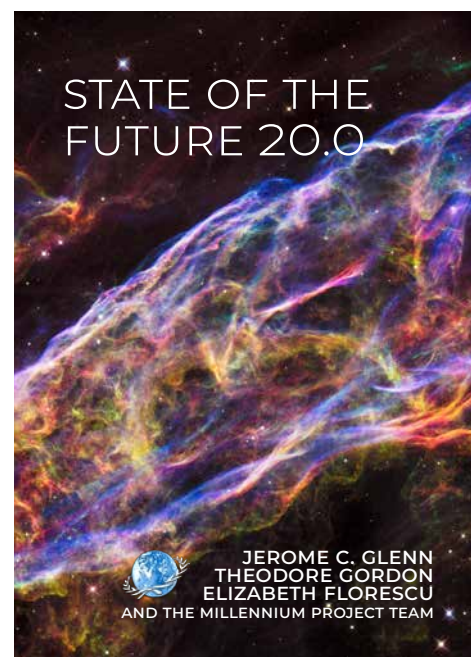
and North Macedonia, was highlighted for its role in leveraging foresight methodologies to contribute to regional sustainable development and digital transformation, particularly in areas like artificial general intelligence (AGI) and urban futures. The focus is on promoting collaboration across cities, which are often "hidden champions" in their ability to drive sustainable and innovative solutions. Importance of Foresight for Cities -The discussion highlighted how cities can contribute significantly to sustainable development by aligning long-term foresight with urban planning. This means using insights from foresight methodologies to identify unique strengths and opportunities within cities and regions, enabling them to become more productive and attractive for investment and innovation.

2. Positioning of Slovenia and the Southeastern Europe Node in the Millennium Project and at Global Futures Society - GFS

Regional Collaboration - The Southeastern Europe Node was positioned as an important contributor to global foresight efforts, most recently through support of the foundation of Global Futures Society – GFS coordinated by Dubai Future Foundation. The collaboration across the region aims to explore how foresight can be applied to address key challenges, such as the governance of artificial intelligence and sustainable urban development. Special Focus Areas - The node aims to foster innovation by connecting foresight methodologies with urban strategies and identifying areas where cities can excel. This includes a focus on sustainable development and AGI governance, where the region can make substantial contributions to global discourse and application. Connecting Foresight with Regional Strengths -The node emphasizes connecting foresight methodologies with existing strengths of the region to create a productive approach to urban and regional planning, ultimately supporting competitiveness, productivity, and sustainability.

3. Slovenian Membership in CERN – European Organization for Nuclear Research

Slovenia's forthcoming full membership in CERN was discussed by high level representatives of the Government of Slovenia as a significant step in advancing the country's research capabilities and positioning it within the global scientific community. Full membership at CERN offers Slovenia direct access to cutting-edge scientific knowledge, infrastructure, and a chance to co-design the future of CERN. Membership will open numerous doors for Slovenian researchers, providing access to state-of-the-art resources and enabling them to participate in major scientific discoveries. It also positions Slovenia as a



Session IV:

ALPE - ADRIA view on FUTURES



Mr. Tit Neubauer; Senior official at Ministry of Higher, Education Science and Innovation, H.E. Ms. Sabina Stadler Ambassador; Head of Department; Ministry of Foreign Affairs, Ms. Jadranka Jezeršek Turnes; Institute Kontekst, Mr. Blaž Golob; GFS; GoForesight Institute – Millennium project, Global Futures Society, Mr. Zoran Aralica prof. Faculty of Economics, Zagreb University, Croatia

player in particle physics and high-energy research, enhancing collaboration with global scientific leaders. Impact on Industry - Full membership will also create opportunities for Slovenian companies, particularly those involved in niche, high-value technologies, to collaborate with CERN. It was highlighted that CERN, as a contractor of services and products, can provide Slovenian companies with a valuable reference for gaining access to global markets. Governance and Participation - Slovenia's full membership will also come with the responsibility of co-governing and co-managing CERN, allowing Slovenia to have a say in its future direction. This level of participation was seen as critical for guiding research and ensuring that it aligns with Slovenian scientific and industrial capabilities.

4. Science Diplomacy and Foresight

Panelists emphasized the importance of science diplomacy in fostering international partnerships through foresight. Science diplomacy was presented as a means to inform policy decisions with scientific evidence, fostering collaboration among diplomats, scientists, and policymakers. She pointed out that science diplomacy requires effective use of foresight to anticipate future challenges and opportunities. The session highlighted the increasingly important role of foresight in diplomacy. Foresight was described not as a means of predicting the future but as a tool for preparing for possible future scenarios. This approach is crucial for informed decision-making and for enhancing the credibility and effectiveness of diplomatic efforts.

Session IV:

City Challenges and AI & Industry solutions for cities

NetZeroCities EU Project Challenges & Opportunities for AI solutions

The presentation highlighted the opportunities and challenges of implementing AI solutions in smart cities to enhance urban sustainability. It discussed the Climate City Contract (CCC), which serves as a framework for cities to plan and execute climate actions, and emphasized a cross-sectoral and demand-driven approach. Key areas of focus included reducing carbon emissions, improving energy efficiency, promoting sustainable urban mobility, and enhancing waste management practices. AI's role in supporting these initiatives was also explored, with examples of optimizing energy consumption, traffic management, and resource efficiency.



Ms. Katarina
Pogačnik, CEO
Envirodual
Ltd Slovenia &
Croatia



CCC - Climate City Contract

-three parts, one document



Key messages:

- Climate City Contract as a Strategic Tool:** The CCC is vital for guiding European cities towards climate neutrality, enabling coordinated action and accountability for sustainability goals.
- AI as a Catalyst for Urban Sustainability:** AI solutions can significantly enhance efficiency in energy use, waste management, and mobility, supporting smart city objectives.
- Collaborative Action and Engagement:** Achieving climate neutrality requires collaboration between stakeholders, adoption of innovative technologies, and ongoing updates based on emerging knowledge.



**Mr. Miha
Ernstsneider;**
**Digital
Transformation
Product
Manager T - 2**

Smart City Platform & AI for city projects

The vision for an ideal AI-driven city revolves around leveraging AI in various sectors, including energy, mobility, public safety, healthcare, urban planning, and governance. AI plays a crucial role in optimizing city systems, such as integrating traffic, energy grids, and waste management, enabling more efficient operations. The presentation highlighted the importance of making data FAIR (findable, accessible, interoperable, reusable) to support decision-making and promote innovation. A call to action was made to create safe environments for innovation, simplify procurement processes, and invest in digital skills for city employees and citizens, emphasizing that the challenges of smart cities are not purely technological but also include bureaucratic delays, outdated legislation, and funding constraints.

Key messages:



AI Integration for City Efficiency: AI can greatly enhance city functions by optimizing energy use, traffic systems, waste management, and other essential services, contributing to a more efficient urban environment.



Overcoming Non-Technological Challenges: Challenges like bureaucratic delays, outdated regulations, and fragmented data pose significant barriers to smart city development, requiring systemic changes to support innovation.



Promoting Data Accessibility and Skills Development: Making city data FAIR and investing in digital skills for both city employees and citizens are essential steps to maximize the benefits of AI in smart city projects.

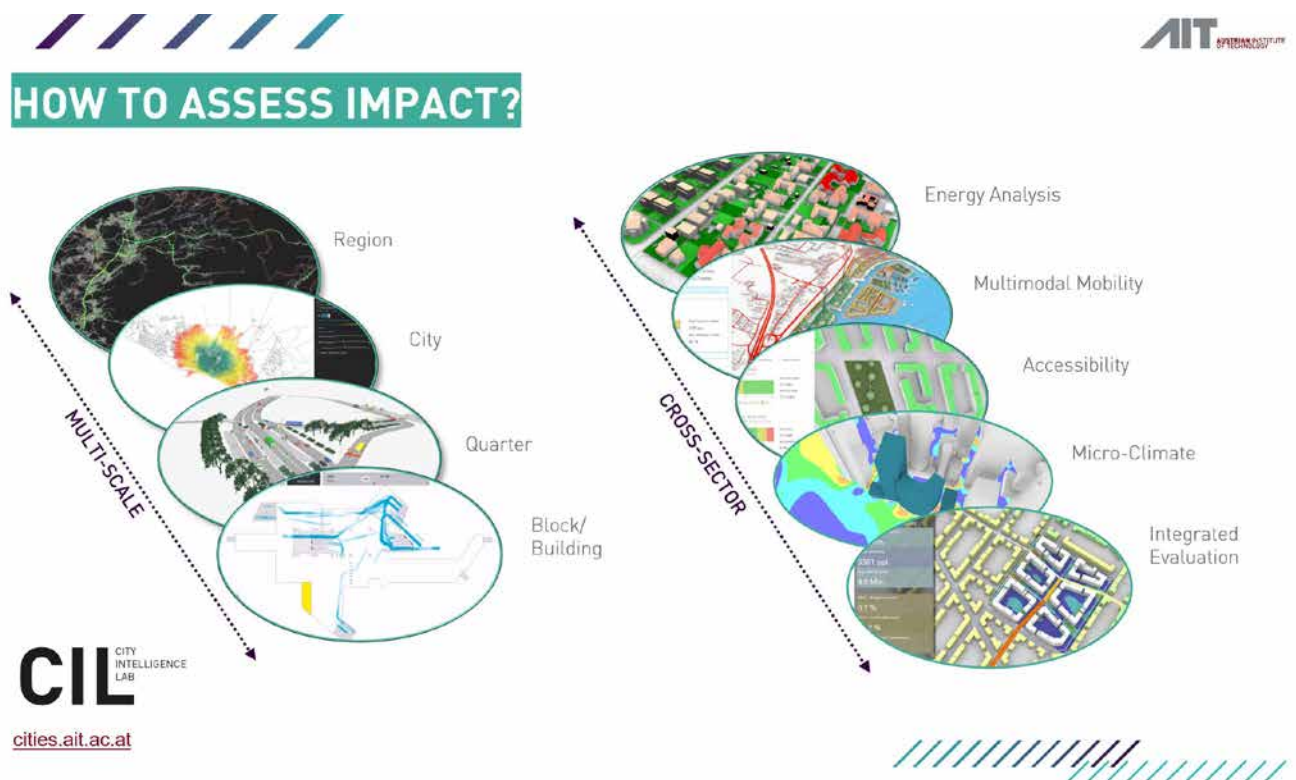
FAIR data stands for Findable, Accessible, Interoperable, and Reusable.

These principles are meant to ensure that data is managed in a way that enhances its value and usability. Findable: Data should be easy to locate by both humans and machines. This involves using rich metadata and having unique, persistent identifiers (such as DOIs for datasets). Accessible: Once data is found, it should be easy to access, possibly using standardized protocols, and with clear conditions on how it can be accessed (e.g., open, restricted, or with a login). Interoperable: Data should be formatted in a way that it can integrate with other datasets, systems, or tools. This means using shared standards and languages to allow datasets from different sources to be combined. Reusable: Data should be well-documented and structured in a way that allows others to understand and use it for different purposes, ensuring long-term value. This includes clear licensing terms.

AI and Digital Technologies Enablers for Co-Creation in Urban Development

The presentation focused on assessing the impact of digital solutions for resilient cities and regions. It covered the importance of evaluating the outcomes of implementing technologies in urban environments, particularly in terms of resilience, sustainability, and energy efficiency. The assessment approach highlighted the need to understand the direct and indirect effects of smart technologies on city infrastructure, environment, and quality of life. Ms. Fink also stressed the role of data-driven insights in shaping resilient urban policies that help cities adapt to climate change and other challenges. The goal is to ensure that cities not only adopt digital solutions but also evaluate their effectiveness to make informed decisions for future developments.

➔
Ms. Theresa Fink; Business Manager AIT, Austrian Institute of Technology, Center for Energy



Key messages:

- ➊ **Impact Assessment for Urban Technologies:** Evaluating the impact of digital solutions is crucial to understanding how they contribute to urban resilience, sustainability, and improved quality of life.
- ➋ **Data-Driven Decision Making:** Data-driven insights are key to developing adaptive urban policies that respond to evolving challenges, particularly in energy and climate resilience.
- ➌ **Holistic Approach to Resilience:** Digital solutions must be assessed not only for their technical functionality but also for their broader impact on city infrastructure, environment, and social aspects to build truly resilient cities

AgiliCity - Modelur



Mr. Jernej Vidmar;
Founder &
CEO, Agilicity,
Ljubljana

The presentation by Dr. Jernej Vidmar focused on the current state of artificial intelligence (AI) in urban planning and design, highlighting both the promises and the challenges of adopting AI technologies in this field. Vidmar discussed how tools like Modelur are used to streamline zoning-compliant urban design, significantly reducing time compared to traditional methods. He also emphasized the challenges that prevent wider adoption of AI in urban planning, such as outdated regulatory frameworks and decision-makers' limited understanding of technological possibilities. AI-based solutions for urban planning, such as generative design and wind velocity prediction models, were presented, demonstrating both their advantages in efficiency and their limitations in accuracy and data dependency. The presentation concluded with a call for better integration of AI technologies through education and a shift in traditional decision-making approaches.



Key messages:



Streamlining Urban Design with AI: Tools like Modelur can significantly accelerate zoning-compliant urban design, reducing the process from weeks to hours.



Challenges to AI Adoption: Regulatory rigidity, lack of technological understanding among decision-makers, and the limitations of AI models, such as data dependency, are key barriers to broader AI adoption in urban planning.



Potential of AI in Specialized Applications: AI has shown promise in specific areas like generative urban design and wind velocity prediction, offering faster solutions for niche problems in the early stages of urban development.



Ms. Katarina Pogačnik, Mr. Miha Ernstschnider, Ms. Theresa Fink, Mr. Jernej Vidmar and mr. Frane Šesnić

The session on "City Challenges and AI - Industry Solutions for Cities" provided several key insights:

AI's Role in Climate-Neutral Cities - The "Net Zero Cities EU" project was highlighted as an initiative for achieving climate-neutral, smart cities by 2050, with Ljubljana as an active participant. AI plays a role in optimizing energy consumption, predicting energy demand, and managing traffic systems in real time. Nature-based solutions were also integrated, like using AI to optimize green infrastructure design and manage heat islands in urban areas.

Smart City Platforms - The presentation from Telekom Slovenije emphasized the importance of creating a city platform where data flows freely across various sectors like transport, energy, and public services. AI solutions can make decisions faster and more efficiently, enabling smoother commutes, better waste management, and overall livability.

AI for Urban Development and Collaboration - AI was seen as a tool to foster collaboration between multiple stakeholders, including citizens. The Austrian Institute of Technology emphasized the importance of co-creation in urban planning using AI to analyze complex data and predict various urban outcomes such as climate resilience and energy models. AI was also highlighted for its role in making predictions and providing real-time urban planning solutions.

Challenges in Implementation - While AI offers many solutions, several challenges were noted, including bureaucratic delays, outdated legislation, and siloed data systems. The integration of AI requires collective effort from governments, businesses, and city stakeholders to push forward innovation and overcome these barriers.

Session V:

Knowledge for Cities & Industry solutions for cities

Hermes project - Tools for managers for successful digital transformation

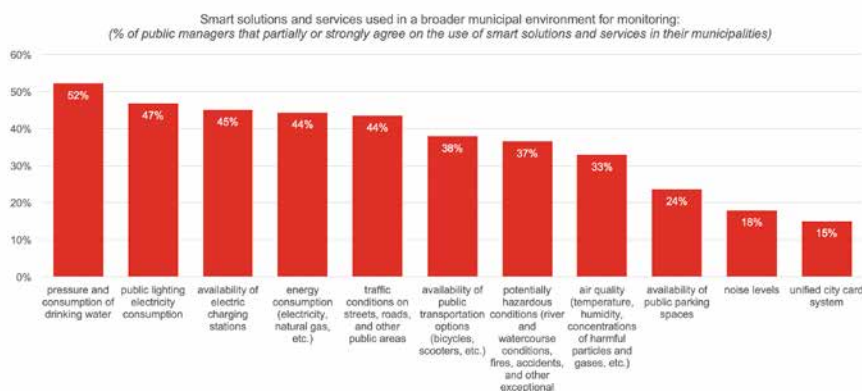


**Dr. Babšek
Matej in
dr. Ravšelj
Dejan; Faculty
of Public
Administration-
University of
Ljubljana**

The presentation by Aleksander Aristovnik, Matej Babšek, and Dejan Ravšelj at the Ljubljana Forum 2024 focused on smart governance within smart cities, emphasizing the use of an e-tool to support public managers in transforming public services. The speakers presented the role of modern governance approaches, incorporating disruptive technologies like AI and IoT to reform public administration processes and enhance citizen interactions. The key goals included collaboration, co-production, and efficient decision-making to create public value and meet citizen needs. The presentation also addressed the practical application of smart solutions in municipal environments for monitoring various urban systems such as energy consumption, public transportation, waste management, and public safety.

SMART SOLUTIONS AND SERVICES

UL|FU



Key messages:

- **Technology-Driven Public Governance:** The integration of disruptive technologies like AI and IoT is transforming public governance, enabling smarter interactions between public administration and citizens.
- **E-Tools for Public Managers:** Effective e-tools can empower public managers to make data-driven decisions, fostering transparency, collaboration, and responsiveness in urban governance.
- **Monitoring Urban Systems:** The use of smart solutions for monitoring urban systems (e.g., energy, transportation, waste management) contributes to optimizing city services, improving efficiency, and enhancing the quality of life for citizens.

Seamless smart parking solutions and mobility services based on interoperability

The presentation by Mohit Mishra at Ljubljana Forum 2024 highlighted the concept of an Open Mobility Network using the becn protocol, aimed at transforming mobility services by making them more interoperable and accessible. This approach involves building an "Internet of Mobility" where users and service providers can interact seamlessly without needing to be on the same platform. Inspired by the open nature of email protocols, the Open Mobility Network envisions similar openness in mobility, enabling innovations on a large scale. The presentation covered the benefits of integrating this open protocol in mobility, including better service access, enhanced customer interactions, and improved infrastructure management from regional to global scales.



Mr. Mohit Mishra; CEO Automicle; Netherlands



This network-centric thinking makes previously impossible innovations possible, at scale.



User and Provider need **NOT** be on the same platform

Key messages:

- Open Mobility Network Concept:** Inspired by open email networks, the Open Mobility Network aims to create a standardized, interoperable system that enhances user and provider interactions across platforms.
- Beckn Protocol for Mobility:** The use of the beckn protocol helps establish an interoperable framework for mobility services, allowing users to search, book, pay, and track seamlessly across different service providers.
- Scalable Innovations in Mobility:** The network-centric approach of Open Mobility Network supports large-scale innovations, enabling effective regional management and seamless integration of mobility services across different geographical locations and platforms.

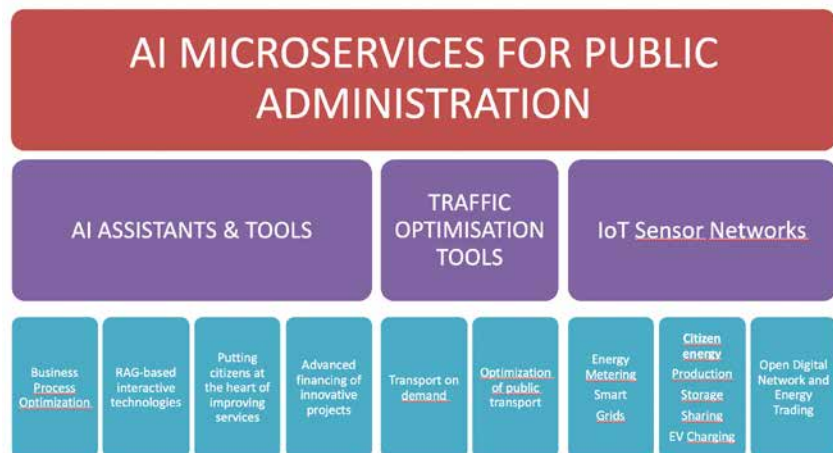
Smart renewable Energy Grids for communities and municipalities - from consumer to the prosumer a seamless journey



Mr. Damir Medved; CEO Edihadria; EU

The presentation by Damir Medved at the Ljubljana Forum 2024 focused on the "Smart Renewable Energy Grids for Communities and Municipalities" initiative under the EDIH Adria project. The project emphasizes the transformation from consumers to "prosumers" who not only consume but also produce and share energy, fostering self-sustainable communities. The presentation discussed the integration of AI microservices and IoT sensor networks for optimizing energy usage, improving business processes, and enhancing public services like transport on demand and energy storage. The goal is to create self-sustaining communities that leverage digital tools to optimize energy production and consumption while incorporating electric vehicle (EV) charging and open energy trading systems. The Beckn protocol was highlighted as a scalable solution for energy and mobility services integration, promoting interoperability across various platforms.

EDIH ADRIA MICROSERVICES (EXAMPLE)



Key messages:



Prosumers and Energy Independence: The transition from energy consumers to prosumers is a crucial step in creating self-sustaining communities, enabling citizens to produce, store, and share energy efficiently.



AI and IoT for Community Services: Integrating AI microservices and IoT sensor networks helps optimize public services like energy management and transport on demand, leading to cost efficiency and better resource utilization.



Open Digital Networks for Interoperability: The Beckn protocol provides a scalable and open solution for integrating energy and mobility services across different platforms, encouraging collaboration and innovation in smart communities.

EMILIA – An AI Platform to Help Citizens Obtain City Permits & Information

In his presentation at Ljubljana Forum 2024, Leonardo Pacher, Co-founder and CTO at SMART8, introduced EMILIA, an advanced AI-driven platform designed to enhance how citizens engage with city services. EMILIA, which stands for Electronic Municipal Information and Licensing Assistant, aims to simplify and modernize the experience of acquiring permits and accessing essential municipal information. Leonardo emphasized the current challenges many face due to cumbersome bureaucratic processes, which often hinder efficient interaction between citizens and public administrations. EMILIA addresses these challenges by leveraging natural language processing and real-time data to streamline tasks that usually require considerable time and effort.

Leonardo illustrated how EMILIA acts as a 24/7 virtual assistant, ensuring citizens can access services at their convenience, thereby improving the overall user experience. Additionally, the platform not only benefits citizens but also enhances operational efficiency for city administrations by automating many routine inquiries and processes. Highlighting the successful implementation of EMILIA in the City of Jundiai, Leonardo showcased tangible improvements in permit processing times and increased citizen satisfaction. Ultimately, the presentation underlined the transformative role that AI can play in public administration, positioning EMILIA as a key tool for building smarter, more responsive, and citizen-focused urban governance.



Mr. Leonardo Pacher; Data Scientist, Start-up initiative, Amsterdam



Key messages:



Simplified Bureaucratic Processes: EMILIA streamlines the process of acquiring city permits, making bureaucratic interactions faster and more accessible for citizens.



24/7 Citizen Assistance: The platform enhances public services by providing round-the-clock support, significantly improving the citizen experience.



Operational Gains for City Administrations: EMILIA's AI capabilities automate routine tasks, increasing the efficiency of municipal operations and boosting citizen satisfaction.

Insights



Mr. Jan Künne; Digital Nomad EDG USA / Germany, Mr. Omar Smajlović; YBG - Youth Business Group Slovenia, Mr. Ravšelj Dejan PhD; Faculty of Public Administration-University of Ljubljana, Mr. Mohit Mishra; CEO Automicle; Netherlands, Mr. Babšek Matej, PhD Faculty of Public Administration – University of Ljubljana, Mr. Damir Medved; CEO Edihadria; EU

The session on "City Challenges and AI - Knowledge for Cities and Industry Solutions" provided several important insights:

Tools for Public Administration - The Faculty of Public Administration at the University of Ljubljana presented a special e-tool designed to assist public managers in implementing smart city initiatives. This tool helps assess the level of smart governance in municipalities by focusing on various dimensions like technology, structures, processes, and citizen engagement. The tool also provides a traffic light system to identify critical areas needing improvement.

Network-Centric Mobility Solutions - A shift away from platform-based solutions to network-centric approaches for mobility was discussed. The example of an interoperable mobility system across the Netherlands, India, and the United States showcased how local transportation systems could be better integrated. The idea is to allow users to access mobility services through existing apps like WhatsApp, making it easier to use various forms of transport across regions.

Energy Communities and Transportation - Another key presentation focused on integrating energy systems with mobility solutions, particularly in rural and island areas. By encouraging local energy production through solar communities and connecting this energy supply to electric vehicle charging stations and public transportation, the goal is to create self-sustaining communities. This approach also offers additional revenue for residents while supporting the green energy transition.

AI-Driven City Solutions - AI tools such as the Emilia platform were highlighted for their ability to streamline city administration processes. Emilia helps citizens obtain city permits and access public information through natural language processing, offering a more efficient and user-friendly interface for interacting with city governments.

Conclusions

of Ljubljana forum 2024

HUMAN QUESTION?

Please provide us with five concluding remarks when you evaluate the insights and conclusions of the sessions in the attached Synthesis Report of Ljubljana Forum 2024.

What would be the 5 key messages on the topic of AI and the model of ideal city for the future?

AI ANSWER ...

Based on the insights and conclusions from the Ljubljana Forum 2024 sessions on AI and the ideal city model for the future, here are five key concluding messages:

- 1. Data as a Pillar for Urban Innovation:** The effective use of data is essential in developing smart city initiatives. Transparent and secure data governance enables cities to improve decision-making and deliver citizen-centric services, ensuring data accessibility and utility while maintaining privacy and security.
- 2. AI as a Catalyst for Sustainability:** AI-driven technologies are pivotal in achieving climate-neutral and resilient urban spaces. By optimizing resource use—such as energy and water—AI supports cities in meeting their sustainability goals, aligning with global climate objectives and enhancing urban efficiency.
- 3. Cross-Sector Collaboration for Scalable Solutions:** The development of smart cities requires robust collaboration across public, private, and community sectors. EU funding, partnerships, and shared projects enable cities to scale smart solutions efficiently, emphasizing the importance of teamwork and collective action.
- 4. Citizen-Centric and Inclusive Growth:** Future city planning must prioritize inclusivity by engaging citizens in governance and providing tools that foster well-being and economic opportunity. Emphasis on creative spaces, accessibility, and participatory decision-making ensures that smart city solutions serve diverse urban populations equitably.
- 5. Resilience through Innovation and Foresight:** Building resilient cities requires ongoing innovation, foresight, and adaptable frameworks. By integrating new technologies like AI and adopting sandbox approaches for testing solutions, cities can remain flexible and resilient, capable of addressing emerging challenges and ensuring a sustainable urban future. (LF2024 Summary Report 05).



Award Ceremony



Members of the award commission Mr. Jan Künne and Mr. Blaž Golob with the winner of 2024 Ljubljana Forum Award Ms. Olivera Injac – Mayor of Podgorica

Ljubljana Forum 2024 Award Introduction

The 2024 Ljubljana Forum proudly recognizes Mayor Olivera Injac of Podgorica as the award winner for her visionary leadership and commitment to shaping the future of her city through sustainability and digital transformation. Mayor Injac's active participation in the Round Table of City Leaders demonstrated her dedication to building a resilient urban future that embraces modern technological advancements while preserving the cultural and historical essence of her community.

Ljubljana Forum Award Winners

2024	Podgorica · Mayor Ms. Olivera Injac	2020	Hybrid event without award ceremony
2023	Barcelona · Superilla - Superblock concept	2019	Rijeka · Technology Park Torpedo
2022	San Sebastian Mondragon · Ibon Zugasti	2018	Almaty · Urban mobility reform
2021	10th Anniversary Awards: Participating city · Rijeka, Mayor Marko Filipović Key note speaker · Barbara Haering Key note speaker · Ladeja Godina Košir Key note speaker · Lorenzo Madrid Key note speaker · Alexander Prosser Company partner · BTC, Jože Mermal NGO · Slovenia / Nigeria, Chamber of Commerce, Fred Uduma Financial Institution · European Investment Bank - EIB, Francesco Ferrero Education / Research / Consulting · Institute of Economics Zagreb, Zoran Aralica Participant / Projects initiator · Tihomir Divjak	2017	Maribor · Wcycle project
		2016	Tirana · Tirana Ime smart application project
		2015	Ankara · Ankara Boulevard project
		2014	Podgorica · Center for Education of Children
		2013	Belgrade · Ada Bridge project

One of the standout initiatives presented by Mayor Injac was the ambitious plan to create a coworking and creative space by architecturally reshaping the old Robna Kuća building in the heart of Podgorica. This project not only aims to breathe new life into a significant historical structure but also symbolizes the city's embrace of innovation, community engagement, and entrepreneurship. By transforming this building into a vibrant hub of creativity, Podgorica is positioning itself as a leader in fostering collaboration, nurturing local talent, and promoting sustainable urban development.

Mayor Injac's forward-thinking approach exemplifies the core values of Ljubljana Forum, inspiring cities across Europe and beyond to pursue bold, innovative paths towards becoming more inclusive, smart, and sustainable urban centres. Her efforts embody the vision of the Forum—a commitment to practical, impactful initiatives that serve as a beacon for future city planning and development.

Ljubljana: A Hub of Innovation from History to the Future



Ljubljana has long been a centre of innovation, deeply rooted in history. This evolution can be traced from ancient discoveries to modern technological and cultural developments.



3seaseurope.com/Photo: A. Peunik / MGML

From the Oldest Wheel to Modern Engineering

One of Ljubljana's most iconic historical innovations is the discovery of the **Ljubljana Marshes Wheel**, the oldest wooden wheel ever found. Dating back over 5,150 years, this remarkable artifact not only highlights ancient engineering prowess but also symbolizes Ljubljana's enduring spirit of innovation. Found in the Ljubljana Marshes, south of the city, this wheel represents the technological ingenuity of early societies, making it a global symbol of prehistoric human achievement. It serves as a reminder of the city's capacity for groundbreaking ideas, both then and now



Source: Večer magazine archive

The Rog Factory - a 20th Century Innovation Hub

Moving forward in time with the Rog Factory, a 20th Century Innovation Hub, Ljubljana continued to be a center of industrial innovation with the Rog Factory, which became a symbol of success in the former Yugoslavia. Known for its production of high-quality bicycles, the Rog Factory marked its 200,000th bike in 1961. This milestone was celebrated during the 1st May Parade, reflecting the city's dedication to technological advancement and its connection to the global cycling movement. Rog bicycles became a cultural icon, representing freedom, mobility, and innovation.



Cyclists near Dubai Futures Museum
Source: www.Dubai Fitness Challenge.com / 2024 & Le Soir 2024

Slovenia's Global Impact in Sports

Today, Slovenia's culture of innovation extends into the world of sports. Slovenian cyclist world champion Tadej Pogačar, a former member of UAE Emirates Team, has achieved international acclaim by winning the Tour de France three times. His success on the world stage has helped to popularize cycling globally, encouraging cities to transform toward more sustainable, wellbeing-focused urban areas, besides other important bicycle racings.

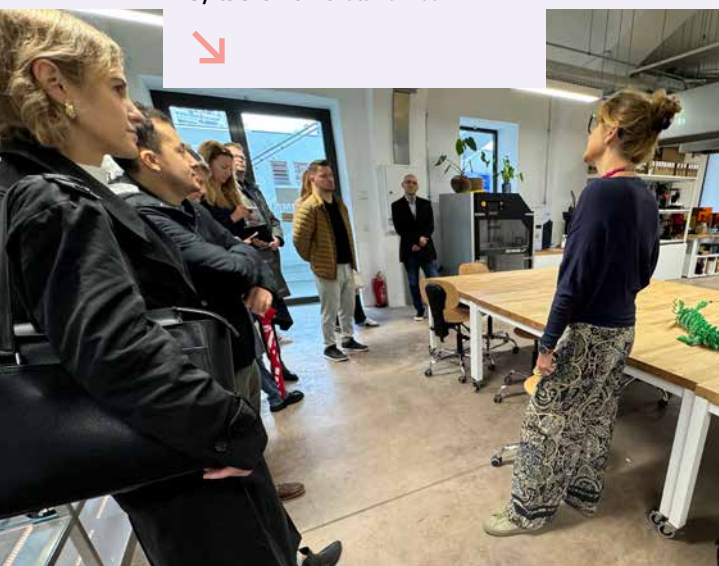


World champion
Tadej Pogačar
on Burj Khalifa
tower

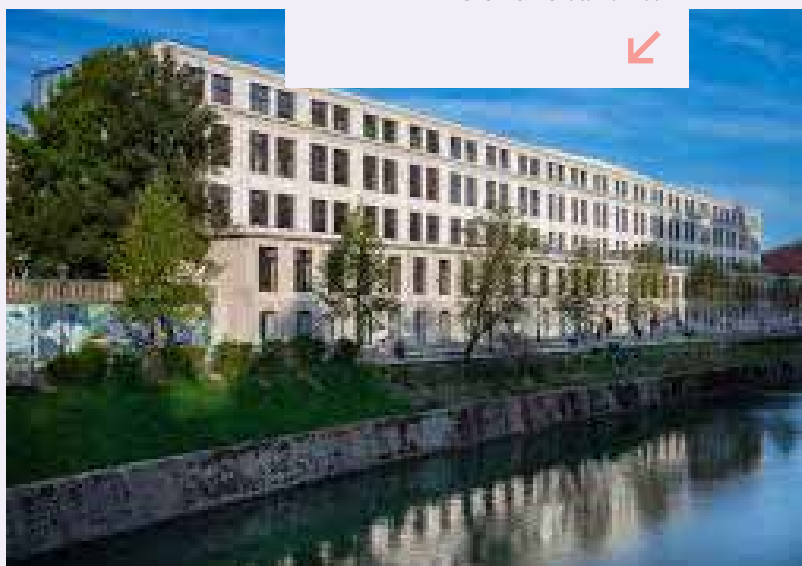
Centre Rog - A Modern Hub for Innovation and Creativity Centre

Building on its rich history, Ljubljana is now home to Center Rog, one of Europe's largest makerspaces. Centre Rog is a platform for innovation, providing tools and support for creators and entrepreneurs, and positioning Ljubljana as a forward-thinking city ready to address future challenges.

Participants of Ljubljana Forum 2024
at the study tour in ROG Factory guided
by its CEO Ms. Renata Zamida



Participants of Ljubljana Forum 2024
at the study tour in ROG Factory guided by its
CEO Ms. Renata Zamida





About the People

City Leaders

Mr. Zoran Janković, Mayor of the City of Ljubljana
 Ms. Olivera Injac, Mayor of Podgorica
 Ms. Sabina Popit, City of Ljubljana
 Mr. Frane Šesnić, City of Zagreb
 Mr. Danijel Antonić, City of Rijeka
 Mr. Tomaž Lanišek, City of Kranj

Speakers and Moderators

Mr. Blaž Golob, Chairman of Ljubljana Forum
 Mr. Sindre Wimberger, WienBot - AI Vienna
 Mr. Simon Savšek, Head of European Investment Bank Group Office in Slovenia
 Mr. Ciaran O'Sullivan, AIT Research Engineer
 Ms. Maja Bogataj Jančič, PhD, LL.M, CEO of Open Data and Intellectual Property Institute, Ljubljana
 Mr. Zoran Aralica, prof. Faculty of Economics, Zagreb University
 Mr. Tit Neubauer, Senior official at Ministry of Higher Education, Science and Innovation
 Ms. Sabina Stadler H.E. Ambassador, Head of Department, Ministry of Foreign and European Affairs
 Ms. Katarina Pogačnik, CEO Envirodual Ltd Slovenia & Croatia
 Mr. Miha Ernstschnneider, Head of Digital Transformation Department T - 2 company
 Ms. Theresa Fink, Business Manager AIT, Austrian Institute of Technology, Center for Energy
 Mr. Jernej Vidmar, Founder & CEO, Agilicity, Ljubljana

Mr. Babšek Matej; PhD, Faculty of Public Administration-University of Ljubljana
 Mr. Mohit Mishra, CEO Automicle; Netherlands
 Mr. Damir Medved, CEO Edihadria; EU
 Mr. Leonardo Pacher, Data Scientist, Start-up initiative, Amsterdam
 Mr. Omar Smajlović, Founder & Co-President YBG - Youth Business Group Slovenia
 Mr. Miha Murn, Painter - President AAMI Corporation

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 Mr. Danijel Antonić, Deputy ICT City of Rijeka
 Mr. Alexander Bakharev, Alex Rus Artist
 Ms. Tjaša Bartol, Artist
 Ms. Suzana Belošević Romac, City of Rijeka
 Mr. Boštjan Berčič, City of Kranj
 Ms. Kaja Bizjak, Youth Business Group/Unija Smart Accounting
 Mr. Luka Brulc, Bold projects d.o.o.
 Mr. Klemen Bukovec, AAMI Corporation
 Ms. Katarina Dalla Valle, URBI d.o.o.
 Ms. Tina Drolc, European Investment Bank
 Mr. Andrej Erzetič, City of Koper
 Mr. Matija Codeša, City of Vienna, International Offices - Ljubljana
 Mr. Mark Golob, Sunergy
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 Mr. Rok Harter, City of Kranj



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 Mr. Roman Renner, Institute for Spatial Planning Slovenia
 Mr. Luka Rep, Entrepreneur
 Mr. Egor Romanov, Artist
 Mr. Aleksandra Romanova, Artist
 Ms. Chiara Seminerio, Artist
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 Ms. Sandra Turk, Entrepreneur
 Mr. Anastas Vangeli, School of Economics and Business, University of Ljubljana

Mr. Jon Velkavrh, Youth Business Group
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 Mr. Aleksander Vujović, Studio for Urban planning (SUPA)
 Mr. Marijan Vundač, City of Rijeka
 Ms. Alexandra Würz-Stalder, Municipal councillor of the City of Graz
 Mr. Jožef Zrimšek, T-2
 Mr. Ignac Zupan, T-2
 Mr. Gašper Žerovnik, T-2

Občan v središču pametnega mesta



T2

Naša Pametna mesta združuje pametne informacijske in merilne sisteme, obstoječe občinske informacijske sisteme, našo spletno platformo ter mobilno in IPTV aplikacijo za meščane v enotni ekosistem.

www.smartcity.si

PAMETNA MESTA
PLATFORMA ZA
INTERAKCIJO Z OBČANI

MESTO PRIHODNOSTI DANES



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