

Jačanje spremnosti hrvatskih lokalnih vlasti za digitalizaciju uprave

U suradnji s



April 9th, 2025
CROATIA

Uvodni pozdrav



Francesca Gržinić Kuljanac
Grad Opatija



RADNA SKUPINA ZA ICT UDRUGA GRADOVA

O nama

Radnu skupinu čine službenici gradova članova Udruge zaduženi za pitanja informacijskih sustava, provedbu projekata digitalne transformacije



Podrška

Aktivno podržavamo gradove na njihovom putu digitalne transformacije, te potičemo razmjenu znanja i iskustava.



Suradnja

Surađujemo s ministarstvima, državnim institucijama i EU inicijativama.



Edukacija

Organiziramo radionice i edukacije kako bismo približili nova tehnološka rješenja i planove razvoja svim dionicima.

Main Approach of the sessions



HYBRID DISSEMINATION SESSION:

This introductory session delivers valuable insights into European digital topics, featuring presentations from experts who communicate in a clear and accessible manner.

It is designed for city and local community representatives and decision-makers, providing them with essential information and understanding to advance their digital initiatives.

The goal of this session is to raise awareness among the target group, and sets the stage for the follow-up training sessions.



ONLINE TRAINING SESSIONS:

These sessions are specifically tailored to address the unique needs of individual communities.

They offer comprehensive training on relevant digital topics and tools, ensuring participants gain the in-depth knowledge and skills required to effectively implement and manage their digital transformation projects.

The goal of these sessions is to provide participants with a hands-on approach to each of the topics disseminated in the hybrid event.



PROMOTING EUROPEAN INITIATIVES:

Promoting and disseminating European Initiatives to support communities in their digitalisation strategy.

The goal is to make sure communities know and utilise these resources and communities available at European level such as [Living-in.EU](#) [LORDIMAS](#) [European data space for smart communities](#) the [Online Procurement Helpdesk](#) the Local Digital Twin Toolbox or the [LDT EDIC](#) among others.



AGENDA



European
Commission |

Detailed Agenda Overview

Phase 0: How to Start Your Digitalisation Journey



9. travnja 2025. godine



10:00

TIME	TOPIC	SPEAKER(s)
10:00 - 10:10	Uvodni pozdrav	Francesca Gržinić Kuljanac <i>Grad Opatija</i>
10:10 - 10:30	Lokalni digitalni blizanci: uvod	Darko Šiško <i>Grad Zagreb</i>
10:30 - 11:00	Digitalni Zagreb <i>Digital transformation of the City of Zagreb</i>	Maja Šajnović <i>Grad Zagreb</i>
11:00 - 11:15	Coffee break	
11:15 - 11:45	Tehnologije koje omogućavaju razvoj: platforme za otvorene podatke	Nikola Modrušan Ministarstvo pravosuđa, uprave i digitalne transformacije Tomaž Lanišek Grad Kranj / Urbanminds
11:45 - 12:00	Procjenite svoju digitalnu spremnost uz LORDIMAS	Peter Geršić <i>Novo Mesto</i> Marina Tavra <i>Tehnološki park Split</i> Genoveva Gil Garcia/ Ignacio Garcia Vega <i>Serendipity</i>
12:00 - 12:30	Izrada plana digitalne tranzicije	
12:30 - 13:15	Ručak	
13:15 -13:45	Ekosistemi za podršku i suradnju	Gabriela Ruseva <i>Living-in.EU & EuroCities</i> Damir Medved <i>CEO EDIHADRIA</i>
13:45 - 14:30	Najava novih izvora financiranja digitalne transformacije	Nataša Margetić Ministarstvo pravosuđa, uprave i digitalne transformacije Ariana Vela <i>Avelant d.o.o.</i>
14:30 - 15:00	Q&A and Closing Remarks	

LOKALNI DIGITALNI BLIZANCI: UVOD



Lokalni digitalni blizanci: uvod



Darko Šiško

Grad Zagreb

A 3D digital twin of the city of Zagreb, showing a dense urban landscape with numerous buildings, green spaces, and a river. The model is overlaid with a semi-transparent text box. The background features rolling green hills under a clear sky. The city is represented by a grid of grey buildings, with some areas highlighted in green and blue. Numerous colorful pins (red, orange, yellow, green, blue, purple) are scattered across the city, indicating specific locations or data points. A large blue L-shaped structure is visible on the left side of the city.

Razvoj lokalnih digitalnih blizanaca – primjer Grada Zagreba

Darko Šiško

Gradski ured za gospodarstvo, ekološku održivost i strategijsko planiranje

Zagreb, 9. 4. 2025.



b.gdi.net/zg3d/

1. Uvod u lokalne digitalne blizance

Pojam digitalnog blizanca

Nastanak digitalnog blizanca grada

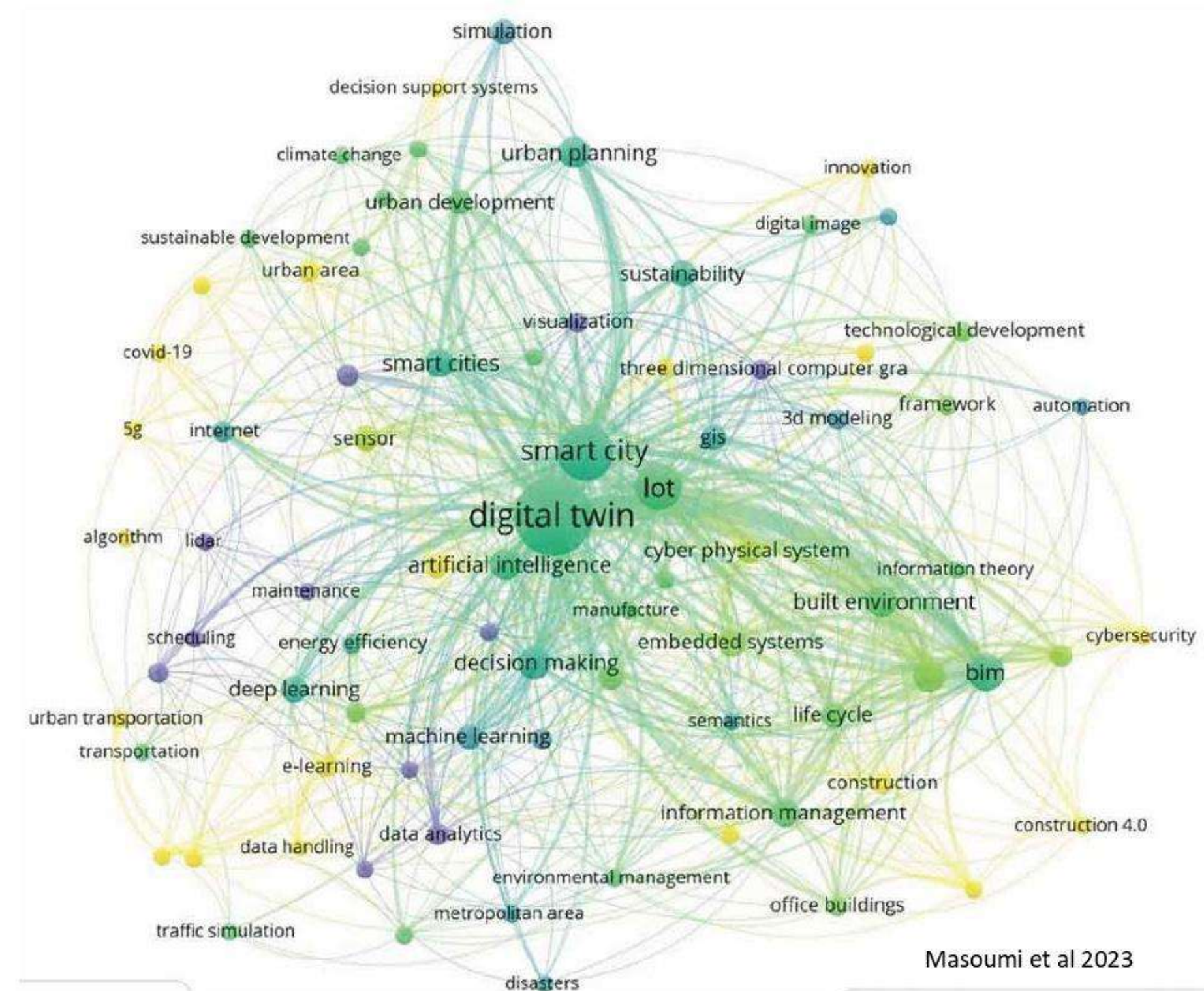
Digitalni blizanac grada: tehnologije i koristi

Područja primjene

Modularna struktura digitalnog blizanca grada

Stupnjevi razvoja

Primjeri u EU gradovima



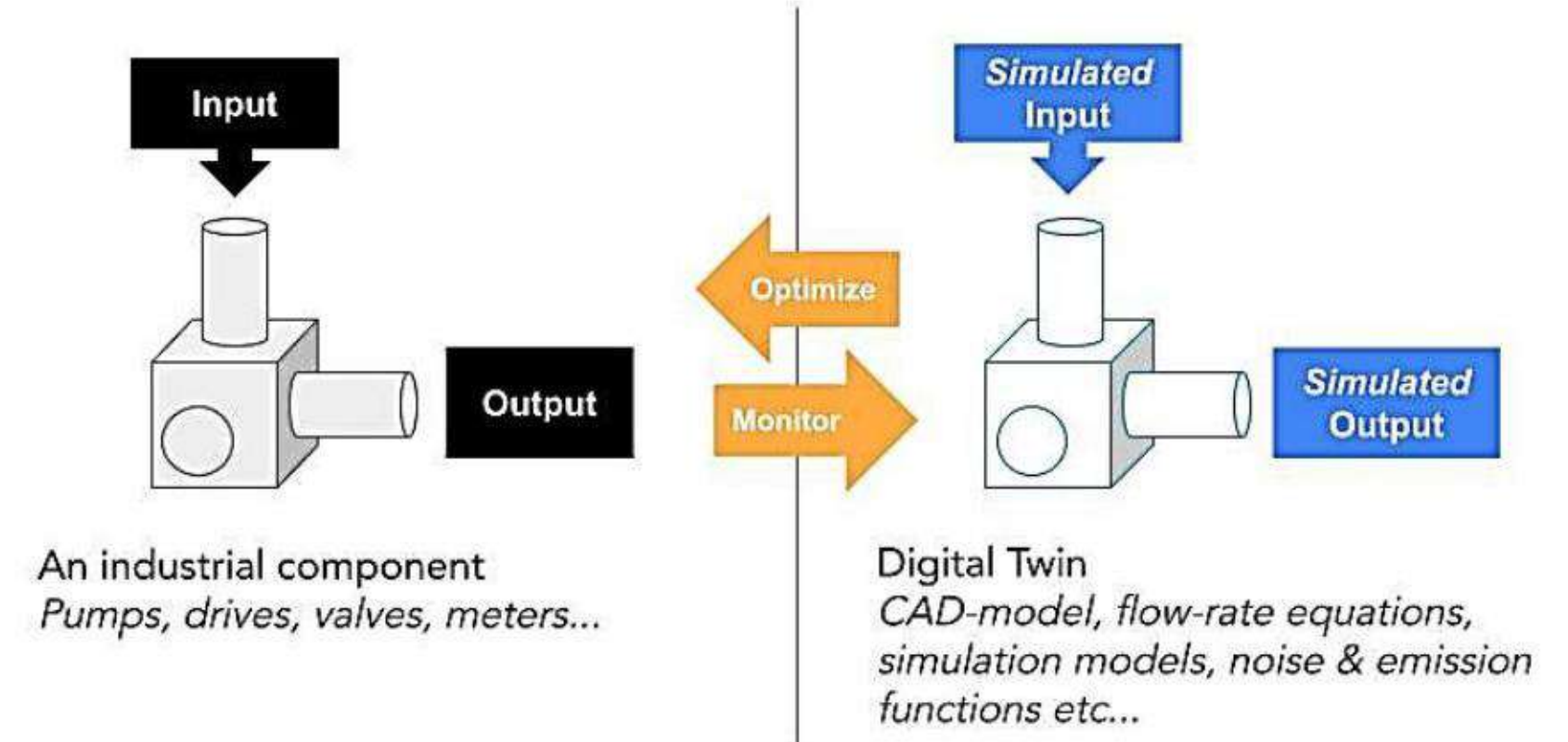
Pojam digitalnog blizanca

Digitalni blizanac (Digital Twin) je virtualna replika fizičkog objekta, sustava ili procesa, u pravilu povezana s podacima prikupljenim u stvarnom vremenu

Simulacija, praćenje, analiza i optimizacija stvarnih operacija u virtualnom okruženju

Prve primjene u svemirskoj i zrakoplovnoj industriji (NASA) i proizvodnji

Pojam definirali tijekom 2000-ih Dr. Michael Grieves (Uni Michigan) i John Vickers (NASA)



Forum Virium Helsinki / Juho-Pekka Virtanen | CC BY 4.0

Nastanak digitalnog blizanca grada

Korištenje načela iz zrakoplovne i proizvodne industrije u upravljanju gradovima

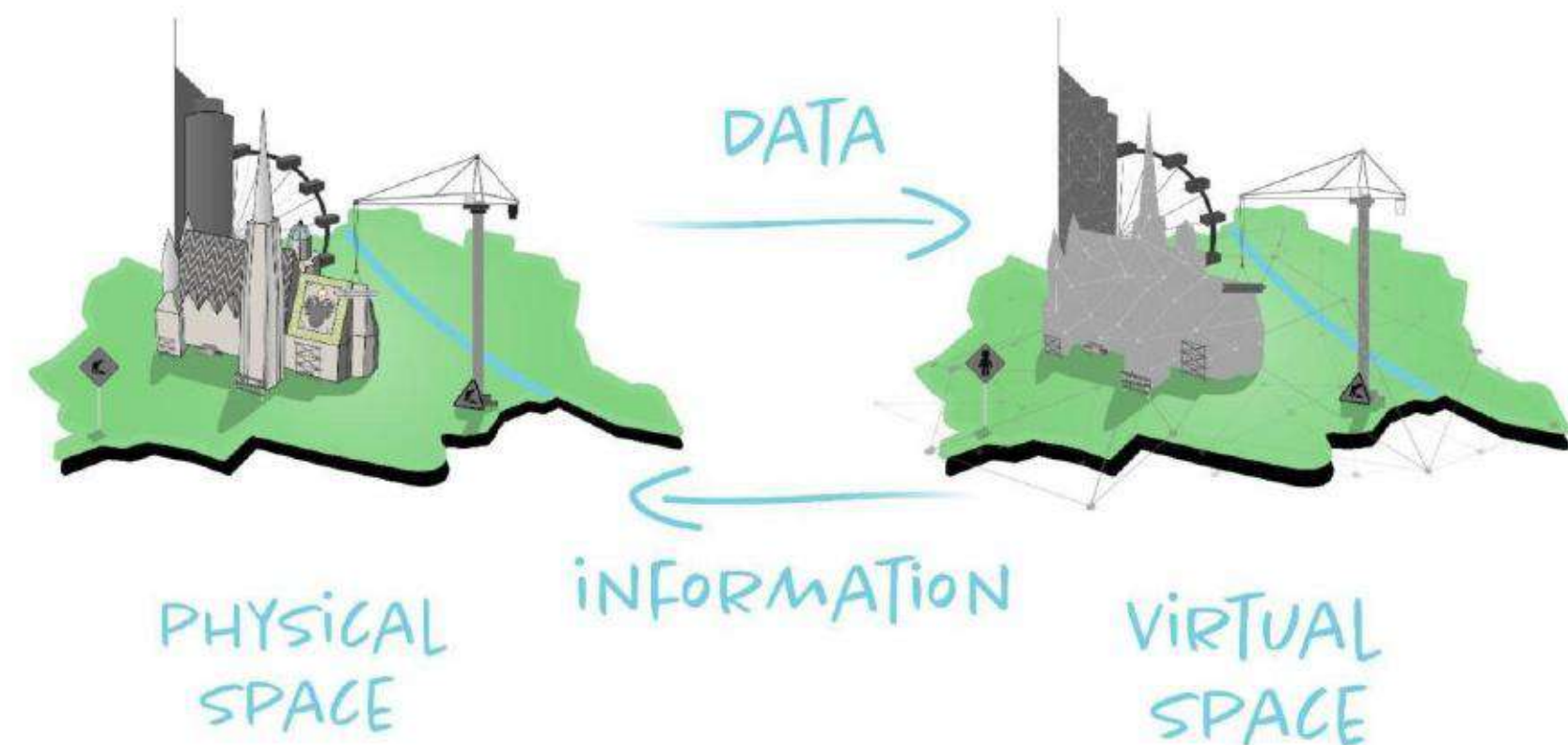
Ključni inicijatori

- razvoj u području GIS-a i 3D modeliranja
- razvoj koncepta pametnog grada i senzora
- razvoj simulacijskih i vizualizacijskih tehnika u tematskim područjima

Prve ozbiljnije primjene – 2010-e, Singapore, Helsinki, Amsterdam ...

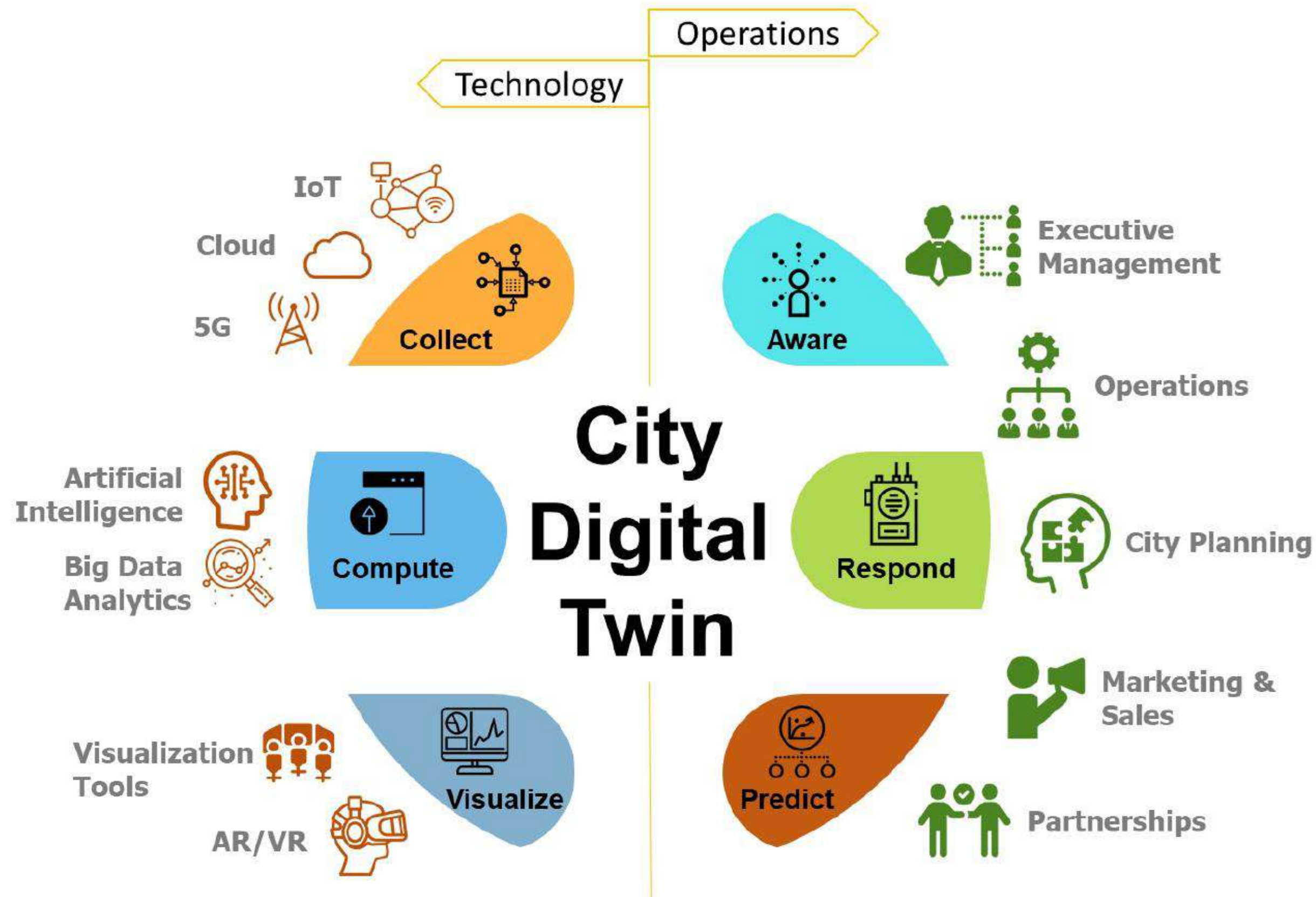


<https://www.tomorrow.city/>



<https://wien.at/>

Digitalni blizanac grada: tehnologije i koristi



Područja i načini primjene

Urbanističko planiranje

Urbana mobilnost i transport

Upravljanje infrastrukturom

Energetika i klima

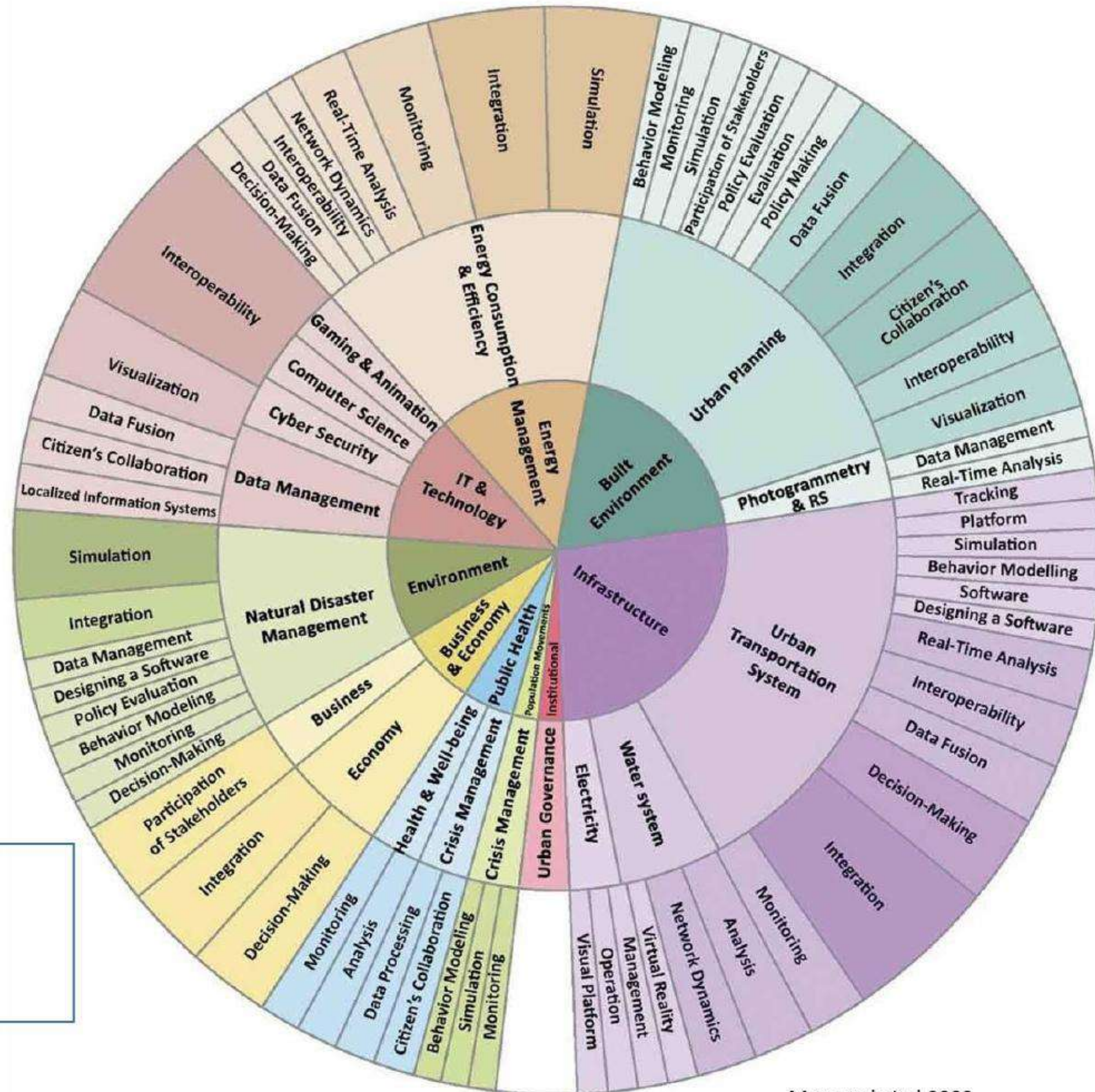
Upravljanje rizicima i događanjima

Okoliš

Javno zdravlje

• • •

Vizualizacija + Analitika + Simulacije + Upravljanje procesima



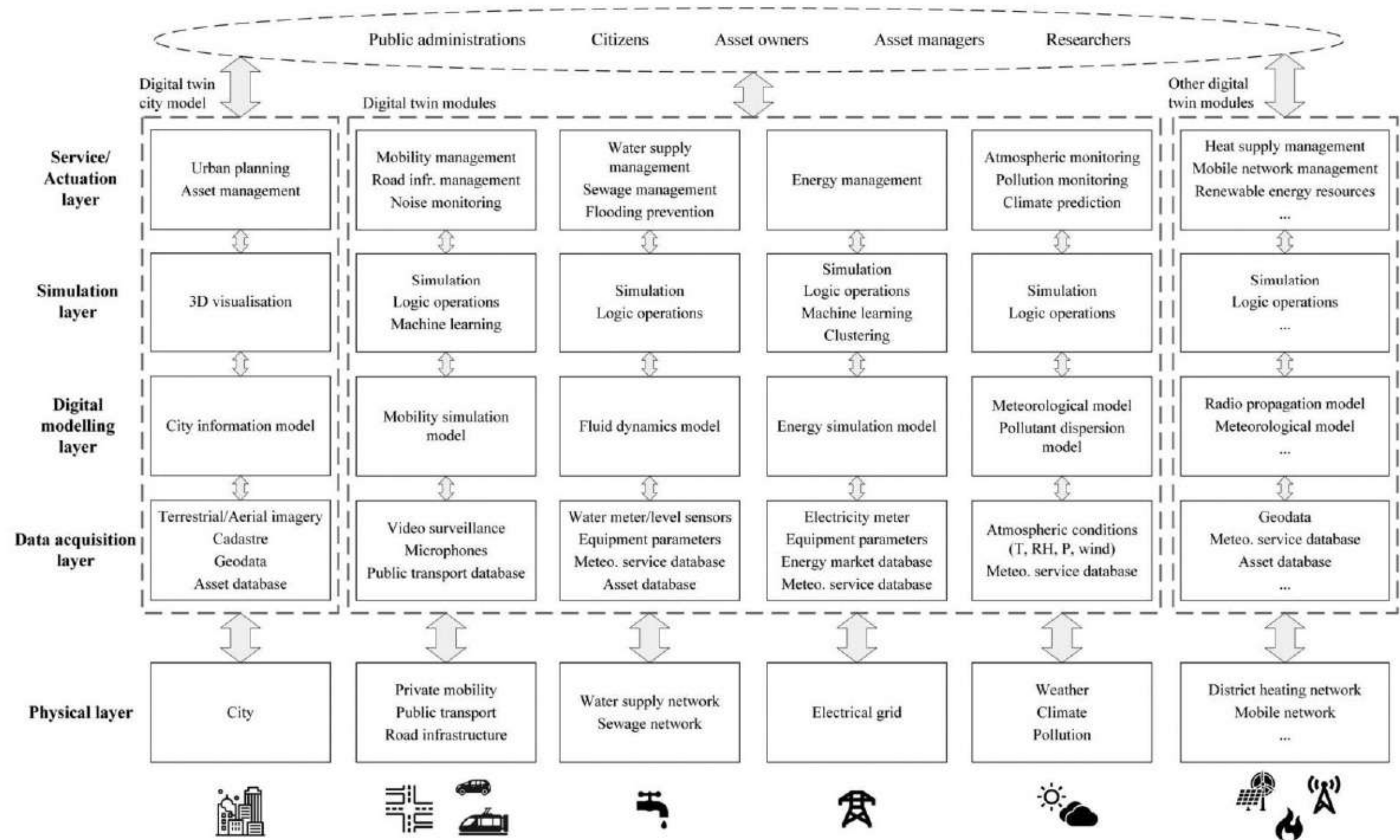
Masoumi et al 2023

Modularna struktura digitalnog blizanca grada

Osobine digitalnog blizanca uvelike ovise o namjeni

Digitalni model fizičke strukture grada služi kao osnova za sve svrhe

Modularna struktura – osnovna platforma s podacima i funkcionalnostima od zajedničkog interesa + pojedinačni tematski moduli

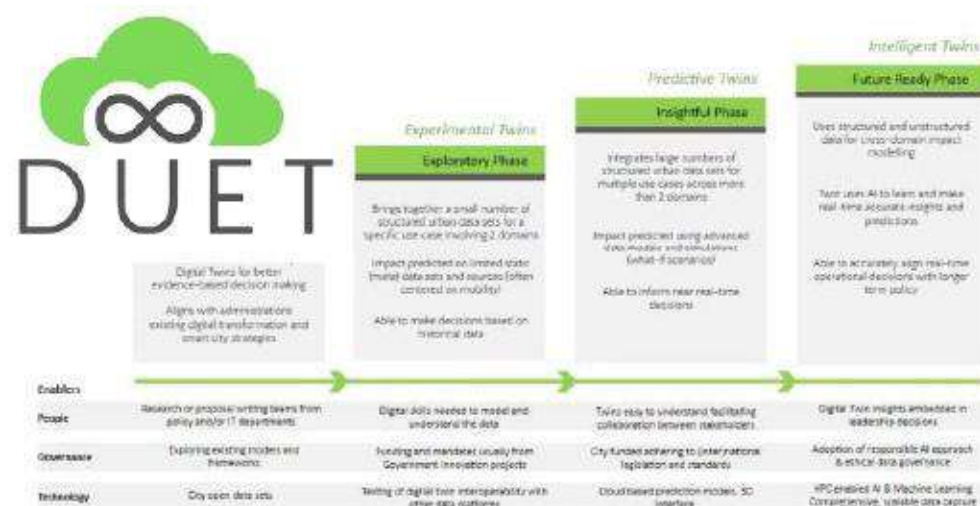


Stupnjevi razvoja digitalnog blizanca grada

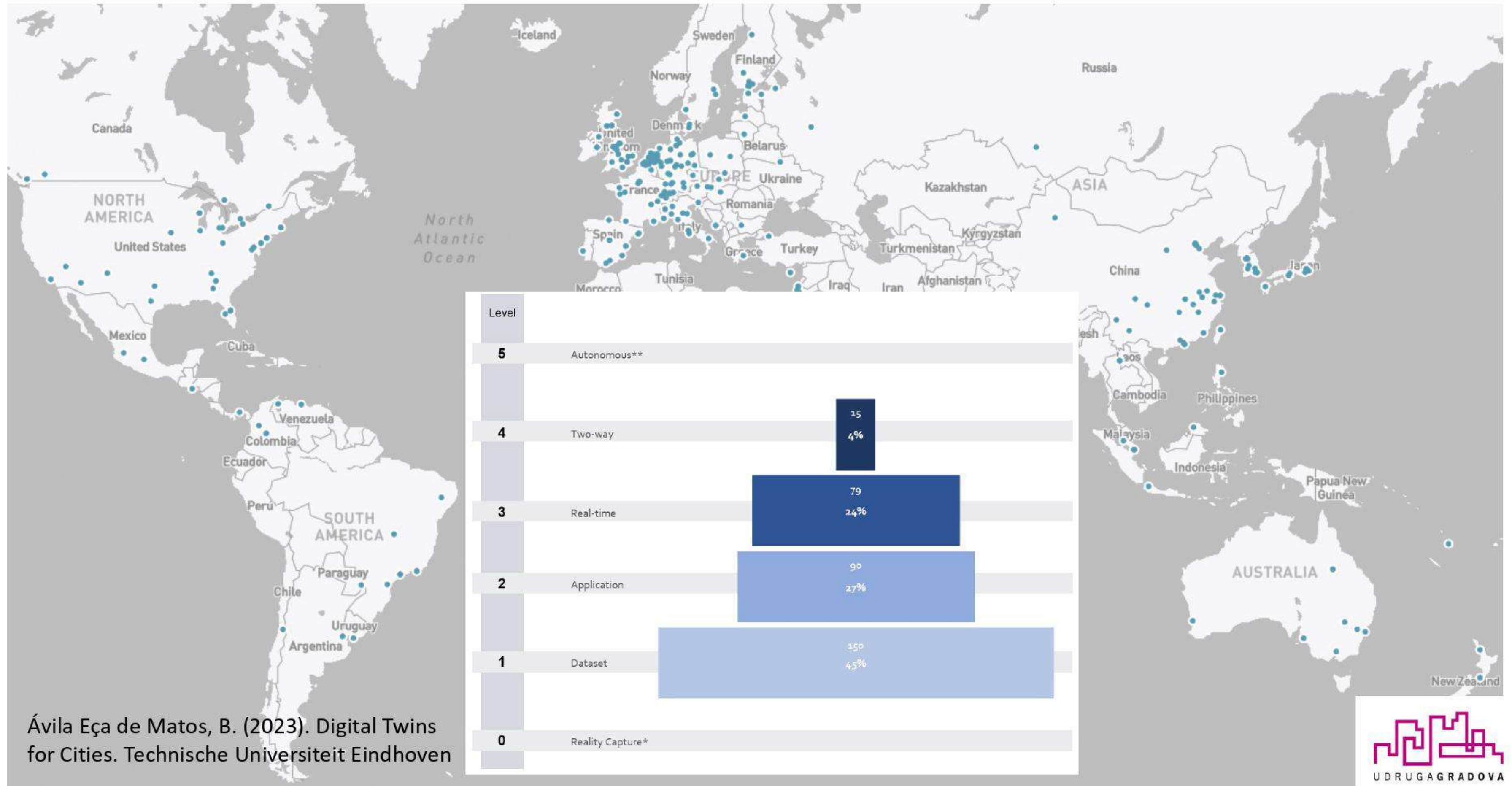
0. Prostorni podaci
1. 3D model
2. 3D model + baze podataka + BIM
3. Podaci prikupljeni u stvarnom vremenu
4. Dvosmjerna integracija i interakcija
5. Autonomni sustavi upravljanja

Maturity element (logarithmic scale of complexity and connectedness)	Defining principle	Outline usage
0	– Reality capture (e.g. point cloud, drones, photogrammetry, or drawings/sketches)	– Brownfield (existing) as-built survey
1	– 2D map/system or 3D model (e.g. object-based, with no metadata or BIM)	– Design/asset optimisation and coordination
2	– Connect model to persistent (static) data, metadata and BIM Stage 2 (e.g. documents, drawings, asset management systems)	– 4D/5D simulation – Design/asset management – BIM Stage 2
3	– Enrich with real-time data (e.g. from IoT, sensors)	– Operational efficiency
4	– Two-way data integration and interaction	– Remote and immersive operations – Control the physical from the digital
5	– Autonomous operations and maintenance	– Complete self-governance with total oversight and transparency

theiet.org/built-environment



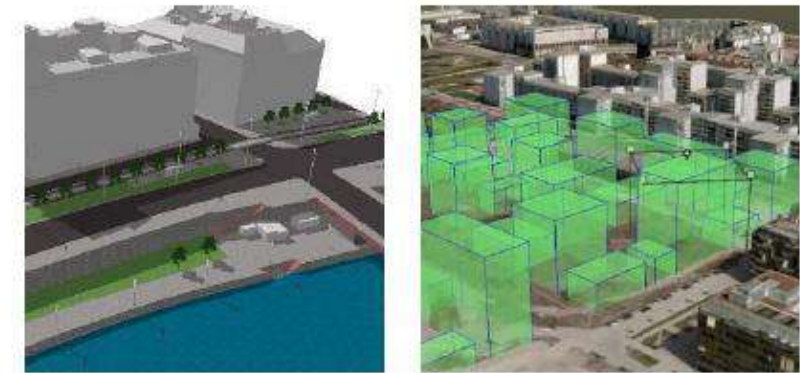
Status digitalnih blizanaca u svijetu 2023.



Digitalni blizanci nekih gradova u EU

Beč

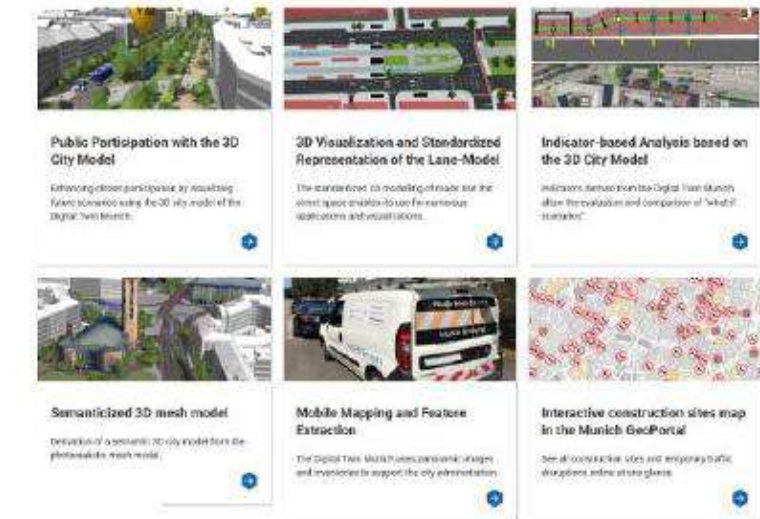
GeoZwilling, PlanungsZwilling



München

CUT – Connected urban twins (Hamburg, Leipzig)

Jedinstvena pristupna točka



Barcelona

Urbanizam + IT, suradnja s Bolognom

Fokus na urbanističku analitiku

The 15-minute city



Helsinki

Forum Virium Helsinki – gradska tvrtka (Smart City)

3D + senzori, cjelovitost, primjene ...



Digital twin tools,
users and processes
Online participation tools
Standardized APIs
3D Tiles
Individual systems
and data
3D City model
Processes
& roles
Base mapping



2. Razvoj digitalnog blizanca Grada Zagreba

3D model Grada Zagreba

Korištenje 3D modela

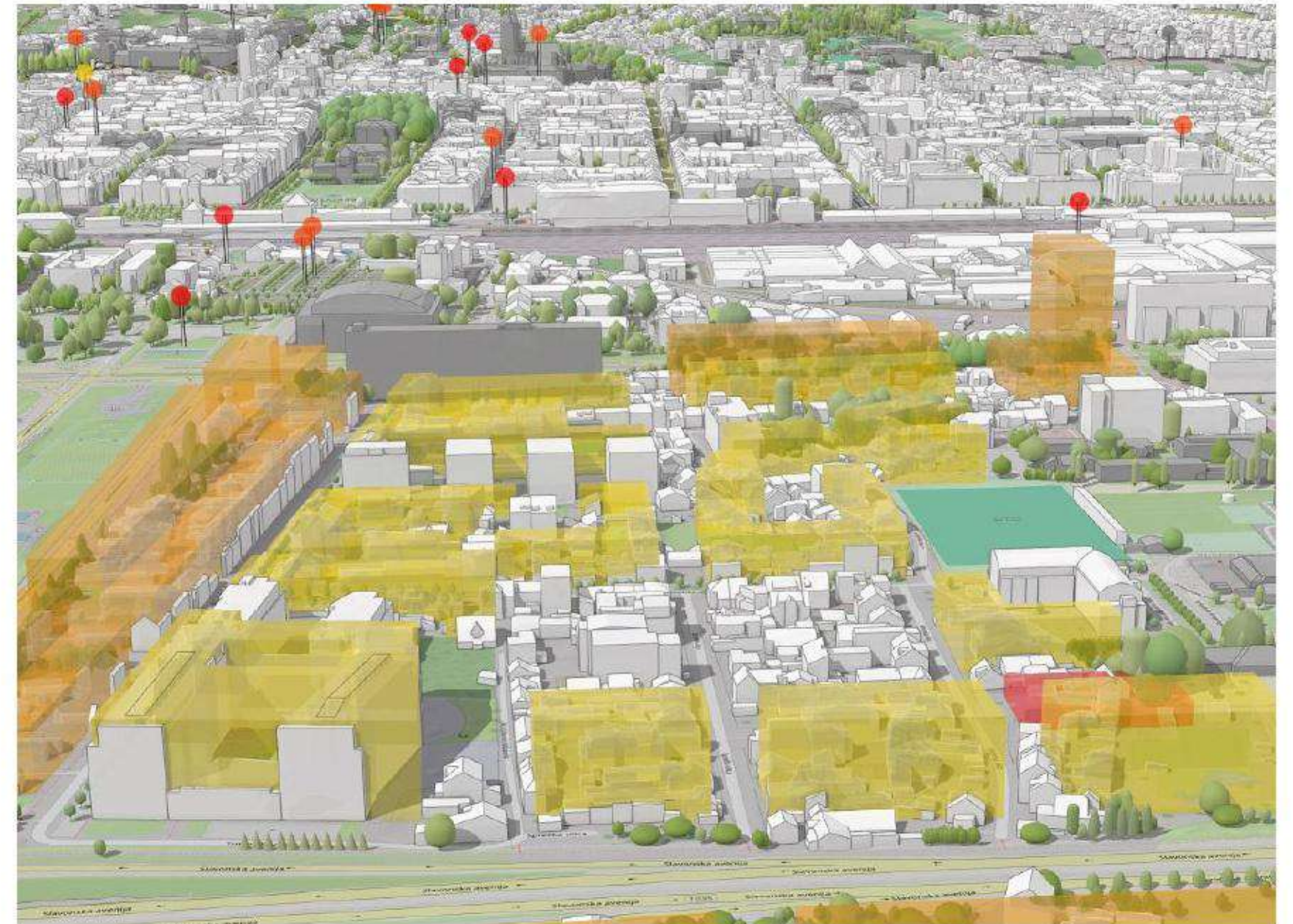
Inicijativa za izradu digitalnog blizanca grada

Modularni koncept digitalnog blizanca grada

Smart city / IoT perspektiva

Planovi i projekti

Mogućnosti primjene



<https://zagreb.gdi.net/zg3d/>

3D model Grada Zagreba

Inicijalni model datira iz 2008. godine,
aerofotogrametrijsko snimanje

Zadnje cjelovito ažuriranje temeljeno na
Multisenzorsko snimanje RH (DGU), LiDAR +
DOF

Cijelo administrativno područje LOD 2.2

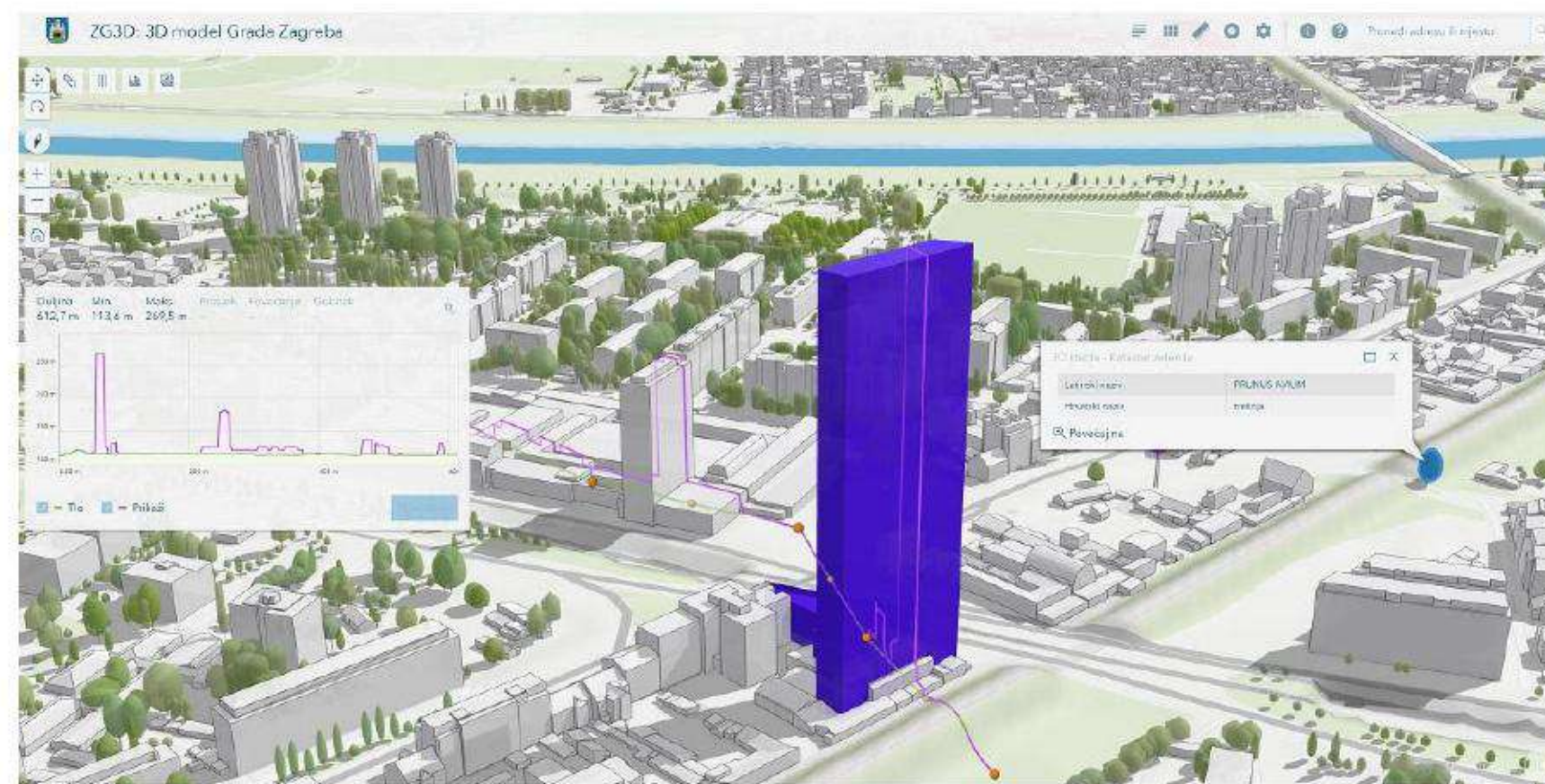
Web aplikaciju ZG3D

<https://zagreb.gdi.net/zg3d/>

3D model zgrada + 3D i 2D slojevi iz različitih
stručnih područja gradske uprave

Funkcionalnosti:

3D vizualizacije, mjerenja, simulacije i analize
različitih podataka u jedinstvenom okruženju



<https://zagreb.gdi.net/zg3d/>



Primjene 3D modela

Urbanizam i arhitektura

Strateško planiranje

Zaštita spomenika kulture

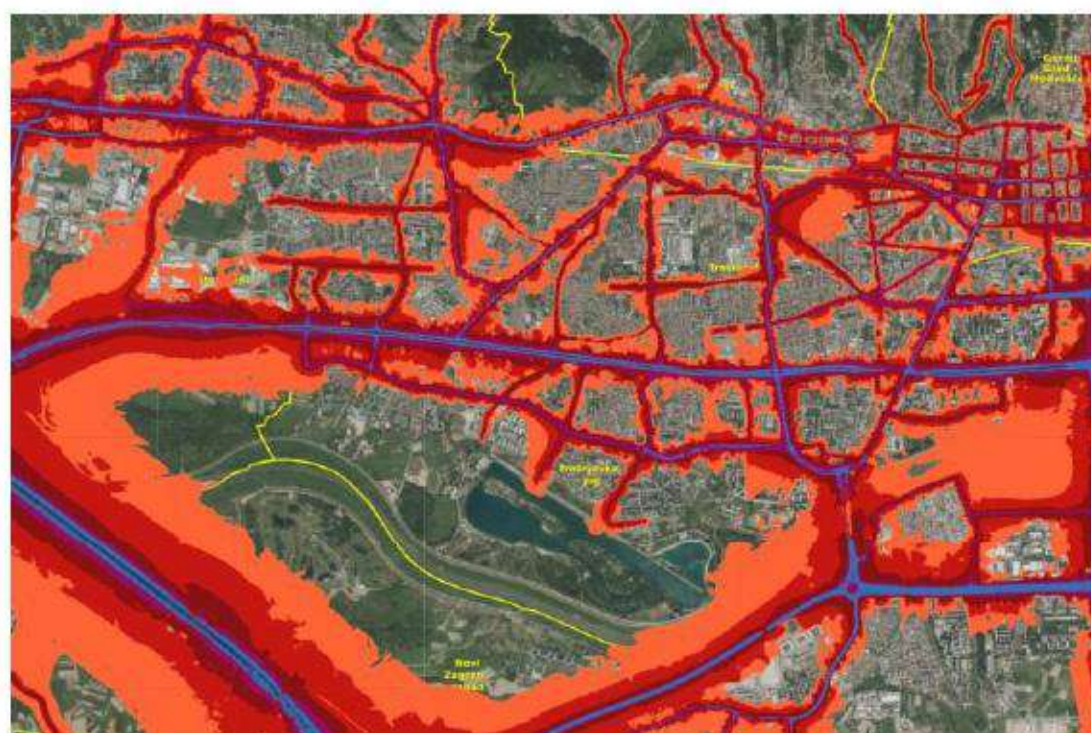
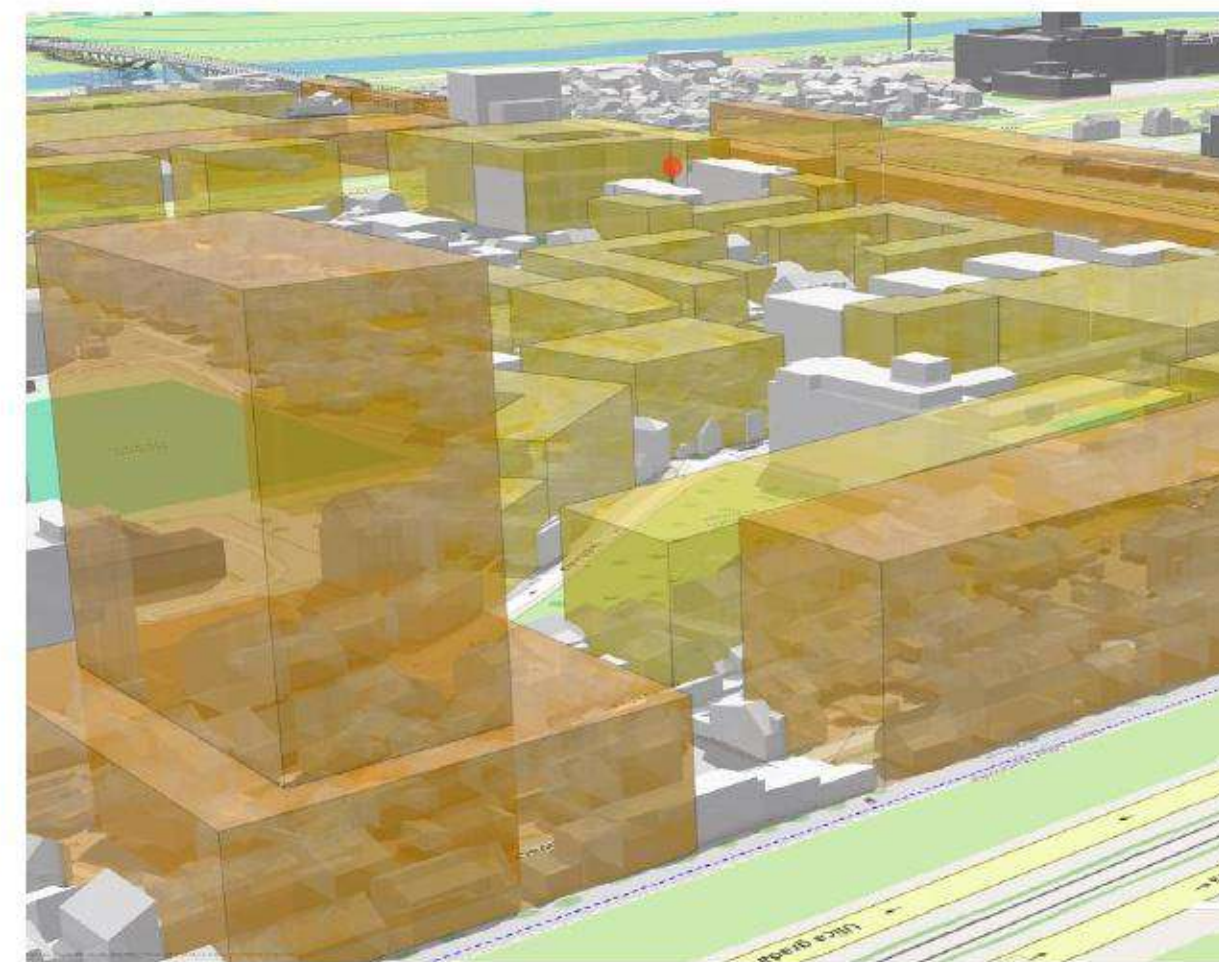
Karte buke i zaštita od buke

Energetska učinkovitost i solarni potencijali

Nestabilne padine

Upravljanje u hitnim situacijama

Akademski sektor ...



Inicijativa za izradu digitalnog blizanca grada

Sljedeći korak u razvoju 3D modela grada, GIS-a i prostornih podataka,

Nužan dio razvoja pametnog grada, projekata i pametnih usluga

Inicijative iz pojedinih tematskih područja, npr. planiranja, javnog zdravstva, klime, energetike i dr.

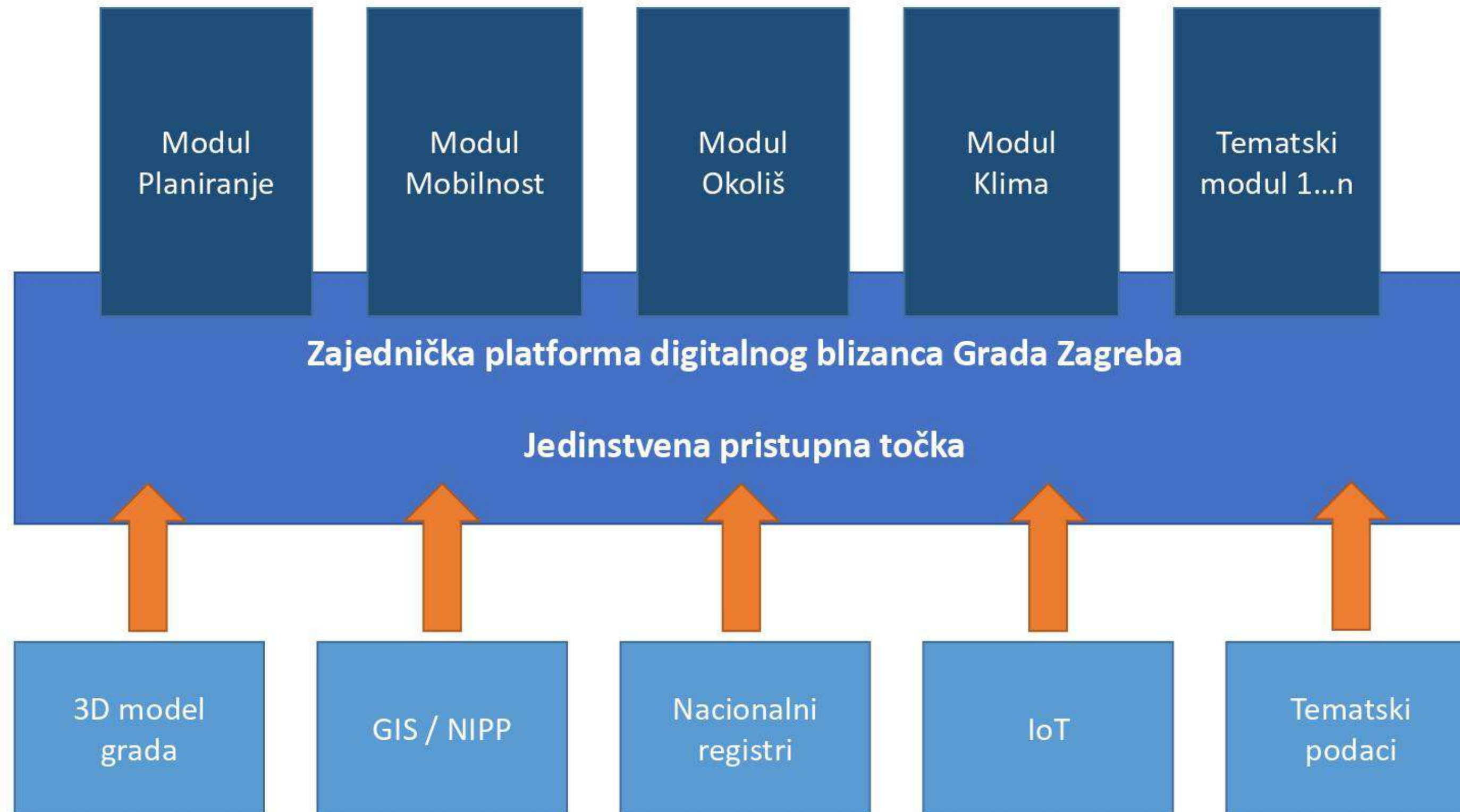
Ključni dionici i uloge:

- Odjel za prostorne informacije (GIS, 3D model)
- Služba za informatiku (IoT platforma)
- Odjel za Smart City (integracija, upravljanje)
- Pojedini odjeli (analitika, simulacije)

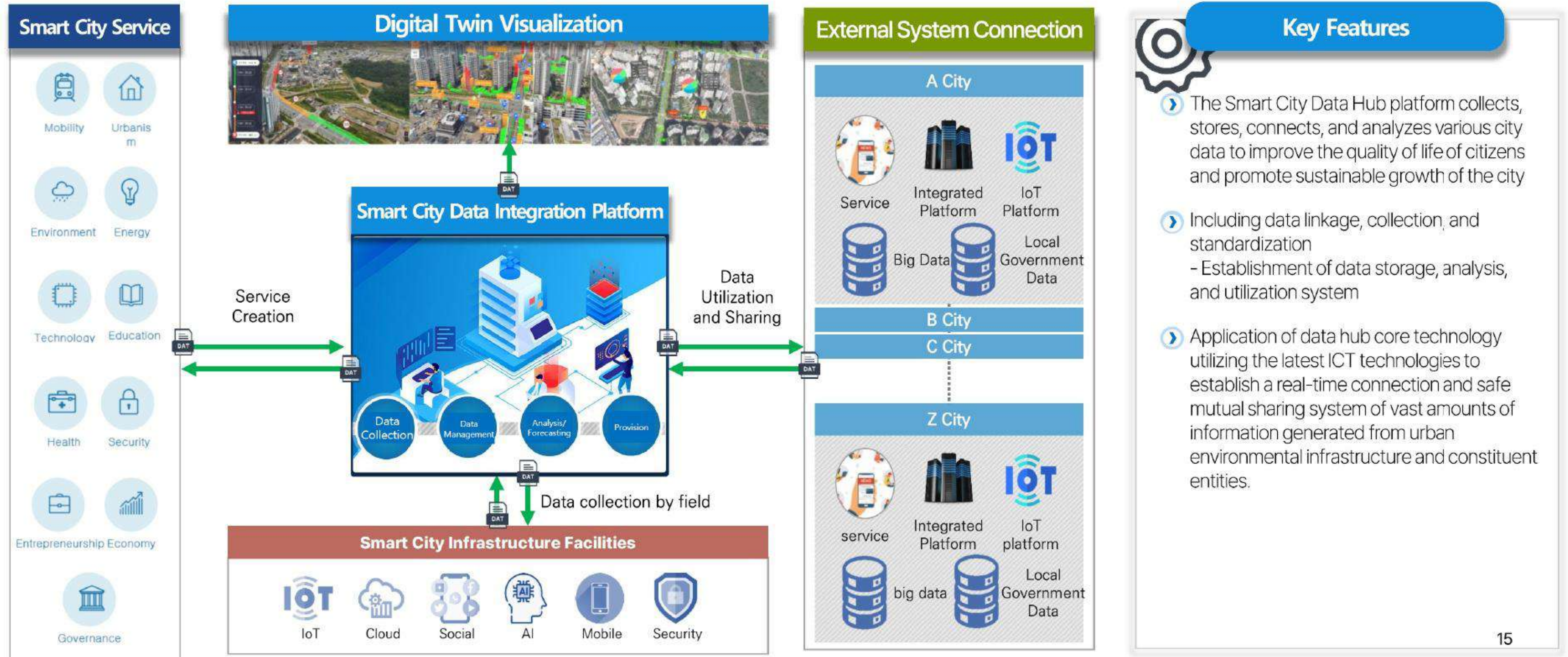


<https://smart-city-zagreb-zagreb.hub.arcgis.com/>

Modularni koncept digitalnog blizanca Grada Zagreba



Smart City / IoT perspektiva



Aktualni planovi i projekti

Organizacija

Strateški plan, model upravljanja

Razvoj platforme

Jedinstvena pristupna točka digitalnog blizanca

Ažuriranje i unaprjeđivanje 3D modela

Razvoj IoT platforme

Vizualizacijski, analitički i simulacijski alati

Projekti

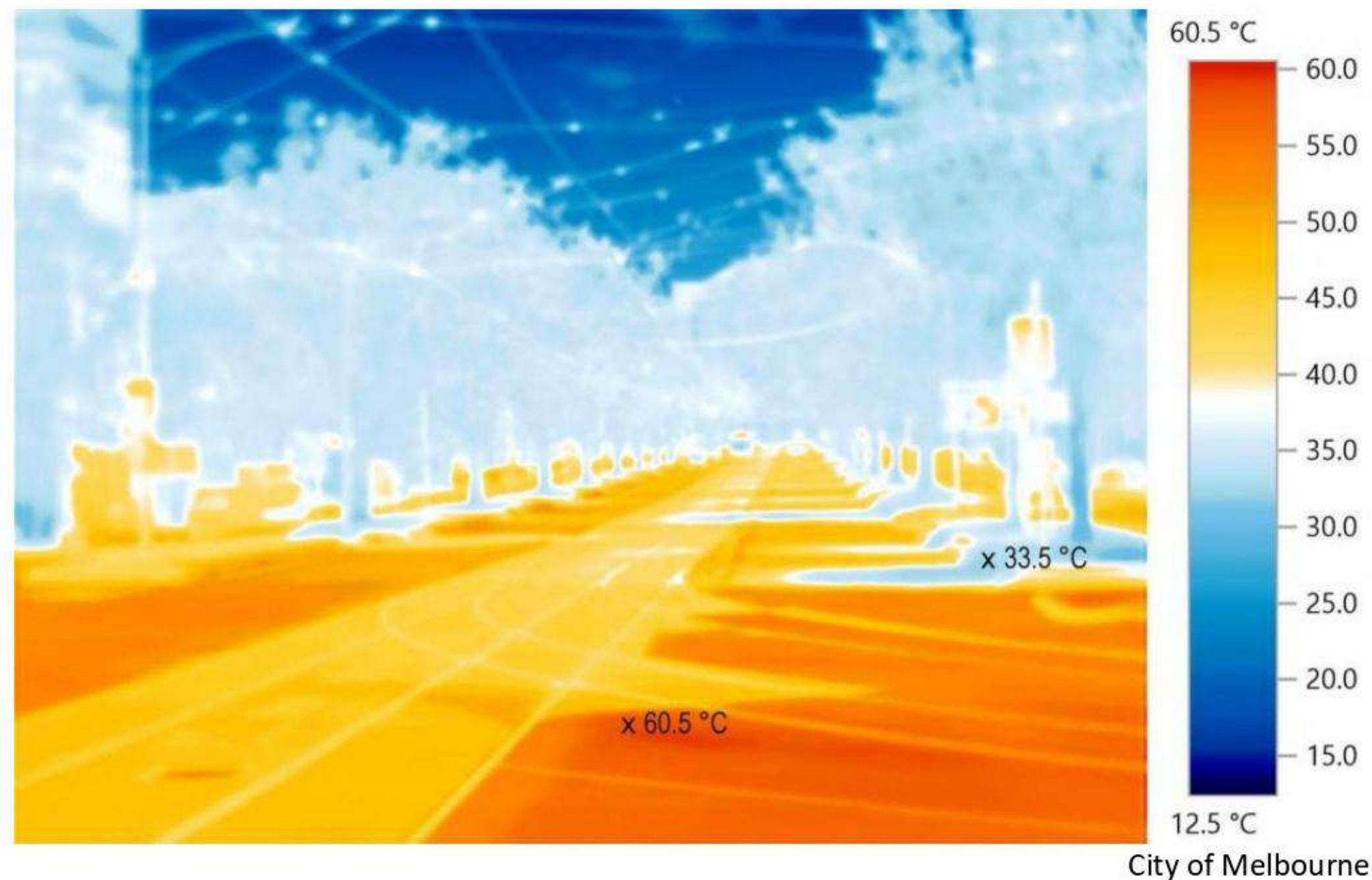
Digitalni blizanac grada kao odgovor na klimatske promjene (FZOEU, INSAIT Horizon)

Digitalni blizanac u razvoju brownfield lokacija (WeGenerate Horizon)



Mogućnosti primjene

Planiranje razvoja grada
Mobilnost
Infrastruktura
Klima
Energija
Okoliš
Zdravlje
Javne usluge
Upravljanje rizicima
Upravljanje događanjima
Turizam



Korisnici / Podaci / Analitika / Vizualizacije /
Simulacije / Procesi / Reakcije



Hvala na pažnji!

Darko Šiško

Gradski ured za gospodarstvo, ekološku održivost i strategijsko planiranje

Zagreb, 9. 4. 2025.



b.gdi.net/zg3d/



LOKALNI DIGITALNI BLIZANCI I NJIHOVA ULOGA U POSTIZANJU CILJEVA EU GREEN DEALA

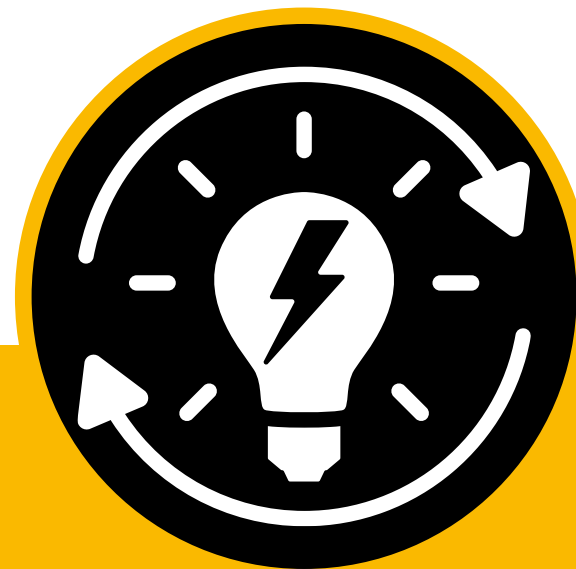


The Role of Cities in the Green Transition

Cities play a pivotal role in achieving climate neutrality by 2050,
the goal of the European Green Deal, accounting for:



75 % of EU citizens



65 % of the world's energy
consumption



+70 % of global CO2 emissions

European cities can contribute to the Green Deal target of reducing emissions by 55% by 2030 and, in more practical terms, to offer cleaner air, safer transport and less congestion and noise to their citizens.

Climate Neutral and Smart Cities Mission

- 112 climate-neutral and smart cities by 2030. 1 Croatian City (Zagreb)
- Ensure that these cities act as experimentation and innovation hubs to put all European cities in a position to become climate neutral by 2050

100 EU cities

12 cities from Horizon Europe associated countries



Cities from every
Member State



Capital cities



Small, medium,
large cities



Frontrunners and
less prepared cities

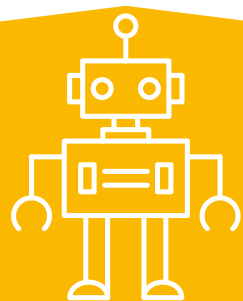


The Twin Green and Digital Transition Go Hand in Hand

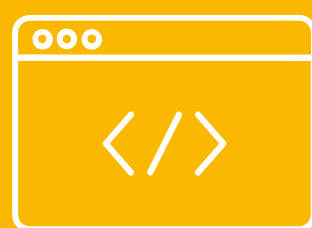
- The digital transformation is taking place against a backdrop of rapid climate change
- The EU's policy agenda looks at digital twins as far-reaching technologies that can support smart cities in contributing to the European green deal strategy, enhancing energy efficiency, adaptation of society to climate change and resilience of urban centres.
- Placed into urban contexts, digital twins help smart cities to reassess their urban planning, transforming how cities are displayed, monitored and managed



Monitoring and
Tracking



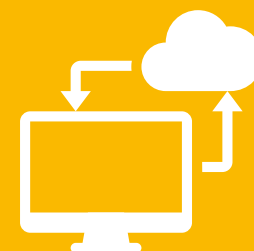
Simulation and
Forecasting



System
Management



Virtualisation



Information and
Communication
Technologies

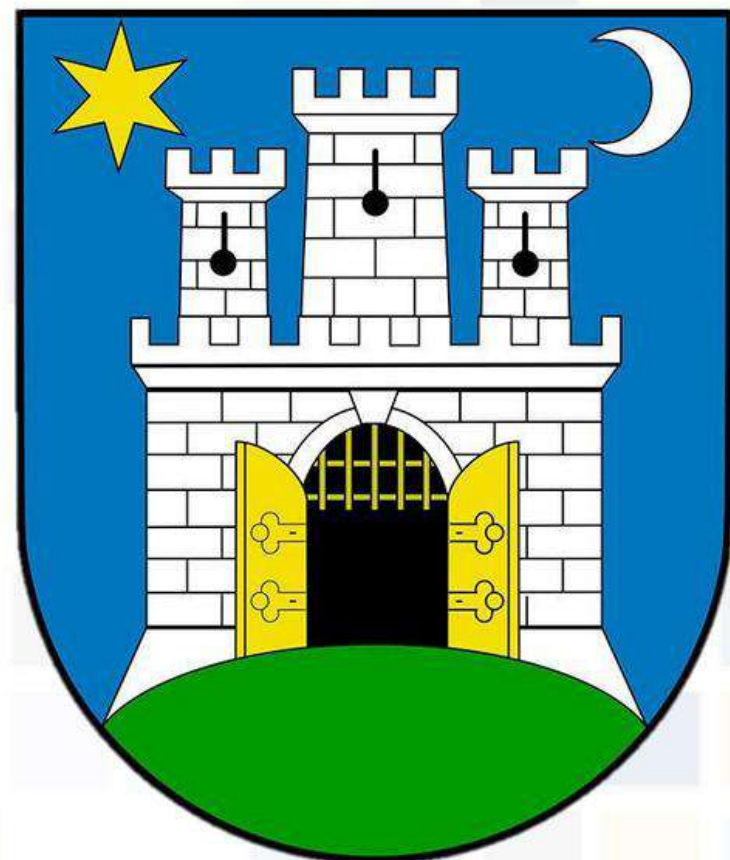


Lokalni digitalni blizanci i njihova uloga u postizanju ciljeva EU Green Deal



Maja Šajnović

Grad Zagreb



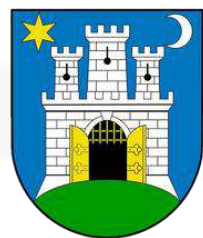
Digitalni Zagreb

Digitalna transformacija gradske uprave Grada Zagreba

Jačanje spremnosti JLS za digitalizaciju uprave, 2025.

Hrvoje Kalčiček Pomoćnik pročelnika za pripremu i praćenje EU projekata

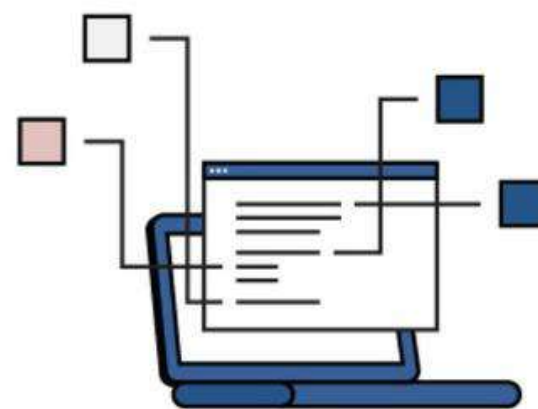
digitalizacije i razvoj i
unapređenje procesa



Uvođenje digitalnih rješenja u Grad Zagreb



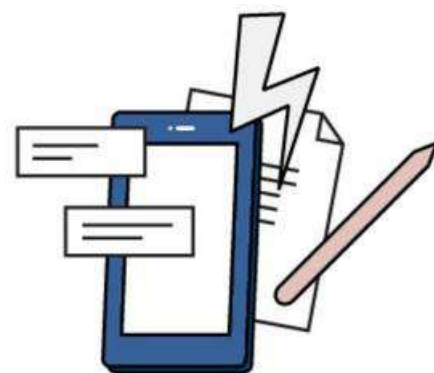
Mediji,
komunikacija



Učinkovita, transparentna i
pametna gradska uprava



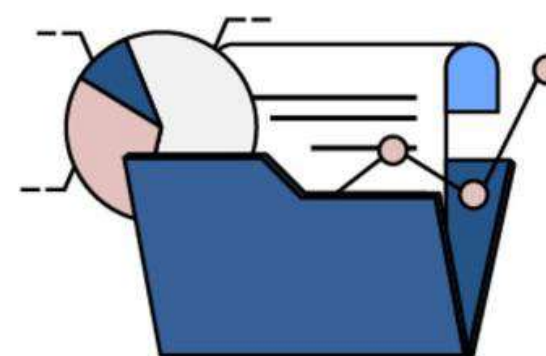
Građani



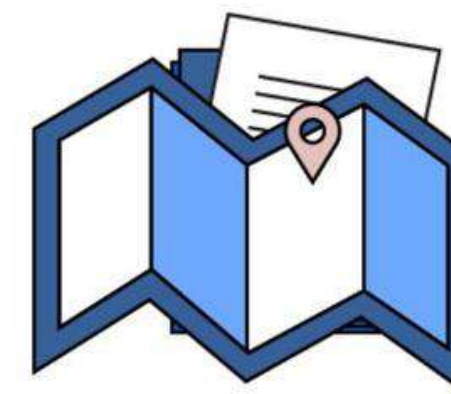
Pametno upravljanje
energijom i komunalnim
uslugama



Obrazovanje



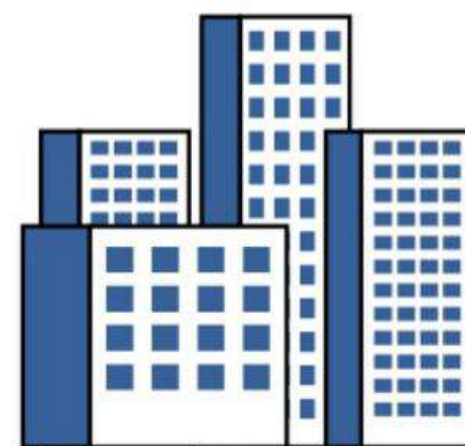
Gospodarst
vo



Održiva urbana
mobilnost



Poduzetnici, tvrtke,
industrije



Digitalna infrastruktura



Znanstvena
zajednica



Učinkovita, transparentna i pametna uprava

Riznica

- Uspostava integriranog sustava za transparentnije i efikasnije upravljanje gradskim proračunom
- 340 proračunskih korisnika Centralni obračun plaća – implementacija u tijeku; ERP specificiran

iTransparentnost

- Potpuno transparentan pregled svih bankovnih transakcija Grada
- Preko 100.000 transakcija godišnje
- Trenutno najveći otvoreni financijski skup podataka u RH

Portal otvorenih podataka

- Nadogradnja Portala –standardizacija i strukturiranje podataka, alati za automatizirano ažuriranje podataka
- 13 kategorija, 174 skupova podataka

Potpore za korištenje otvorenih podataka

- Novi instrumenta financiranja projekata korištenja otvorenih podataka
- 14 projekata odabrano za sufinanciranje

Grad Zagreb

iTransparentnost

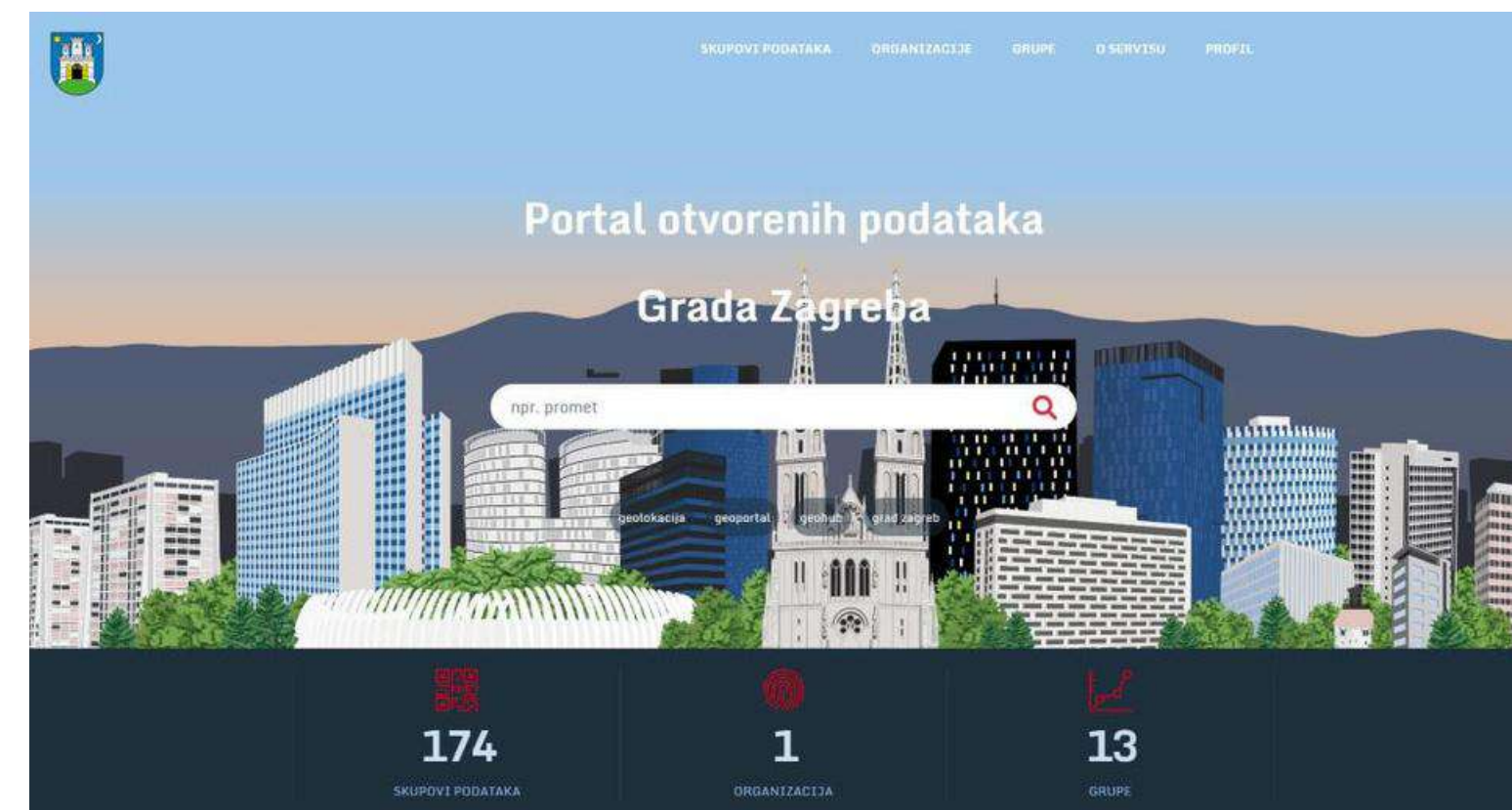
Transparentan uvid u poslovanje JLP(R)S. Pregled financijskog djelovanja te izdanih i zaprimljenih poslovnih dokumenata

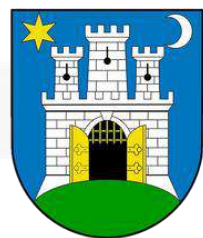
ISPLATE FINANCIJSKIH OBEZA

Pregled isplata

+ Dodaj filter

Datum	Primatelj	OIB	Mjesto	Broj računa	Opis	Iznos (€)
20.02.2025.	MARGON MEDIA D.O.O. ZA USLUGE I INFOR...	53736631841	VELIKA GORICA	195/P1/1	USLUGE KONTAKT CENTRA ZA 10/2024. GO...	2.223,13
20.02.2025.	MARGON MEDIA D.O.O. ZA USLUGE I INFOR...	53736631841	VELIKA GORICA	196/P1/1	USLUGE KONTAKT CENTRA ZA 11/2024. GO...	2.223,13
20.02.2025.	GRAD ZAGREB	61817894937	ZAGREB	12611307-112884041-7	KOMUNALNA I VODNA NAKNADA ZA 01/2025...	22,44
20.02.2025.	GRAD ZAGREB	61817894937	ZAGREB	12030142-112884211-0	KOMUNALNA I VODNA NAKNADA ZA 01/2025...	12,21
20.02.2025.	GRAD ZAGREB	61817894937	ZAGREB	12006519-112836853-2	KOMUNALNA I VODNA NAKNADA ZA 01/2025...	58,99
20.02.2025.	GRAD ZAGREB	61817894937	ZAGREB	12006519-105415915-3	KOMUNALNA I VODNA NAKNADA ZA 12/2024...	59,00
20.02.2025.	GRAD ZAGREB	61817894937	ZAGREB	12244398-112836888-3	KOMUNALNA I VODNA NAKNADA ZA 01/2025...	21,85
20.02.2025.	GRAD ZAGREB	61817894937	ZAGREB	12244398-105415931-3	KOMUNALNA I VODNA NAKNADA ZA 12/2024...	21,85
20.02.2025.	DOM ZDRAVLJA ZAGREB CENTAR	00053084642	ZAGREB	2024210002313	REF.REŽUSKIH TROŠKOVA ZA 12/2024. KUM...	899,62
20.02.2025.	SVILAN DOO	05982228231	ZAGREB	32/1/1	NABAVA UREDSKOG MATERIJALA, TRG S.R...	468,75





Učinkovita, transparentna i pametna uprava

e - Savjetovanje



Digitalizacija procesa otvorenog savjetovanja s javnošću i omogućavanje online davanja prijedloga ili primjedbi na akte Gradonačelnika i

Gradske skupštine

Participativno budžetiranje



Digitalizacija procesa uključivanja građana u odlučivanje i omogućavanje izravnog odlučivanja građana o komunalnim aktivnostima u njihovim lokalnim zajednicama

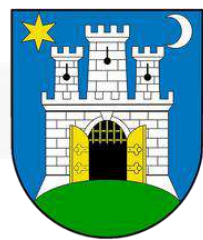
ZG Zviždač



Digitalizacija procesa podnošenja prijava o nepravilnostima u poslovanju gradske uprave i trgovačkih društava

252 zaprimljena prijedloga
73 odobreno za glasanje
593 građana glasalo 16 projekata
u provedbi u 2025.





Učinkovita, transparentna i pametna uprava – participacija struke

ZGBit



Meetupoviza uključivanje šire stručne zajednice 1. ZGBit–Digitalizacija 2. ZGBit! –Otvoreni podaci 3. ZGBit! –Partnerstvo za otvorenu vlast 4. ZGBit! – Predstavljanje financiranih programa korištenja otvorenih podataka

Vizualni identitet

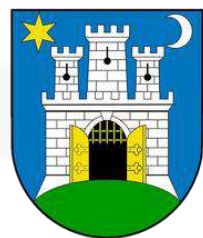


Novi UX dizajn i struktura Međunarodni projektni natječaj za dizajn vizualnog identiteta Grada Zagreba

Hackathoni



Vikend-natjecanja kreativnih timova u rješavanju gradskih izazova 1. Hackl–Otvoreni proračun Grada 2. Hackl–rezervacija i pregled raspoloživih gradskih prostora 3. Hackl-Kultura na dlanu 4. Hackl–Sport na volej –**prijave otvorene do 20.4.**



Učinkovita, transparentna i pametna uprava – Paperless uprava

Paperless uprava

- Cilj ubrzati rad službenika digitalnim alatima

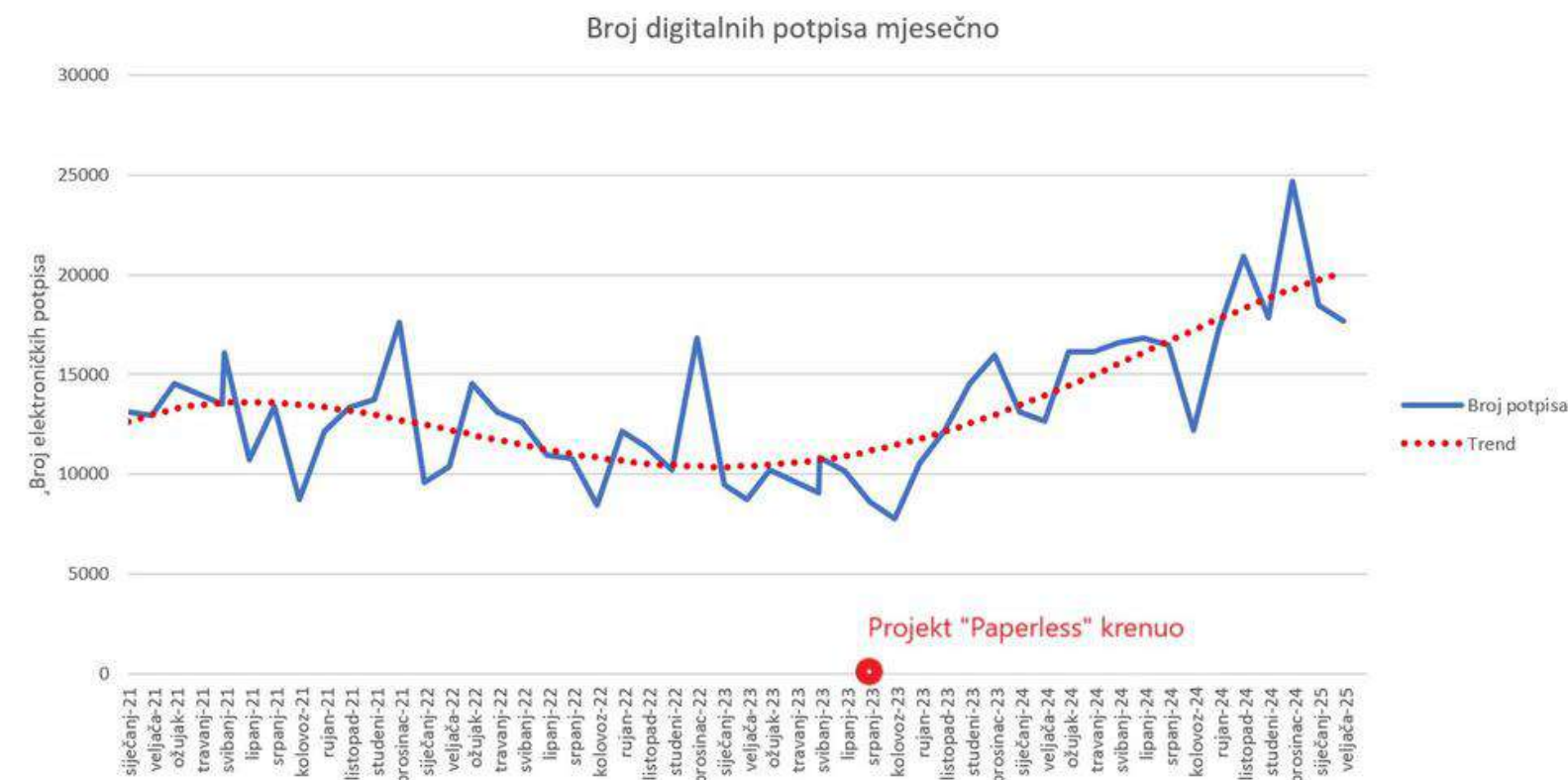
Ubrzano digitalno potpisivanje u Gradu

- Integracija novog potpisnog modula kojim se omogućuje duplo brže digitalno potpisivanje

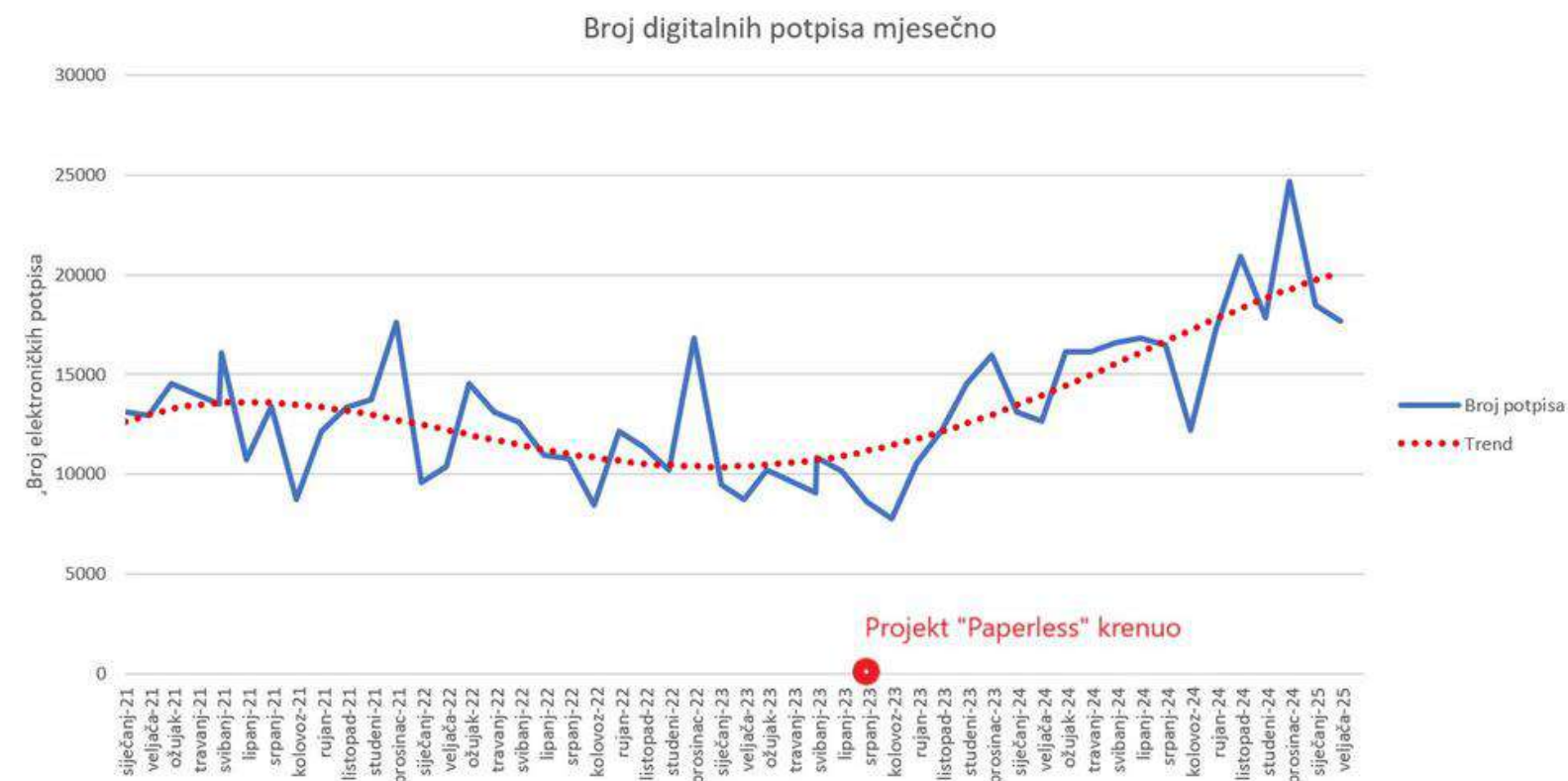
Digitalizacija arhivske građe

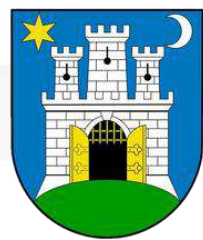
- Arhivska građa Grada Zagreba duga je 30 km, a nalazi se na preko 20 lokacija. Arhiv Grada je veći čak i od državnog arhiva
- Započeo proces digitalizacije arhivske građe!
- Pilotiranje naprednih varijanti OCR-a i semantičke tražilice

50% više digitalno potpisanih dokumenata!



20% manje tonera za printere!





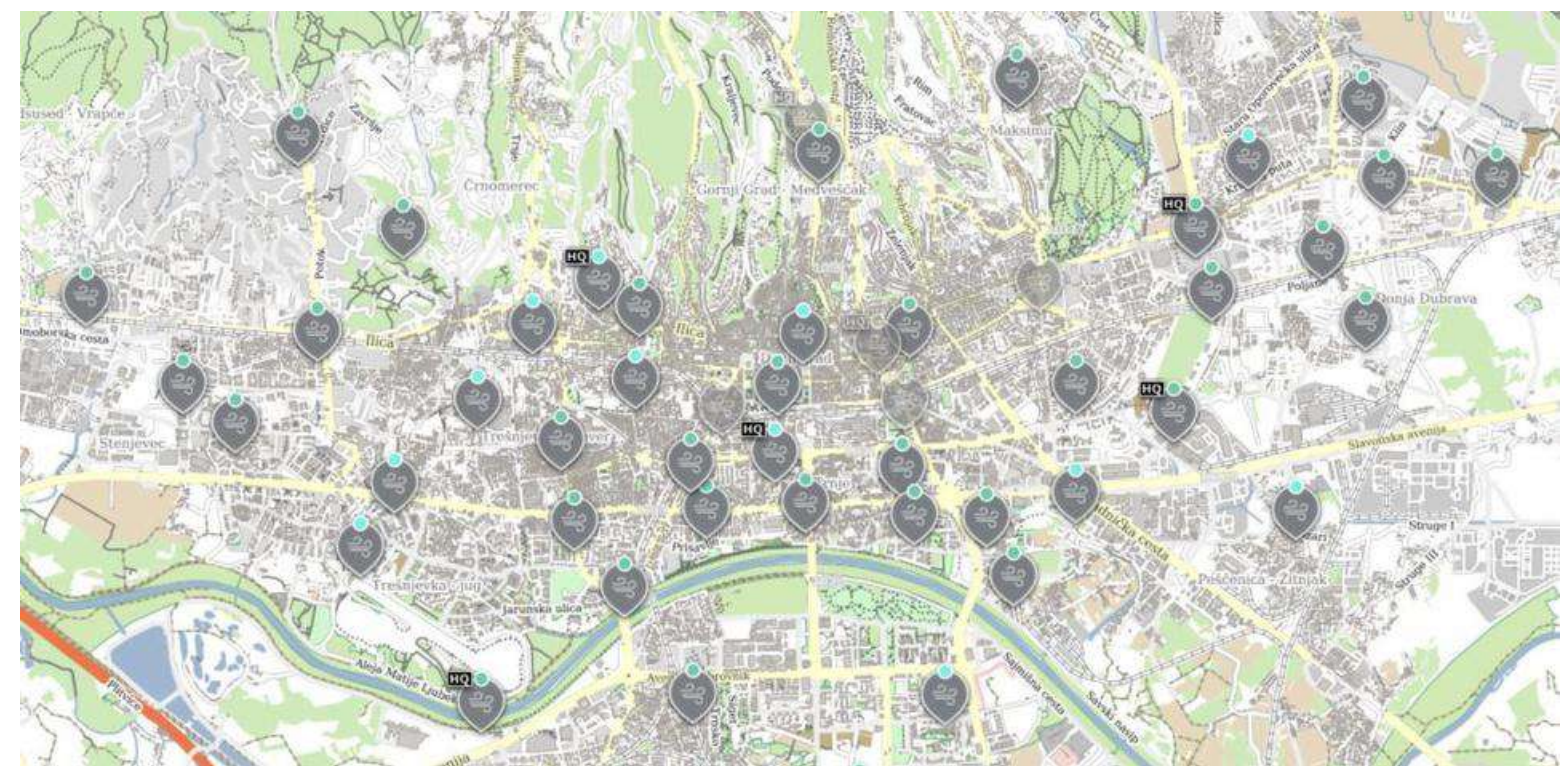
Pametno upravljanje energijom i komunalnim uslugama

Upravljanje potrošnjom energenata u zgradama javne namjene

- Modernizacija sustava grijanja, hlađenja i rasvjete na objektima uštede
- Nadzor kvalitete zraka –50 senzora kvalitete zraka postavljeno diljem Zagreba i dostupno na Eko karti (<https://ekokartazagreb.stampar.hr/>)

Centralni integrirani informacijski sustav upravljanja i održavanja objekata Grada Zagreba

- Evidentiranje i životni vijek imovine, informacije o vlasništvu, korisniku, katastarski podaci, građevinska dokumentacija, legalnost itd.
- Registri korisnika i ugovora, ugovora o održavanju, imovine, inventara i radnih mjesta, infrastrukturnog inventara i opreme te skladišta
- Informacije o potrošnji električne energije, grijanja i hlađenja



**Facility
Management**



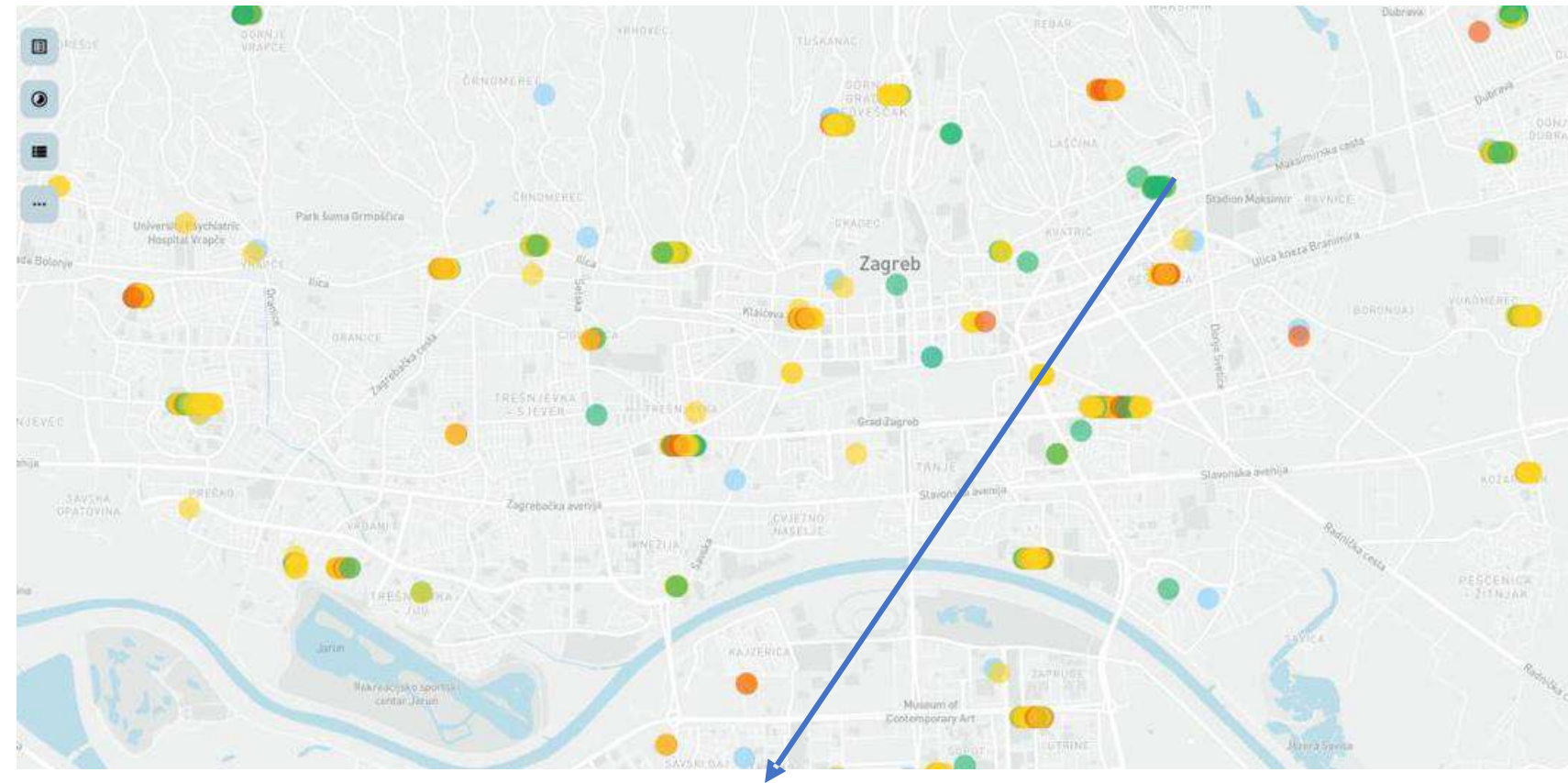
Obrazovanje

Senzori kvalitete zraka u školama

- Postavljeno 525 senzora kvalitete zraka u 24 škole Senzori prate
- kvalitetu zraka u učionicama -razinu CO₂, temperaturu i vlagu

eStipendije

- Novi sustav prijave putem aplikacije e-Stipendije
- 20% više studentskih prijava već u prvoj godini!
- Novi tipovi stipendija i povećani iznosi



IAQM04401694



Monday, 10. – Sunday, 16. February 2025.





Gospodarstvo

Ozelenjivanje



Online sustav prijave za sadnju novih stabala i ozelenjivanje

Novi 3D model Grada



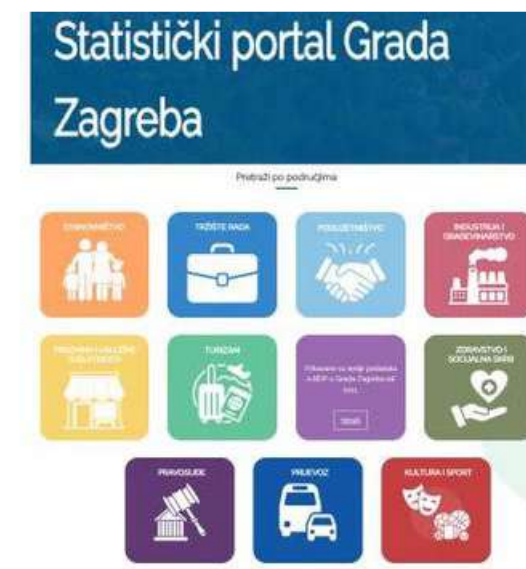
Novi 3D model Grada Zagreba integrira 3D podatke o postojećim objektima s 3D i 2D slojevima podataka iz područja urbanizma, arhitekture, topografije, geotehnike, javnih zelenih površina i statistike

Energetski info atlas



Energetski atlas
Energetska obnova zgrada
javne namjene
Sunčani potencijal
<https://eic.zagreb.hr/>

Statistički portal



Interaktivan način prikazivanja statističkih podataka o Gradu Zagrebu



Gospodarstvo

Razvrstaj MojZG



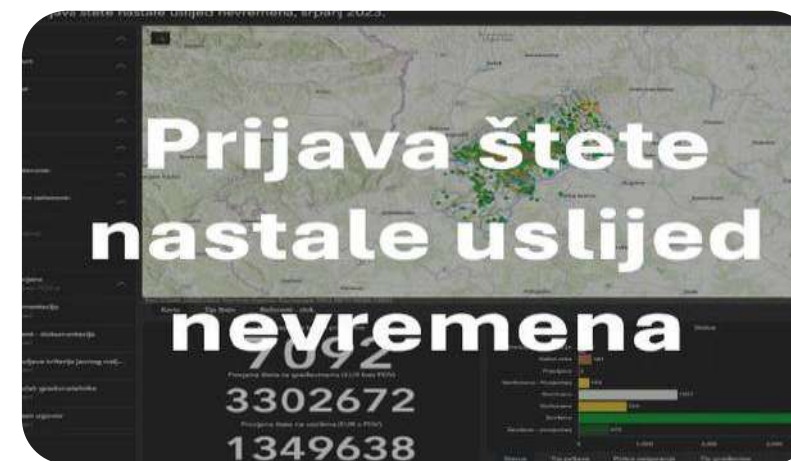
Nadograđena mobilna aplikacije Razvrstaj MojZG za lakše pridržavanje novog modela zbrinjavanja otpada

e - Redar



U tijeku nadogradnja sustava e-Redar za lakše praćenje prijave komunalnih problema
Integracije na ticketingsustave radni nalozi Zagrebačke ceste
radni nalozi Čistoća radni nalozi Zrinjevac

Prijava štete



Web aplikacija za prijavu štete nakon nevremena 19.7.2023.

7000 prijava građana

ZG Smart City Hub



Platforma na kojoj se nalaze objedinjeni svi pametni projekti

Grada Zagreba 109

smartprojekata
15 dashboarda



Održiva urbana mobilnost

Automatsko upravljanje prometom

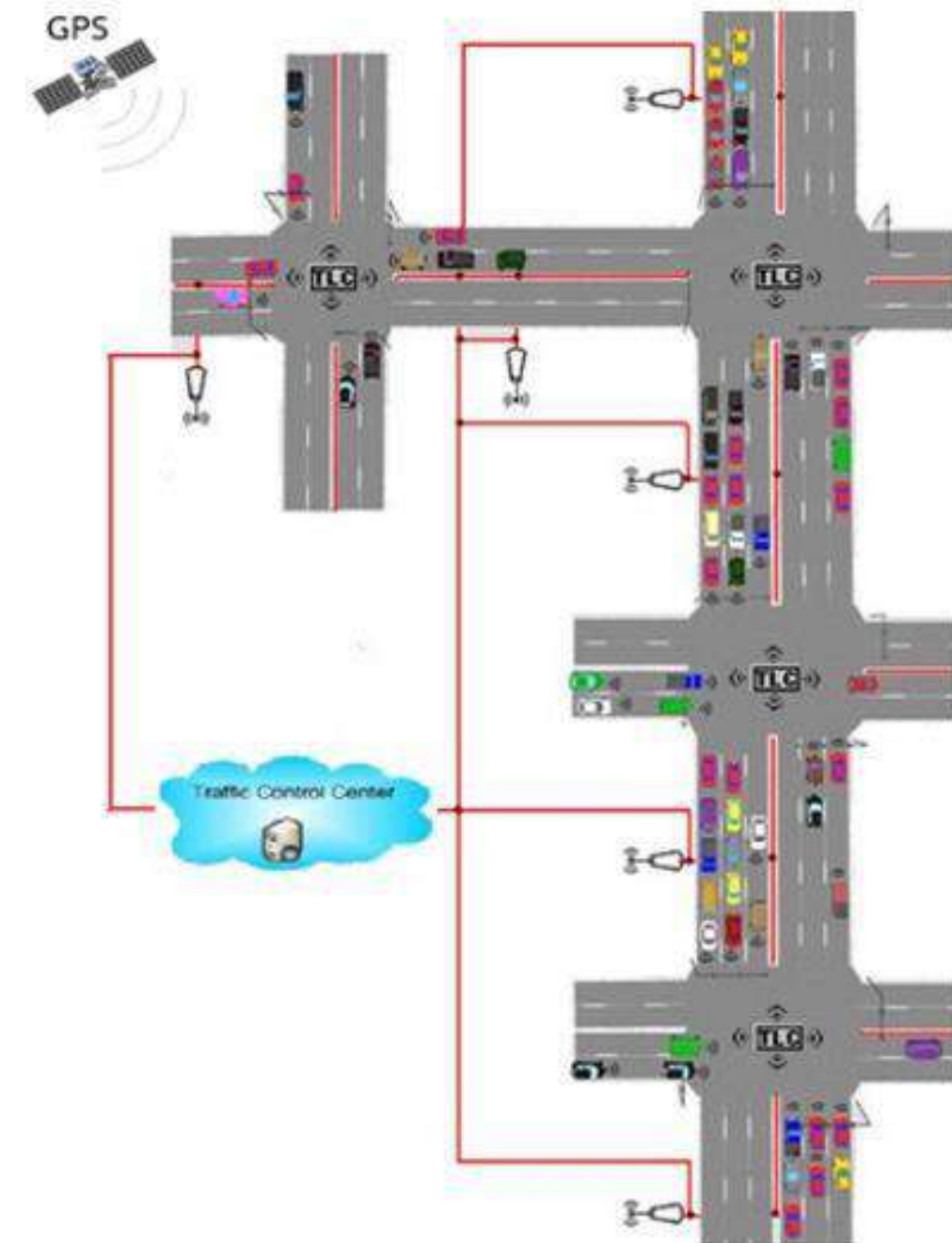
- Modernizacija centra za upravljanje prometom
- 150 raskrižja, funkcionalnost prioritizacije prolazaka tramvaja i autobusa
- Prognoza prometnog opterećenja

Moj ZET aplikacija

- Mobilna aplikacija za kupnju mjesečnih i godišnjih kupona te pojedinačnih karata za autobuse, tramvaje i uspinjaču
- 80.000 aktivnih korisnika

Privremene regulacije prometa

- U tijeku je digitalizacija procesa Privremenih regulacija prometa na području Grada Zagreba
- Integracija na Waze i Google Maps za točnu navigaciju





Digitalna infrastruktura

LoRaWAN

- U projektiranju gradska LoRaWAN mreža za udaljeno prikupljanje podataka i bolju kontrolu
- Površina Grada - 640 km²
- Planirana udaljena mjerenja sa 250.000 vodomjera, 250.000 plinomjera i kontrola pametne rasvjete

Obnovljena besplatna WiFi gradska mreža

- Nadograđeni svi accesspointovi gradskog besplatnog WiFi-ja u pješačkim zonama za bolju povezanost
- Planirano i proširenje zone obuhvata u pješačkim zonama

Disaster recovery site

- Novi data centar Grada za brži oporavak u slučaju problema na primarnom data centru



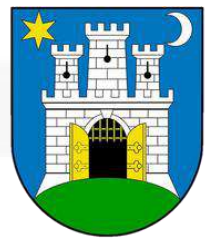
Gradska IT infrastruktura

Brojna druga poboljšanja: -U tijeku

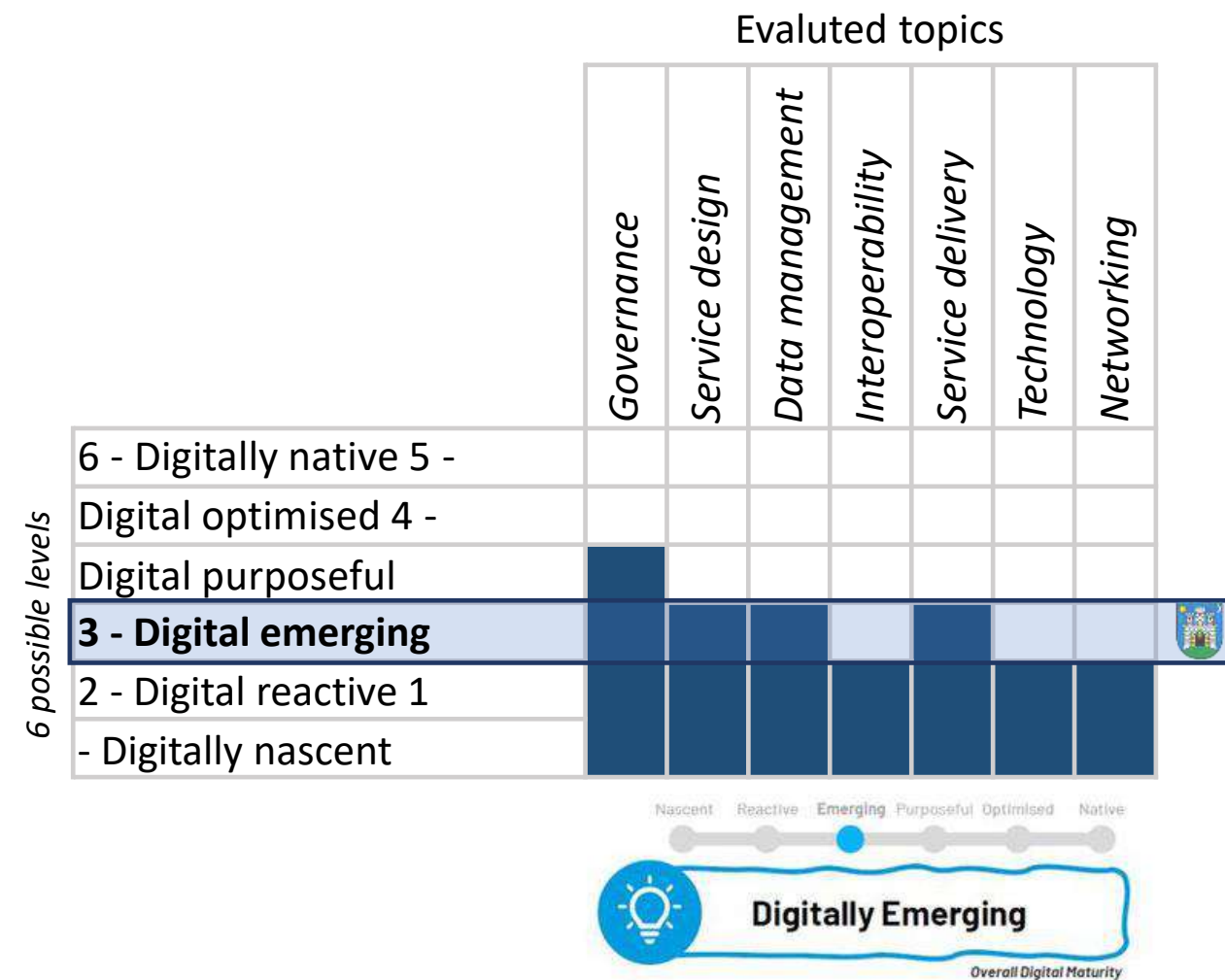
zamjena aktivne i pasivne mrežne opreme u gradskoj upravi za brži rad

-Nadograđeni Storage i Virtual Desktop Infrastructure (VDI) sustavi za lakši udaljeni pristup i kolaboraciju

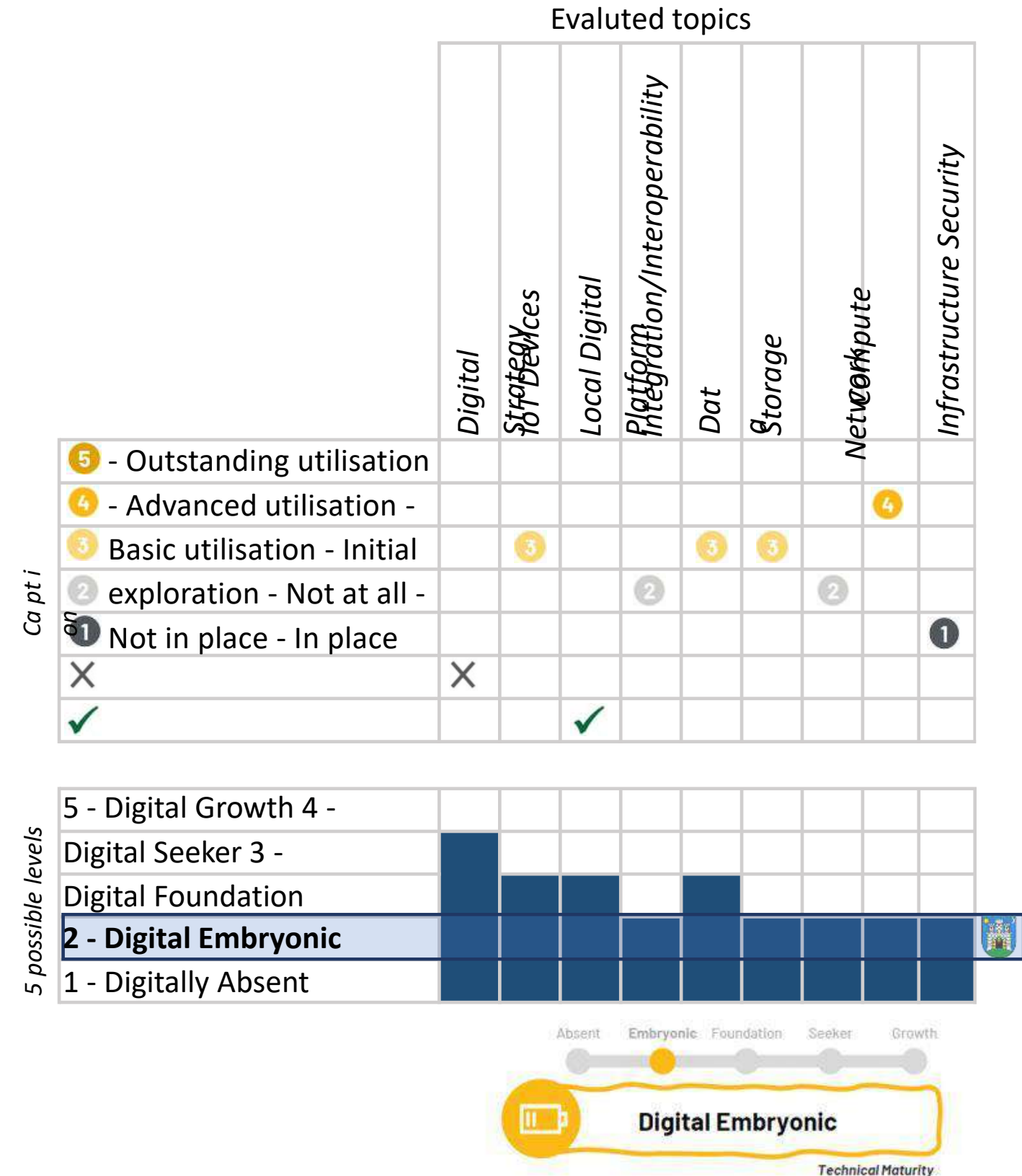
-Nadograđene Oracle baza podataka radi veće sigurnosti i novih mogućnosti

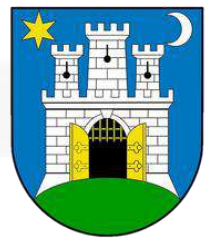


DIGITAL MATURITY - Lordimas Assessment



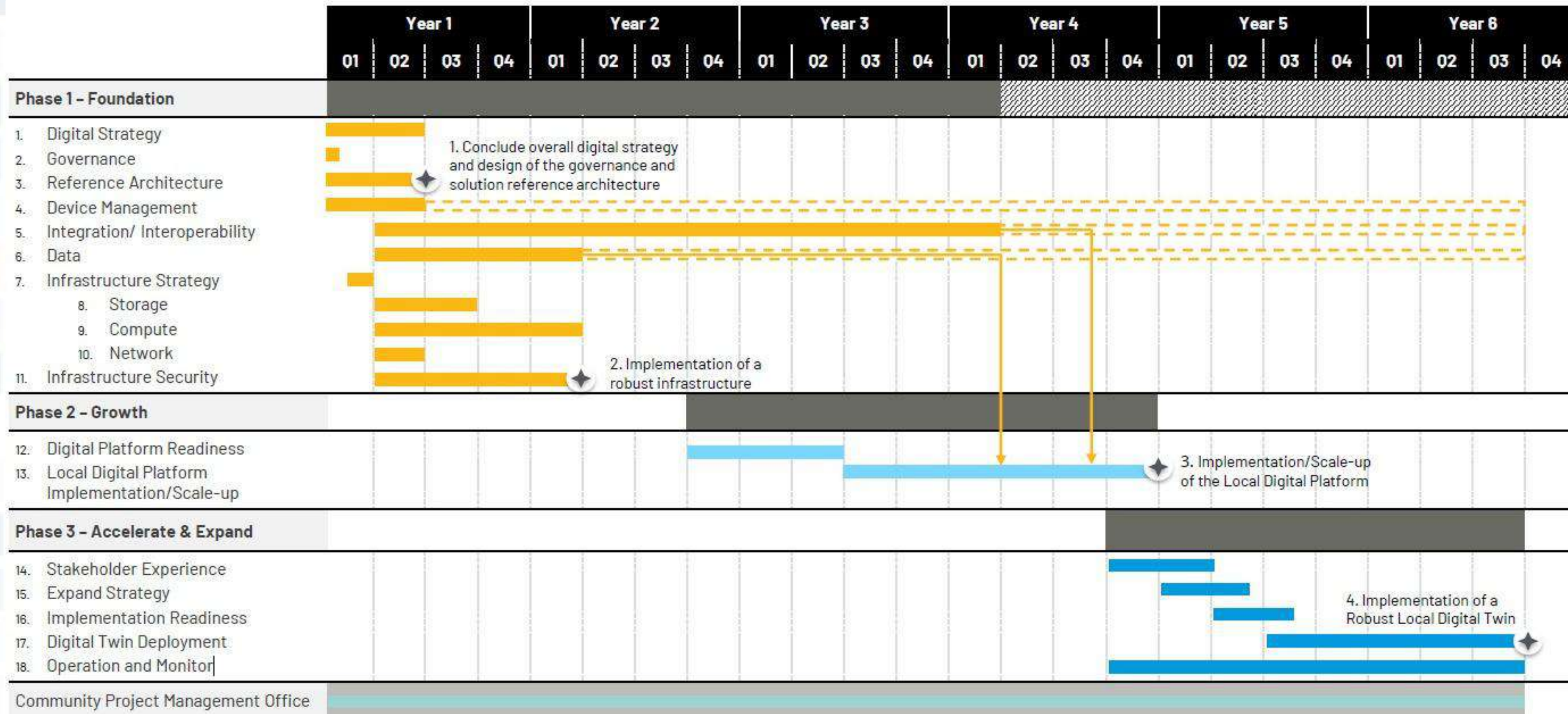
TECHNICAL MATURITY - Lordimas, Strategy, IT Assessments





LORDIMAS Plan digitalne transformacije Grada Zagreba

LIVING-IN.EU



Hvala na pažnji!

Hrvoje Kalčiček, univ. spec. admin. urb.
Pomoćnik pročelnika za pripremu i praćenje EU
projekata digitalizacije i razvoj i unapređenje procesa
Tel: 01 616-6066
E-mail: procesi@zagreb.hr



PAUZA



European
Commission

Detailed Agenda Overview

Phase 0: How to Start Your Digitalisation Journey



9. travnja 2025. godine



10:00

TIME	TOPIC	SPEAKER(s)
10:00 - 10:10	Uvodni pozdrav	Francesca Gržinić Kuljanac <i>Grad Opatija</i>
10:10 - 10:30	Lokalni digitalni blizanci: uvod	Darko Šiško <i>Grad Zagreb</i>
10:30 - 11:00	Digitalni Zagreb <i>Digital transformation of the City of Zagreb</i>	Maja Šajnović <i>Grad Zagreb</i>
11:00 - 11:15	Coffee break	
11:15 - 11:45	Tehnologije koje omogućavaju razvoj: platforme za otvorene podatke	Nikola Modrušan Ministarstvo pravosuđa, uprave i digitalne transformacije Tomaž Lanišek Grad Kranj / Urbanminds
11:45 - 12:00	Procjenite svoju digitalnu spremnost uz LORDIMAS	Peter Geršić <i>Novo Mesto</i> Marina Tavra <i>Tehnološki park Split</i> Genoveva Gil Garcia/ Ignacio Garcia Vega <i>Serendipity</i>
12:00 - 12:30	Izrada plana digitalne tranzicije	
12:30 - 13:15	Ručak	
13:15 -13:45	Ekosistemi za podršku i suradnju	Gabriela Ruseva <i>Living-in.EU & EuroCities</i> Damir Medved <i>CEO EDIHADRIA</i>
13:45 - 14:30	Najava novih izvora financiranja digitalne transformacije	Nataša Margetić Ministarstvo pravosuđa, uprave i digitalne transformacije Ariana Vela <i>Avelant d.o.o.</i>
14:30 - 15:00	Q&A and Closing Remarks	

A person in a white shirt is holding a tablet. The tablet screen shows a city skyline at night with several skyscrapers. A white network diagram, consisting of nodes and connecting lines, is overlaid on the cityscape. The background of the entire image is a blurred cityscape at sunset or sunrise.

TEHNOLOGIJE KOJE OMOGUĆAVAJU RAZVOJ: PLATFORME ZA otvorene podatke

Tehnologije koje omogućavaju razvoj: platforme za otvorene podatke



Nikola Modrušan

Ministry of Justice Public Administration
and Digital Transformation



Tomaž Lanišek

City of Kranj/Urbanminds

Tehnologije koje omogućavaju razvoj: platforme za otvorene podatke



Nikola Modrušan

Ministry of Justice Public Administration
and Digital Transformation

Tehnologije koje omogućavaju razvoj: platforme za otvorene podatke



Tomaž Lanišek

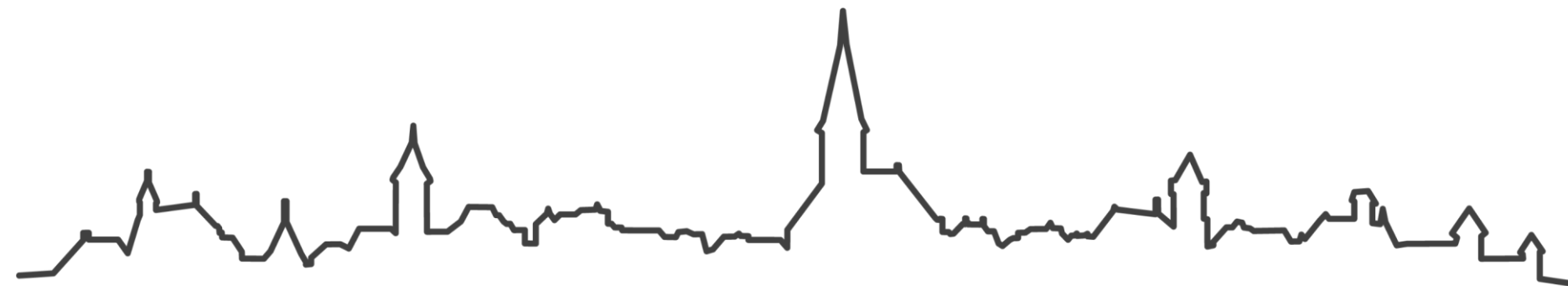
Mestna občina Kranj, pročelnik Ureda za razvoj i pametni grad

PILOT 2024-1-A - UrbanMind

Mestna občina Kranj (SI), Grad Pula(HR)



CITY OF KRANJ



Zagreb, 09. april 2025

Osnovne informacije o pilotu

- Naslov: **UrbanMind**
- Uključeni gradovi: **Kranj, Pula**
- Datumi: 01. studenoga 2024. – 30. travnja 2026. (**trajanje: 18 mjeseci**)
- Proračun: **3 milijuna EUR**
- Područja:
 - Prediktivno upravljanje prometom / **planiranje održive mobilnosti**
 - Podatkovne usluge povezane s vremenskim i klimatskim i ekstremnim vremenskim prilikama

Motivacija

Pametna Mlaka (Smart Swamp) podatkovni prostor u nastajanju:

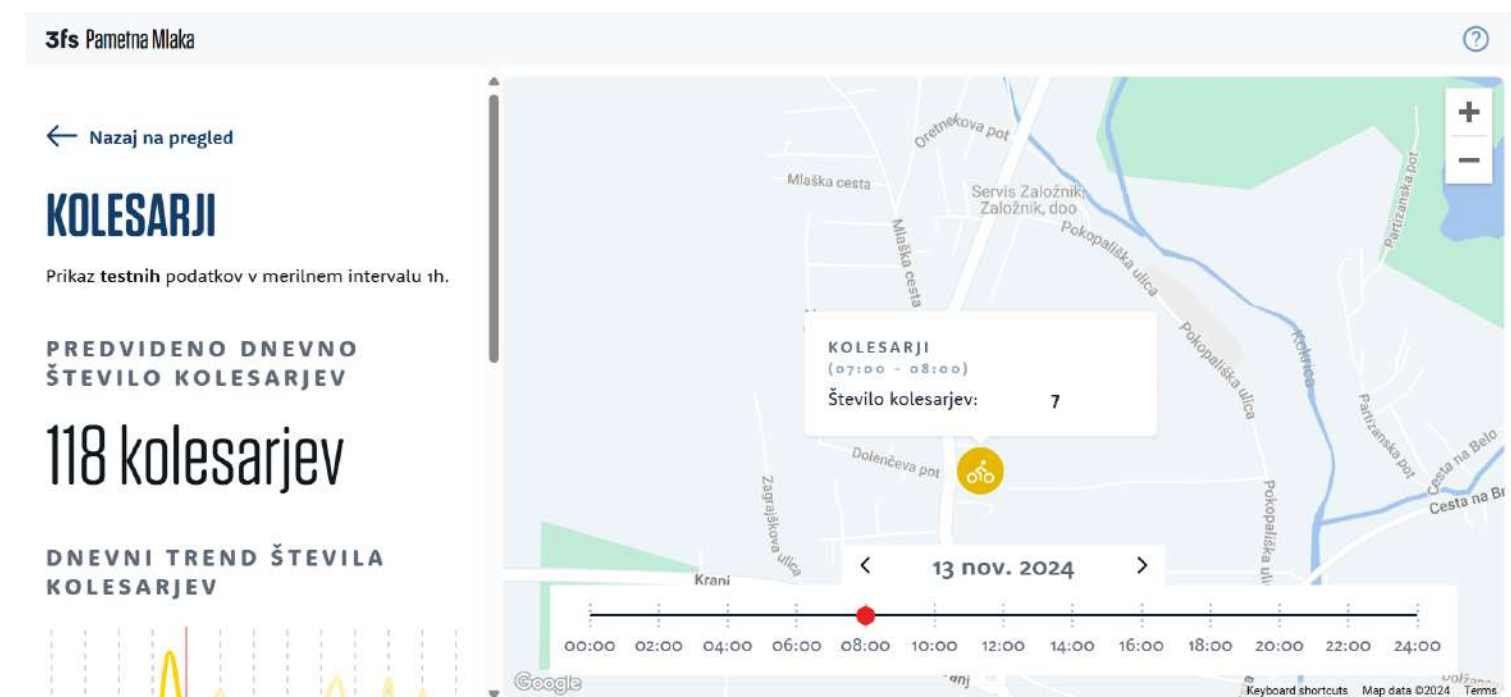
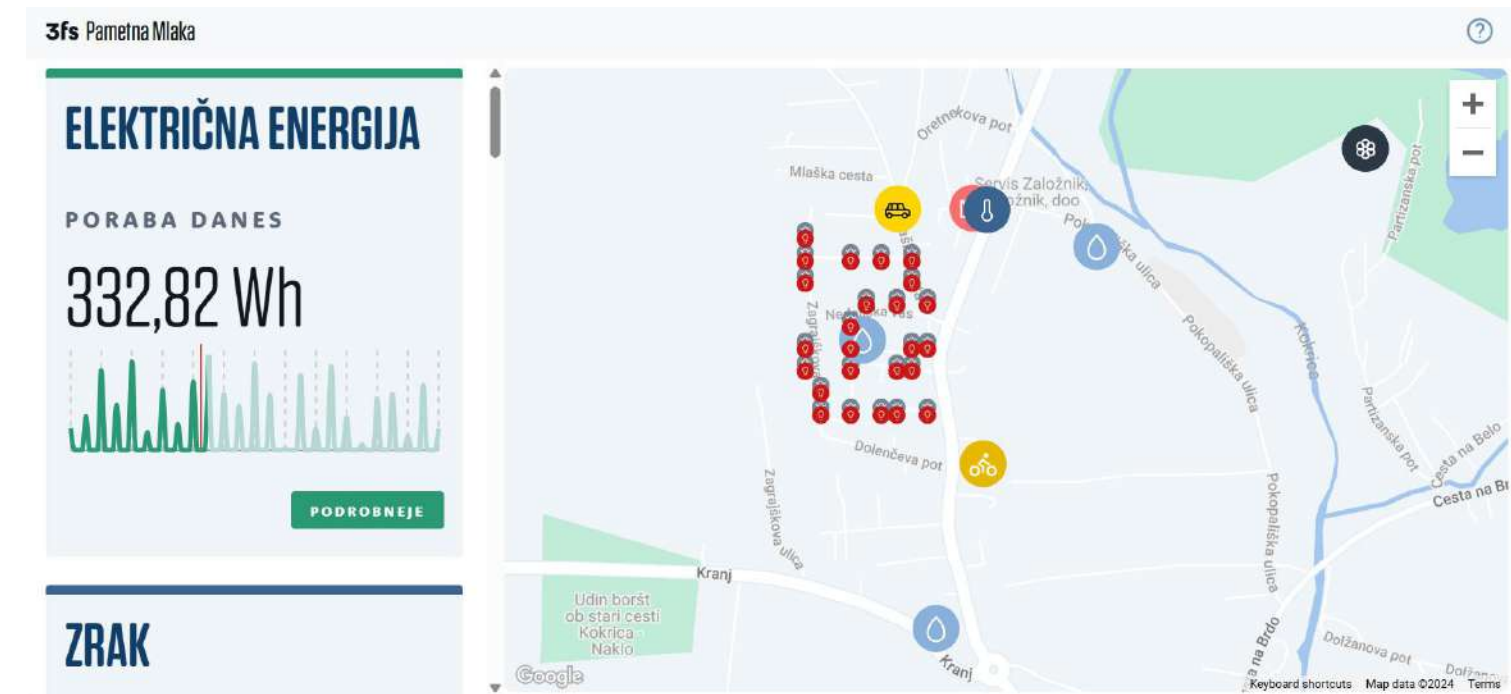
- Europska komisija utvrdila ga je kao jednu od 4 odabrane najbolje prakse u području pametnih gradova
- diseminirao gradonačelnik Matjaž Rakovec na Forumu gradonačelnika u Švicarskoj

Cilj: Ugraditi Pametnu Mlaku u puni podatkovni prostor



JRC TECHNICAL REPORT

Benchmarking the role of the Public Sector and Location Intelligence in Smart Spaces



Opis primjera upotrebe

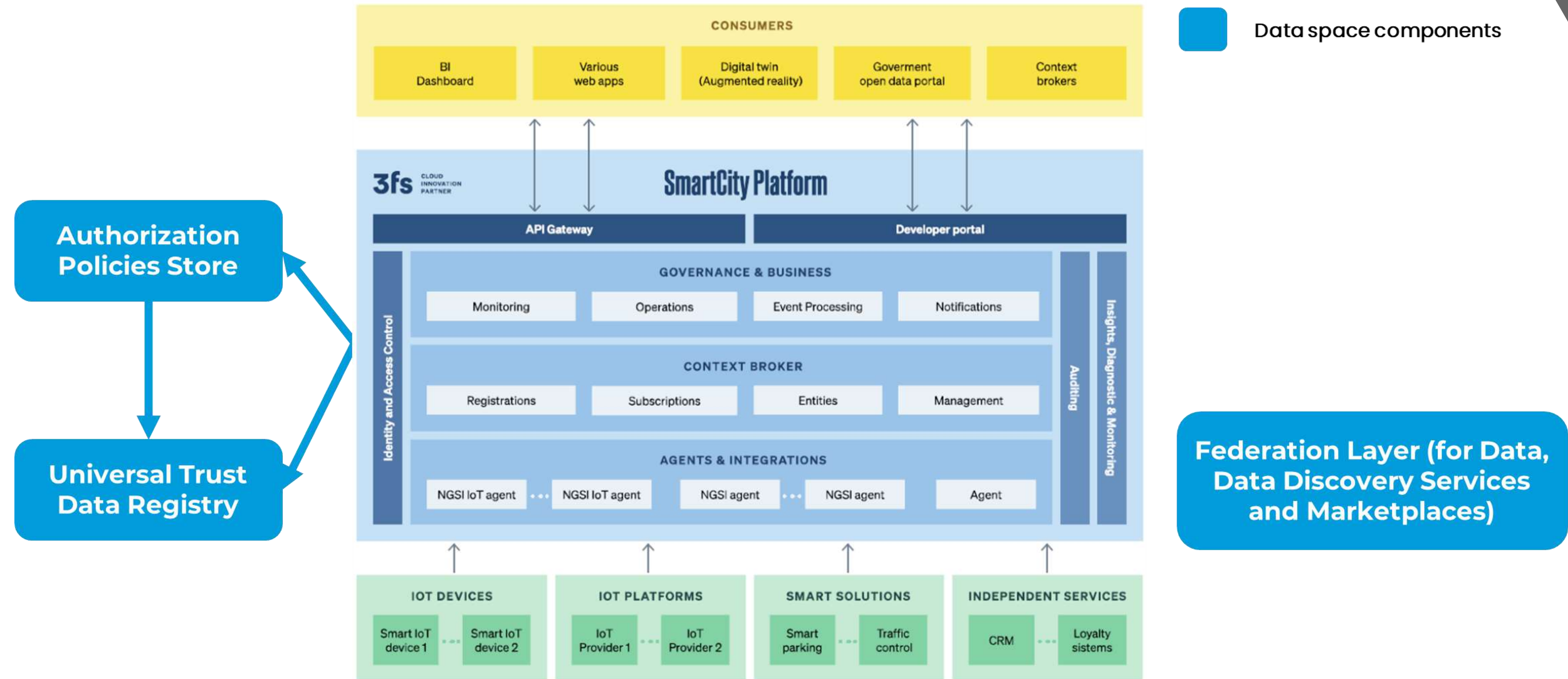


Praćenje okoliša na temelju mikrolokacije
(senzori na autobusima ili drugoj pokretnoj infrastrukturi)



Prediktivna analitika prometa u starim gradskim jezgrama Kranja i Pule

Infrastruktura i upravljanje podatkovnim prostorom



Kako koristiti MIM-ove i prijedlog nacрта

MIM1 - Upravljanje kontekstnim informacijama: Upravljanje kontekstnim informacijama na standardiziran način, omogućujući besprijekornu integraciju i razmjenu podataka u stvarnom vremenu između različitih sustava.

MIM2 - Zajednički podatkovni modeli: Koristiti standardizirane podatkovne modele koji osiguravaju dosljednost i razumijevanje podataka na različitim platformama i uslugama.

MIM4 - Upravljanje osobnim podacima (Trust): Kako bi se osiguralo sigurno upravljanje osobnim podacima, poticanje povjerenja među sudionicima kroz poštivanje propisa o privatnosti.

MIM5 - Pravedna i transparentna umjetna inteligencija (Transparency): Kako bi se osiguralo da AI korišteni algoritmi su transparentni, pravedni i objašnjivi, promičući povjerenje i odgovornost.

MIM6 - Security Management: Implementirati robusne sigurnosne mjere koje štite podatke i usluge od neovlaštenog pristupa, osiguravajući integritet i povjerljivost informacija.

Očekivana dodana vrijednost

Društvena

Održivost:

- Smanjenje emisija CO2 povezanih s prometom za 10 – 25 %,
- **Smanjenje prometnih zastoja** do 30%,
- **Povećanje produktivnosti** resursa za 15-25%.

Društvena plat:

- Integracija u procese donošenja odluka (urbanističko planiranje, planiranje događaja),
- Informacije koje vode pravednom urbanom razvoju.

Ekonomska

Pojednostavljeno postavljanje podatkovnog prostora(Pula kao drugi pilot), smanjenje troškova implementacije i integracije.

Integrirana platforma za razvojne programere za izradu aplikacija na „vrhu“ platforme UrbanMind.

Tehnična

Pilot-projekt podatkovnog prostora za pametne gradove, usklađen s referentnom arhitekturom i MIM-ovima

Napredne aplikacije izgrađene za gradove(praćenje okoliša, analitika prometa)

Integracija procesa za jednostavnu implementaciju i raširenje na druge gradove.

Trajanje projekta

Activity

Scaling-up the Smart Mlaka
Emerging Data Space to
UrbanMind Data Space

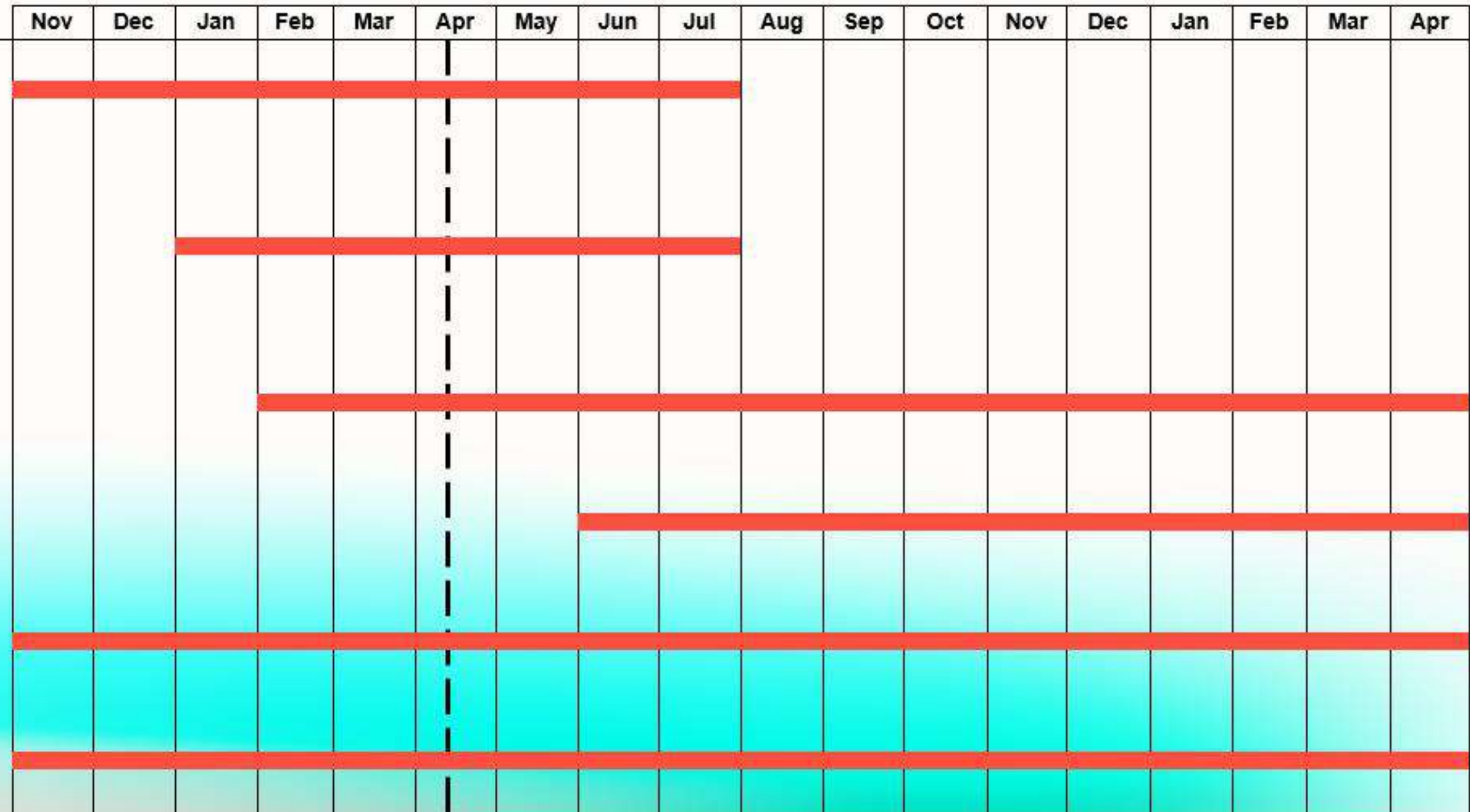
Data services design and
development based on the
Data Space Blueprint

UrbanMind Data Space Pilot 1
(validation and verification)

UrbanMind Data Space Pilot 2
(scaling-up and migrations)

Project management, coor-
dination and risk management

Dissemination and exploitation



9. Travanj
2025

30. Travanj
2026

Projektni partneri

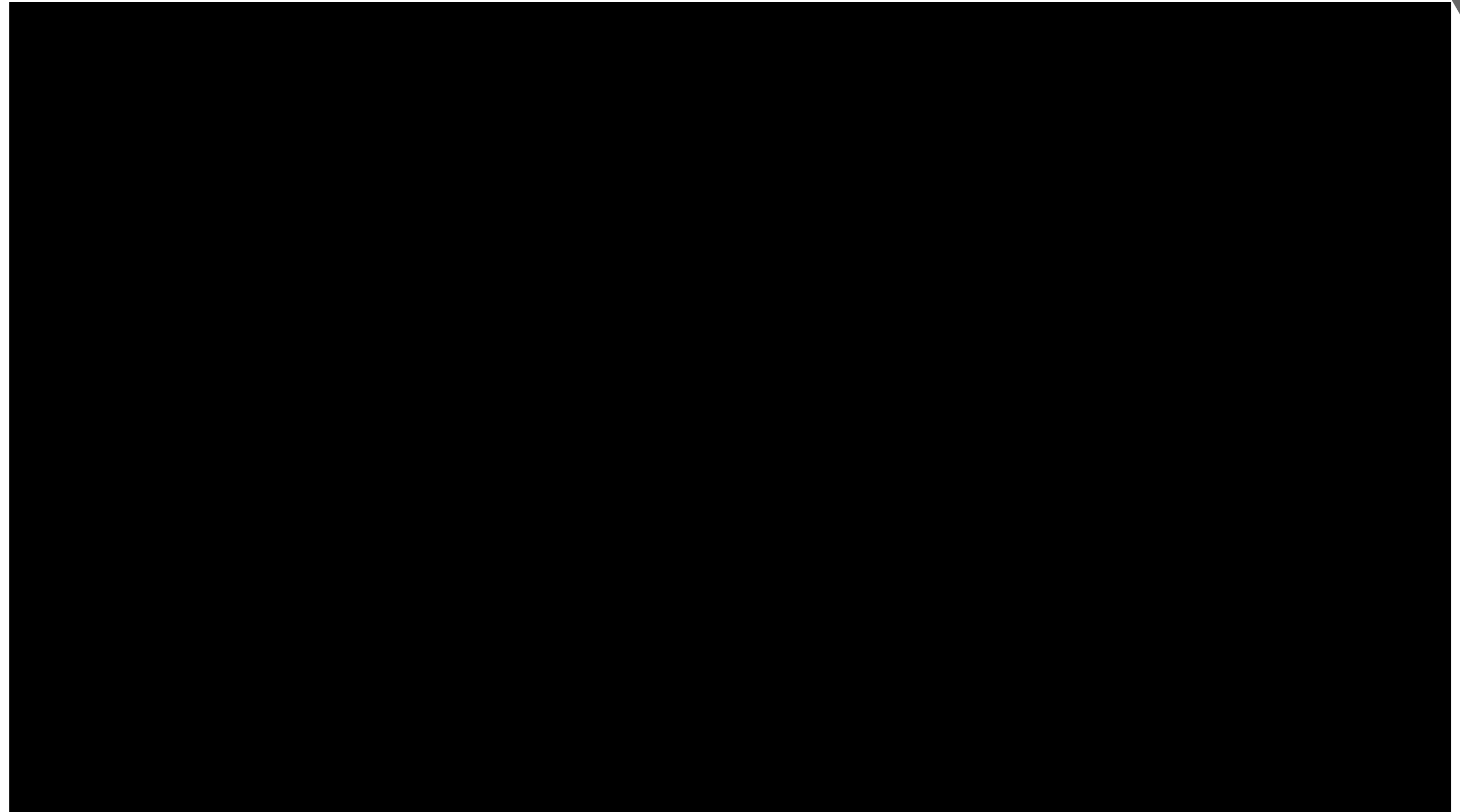
Internet
stranica
projekta:



CITY OF KRANJ



Video projekta



Projektna ekipa



Tomaž Lanišek

Development and Smart
City Manager
City of Kranj

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Head of Smart City
Department
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Ana Vizovišek

Smart City Adviser
City of Kranj

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Dražen Stepanov

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Smart City Department
City of Pula

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Marko Grgić

Senior Asistant for
Development Projects and
Smart City
City of Pula

Contact

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Projektna ekipa



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Smart City Consultant
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Biljana Prinčič

Head of IT and Smart City
Department
Riko

Contact
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Andraž Logar

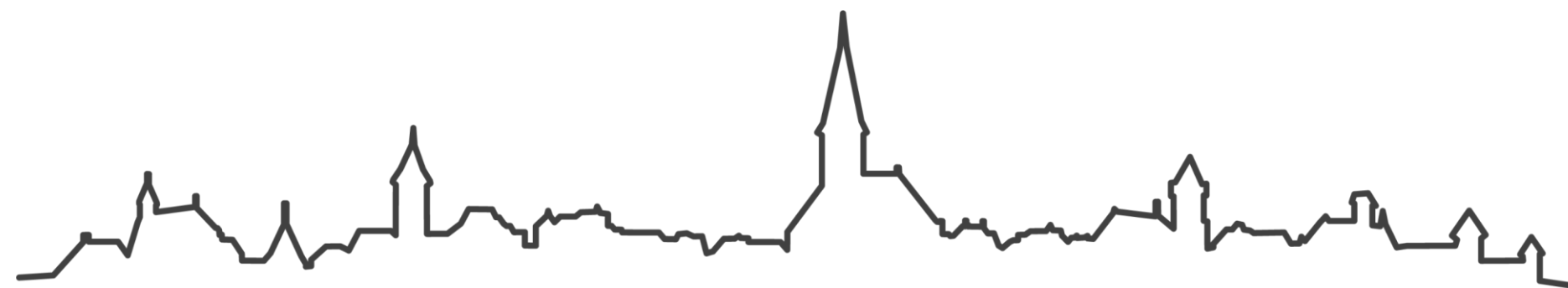
Chief Executive Officer 3fs
3fs

Contact
andraz@3fs.si

Hvala!



CITY OF KRANJ



GRAD
PULA
CITTÀ
DI POLA

Zagreb, 09. april 2025

Session Moderators



Genoveva Gil Garcia

Serendipity



Peter Geršič

Novo Mesto



Ignacio Garcia Vega

Serendipity



Marina Tavra

Tehnološki park Split



Evropska
Komisija

A person in a white shirt is holding a tablet. The tablet screen shows a vibrant city skyline at night, with several skyscrapers illuminated. Overlaid on the city is a white, glowing geometric network of lines and dots, resembling a digital or blockchain structure. The background of the entire image is a blurred cityscape under a sunset sky.

**Procjenite svoju digitalnu spremnost
uz LORDIMAS**



European
Commission

Procjenite svoju digitalnu spremnost uz LORDIMAS



Genoveva Gil Garcia
Tech Lawyer | Project Manager

The Bigger Picture

The **Digital Decade Policy Programme** guides Europe's digital transformation towards 2030 – **enabler of the green transition**

Path to the Digital Decade

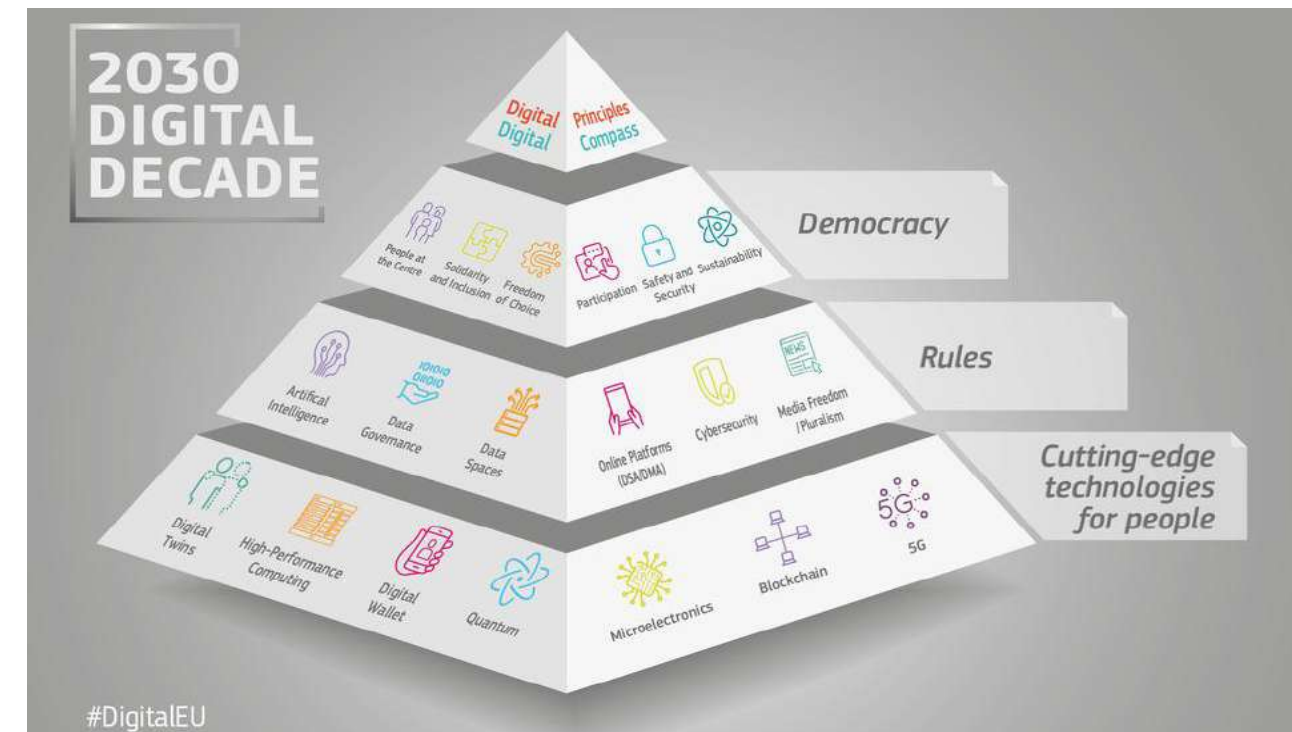
Annual cooperation cycle to achieve the targets & objectives

Digital Economy and Society Index (DESI) to measure progress towards each of the 2030 targets

An annual report on the **state of the Digital Decade** per Member State

National Digital decade strategic roadmaps in which MS outline adopted or planned actions towards 2030

Implementation of multi-country projects: **European Digital Infrastructure Consortium**



Communication 2030 'The Digital Compass', 2021 ([source](#))

HOW CAN LOCAL AND REGIONAL AUTHORITIES WALK THROUGH THIS PATH TO THE DIGITAL DECADE?

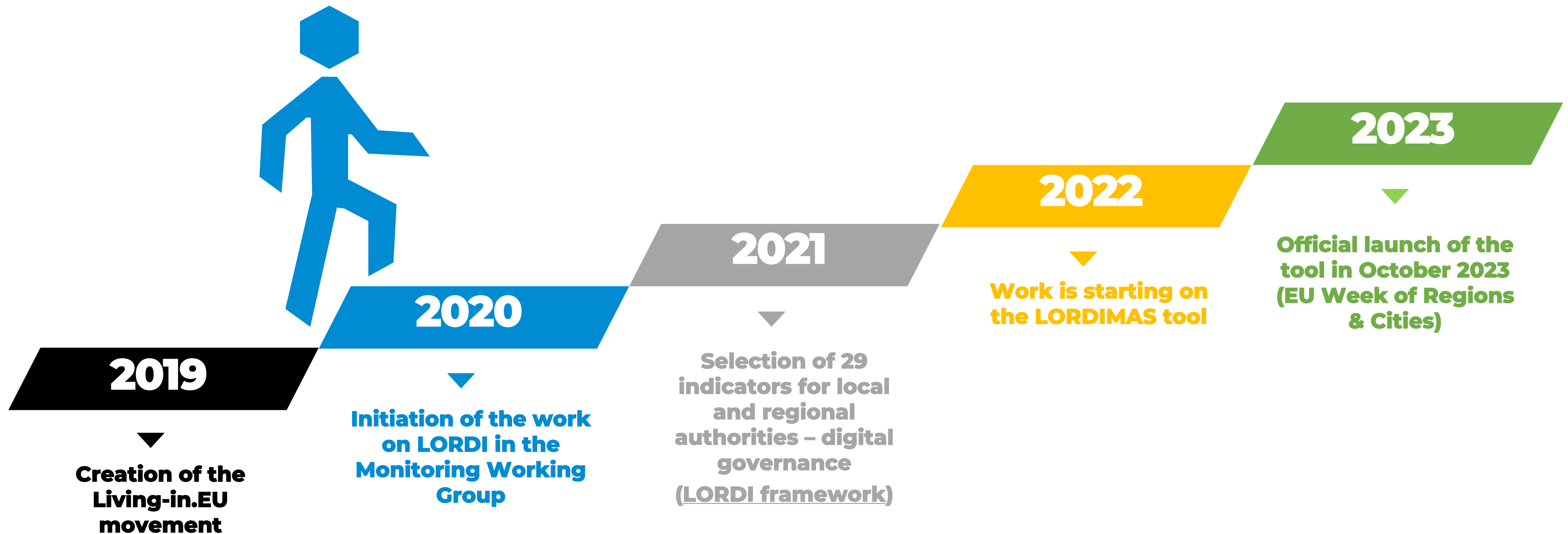
ASSESSING YOUR DIGITAL MATURITY

What is LORDIMAS?

‘Interactive tool aimed at helping local and regional governments to understand where they are in their digital transformation journey’

Where does **LORDIMAS** come from?

A collaborative work with many stakeholders



EVALUATE

A digital maturity tool

Governance, Service design, Data management, Interoperability, Technology, Service delivery and Networking

COMPARE

An interactive dashboard

Presenting your data in real-time and allowing you to compare with other cities in Europe

SHARE

Repository of good practices

Sharing your success and challenges to promote the European way for digital transformation

LEARN

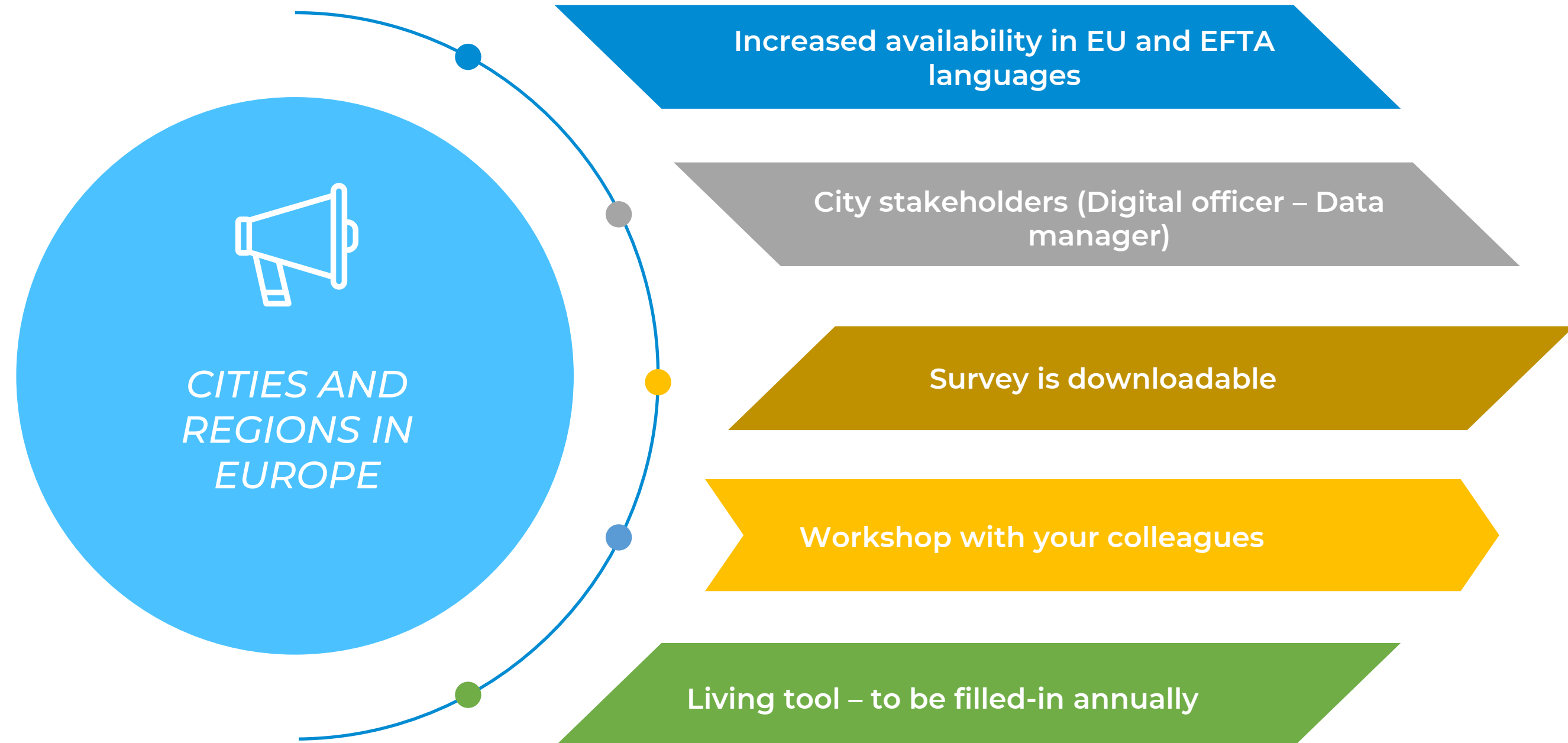
Policy recommendations

Bringing awareness about emerging topics at the EU level and to giving policy advice

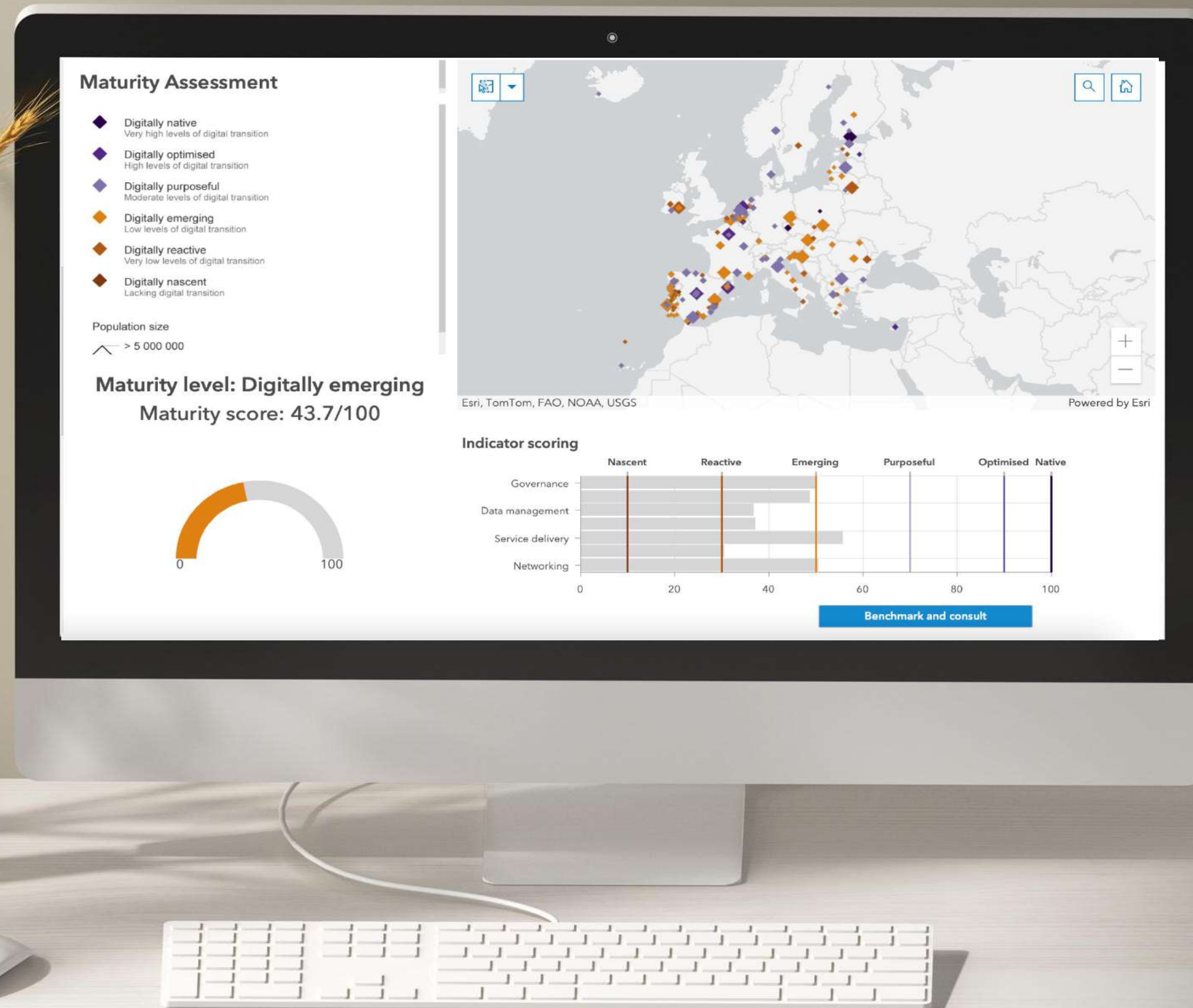
What is **LORDIMAS?**

A functional approach

What else to know about **LORDIMAS**?



How does LORDIMAS work?





Get policy advice, promote and learn from best practices



LORDIMAS is an interactive digital maturity assessment tool aimed at helping local, metropolitan and regional governments to understand where they are in their digital transition journey.

[Participate](#)[Explore](#)

Promoted by



Analyse and visualise

Analyse and visualise

Overall Digital Maturity

About this dashboard

This module assesses the overall digital maturity of public administrations, looking into the seven LORDIMAS topics: Governance, Service design, Data Management, Interoperability, Service delivery, Technology and Networking.

Search and filter

Filter by country

Finland

Filter by type

No category selected

The Digital Maturity Assessment is calculated for the selection you see on the Map. You can select one or multiple public authorities using the Map or Search and Filter section.

Maturity Assessment

- Digitally native
Very high levels of digital transition
- Digitally optimised
High levels of digital transition
- Digitally purposeful
Moderate levels of digital transition
- Digitally emerging
Low levels of digital transition
- Digitally reactive
Very low levels of digital transition
- Digitally nascent
Lacking digital transition

Population size

Maturity level: Digitally optimised

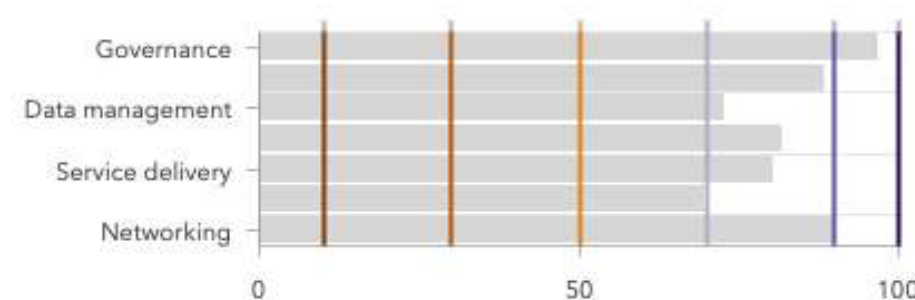
Maturity score: 82.5/100



Esri, TomTom, FAO, NOAA, USGS

Powered by Esri

Indicator scoring



Overall Digital Maturity

About this dashboard

This module assesses the overall digital maturity of public administrations, looking into the seven LORDIMAS topics: Governance, Service design, Data Management, Interoperability, Service delivery, Technology and Networking.

Search and filter

No category selected

Filter by country

France

Filter by type

No category selected

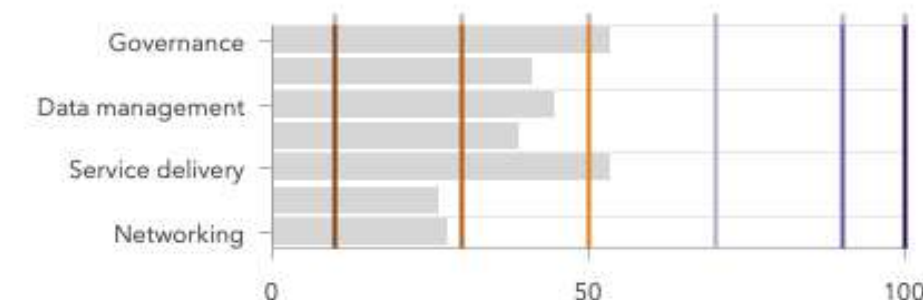
The Digital Maturity Assessment is calculated for the selection you see on the Map. You can select one or multiple public authorities using the Map or Search and Filter section.



Esri, TomTom, FAO, NOAA, USGS

Powered by Esri

Indicator scoring



All

Governance

Service design

Data management

Interoperability

Service delivery

Technology

Networking

Insert your best practice

**[Draft example] Helsinki's innovation...**

Forum Virium Helsinki (FVH) is the City of Helsinki innovation company. FVH co-creates...

**[Draft example] Terrassa creates a m...**

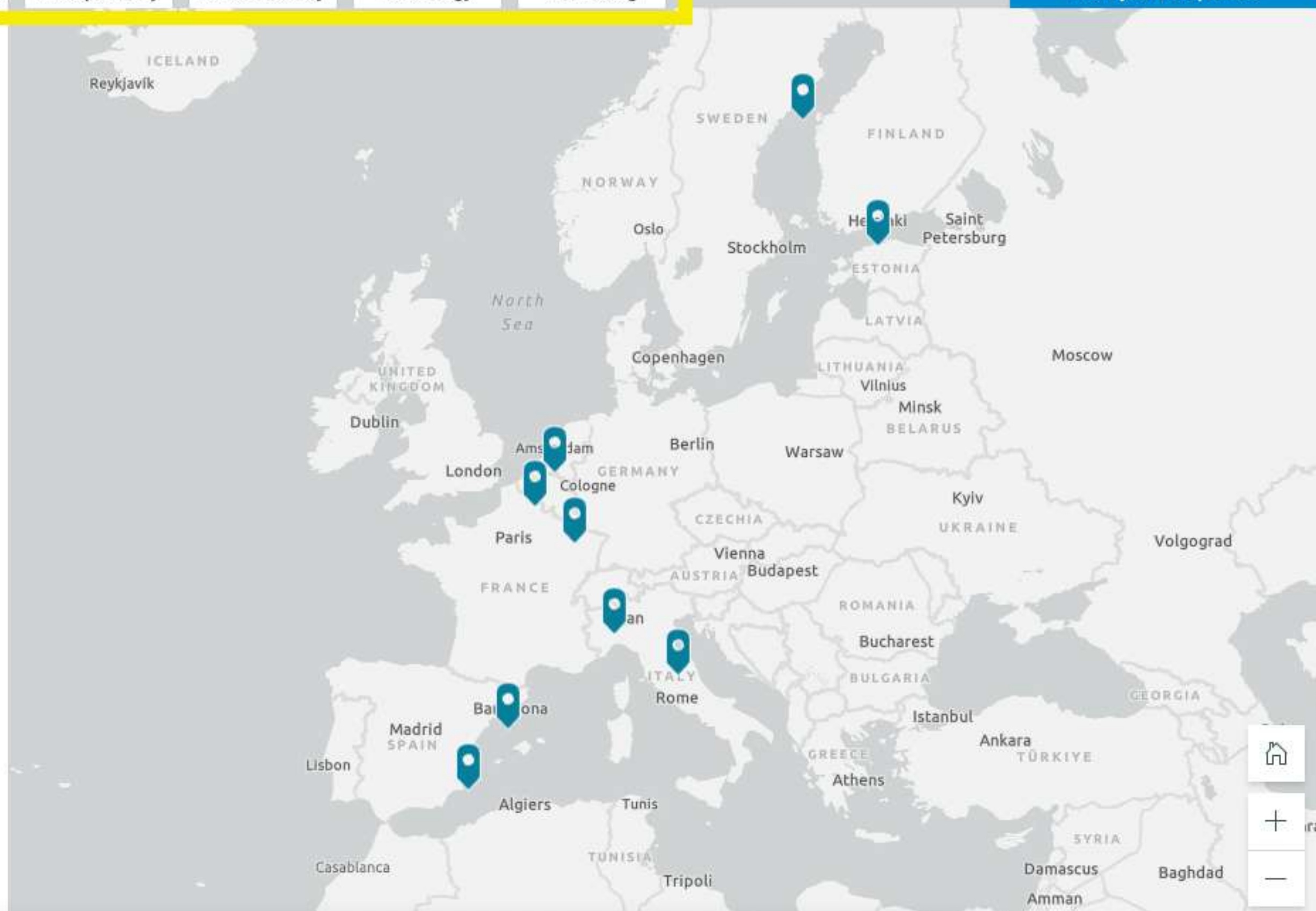
"Participa a Terrassa" (participa.terrassa.cat) is the online tool for citizen participation that...

**[Draft example] Amsterdam informs ...**

Private companies, research institutions and government organisations in Amsterdam mus...

**[Draft example] Umeå integrates dat...**

The Umeå urban data platform (UDP) integrates a wide number of data sources from both...



And **since** then?

193
participants

From 27
countries

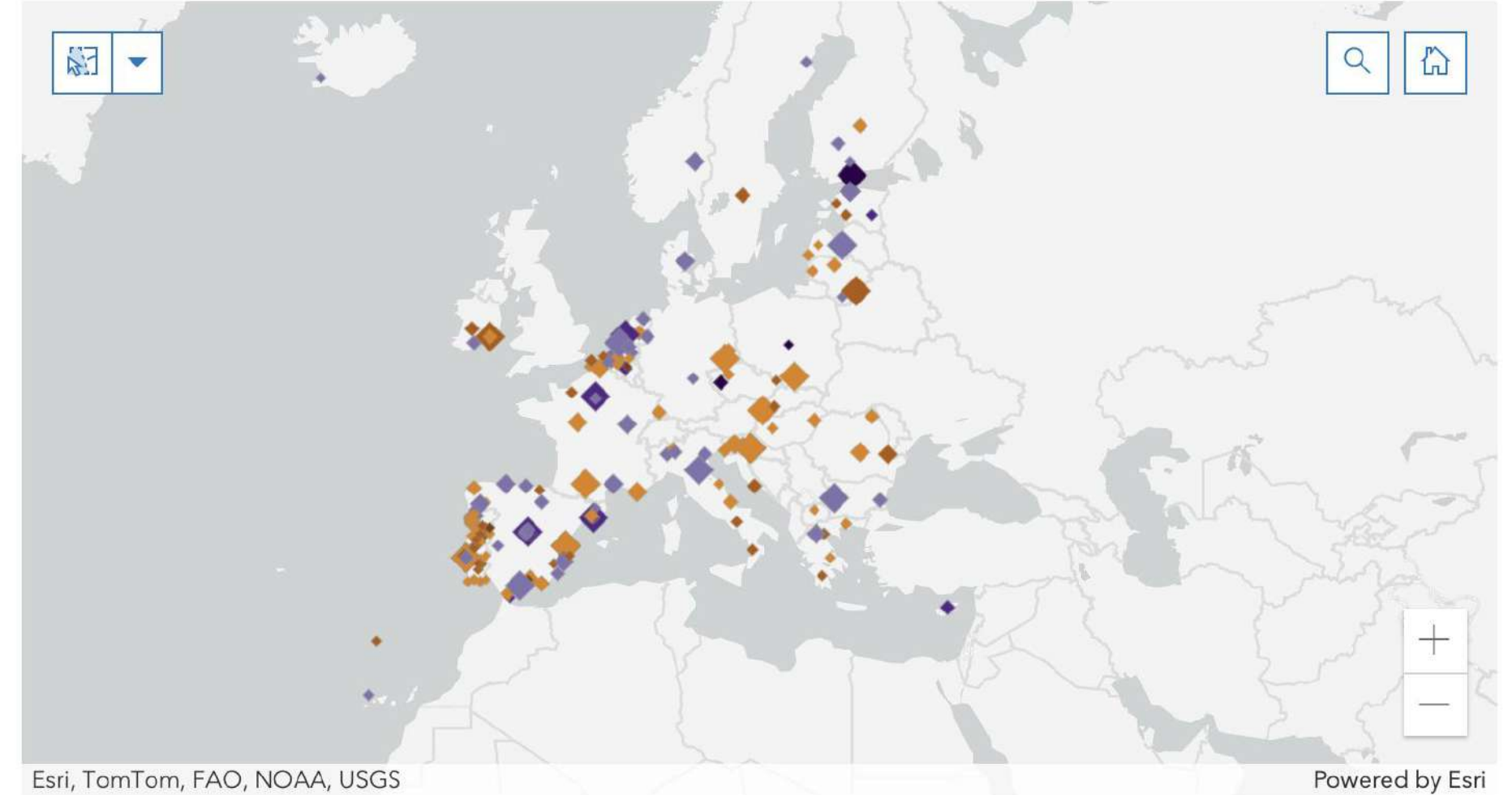
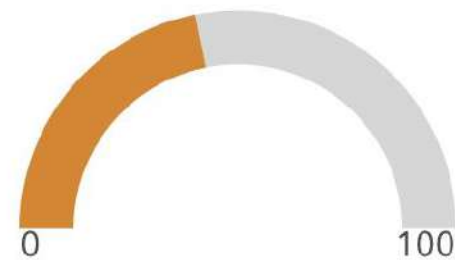
2 Croatian
communities:
Split and
Zagreb

Maturity Assessment

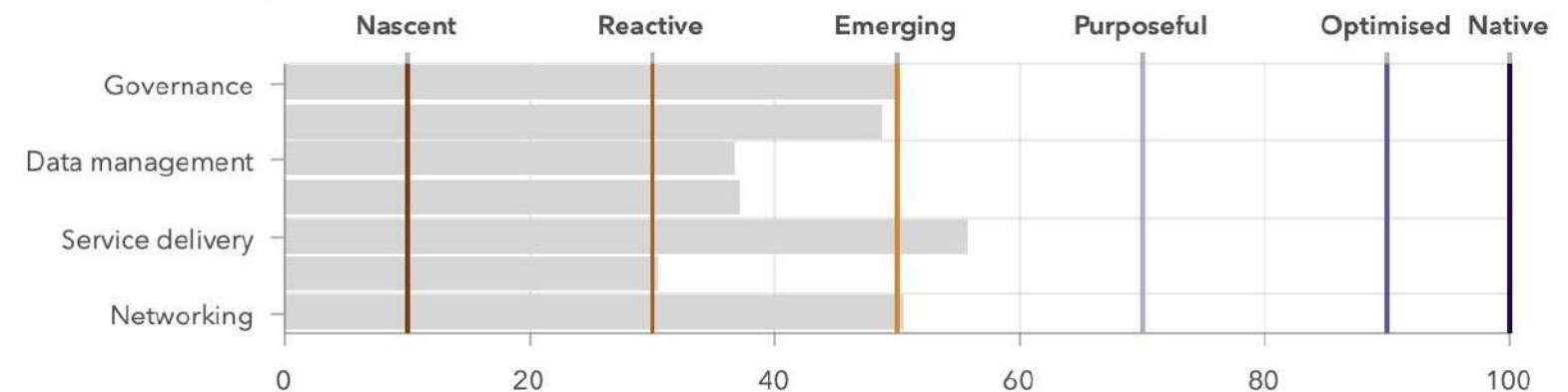
- Digitally native
Very high levels of digital transition
- Digitally optimised
High levels of digital transition
- Digitally purposeful
Moderate levels of digital transition
- Digitally emerging
Low levels of digital transition
- Digitally reactive
Very low levels of digital transition
- Digitally nascent
Lacking digital transition

Population size
^ > 5 000 000

Maturity level: Digitally emerging
Maturity score: 43.7/100



Indicator scoring



Benchmark and consult

Procjenite svoju digitalnu spremnost uz LORDIMAS



Peter Geršič

Novo Mesto



Marina Tavra

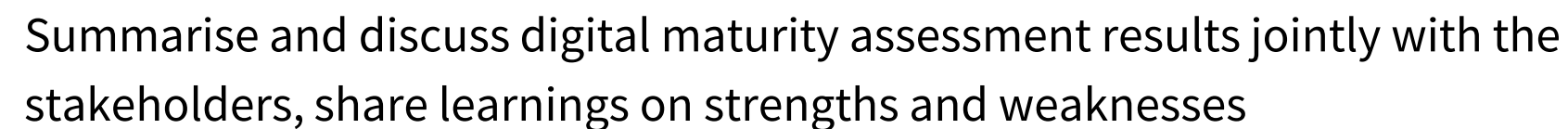
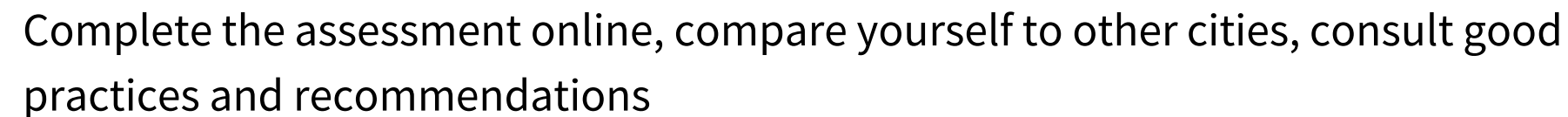
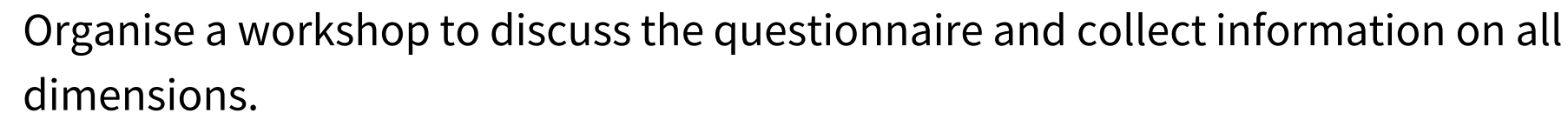
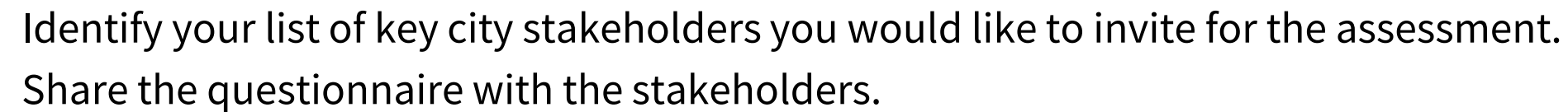
Tehnološki park Split



If you want to contribute to shape the future development of the tool you can join the **Monitoring & Measuring Working Group** of Living-in.EU



Call to Action – How to Get Started



BOOST



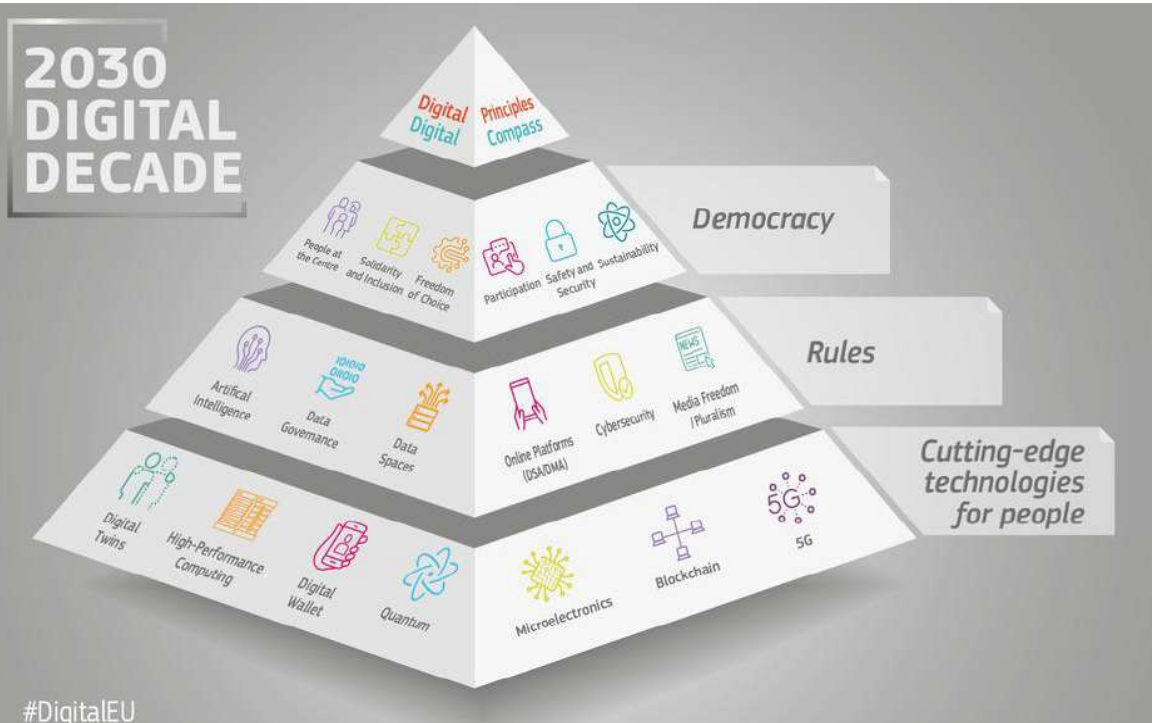
Izrada plana digitalne tranzicije

Izrada plana digitalne tranzicije



Ignacio Garcia Vega
Chief Innovation Officer
Serendipity

The Bigger Picture



Digital Decade

development of the digital economy

The Digital Decade Policy Programme as compass to guide Europe's Digital Transformation

The Online Procurement Helpdesk as instrument to guide cities and communities



Local Digital Twins and GovTech

Local Digital Twins & GovTech will form the core to transform the Digital Infrastructure of cities and create human centered services.



EDIC

LDT and Citiverse

The European Digital Infrastructure Consortium (EDIC) as the funding instrument for large scale deployment for municipalities, regions, Member States and companies to work together in creating a European Digital Industry.

The Online Procurement Helpdesk



Online Tool

An environment for cities and communities representatives to quickly and effectively establish the digital transformation strategy.



Service

Expert “**Guiding Agents**” guide through the process.

Currently, 150 EU cities will receive support services*

*The service will be **transferred** to **LDT CitiVERSE EDIC**



Customisation

The results are unique and tailored to the needs of the city or community in the form of a **customised digitalisation roadmap**.



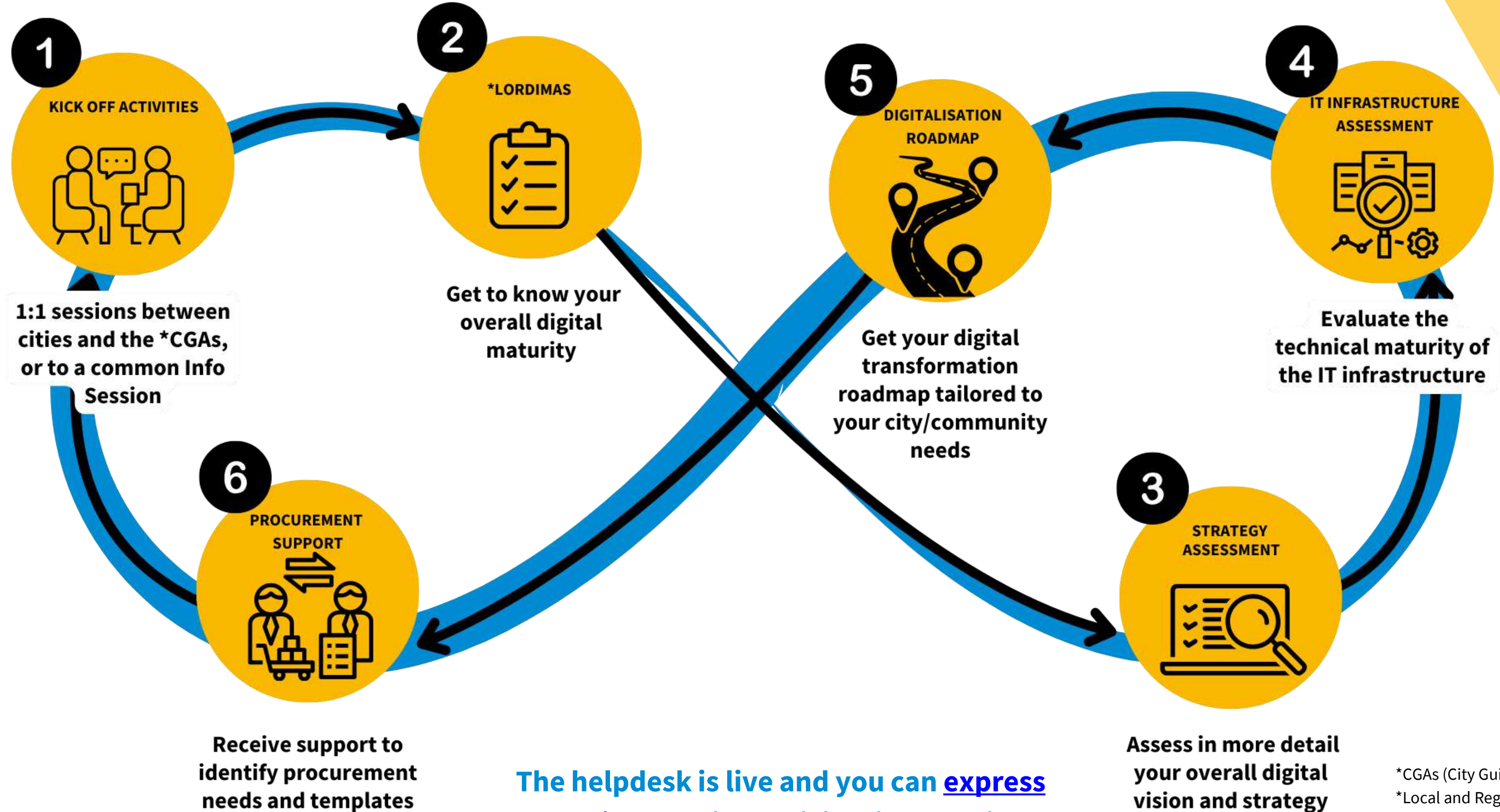
Result

Identification of procurement needs and access to **procurement guidelines and templates**, aligned with standards and legislation



- **Multidisciplinary team available:** Chief Innovation, Digital Officers, ICT managers, IT architects, IT procurement and Infrastructure providers.
- **Focus dedication:** 2-4 days to fulfill the assessments.

Journey for Participating Cities



*CGAs (City Guiding Agents)

*Local and Regional Digital Maturity Assessment

STEP 1 - Procurement Helpdesk

LIVING-IN.EU DIGITAL TOOLBOX

Welcome Arthur Kenjora Click here to [Start →](#) your next LDT assessment

Your City Journey 1/3 completed



 **LORDIMAS Assessment** [View →](#)



 **Strategy Assessment** [Continue →](#)



 **IT Infrastructure Assessment** [Start →](#)

Procurement Helpdesk Support Service



Get support →



Knowledge Centre →

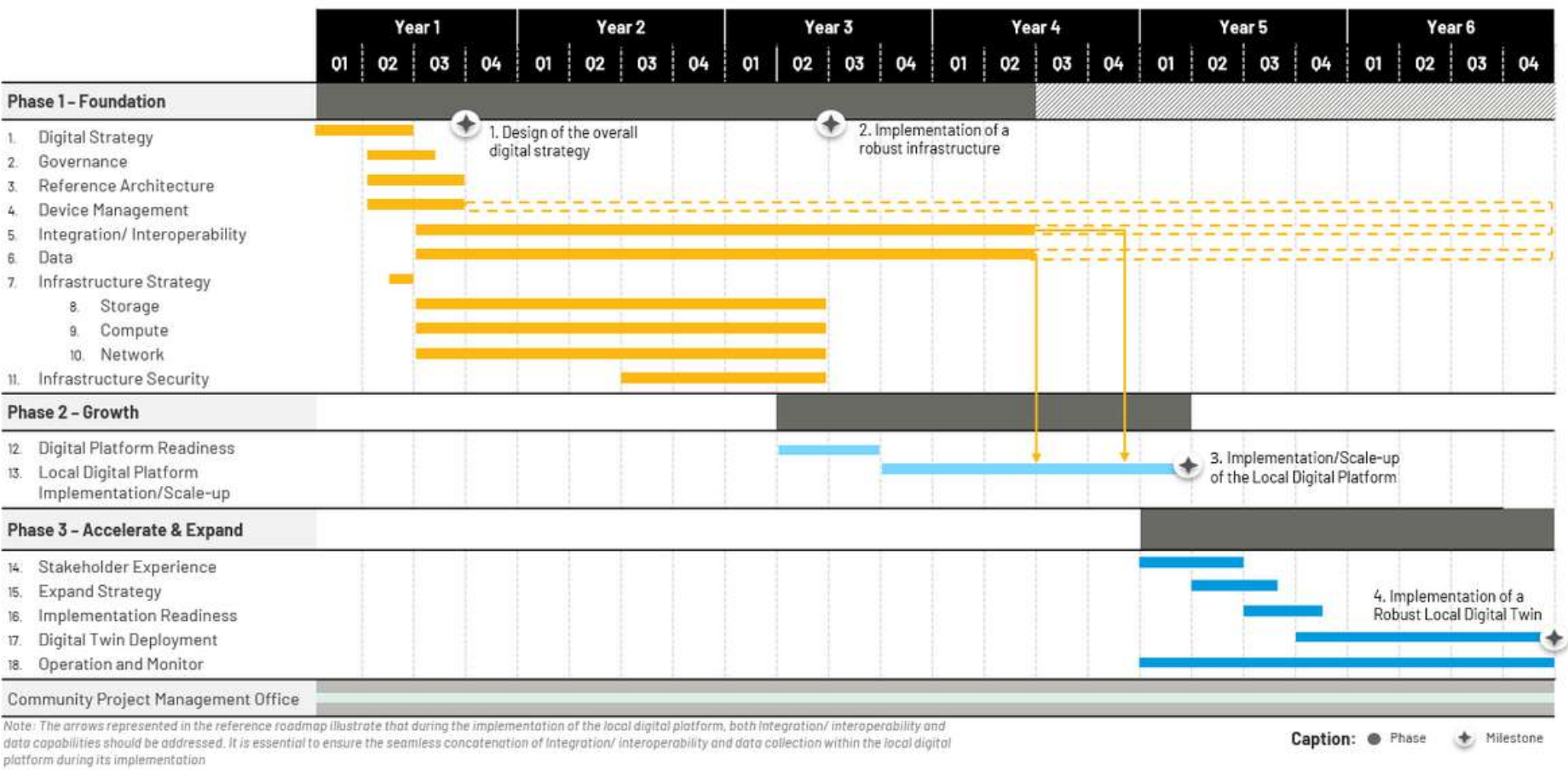
 European Commission

STEP 5 - Digitalisation Roadmap

Each community will get its own reference digitalisation roadmap, based on their current maturity scores.

This roadmap will present the key enablers and capabilities that the community needs to work on towards the development of a Local Digital Platform (LDP), and later a Local Digital Twin (LDT) For that, a set of initiatives and a reference timeline will be proposed

Overview of capabilities and enablers and correspondent reference timeline



List of initiatives for each capability and/or enabler

3

Device Management

The Device Management capability entails efficient deployment, maintenance, and integration of IoT devices to enhance overall operational efficiency within the smart community ecosystem.

Main Initiatives

Device Management Strategy

- 1| Review the device management strategy, including lifecycle management framework, protocols and APIs, and the KPIs
- 2| Review your current IoT devices, and see if they are a good fit based on the strategic priorities and identified requirements

Device Installation

- 1| Review current IoT devices and check their integration the current network and compliance with the policies based on your device management strategy and IT Infrastructure strategy

Device Platform

- 1| Acquire and implement the chosen IoT Platform based on the IoT strategy, strategic priorities and IT Infrastructure strategy

Calendar Estimate

Year 1	Year 2	Year 3
01 02 03 04	01 02 03 04	01 02 03 04
01 02 03 04	01 02 03 04	01 02 03 04
01 02 03 04	01 02 03 04	01 02 03 04

Procurement Objects*

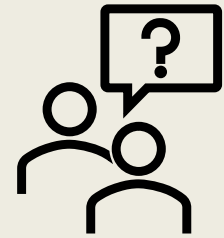
- IoT devices
- IoT platform

Interdependencies

Not applicable

*The procurement objects provided are preliminary versions and subject to further refinement

STEP 6 - Procurement support

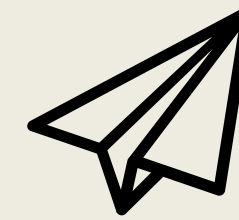


**Procurement support
through the Online
Helpdesk**



City Guiding Agents

- Respond to specific requirements coordinating with procurement experts.
- Deliver customized guidance.



**Helpdesk's Ticketing
system**

- Direct contact with project **procurement experts** for template specific queries.

STEP 6 - Procurement Templates



Procurement Templates

French and German translation!



Tender specifications



Scope and description of the procurement



General tendering information



Evaluation and award

Technical specifications



Compliance checks and warranty



Technical and functional requirements



Minimum Interoperability Mechanisms (MIMs)

STEP 6 - Procurement Guidelines



Procurement Guidelines



French and German translation!

Procurement process and related Guidelines



Templates Guidance

- How to use the templates and guidelines
- Guidance on selection of objects of procurement and templates
- Criteria and considerations to use the templates
- Identifying the appropriate templates user profile



Tender Development

- Guidance on needs identification
- EU Public procurement legal framework
- EU Procurement legal framework regarding digital products and services
- Technical specifications interpretation and tailoring
- AI/ML
- Innovation procurement



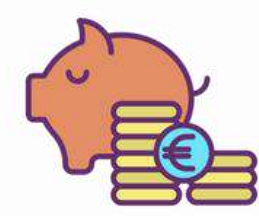
Market Engagement

- Information on how to encourage participation of SMEs
- Procurement initiatives and criteria for achieving sustainability and social goals



Evaluation & Award

- Effective Procurement Evaluation Processes and Negotiations
- Conditionalities definition, contractualisation and quality assurance
- Compliance with MIMs, standards, specifications and certifications



Funding & Financing

- Guidance on EU Support and Finance

Izrada plana digitalne tranzicije



Peter Geršič

Novo Mesto



Marina Tavra

Tehnološki park Split

EXPRESS YOUR INTEREST IN THE ONLINE PROCUREMENT HELPDESK

2 cities a
have already joined!
(Split and Zagreb)

We will provide access to +3
cities more until June 2025.



<https://living-in.eu/online-procurement-helpdesk-smart-communities>



LORDIMAS and the Online Procurement Helpdesk

THANK YOU!

ANY QUESTIONS?

genoveva@serendipity.buzz

ignacio@serendipity.buzz



RUČAK



European
Commission

Detailed Agenda Overview

Phase 0: How to Start Your Digitalisation Journey



9. travnja 2025. godine



10:00

TIME	TOPIC	SPEAKER(s)
10:00 - 10:10	Uvodni pozdrav	Francesca Gržinić Kuljanac <i>Grad Opatija</i>
10:10 - 10:30	Lokalni digitalni blizanci: uvod	Darko Šiško <i>Grad Zagreb</i>
10:30 - 11:00	Digitalni Zagreb <i>Digital transformation of the City of Zagreb</i>	Maja Šajnović <i>Grad Zagreb</i>
11:00 - 11:15	Coffee break	
11:15 - 11:45	Tehnologije koje omogućavaju razvoj: platforme za otvorene podatke	Nikola Modrušan Ministarstvo pravosuđa, uprave i digitalne transformacije Tomaž Lanišek Grad Kranj / Urbanminds
11:45 - 12:00	Procjenite svoju digitalnu spremnost uz LORDIMAS	Peter Geršić <i>Novo Mesto</i> Marina Tavra <i>Tehnološki park Split</i> Genoveva Gil Garcia/ Ignacio Garcia Vega <i>Serendipity</i>
12:00 - 12:30	Izrada plana digitalne tranzicije	
12:30 - 13:15	Ručak	
13:15 -13:45	Ekosistemi za podršku i suradnju	Gabriela Ruseva <i>Living-in.EU & EuroCities</i> Damir Medved <i>CEO EDIHADRIA</i>
13:45 - 14:30	Najava novih izvora financiranja digitalne transformacije	Nataša Margetić Ministarstvo pravosuđa, uprave i digitalne transformacije Ariana Vela <i>Avelant d.o.o.</i>
14:30 - 15:00	Q&A and Closing Remarks	

A person in a white shirt is holding a tablet. On the tablet screen, a city skyline is visible with a network of white lines connecting various points, suggesting a digital or smart city theme. The background is a blurred cityscape at sunset or sunrise.

EKOSISTEMI ZA PODRŠKU I SURADNJU



Ekosistemi za podršku i suradnju



Damir Medved
CEO
EDIHADRIA



Gabriela Ruseva
Living-in.EU and EuroCities

Ekosistemi za podršku i suradnju



Damir Medved
CEO
EDIHADRIA



uniri



STEPRI



EDIH ADRIA

Damir Medved, direktor



**Financira
Europska unija**
NextGenerationEU



REPUBLIKA HRVATSKA
Ministarstvo gospodarstva
i održivog razvoja



**Sufinancira
Europska unija**

The project is co-financed by the European Union under the Grant Agreement No. 101083838 and National Recovery and Resilience Plan of the Republic of Croatia 2021-2026.

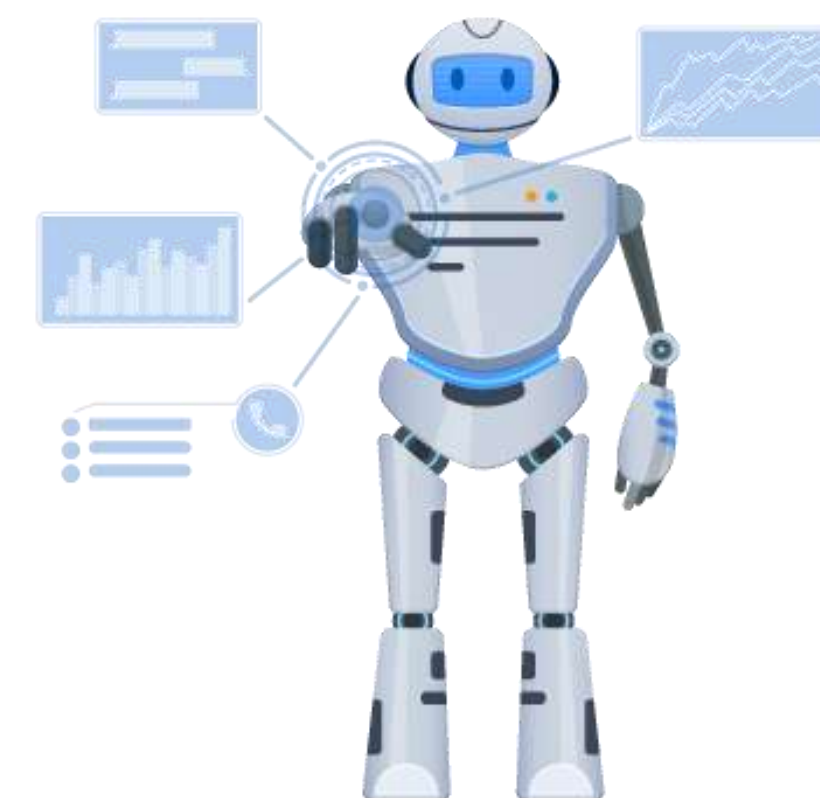
EDIH ADRIA - Konzorcij usmjeren na korisnika



Stručnjaci koji nude znanje, iskustvo i vještine rješavanja problema

Konzorcij EDIH Adria uključuje:

- **Dvije znanstveno-istraživačke institucije** (Sveučilište u Rijeci i Sveučilište u Puli),
- **Svjetske tehnološke lidere u svojim područjima** (Ericsson Nikola Tesla i Infobip, prvi hrvatski jednorog),
- **Institucije za podršku poslovanju** (Step Ri, vodeća hrvatska poduzetnička potporna institucija) i klaster tehnoloških inovacija (Smart Ri, nacionalni centar kompetencija za pametne gradove).



UNIRI



ERICSSON



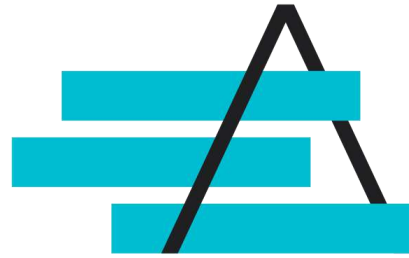
infobip

STEPRI



SmartRI

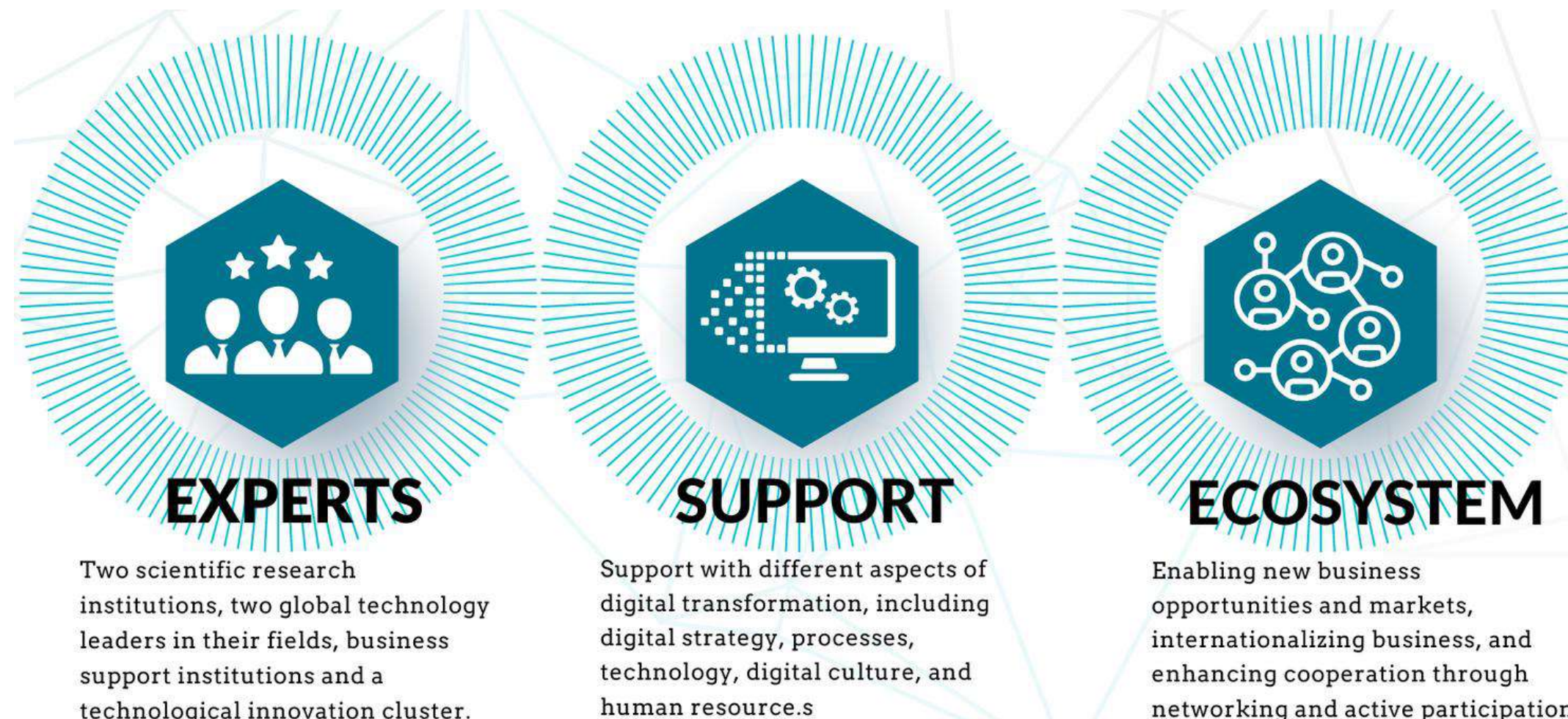
EDIH ADRIA – Podrška svim aspektima digitalne transformacije



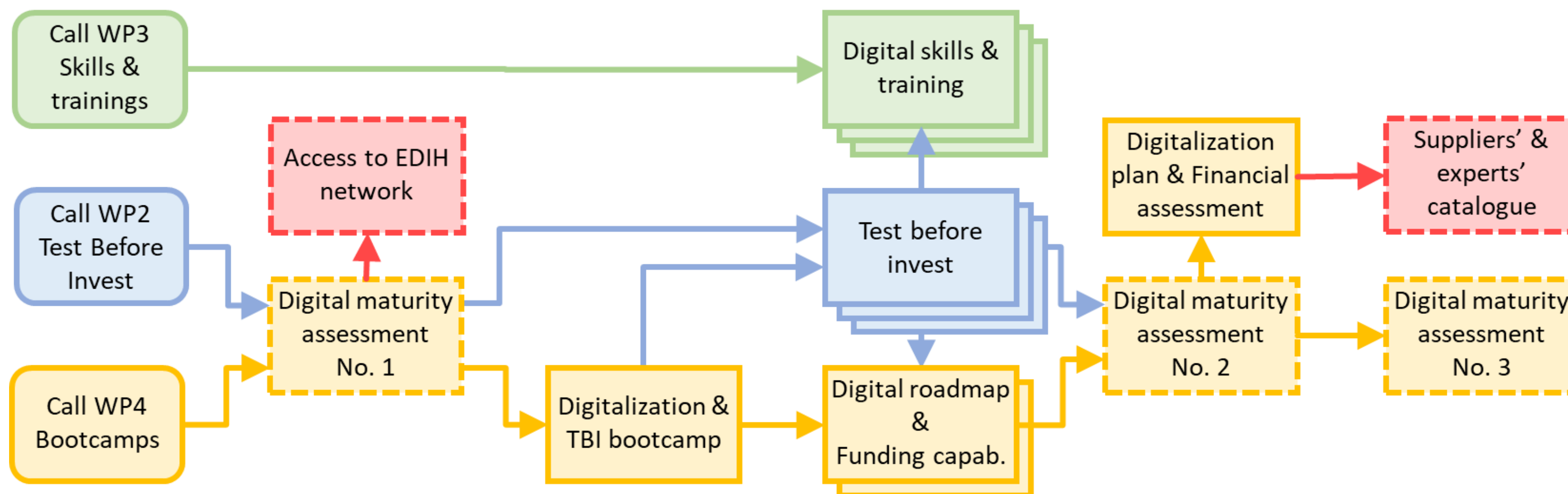
Planirano poslovanje **EDIH Adrije** pruža podršku različitim aspektima digitalne transformacije, uključujući digitalnu strategiju, procese, tehnologiju, digitalnu kulturu i ljudske resurse.

Uključuje razrađen skup usluga digitalizacije i obrazovanja za korisnike te umrežavanje, komplementarnost i suradnju s drugim EDIH-ovima u Europskoj uniji.

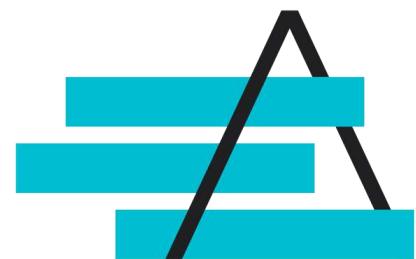
Potiče razvoj ekosustava poduzetnika, poslodavaca i potpornih institucija, s jedne strane, akademskog i obrazovnog sektora, s druge strane, te javnog sektora s treće strane.



EDIH ADRIA – Podrška svim aspektima digitalne transformacije

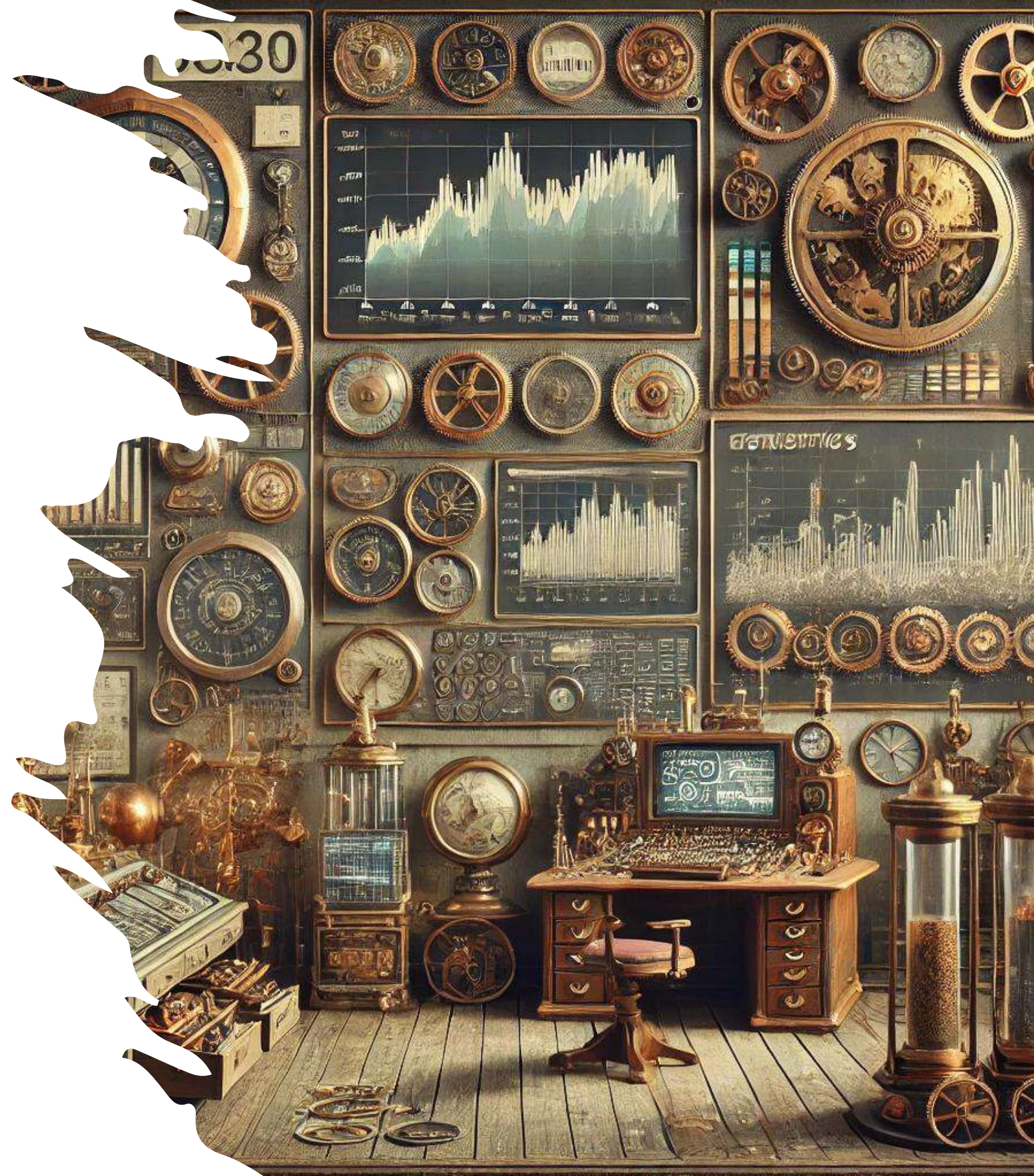


WP2 Test before invest	WP3 Digital skills and training	WP4 Digitalisation support activities	WP5 Innovation ecosystem...
1.000 € per TBI support day	Price per participant training day	Price per service used	n/a



EDIH ADRIA - MALO STATISTIKE I ANALITIKE

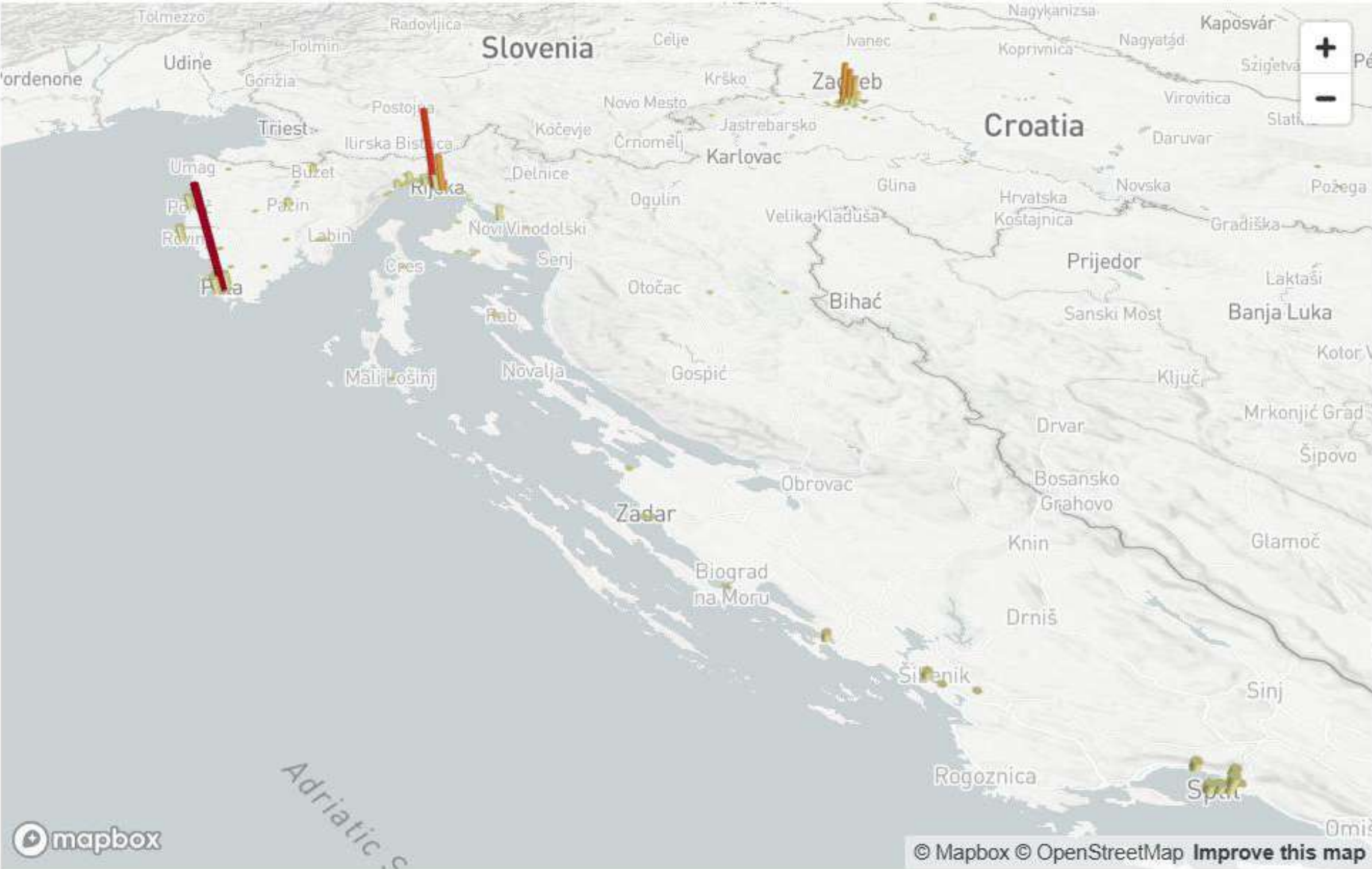
EDIH ADRIA – [EDIH Services Analysis Dashboard](#)



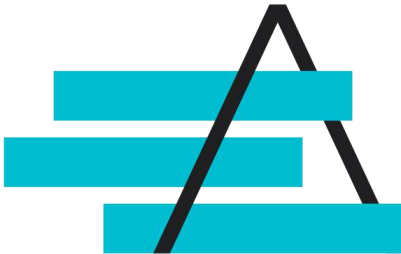
EDIH ADRIA Service Overview

Explanation of Results

EDIH Users on Map



Progress Toward Target



Total partner cost - midterm (€):

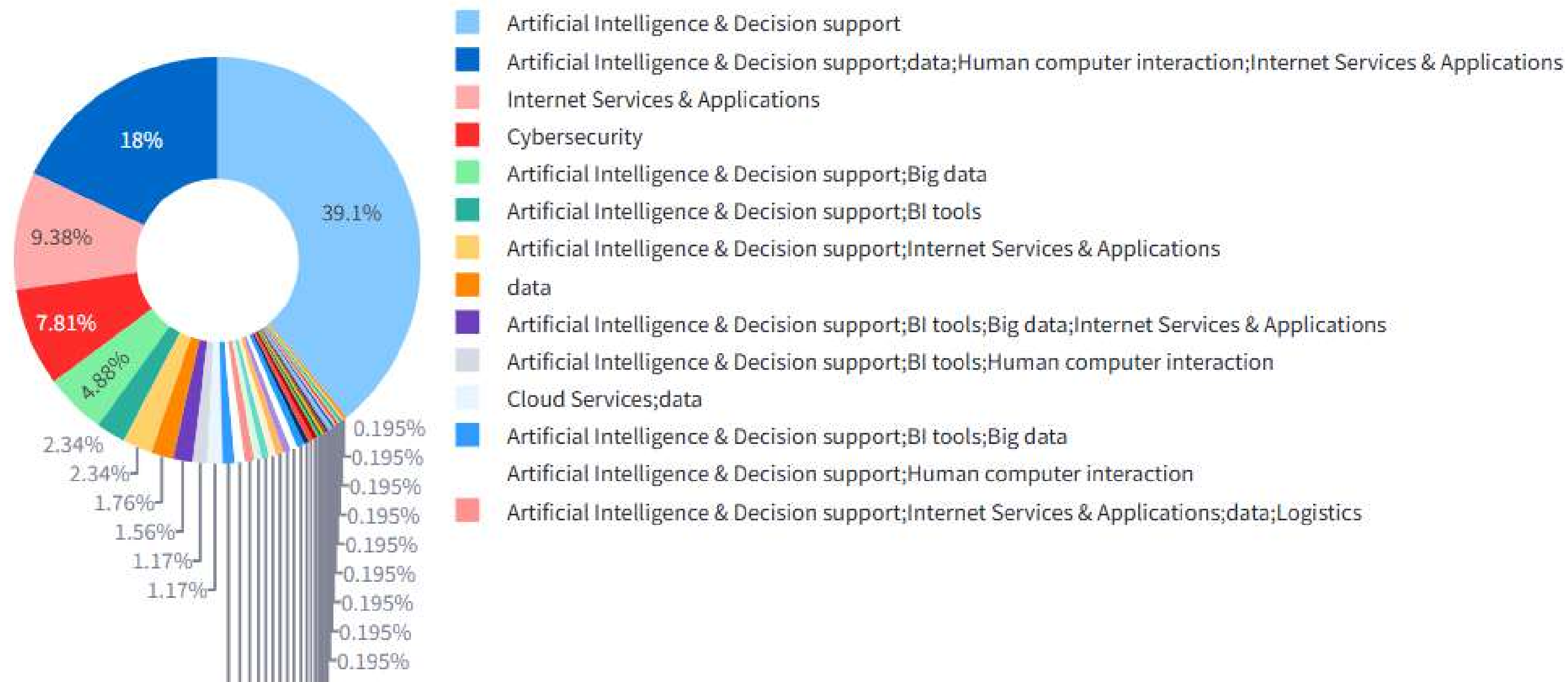
1128186.17

↑ 2645000

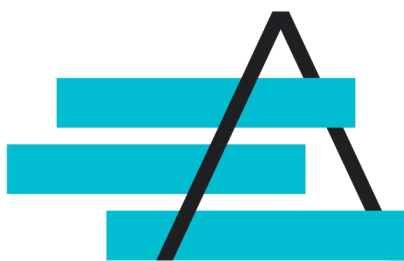
Tipovi pruženih servisa krajnjim korisnicima



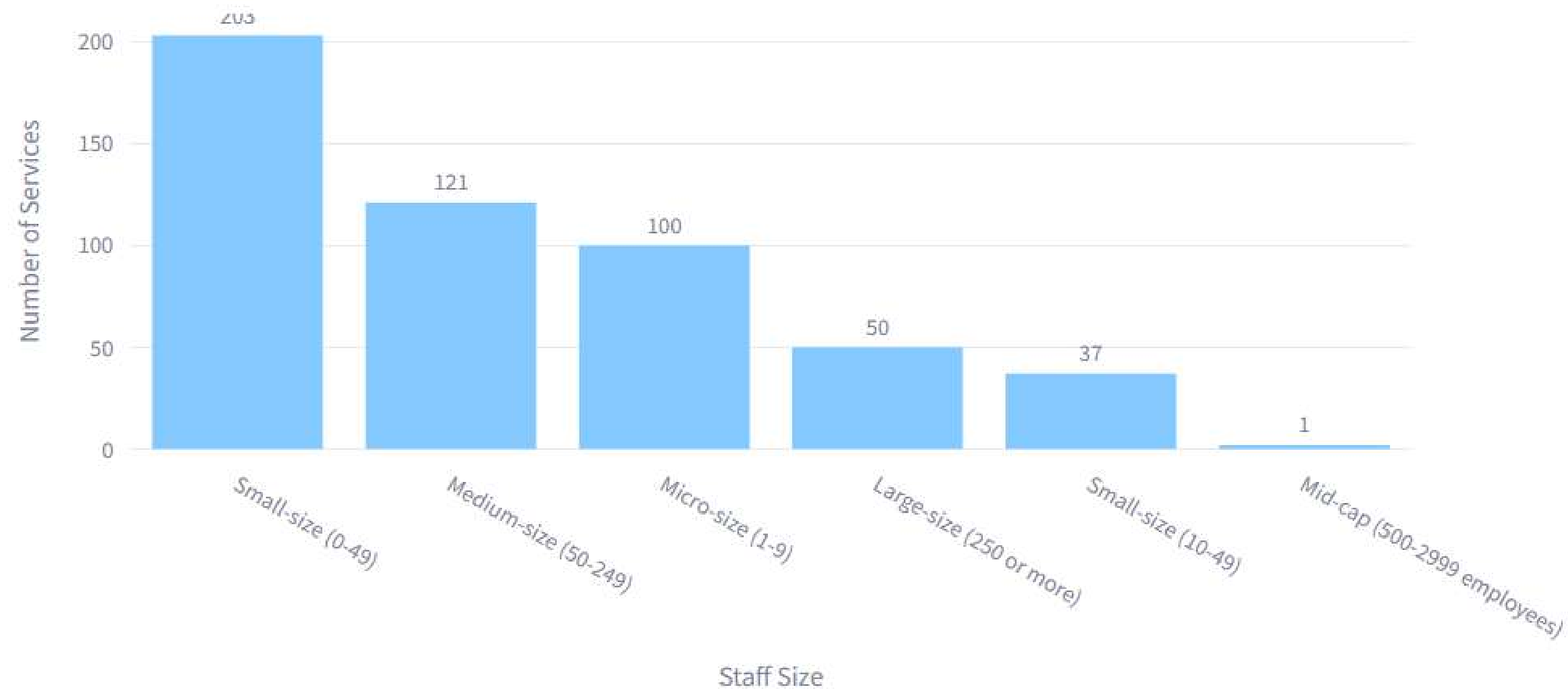
Technologies applied in EDIH ADRIA Services



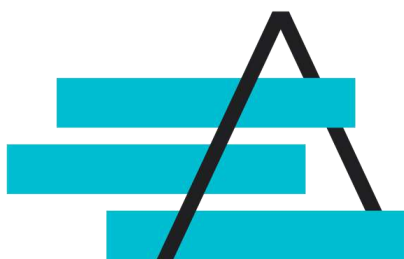
EDIH ADRIA – struktura korisnika



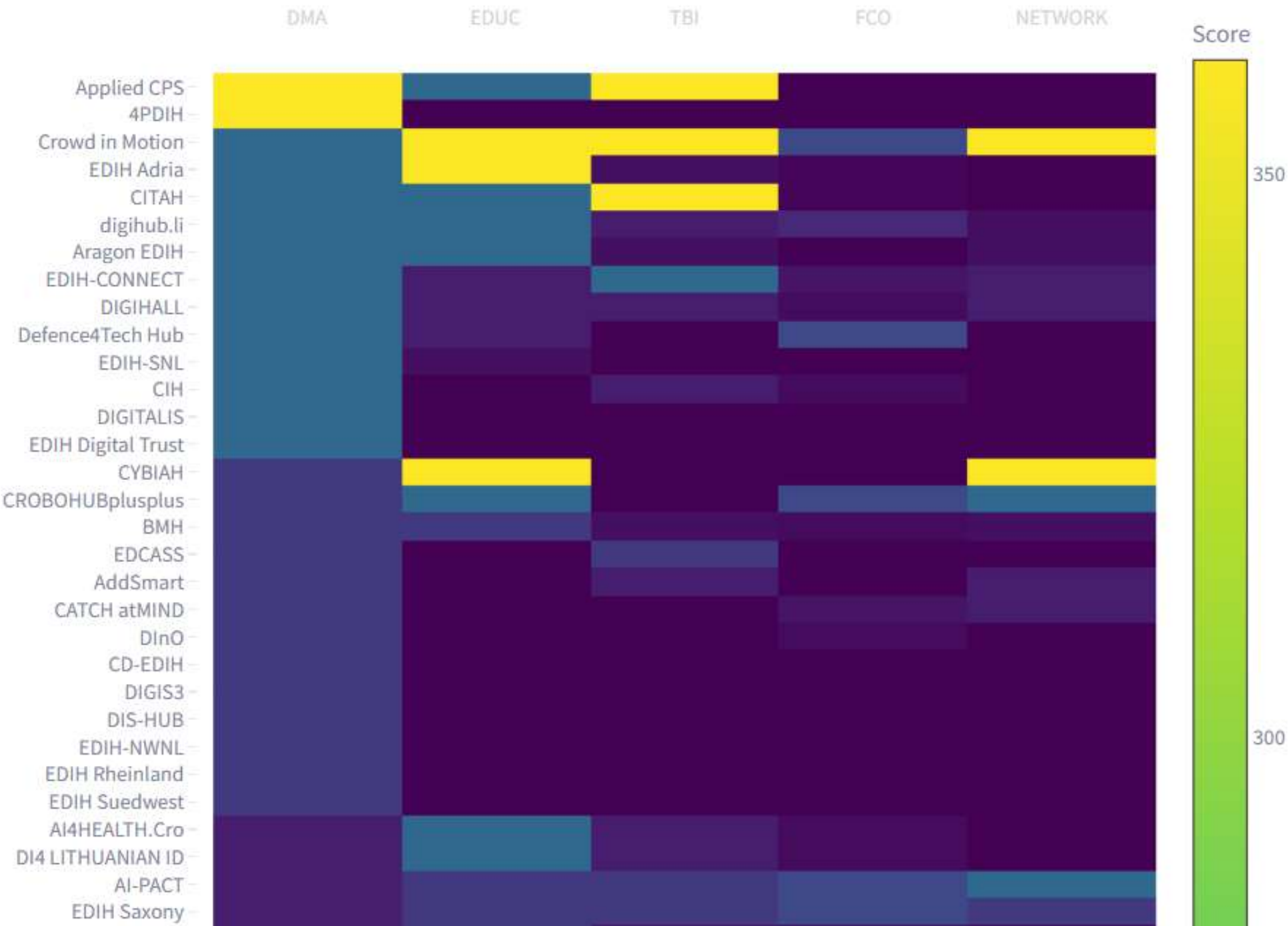
Delivered Services by Customer Staff Size



HR EDIH - rezultati



Heatmap of EDIH Rankings



Progress Toward Target

AI and Gaming EDIH

155

AI4HEALTH.Cro

190

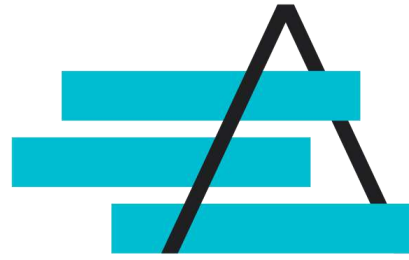
CROBOHUBplusplus

380

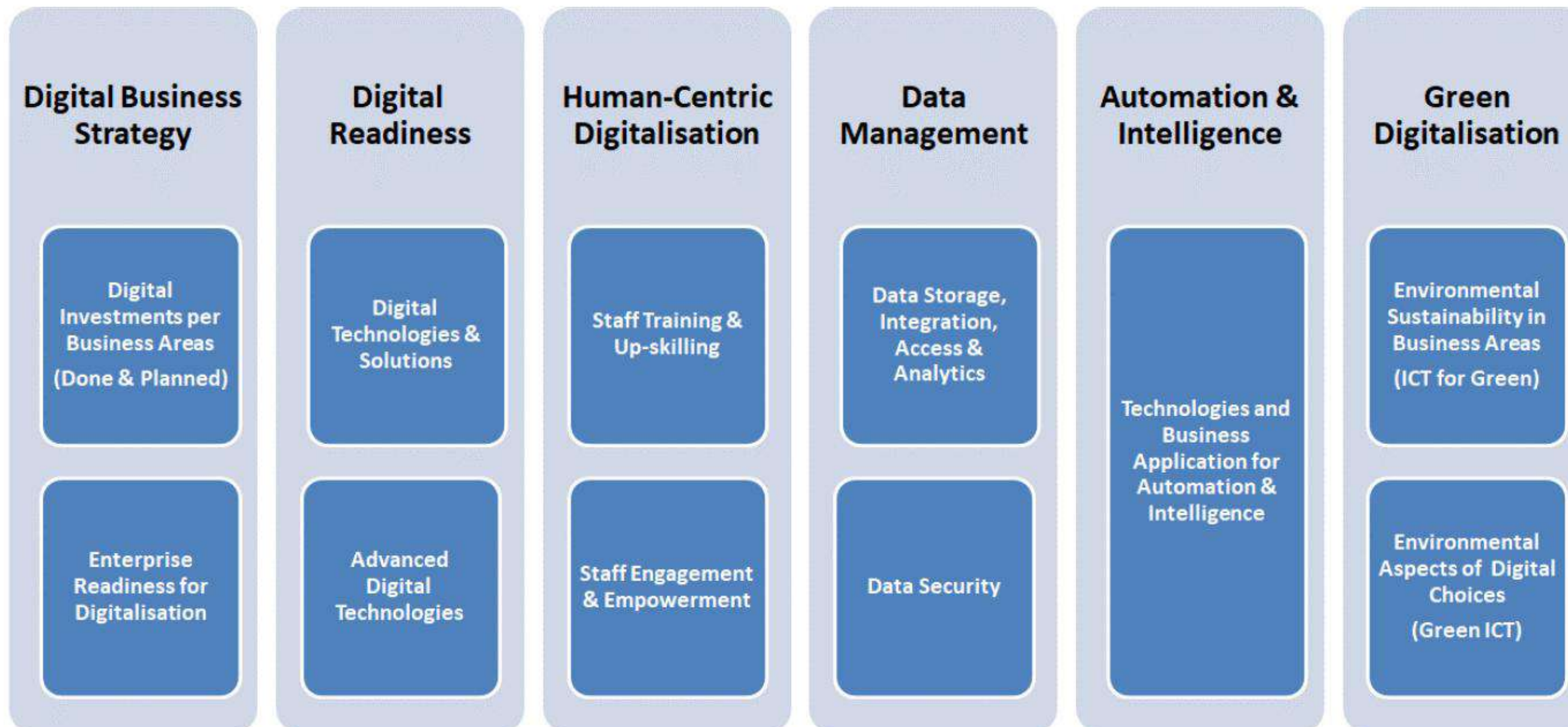
EDIH Adria

500

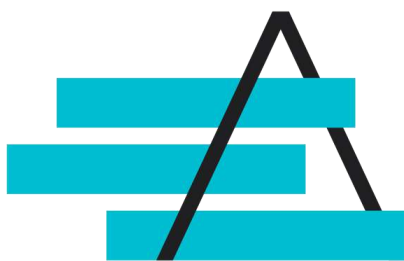
DMA - Metodologija



Questions in this module aim to measure the digital maturity of your enterprise. This information will help to characterise the departing point of the digital transformation journey of your enterprise, identifying areas where it might need EDIH support. It will also help to assess the services eventually provided by the EDIH to your enterprise as well as to fine tune the EU policies and financial instruments supporting EDIHs. The following dimensions will be assessed (applying the scoring criteria detailed in the end page):



DMA ANALITIKA – JAVNA PODUZEĆA



DMA Analytics by Organisation

Explanation of Results

▼

Select Dataset:

- ☐ SMEs
- ☒ Public Organizations

Digital Strategy & Investments (%):

53

↑ 100

Digital Readiness (%):

46

↑ 100

Human Centric Digitalisation (%):

51

↑ 100

Data Management & Security (%):

38

↑ 100

Interoperability (%):

41

↑ 100

Green Digitalisation (%):

37

↑ 100

Progress Toward Target

DMA target achieved in %

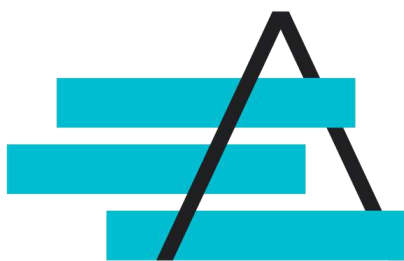


Number of organisations with compl...

126

↑ 120

DMA ANALITIKA - MSP



DMA Analytics by Organisation

Explanation of Results

▼

Select Dataset:

- ☒ SMEs
- ☐ Public Organizations

Digital Bussines Strategy (%):

52

↑ 100

Digital Readines (%):

40

↑ 100

Human Centric Digitalisation (%):

63

↑ 100

Data Governance (%):

53

↑ 100

Artificial Intelligence (%):

24

↑ 100

Green Digitalisation (%):

41

↑ 100

Progress Toward Target

DMA target achieved in %

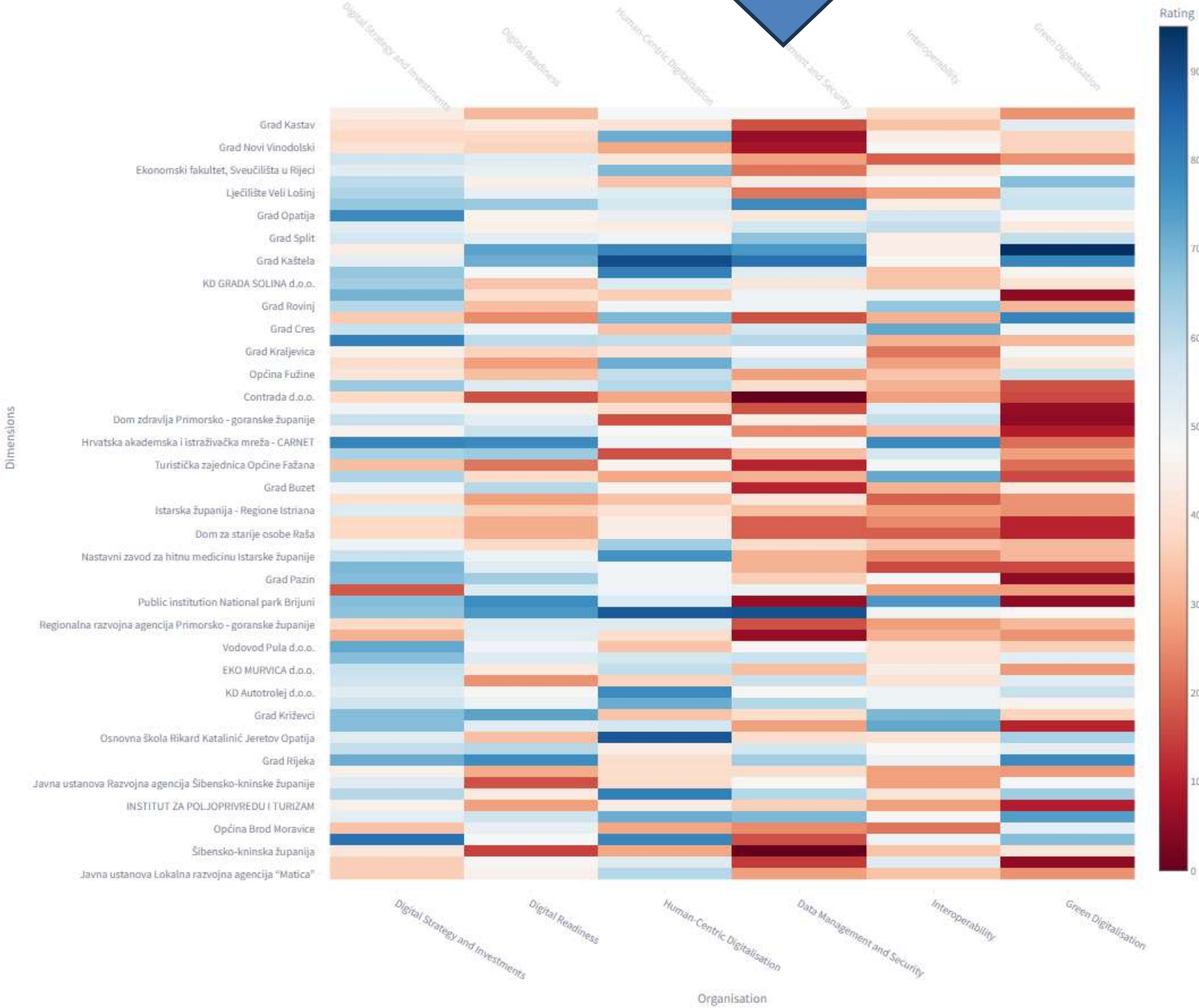
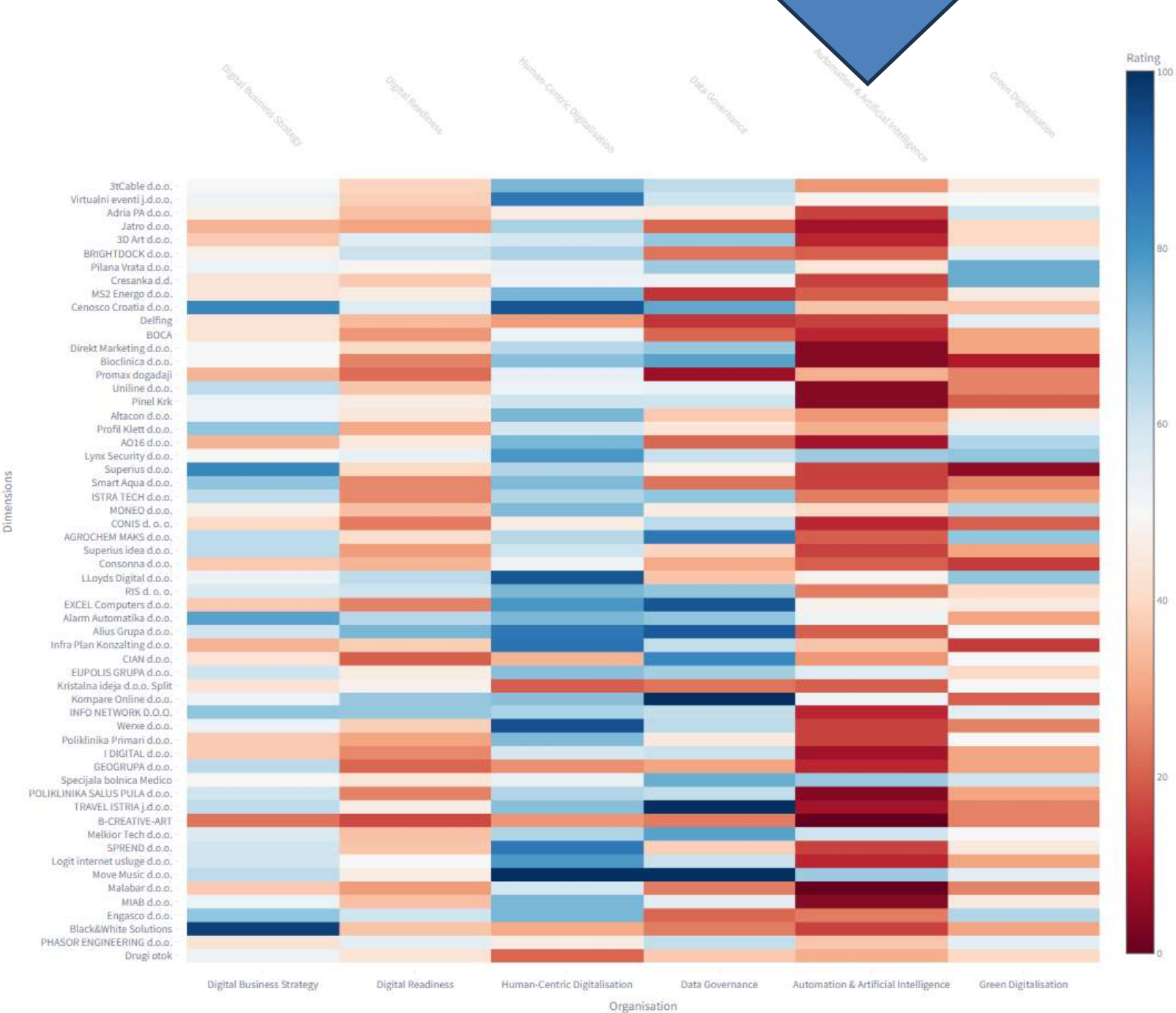
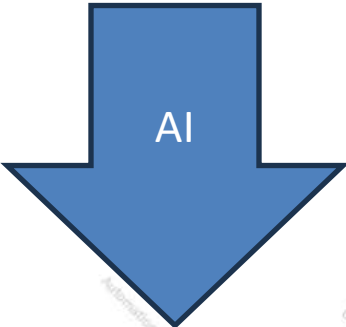
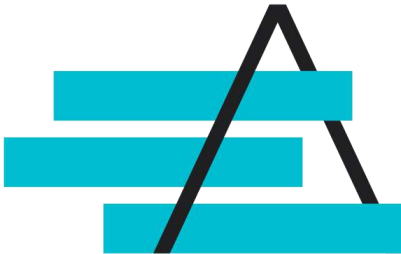


Number of organisations with compl...

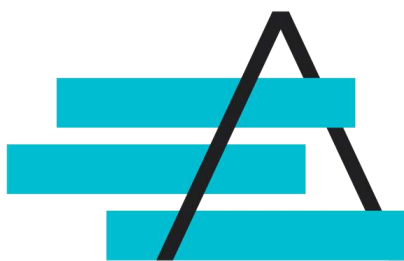
126

↑ 120

DMA – Analiza po pojedinim grupama parametara - MSP i javna uprava



Testiranje prije investiranja

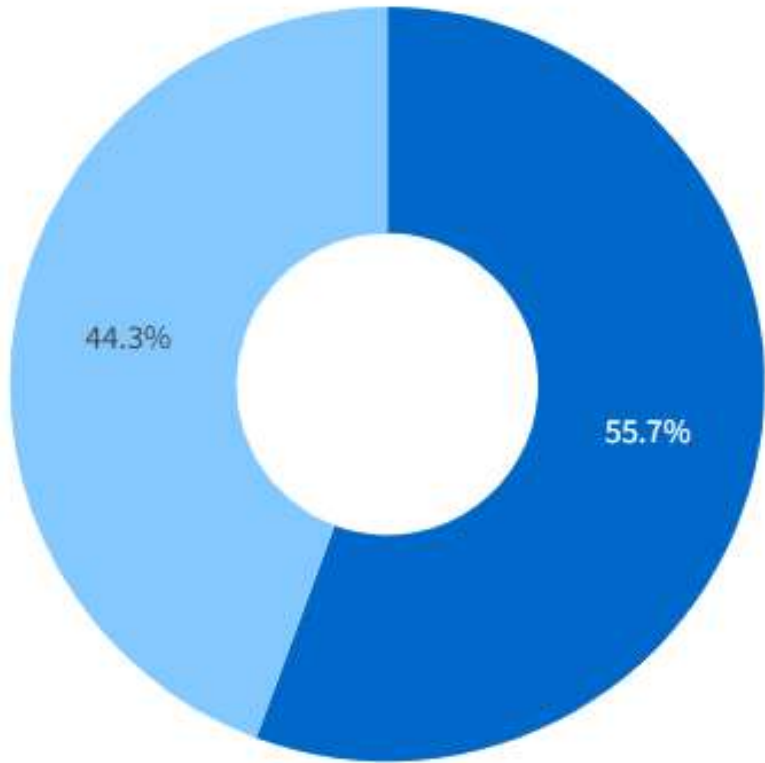


Test Before Invest Analysis

Explanation of Results

▼

Work Completion Percentage by Status



- On going
- Finalised and invoiced

Progress Toward Target

TBI target achieved in %

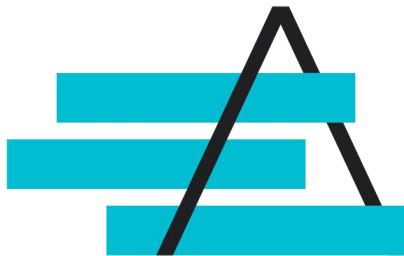


Number contracted TBI days:

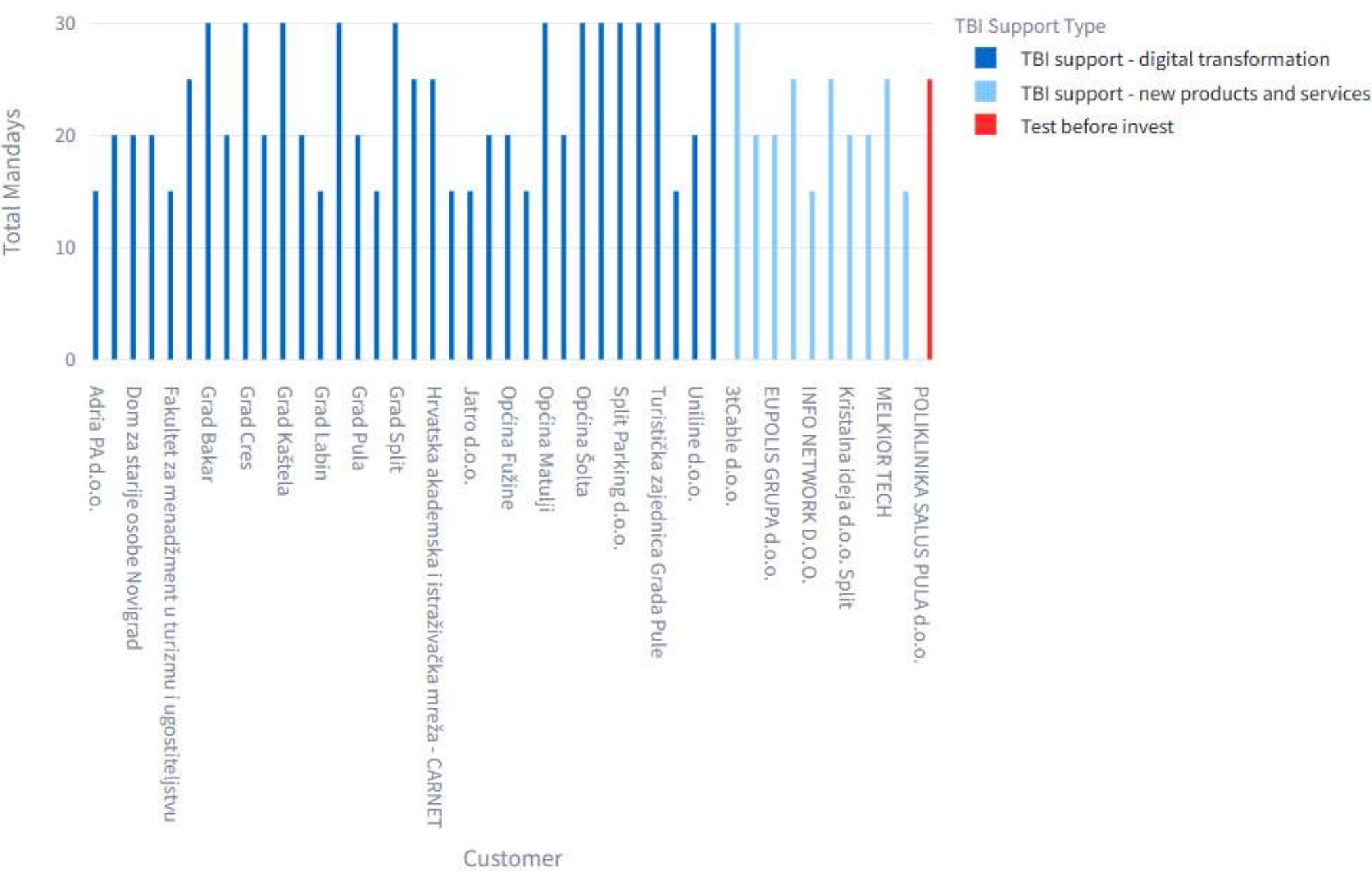
1229

↑ 1400

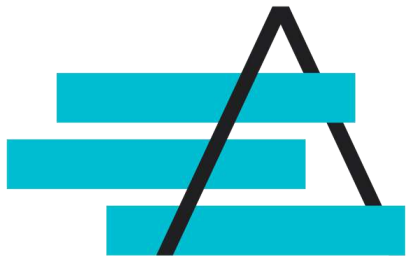
Testiranje prije investiranja



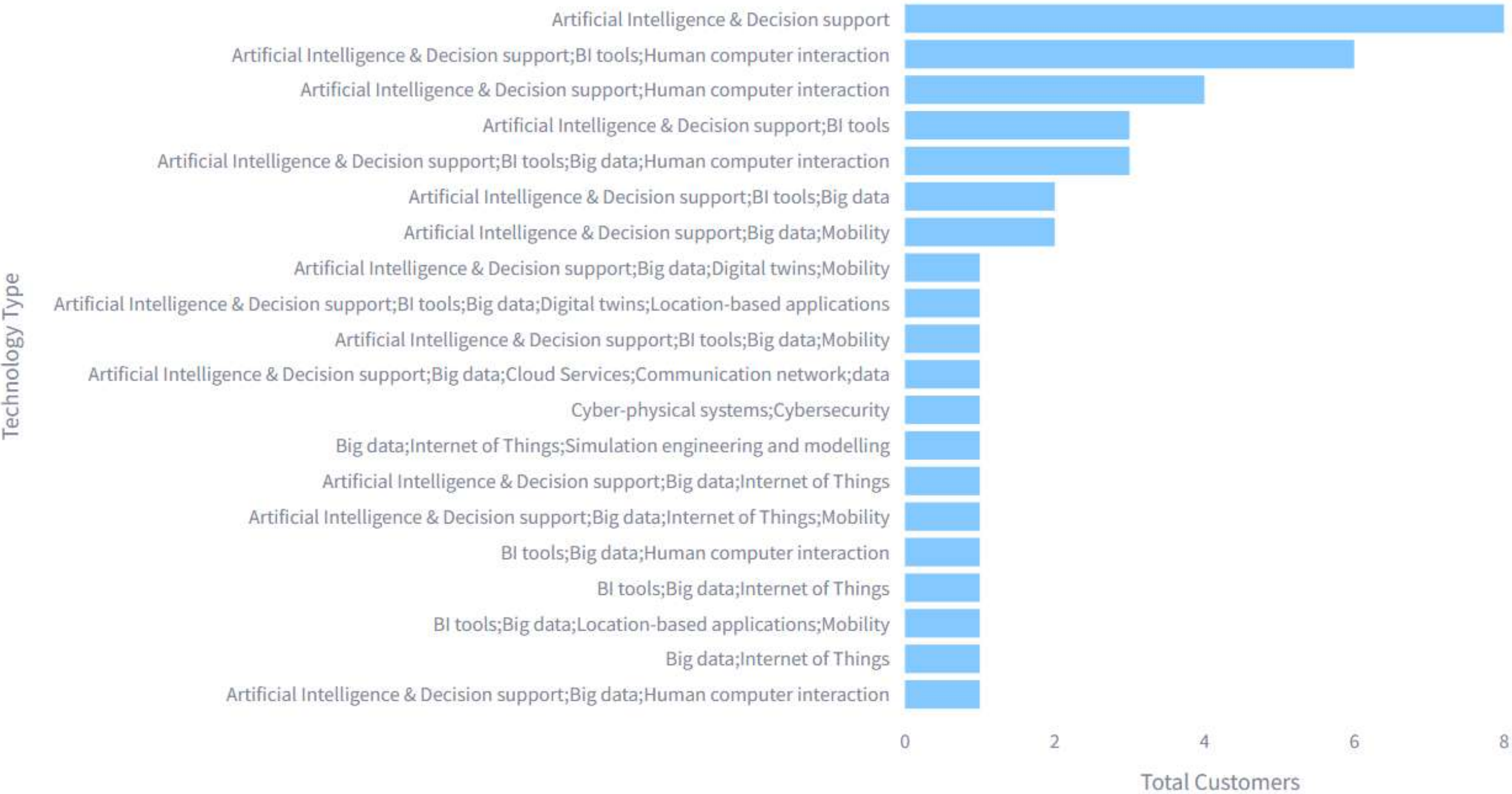
TBI Support Analysis by Customer

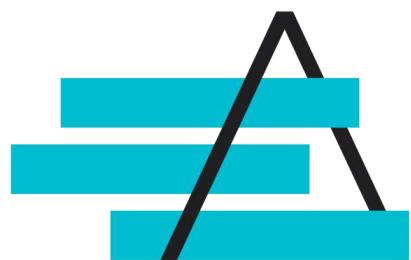


Što je to najzanimljivije našim korisnicima?



TBI Customers by Technology Type

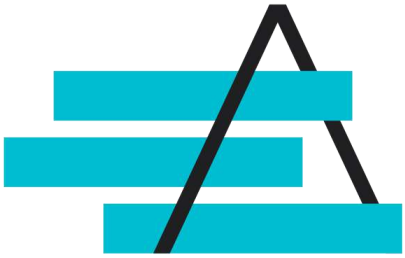




EDIH ADRIA MIKROSERVISI

„Mikro” servisi za velike
rezultate ili zašto je
komponentizacija kod primjene
AI kritična!





AI MIKROSERVISI ZA JAVNU UPRAVU

AI ASISTENTI

Optimizacija
prometnih
tokova

IoT senzorske
mreže

Optimizacija
poslovnih
procesa

Interaktivne
tehnologije
temeljene
na RAG-u

Građani u
središtu
poboljšanja
usluga

Napredno
budžetiranje

Prijevoz na
zahtjev

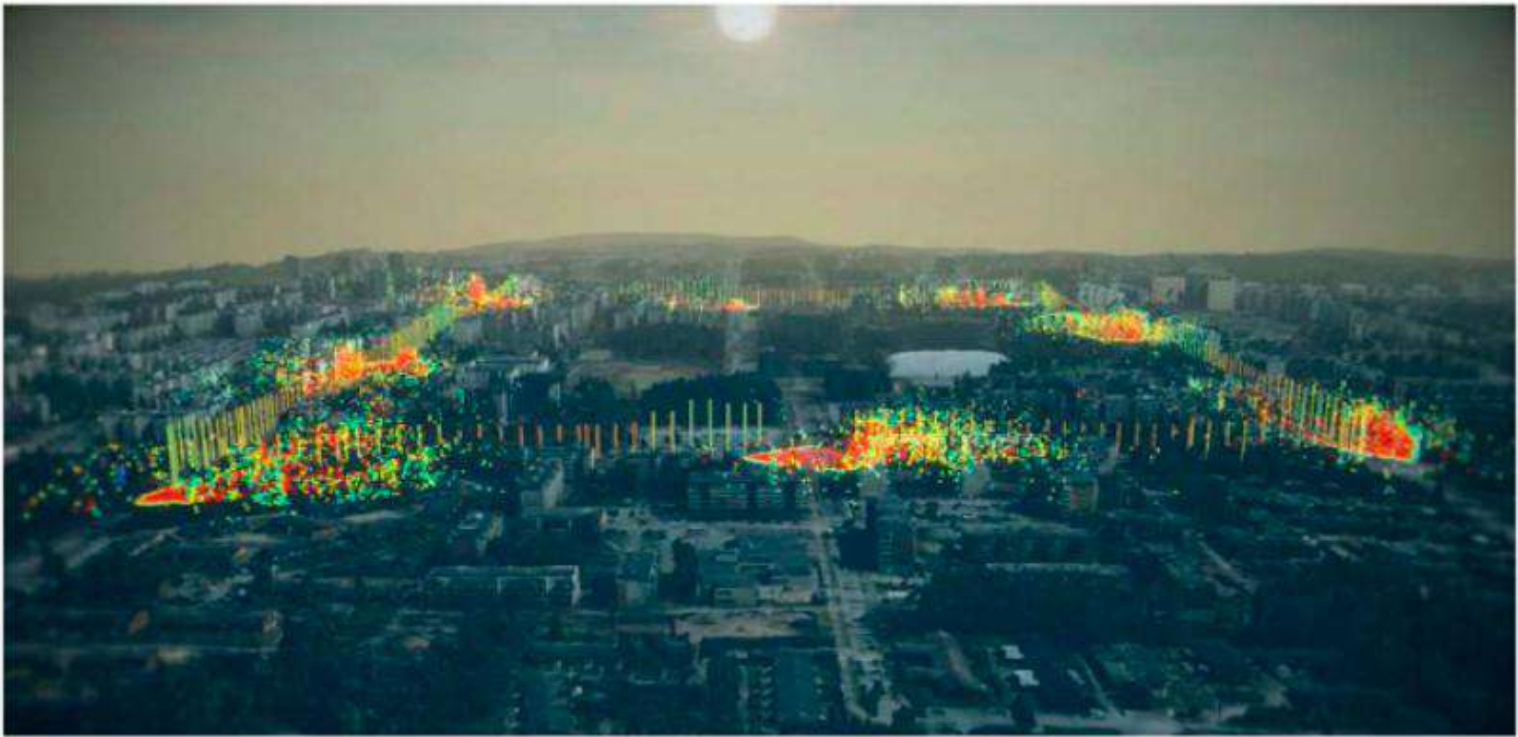
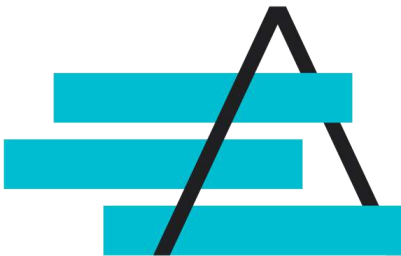
Optimizacija
javnog
prijevosa

Mjerenje i
optimizacija
energije

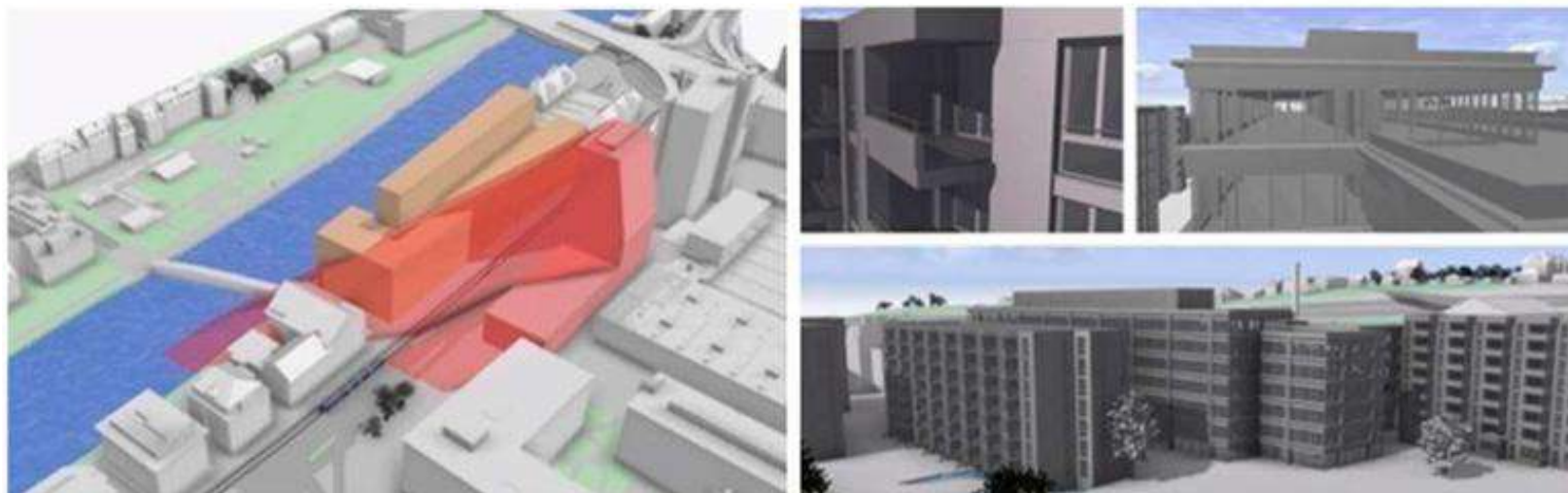
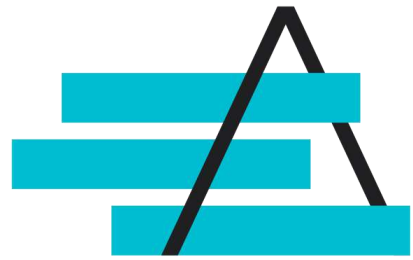
Građanska
energija

Napredne
mreža i
trgovina
energijom

JASNA JE POTREBA ZA NAPREDNIM MIKROSERVISIMA



Interoperabilnost **mora** biti prilika a ne problem...



A Smart City Enabled via Beckn Protocol

Mobility & logistics networks

Services networks

Govt. procurement networks

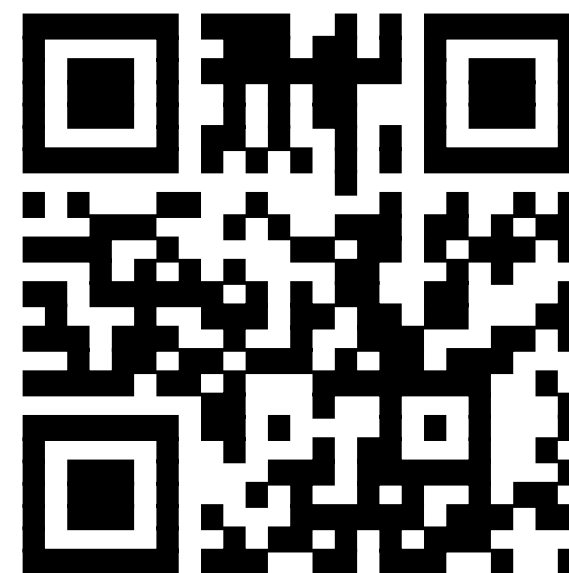
Manufacturing networks

Waste Mgmt networks

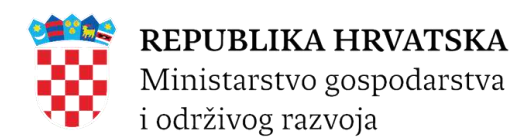
Energy networks



EDIHADRIA



EDIH | European
Digital Innovation
Hubs Network



Projekt je sufinanciran od strane Europske unije prema Ugovoru o dodjeli bespovratnih sredstava br. 101083838 i Nacionalnom planu oporavka i otpornosti Republike Hrvatske 2021.-2026.

Ekosistemi za podršku i suradnju



Gabriela Ruseva
Living-in.EU and EuroCities

A person in a white shirt is holding a tablet. On the tablet screen, a city skyline at night is visible, with several skyscrapers illuminated. A white, glowing digital network structure, resembling a web or a blockchain, is superimposed over the city skyline. The background of the entire image is a blurred cityscape at sunset or sunrise, with a warm orange and yellow sky.

NAJAVA NOVIH IZVORA FINANCIRANJA DIGITALNE transformacije



Najava novih izvora financiranja digitalne transformacije



Nataša Margetić

Ministry of Justice Public Administration
& Digital Transformation



Ariana Vela

Avelant d.o.o.

Najava novih izvora financiranja digitalne transformacije



Nataša Margetić

Ministry of Justice Public Administration
& Digital Transformation



REPUBLIKA HRVATSKA

Ministarstvo pravosuđa, uprave i
digitalne transformacije

OTVORENI POZIV:

**DIGITALIZACIJA USLUGA JEDINICA LOKALNE I
PODRUČNE (REGIONALNE) SAMOUPRAVE**

9. travnja 2025.

DIGITALIZACIJA USLUGA JEDINICA LOKALNE I PODRUČNE (REGIONALNE) SAMOUPRAVE

- Vrsta poziva: **otvoreni**
- Vrijednost poziva: **11.764.706 EUR (10 M EUR EFRR)**
- Prihvatljivi prijavitelji: **zajednička prijava više JLP(R)S**
- Indikativni datum objave: **2Q 2025.**
- Kriteriji odabira operacija i pripadajuće metodologije **usvojeni na OzP-u 25.3.2025.**

DIGITALIZACIJA USLUGA JEDINICA LOKALNE I PODRUČNE (REGIONALNE) SAMOUPRAVE

NAMIJENJEN ZA PROVOĐENJE AKTIVNOSTI ZA DIGITALIZACIJU JAVNIH USLUGA JLP(R)S

- omogućiti JLP(R)S-ovima digitalizaciju procesa i zajedničkih usluga koje su od najveće važnosti za poboljšanje kvalitete života lokalnog stanovništva te stvaranje poticajnog poslovnog okruženja.

DIGITALIZACIJA USLUGA JEDINICA LOKALNE I PODRUČNE (REGIONALNE) SAMOUPRAVE

REZULTATI koji se očekuju:

- uspostavljene nove ili nadograđene postojeće e-usluge i m-usluge JLP(R)S-ova dostupne građanima i poduzećima,
- uključivanje razvijenih e-usluga i m-usluga u postojeće informacijske sustave u okviru Državne informacijske infrastrukture kao što je sustav e-Građani,
- druge JLP(R)S moći će ih koristiti uz dogovor oko uvjeta sa JLP(R)S koji su vlasnici.

DIGITALIZACIJA USLUGA JEDINICA LOKALNE I PODRUČNE (REGIONALNE) SAMOUPRAVE

INDIKATIVNE PRIHVATLJIVE AKTIVNOSTI:

- razvoj novih e-usluga i/ili m-usluga,
- unaprjeđenje postojećih e-usluga i/ili m-usluga,
- integracija više jednostavnih e-usluga i/ili m-usluga u jednu kompleksnu e-uslugu i/ili m-uslugu

DIGITALIZACIJA USLUGA JEDINICA LOKALNE I PODRUČNE (REGIONALNE) SAMOUPRAVE

INDIKATIVNE PRIHVATLJIVE AKTIVNOSTI:

- **prilagodba** novih ili postojećih e-usluga **u m-usluge** dostupne na postojećim mobilnim platformama i aplikacijama razvijenim u okviru Državne informacijske infrastrukture u svrhu omogućavanja veće digitalne mobilnosti građana,
- razvoj mjera i rješenja koje **povećavaju sigurnost informacijskih sustava** i smanjuju rizike od kibernetičkih napada na javne e-usluge i/ili m-usluge.

DIGITALIZACIJA USLUGA JEDINICA LOKALNE I PODRUČNE (REGIONALNE) SAMOUPRAVE

INDIKATIVNE GLAVNE VRSTE PRIHVATLJIVIH IZDATAKA:

- trošak razvoja novih, unaprjeđenja postojećih, integracije više jednostavnih u jednu kompleksnu e-uslugu i/ili m-uslugu,
- trošak prilagodbe nove ili postojeće e-usluge u m-uslugu,
- trošak povezivanja novih ili unaprijeđenih e-usluga i/ili m-usluga na postojeće sustave,
- trošak izrade mjera i rješenja koje povećavaju sigurnost informacijskih sustava i smanjuju rizike od kibernetičkih napada na javne e-usluge i/ili m-usluge,

DIGITALIZACIJA USLUGA JEDINICA LOKALNE I PODRUČNE (REGIONALNE) SAMOUPRAVE

INDIKATIVNE GLAVNE VRSTE PRIHVATLJIVIH IZDATAKA:

- trošak administrativnog upravljanja projektom,
- trošak pripreme i održavanja edukacija povezanih s uslugom koja je predmet projekta,
- trošak provedbe horizontalnih aktivnosti,
- trošak promidžbe i vidljivosti.

DIGITALIZACIJA USLUGA JEDINICA LOKALNE I PODRUČNE (REGIONALNE) SAMOUPRAVE

KRITERIJ PRIHVATLJIVOSTI UNUTAR SPECIFIČNOG CILJA RSO 1.2.

- Operacija (projekt) je u skladu sa zakonodavnim okvirom provođenja postupaka i mjera kibernetičke sigurnosti sukladno Zakonu o kibernetičkoj sigurnosti (NN broj 14/2024) i Standardom razvoja javnih e-Usluga u Republici Hrvatskoj.

DIGITALIZACIJA USLUGA JEDINICA LOKALNE I PODRUČNE (REGIONALNE) SAMOUPRAVE

SLJEDEĆI KORACI

- raspis i objava Poziva u suradnji s Ministarstvom regionalnoga razvoja i fondova Europske unije



PITANJA?

HVALA NA PAŽNJI

Najava novih izvora financiranja digitalne transformacije



Ariana Vela
Avelant d.o.o.

NAJAVA NOVIH IZVORA FINANCIRANJA DIGITALNE TRANSFORMACIJE

Predavači: Ariana Vela, MBA, IPMA/A

Zagreb, 9. 4. 2025.



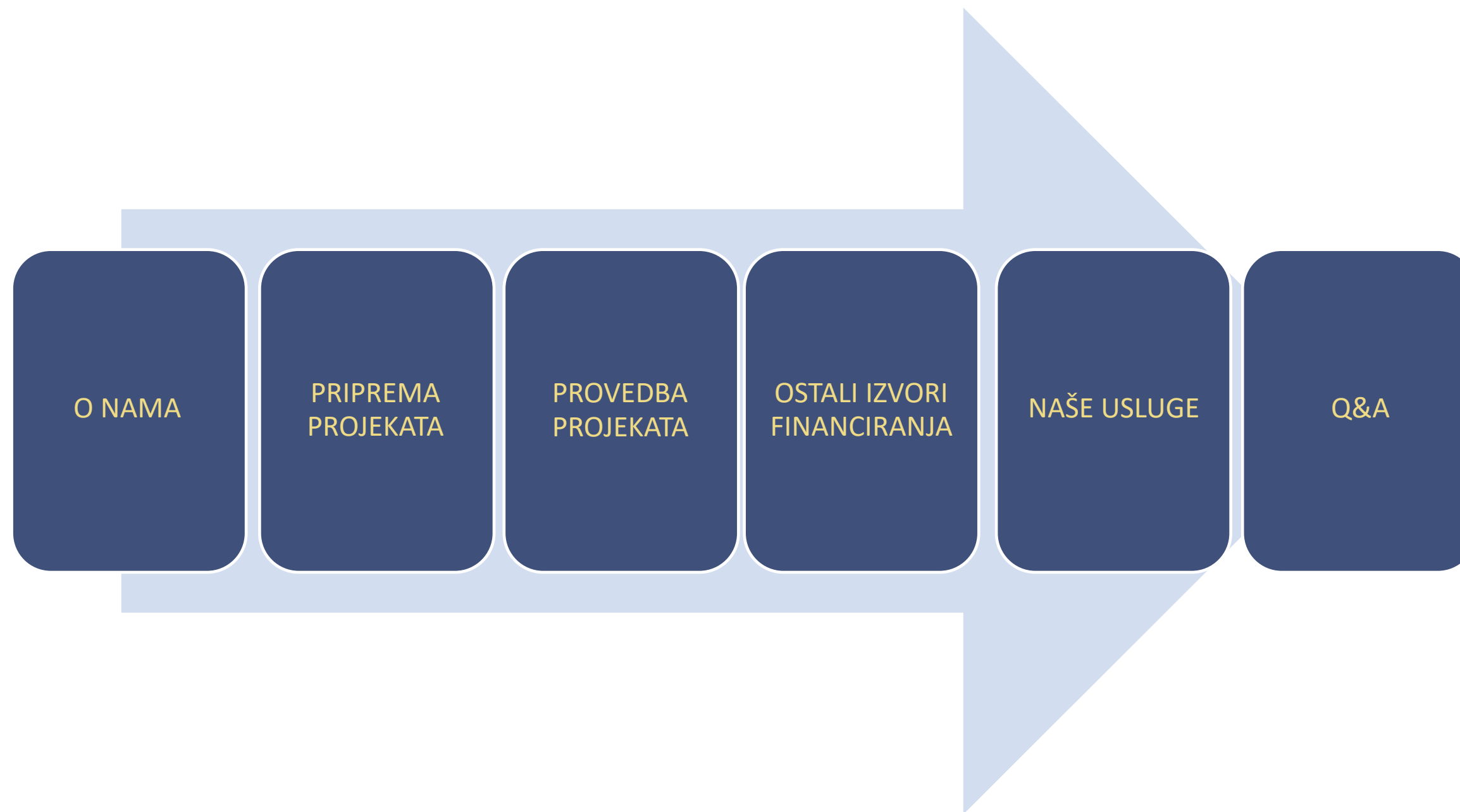
AVELANT
d.o.o. za poslovno i strateško savjetovanje

Ured: Poslovni centar Zavrtnica
objekt 1, Zavrtnica 17, 10000 Zagreb

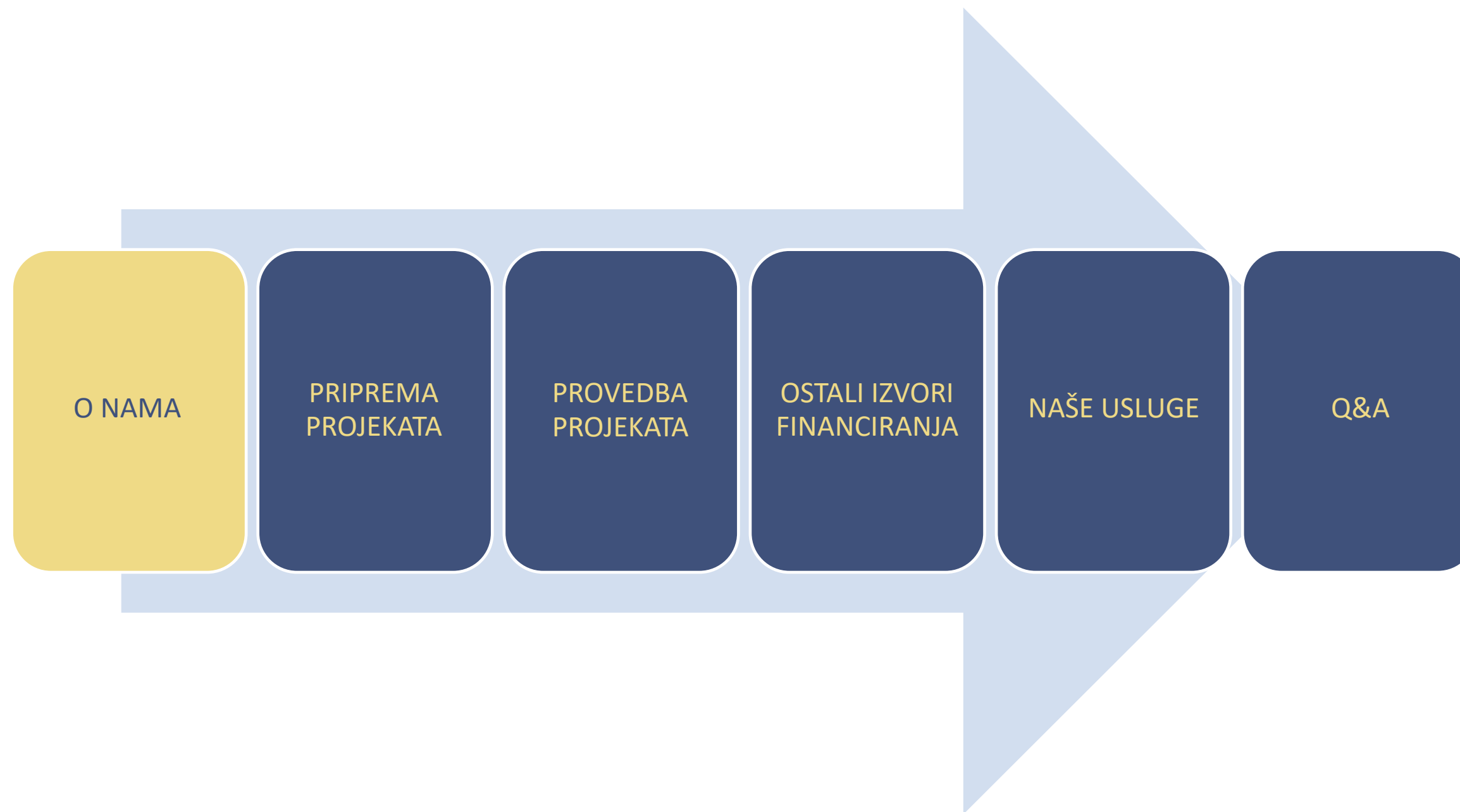
Sjedište: Froudeova3, 10000 Zagreb

t/f: 01 5534 878
m: 099 6492468 **e:**
info@avelant.hr
w: avelant.hr

SADRŽAJ



SADRŽAJ



O NAMA



AVELANT
d.o.o. za poslovno i strateško savjetovanje



6+ milijardi eura
projektnog
portfelja



500+ pripremljenih i
provedenih projekata



500+ projekata koje
smo mentorirali

e: info@avelant.hr

t/f: 01 5534 878



11000
polaznika edukacija



3,5 milijarde kuna
postupaka javne
nabave



19+ godina iskustva

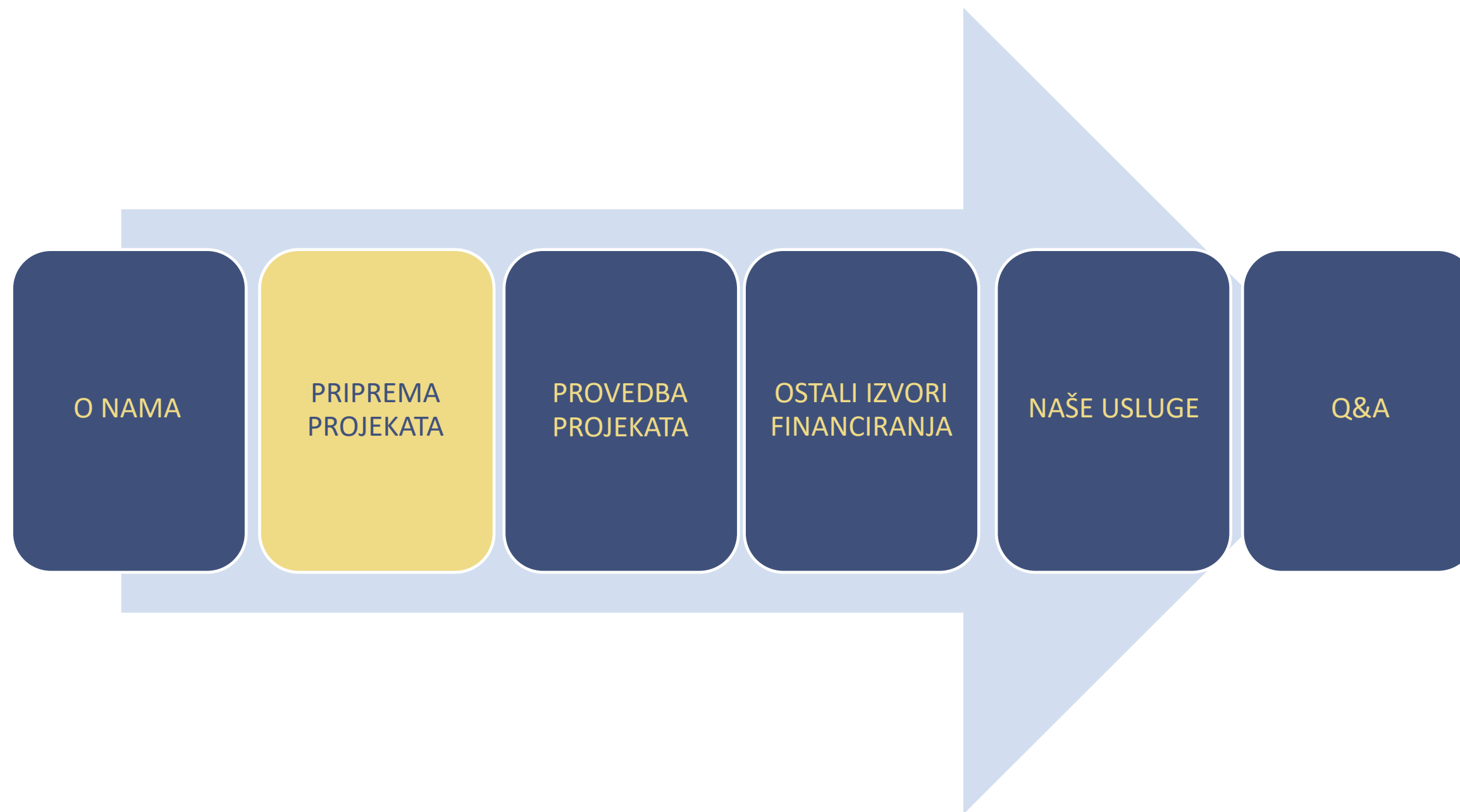
O NAMA

- **AVELANT d.o.o.:** Pravni sljednik EU PROJEKTI – Obrta za poslovno savjetovanje i ostale usluge, konzultanti za EU fondove s više od 20 godina iskustva u sektoru, portfolijom projekata većim od 6 milijardi eura i suradnjom s velikim brojem domaćih i inozemnih organizacija
- Vlasnici i autori prvog hrvatskog portala o EU fondovima (eu-projekti.info)
- **UČILIŠTE EU PROJEKTI – USTANOVA ZA OBRAZOVANJE ODRASLIH:** Prvo hrvatsko učilište specijalizirano za edukaciju o fondovima EU i projektnom managementu
- Prvi hrvatski portal o EU fondovima: **eu-projekti.info**
- Autori prve knjige o pripremi i provedbi projekata financiranih iz ESI fondova „**Menadžment ESI fondova**” u izdanju Školske knjige
- Savjetnici **McKinsey&Company** za fondove EU-a

PROJEKTI



SADRŽAJ





Učilište **EU PROJEKTI**

PRIPREMA PROJEKATA

NA ŠTO PAZITI PRILIKOM PRIPREME PROJEKTA

KLJUČNI PRIHVATLJIVI IZDACI:

1. Nabava software-a (uključuje savjetodavne usluge za potrebe izrade tehničkih specifikacija)
2. Promidžba i vidljivost (klasika)
3. Upravljanje projektom i administracija (uključuje troškove osoblja i druge troškove)
4. Ostalo (sukladno UzP)

NA ŠTO PAZITI PRILIKOM PRIPREME PROJEKTA

FORMULACIJA PROJEKTNE PRIJAVE:

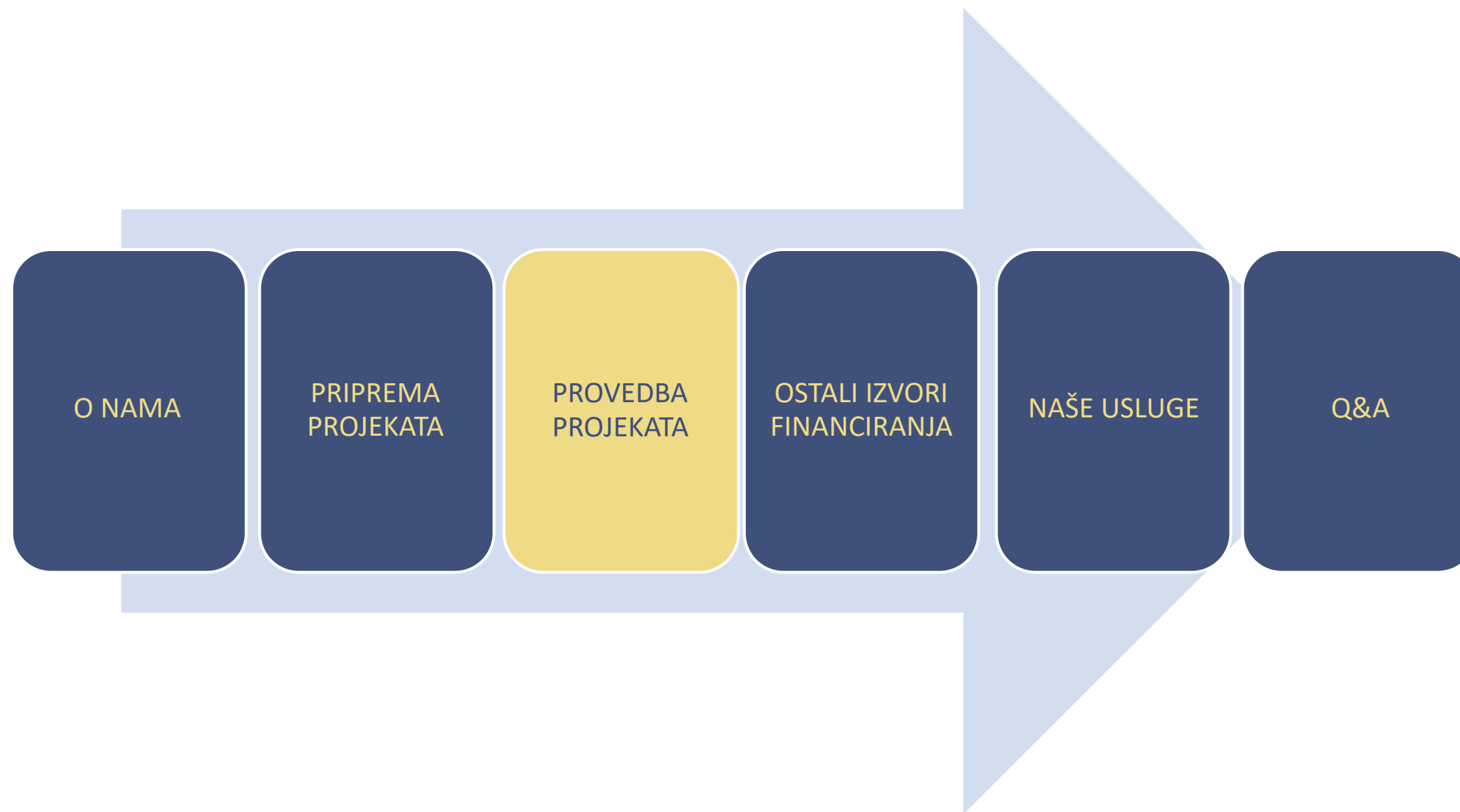
1. Tko su partneri – partnerski sporazum (važno)?
2. Koje rješenje kupujemo i za koje e-usluge?
3. Koji postupak javne nabave provodimo –otvoreni postupak JNMV i JNVV (radi utvrđivanja trajanja postupka i pravilnog određivanja trajanja projekta)?
4. Koji su rokovi isporuke?
5. Kakva je raspodjela poslova i odgovornosti unutar projektnog tima i između projektnih partnera?
6. Paziti na horizontalna pitanja!

KAKO PROVESTI EGZEKUCIJU



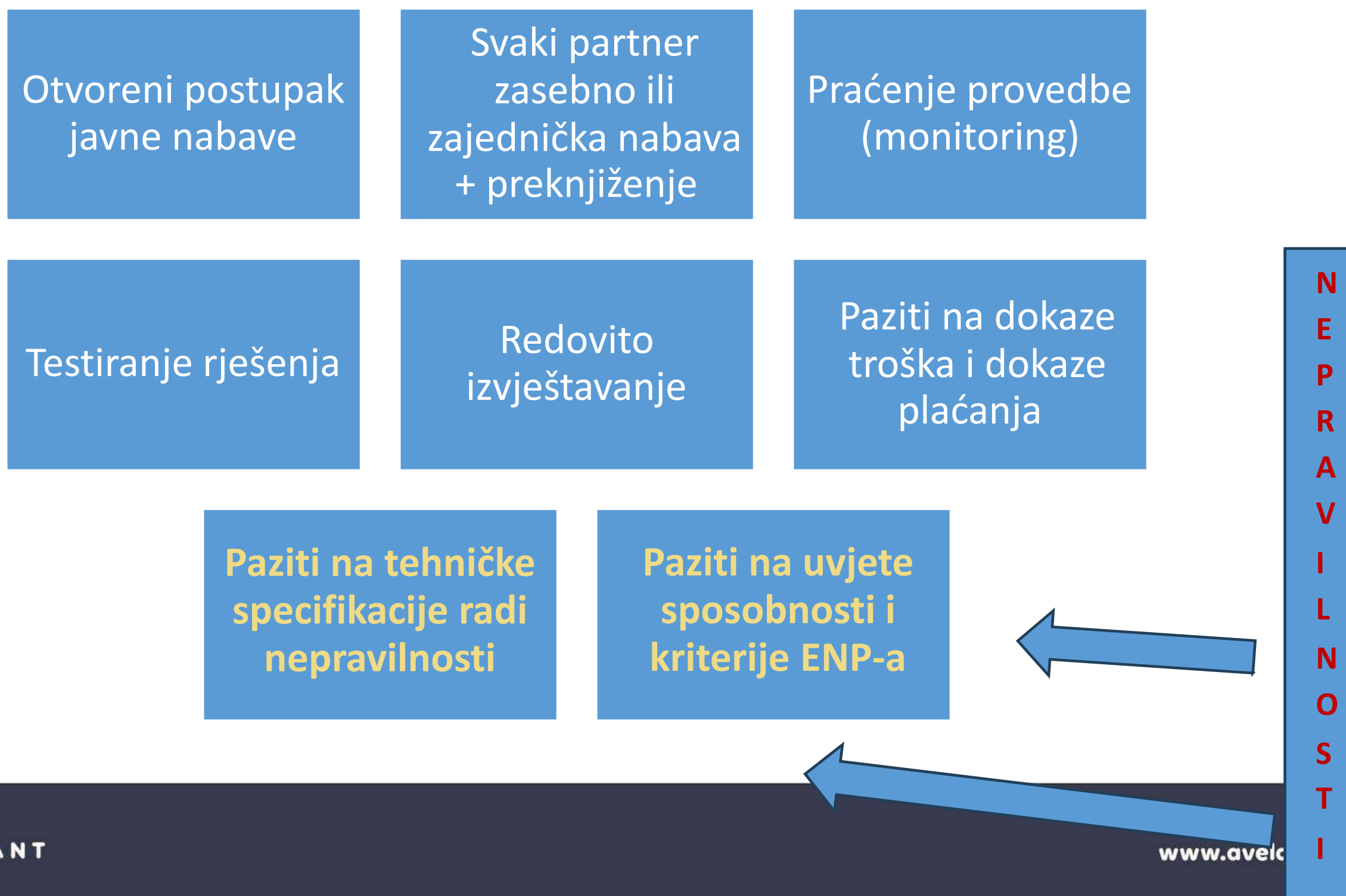
1. Jedan partner (korisnik) piše prijavu, diže u sustav i objedinjuje dokumentaciju
2. Drugi daju doprinos
3. Unaprijed dogovoriti rokove i sadržaj isporuka
4. Unaprijed regulirati odnose u partnerskom sporazumu
5. Dogovoriti tko sudjeluje u projektnom timu i s kojim zadaćama
6. Riješiti pitanje javne nabave u smislu provedbe postupka i sklapanja ugovora o javnoj nabavi

SADRŽAJ

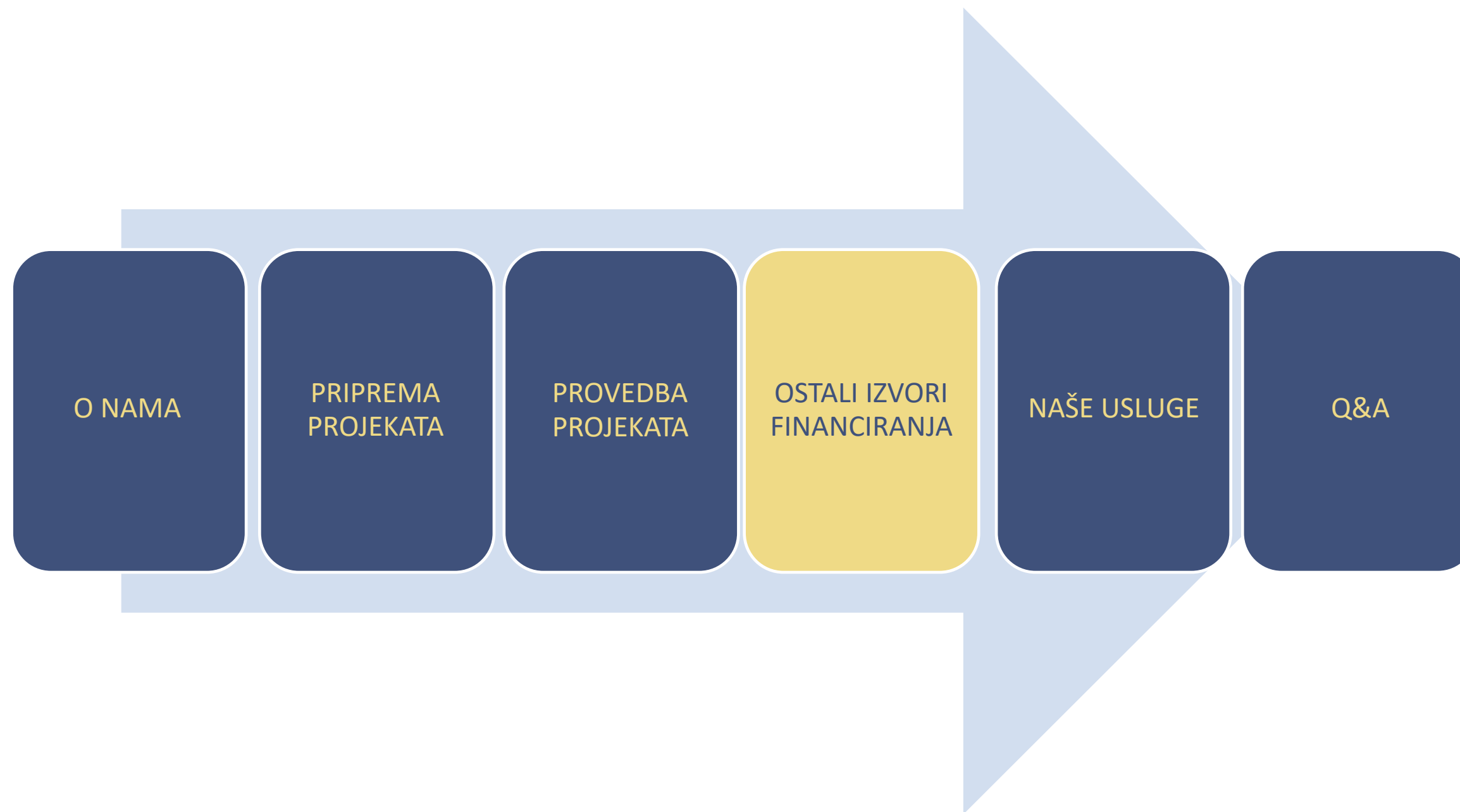


PROVEDBA PROJEKATA

PROVEDBA PROJEKTA NE MORA BITI BAUK



SADRŽAJ



OSTALI IZVORI FINANCIRANJA

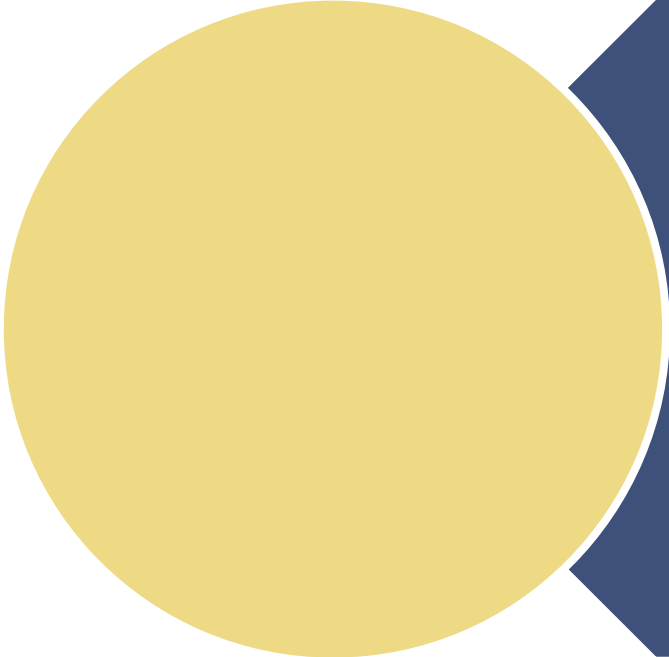
OSTALI IZVORI FINANCIRANJA

Kohezijska politika 2021. –2027.

Glavni izvor sredstava kroz **Europski fond za regionalni razvoj (EFRR)** i **Kohezijski fond (KF)**.

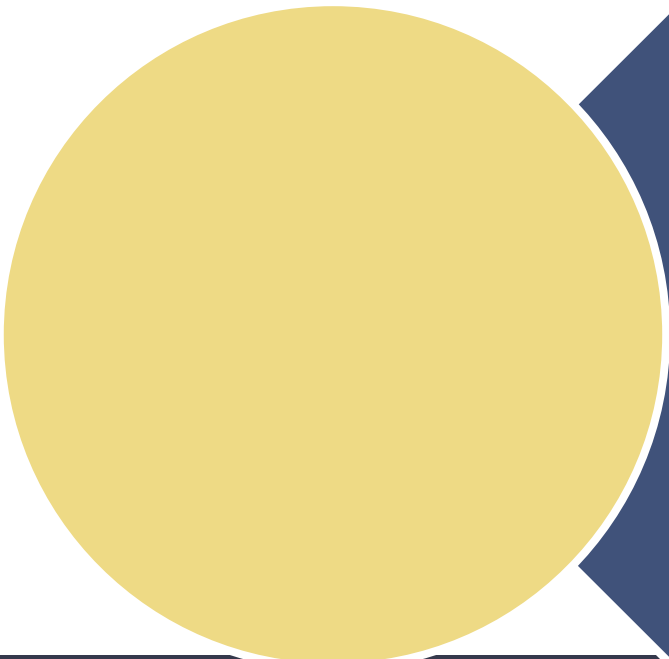
U Hrvatskoj se sredstva koriste putem: **a)Program Konkurentnost i kohezija (PKK 2021. –2027.)** **b)Integrirani teritorijalni program (ITP 2021. –2027.)**

OSTALI IZVORI FINANCIRANJA



a) Program Konkurentnost i kohezija (PKK 2021. – 2027.)

Sufinancira pametne gradove, digitalnu transformaciju javnih službi, e-usluge i IT rješenja.



b) Integrirani teritorijalni program (ITP 2021. –2027.)

Fokus na razvoj urbanih područja –posebno **urbane aglomeracije**(npr. Zagreb, Split, Rijeka, Osijek).

Omogućuje financiranje digitalnih rješenja u gradovima: pametna rasvjeta, upravljanje prometom, sustavi za upravljanje otpadom i dr.

OSTALI IZVORI FINANCIRANJA

Digitalna Europa (Digital Europe Programme)

EU program fokusiran na stratešku digitalnu infrastrukturu (AI, kibernetička sigurnost, digitalne vještine). Iako je više usmjeren na državnu razinu i privatni sektor, **JLPS mogu sudjelovati** u nekim projektima, posebno u partnerstvima ili kroz digitalne centre.

Obzor Europa (Horizon Europe)

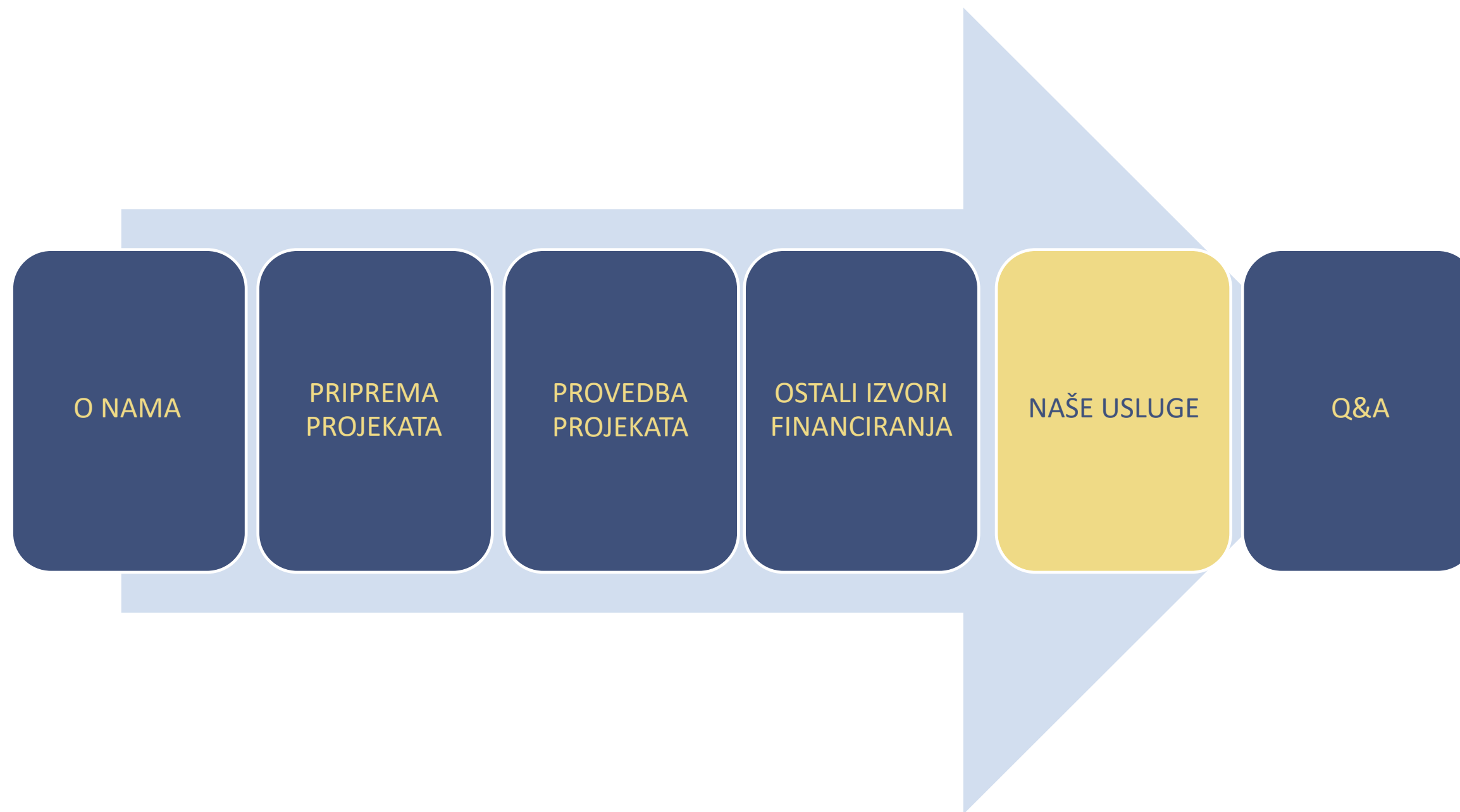
Iako je primarno istraživački program, nudi mogućnosti za JLPS u partnerstvima sa sveučilištima, institutima i tvrtkama na projektima digitalne inovacije (npr. pilot-projekti u pametnim gradovima).

CEF –Connecting Europe Facility (Povezivanje Europe)

Podupire izgradnju digitalne infrastrukture –posebno **sigurnu komunikaciju digitalne usluge**.

Gradovi i općine mogu prijaviti projekte vezane uz: Interoperabilnost baza podataka, EU digitalni identitet te Infrastrukturu za eZdravstvo, ePravosuđe i eUpravu.

SADRŽAJ



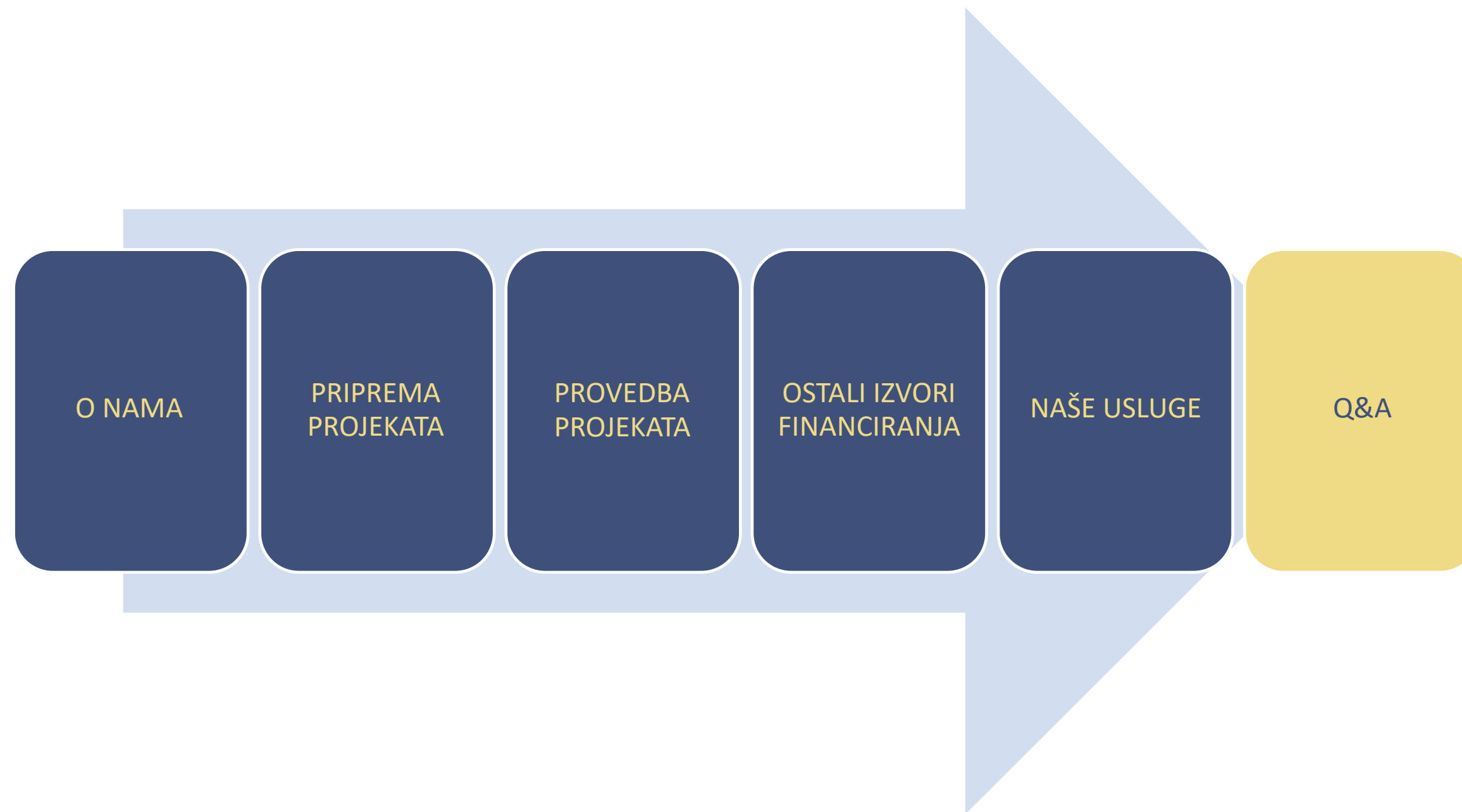
NAŠE USLUGE

NAŠE USLUGE

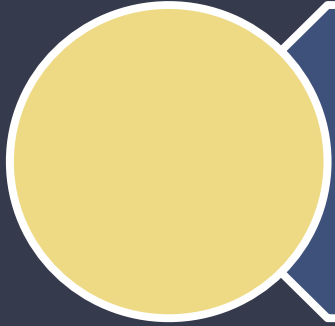


**ZADAĆA NAŠIH KONZULTANATA JE DA VODE RAČUNA
O VAŠEM PROJEKTU!**

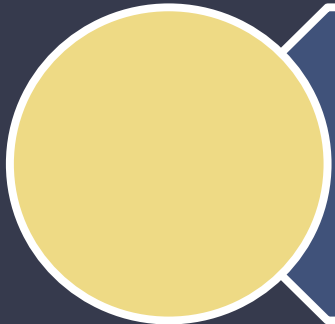
SADRŽAJ



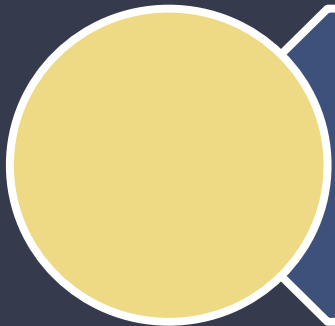
EDUKACIJE UČILIŠTA EU PROJEKTI



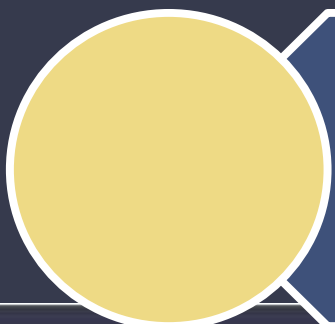
Projektni menadžment—od 5. svibnja. do 14. svibnja 2025. te se nastava odvija ponedjeljkom, utorkom i srijedom od 17:00 do 20:45



Studija izvodljivosti te analiza troškova i koristi (CBA) -od 10. lipnja do 11. lipnja 2025. svakoga dana u terminu od 17:00 do 20:00



Specijalistički program izobrazbe u području javne nabave -od 12. svibnja do 16. svibnja 2025. u Zagrebu



Voditelj pripreme i provedbe EU projekata —od 5. svibnja 2025. u popodnevnom terminu od 17:00 –20:45 ponedjeljkom, srijedom i petkom

**Kontakt e-mail:
info@avelant.hr**



AVELANT
d.o.o. za poslovno i strateško savjetovanje

Ured: Poslovni centar Zavrtnica
objekt 1, Zavrtnica 17, 10000 Zagreb

Sjedište: Froudeova3, 10000 Zagreb

t/f: 01 5534 878
m: 099 6492468 **e:**
info@avelant.hr
w: avelant.hr

Kontaktirajte nas



Francesca Gržinić Kuljanac
francesca.grzinic@opatija.hr



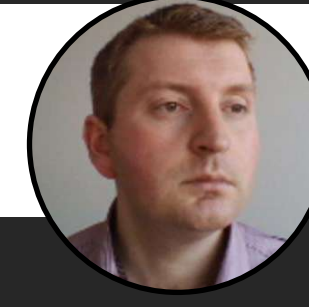
Darko Šiško
Darko.Sisko@zagreb.hr>



Ignacio Garcia Vega
ignacio@serendipity.buzz



Maja Šajnović
Maja.Sajnovic@zagreb.hr



Nikola Modrušan
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Tomaž Lanišekxx
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Marina Tavra
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Genoveva Gil García
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Nataša Margetić
info@avelant.hr



Ariana Vela
info@avelant.hr



Q&A



European
Commission

Call to Action: Reminder

1



**Prepare your strategy to
implement Local Digital
Twins**

2



**Join the Living-in.EU
movement**

3



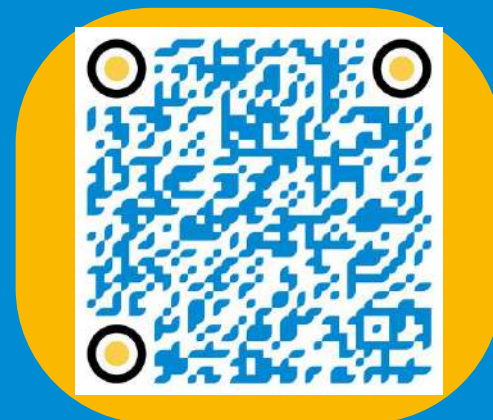
**Evaluate your digital
maturity with LORDIMAS**

4



**Discover the MIMs Plus to
start building your Open
Data Architecture
Framework**

5



**Access the EU Support
Services for Smart
Communities**

6



**Express your interest to
participate to the Online
Procurement Helpdesk**

**REGISTER
FOR THE
NEXT TRAINING
SESSION!**

PLANNING

Online Training 1
May 7th
9:30 AM

PREPARATION

Online Training 2
May 28th
9:30 AM

EMPOWERMENT

Online Training 3
June 11th
9:30 AM

We Appreciate Your Feedback



<https://gqr.sh/zTsB> 🔍

“

Innovation is the engine of growth. It provides solutions to the pressing challenges we face – from climate change to digitalisation – and helps us build a sustainable future for all.

-Ursula von der Leyen

Jačanje spremnosti hrvatskih lokalnih vlasti za digitalizaciju uprave

U suradnji s



HVALA

Citiverse EDIC (European Digital Infrastructure Consortium)

WHO

Signatory Member States: Spain, Slovenia, Estonia, Latvia, Croatia, Portugal, France, Czech Republic, Luxembourg, Belgium, Slovakia, Italy, the Netherlands *Ireland.

WHAT

Common tools: EU LDT toolbox, Data and services interoperability, Reuse of components & best practices.

Joint tenders: Economies of scale, Open standards, Certification.

WHY

- To create a common & sustainable European infrastructure.
- To go beyond research.
- To avoid repetitions.
- To deploy large-scale innovative projects and technologies.
- To provide recommendations for future R&D&I in SCC.
- To create a solid EU ecosystem on SCC.

