European Digital Innovation Hub in Kharkiv



Dr. Lina Smovziuk

International R&D projects manager,
National Aerospace University "KhAI"

HANNOVER MESSE

"Reconstruction of Ukraine: new opportunities through digital transformation"

April 23, 2024



Eastern Ukraine EDIH Candidate











Kharkiv IT Cluster

The most influential IT community of Ukraine with 600+ members and partners united

National Aerospace University "KhAI"

Excelling in both high-tech aerospace sector and cutting-edge digital technologies

Kharkiv National University of Radio Electronics

Recognized for its advanced expertise in digital technologies

Municipal Institution "Kharkiv Office of Reform"

Entrepreneurship development, and enhancing social well-being

Cyber Diia Platform

Aimed at developing a resilient and safe digital future of Ukraine



Eastern Ukraine EDIH geographical coverage



KHARKIV REGION

31 400 sq. km area 6.3% GRP

17 cities 24% Manufacturing share

2.83 mln population 12% Agriculture share

DNIPROPETROVSK REGION

31 914 sq. km area 10.5% GRP

20 cities 48.2% Manufacturing share

3.2 mln population 7.3% Agriculture share

POLTAVA REGION

28 750 sq. km area 5.1% GRP

16 cities

17.2% Manufacturing share

1.4 mln population **14.3%** Agriculture share

SUMY REGION

23 832 sq. km area 1.9% GRP

15 cities 23.2% Manufacturing share

1.06 mln population **26.4%** Agriculture share

Eastern Ukraine EDIH mission

- Drive the digital and green transformation processes in Eastern Ukraine
- Focus on vital economic sectors to support local economic during-the-war survival and post-war recovery
- Nurture smart-city initiatives to enable a safe and comfortable living environment for local population
- Facilitate sustainable practices implementation of & environmental impact reduction
- Foster internationalisation of supply chains
- Contribute towards EU-Ukraine integration



Manufacturing



Agriculture



Energy



Smart City



Eastern Ukraine EDIH focus alignment with Regional Development Strategies 2021-2027



New reality: challenges and opportunities

Manufacturing Industry revitalization:

Spring-in with digital technologies for growth and resilience



Energy sector transformation:

Driving digital technologies for sustainable energy supply to homes and businesses



Agriculture efficiency and safety:

Adopting digital technologies for productivity and worker safety



New reality: challenges and opportunities

Supporting entrepreneurship:

Empowering new ventures to become more efficient and resilient in the face of ongoing and post-war environment



Bringing refugees back home:

Rebuilding communities and cities towards safe and comfortable living environment



Growing a digital workforce:

Investing in reskilling/upskilling to tackle workforce shortage and utilize temporarily displaced persons' potential





One-stop-shop of digital transformation services

Pillar I: Test Before Investing

- Digital transformation roadmapping services
- Technical consultation on digital technologies
- Validation, prototyping or demonstration projects

Pillar II: Training and Skills Development

- Digital transformation awareness-raising events
- Short-term training courses on digital technologies
- Intensive training courses on digital technologies

Pillar III: Support to Find Investments

- Trainings on access to finance
- Consultation on access to finance
- Investment forums

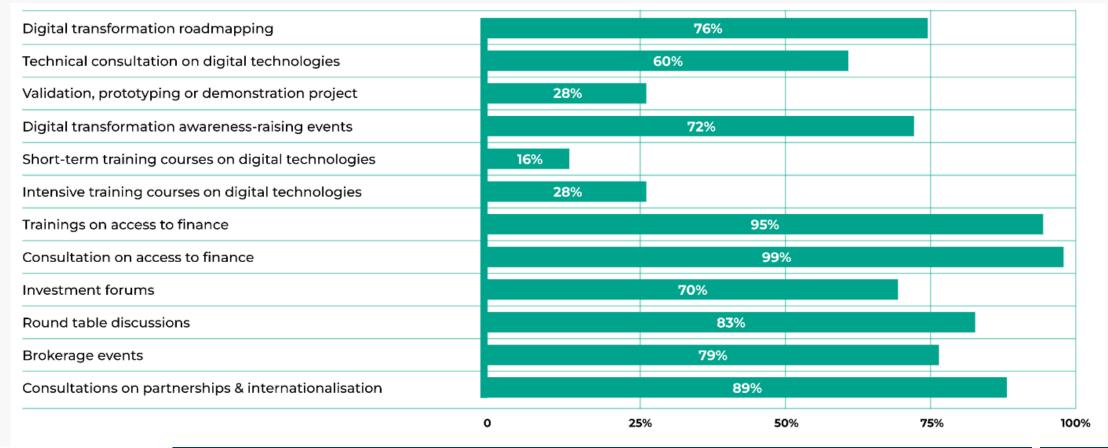
Pillar IV: Networking and Access to Innovation Ecosystem

- Round table discussions
- Brokerage events and company missions
- Consultations on partnership building and internationalisation



What services could be useful for your company in planning or implementing digitization projects?

Based on Results of a survey of companies and enterprises in Kharkiv, Poltava, Dnipro and Sumy regions, March 2024, 160 respondents





Eastern Ukraine EDIH clients

EDIH Operation principles





KHARKIV REGION

22,6k SMEs 1215 mid-caps 56 admin. communities 1,85 mln workforce

DNIPROPETROVSK REGION

27,8k SMEs 1298 mid-caps 86 admin. communities

2,13 mln workforce

POLTAVA REGION

10,3k SMEs 600 mid-caps 60 admin. communities

580k workforce

SUMY REGION

5,6k SMEs 378 mid-caps

51 admin. communities

533k workforce



Eastern Ukraine EDIH technology scope

Eastern Ukraine EDIH's sectors & technologies

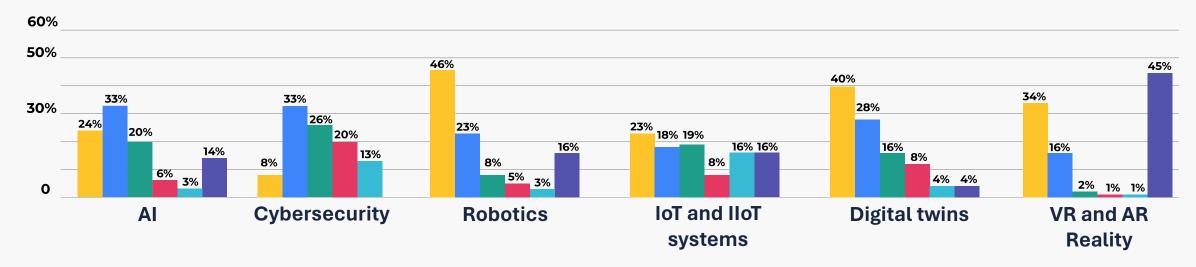
sectors & technologies		Manufacturing	Agriculture	Energy	Smart City	
Digital Technologies	Artifici	al intelligence		•	•	•
	Cybers	ecurity				
Other Technologies	loT and	l IIoT systems		•	•	
	Indust	rial robotics				
	Lot Autono	omous robots			•	
	Digital	Twins			•	
	VR and	d AR reality				



What technologies could be useful for your company in planning or implementing digitization projects?

Based on Results of a survey of companies and enterprises in Kharkiv, Poltava, Dnipro and Sumy regions, March 2024, 160 respondents









EDIH initiative maturity and background

Expected launch of Eastern Ukraine EDIH



- Kharkiv EDIH idea originating
- 2. Creation of Eastern Ukraine EDIH consortium
- 3. Designation of Kharkiv IT Cluster as a candidate entity
- 4. Submission of proposal to DIGITAL-2023-EDIH-04-ASSOCIATED call

- Phase 1 Services & activities deployment
- Phase 2 Services & activities scaling up
- Phase 3 EDIH sustainability planning



Digital knowledge, competencies and facilities

EXPERTS

15+ Professors
50+ Associate Professors
in EDIH's technology
scope fields

LABS AND FACILITIES

for cybersecurity,
IoT and IIoT, industrial
and autonomous robotics,
AR/VR

TRAINING PROGRAMMES

50+ PhD,
MSc, Bachelor programmes,
25+ vocational training courses
on digital technologies









Fundraising skills, experience and connections



Kharkiv Office of Reform



National Aerospace University "KhAI



Kharkiv IT Cluster

Strong expertise in grant writing and fundraising

300+ partners among international funding providers

150+ million Euro raised for Kharkiv projects after 24 February 2022

Secured 3.6 million Euro in EU FPs, ranking 2nd among all Ukrainian organisations and 1st among Ukrainian universities.

Operated H2020 NCP for Smart, Green and Integrated Transport in 2012-2018

Strategic partnerships with national, regional and local governmental authorities, banks and investors.

Extensive experience in securing investments from international organisations, e.g. EBA, ZPP, EEPO, NRW.Global Business, UBTA



Ecosystem building sustainable practices

Kharkiv IT Cluster

600+ members and partners united

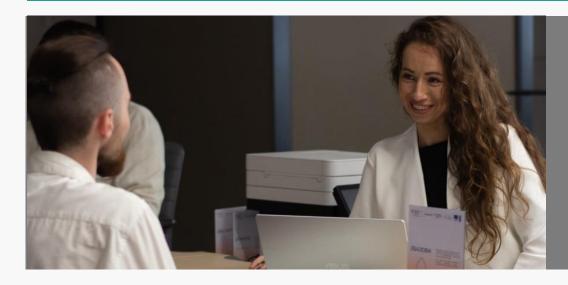
110+ events for internal communities per year

4κ+ participants gather at internal community events annually

70+ implemented projects in partnership with TECH

companies, universities and authorities





Kharkiv Office of Reform

Kharkiv Business Hub front-runner

500+ local businesses in ecosystem

25+ local business events organized annually



EDIH ecosystem

DIGITAL TECHNOLOGY PROVIDERS

BUSINESS SUPPORT ORGANISATIONS































FUNDING PROVIDERS



POLICY MAKERS





MINISTRY

OF STRATEGIC INDUSTRIES

OF LIKBAINE















Eastern Ukrainian EDIH long-term impact: Facilitation of digital & green transformation of Eastern Ukraine vital economic sectors in Eastern Ukraine region









Eastern Ukrainian EDIH deliverables and short-term impacts

Short-term impact #1:

Access to digital transformation expertise & services

- 40 digital transformation roadmaps
- 100 technical consultations
- 12 validation, prototyping and demonstration projects

Short-term impact #2:

Addressing digital skills gap

- 25 awareness-raising events (1000+ participants)
- 20 short-term training courses (500+ participants)
- 8 intensive training courses (120+ participants)

Short-term impact #3:

Access to funding opportunities

- 8 training courses
- 100 individual consultations
- 2 Investment Forums (200+ participants)

Short-term impact #4:

Establishing digital-minded & collaborative ecosystem

- 8 round-table discussions (200+ participants)
- 8 brokerage events (400+ participants)
- 4 company missions (15+ companies)

Transversal short-term impact: Strengthening EDIH external collaborations at European level

- 15+ community building and matchmaking events with other EDIHs
- 8+ best practices exhibition DTA events
- 75+ "train the trainer" DTA events

- 4+ joint events with EEN
- 20+ service cross-sell cases with EEN
- 15+ coordination events and activities at regional, national and European levels





Eastern Ukraine EDIH's 4-year revenue plan

Source of the financing	Target amount (in Euro)	
Digital Europe	657,036.18	
Competitive grants and donor's funding	382,532.74	
National, regional, local co- financing programmes	130,000.00	
Crowdfunding	65,000.00	
50% coverage of EDIH's services by mid-caps	79,503.43	

