



# State of Practice of Digital Transformation in Argentina – Experiences of the UNI-UEAR Project

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# AGENDA

- 1 **MOTIVATION**
- 2 METHODOLOGY
- 3 DATA COLLECTION
- 4 FINDINGS AND RECOMMENDATIONS
- 5 CONCLUSIONS

# MOTIVATION – THE PROJECT

There is a need to build human capacity for digital transformation in Argentina.

Co-funded by the EU, the “Argentine-European University Alliance for Digital Transformation” (UNI-UEAR) Project contributes to fulfilling such needs, as well as to promote digital rights in the country.

The Project is led by the National Interuniversity Council (CIN) and conducted by a consortium of 9 universities – 5 from Argentina and 4 from the EU.



Ref: <https://uniuear.cin.edu.ar/>

## PROJECT SPECIFIC OBJECTIVES

- 1) To deepen cooperation between the European Union and Argentina in terms of digital transformation;
- 2) To strengthen the creation and dissemination of applied knowledge for digital transformation;
- 3) To develop alliances between academia, the public and private sectors, and civil society for digital transformation.

# MOTIVATION – THIS PAPER

To achieve the second objective (creation and dissemination of applied knowledge), we assessed the state of practice of digital transformation (DT) in Argentina, as part of a broader effort to build human capacity.

This paper presents the findings of a study to assess the state of the DT practice in Argentina.

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## RESEARCH QUESTIONS:

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- 1) What are current examples of digital transformation efforts conducted by different types of stakeholders in Argentina?
  - 2) What are the main barriers to embracing digital transformation efforts?
  - 3) What are the training needs to embrace and benefit from digital transformation efforts?
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# METHODOLOGY – COUNTRY CONTEXT

Argentina is large in area (#8 – 2,780,400 kms<sup>2</sup>) but small in population (#35 – 45M people).

Regarding human capital, tertiary education mostly relies on public universities supported by the national or provincial governments. In total, there are 75 public university institutions.



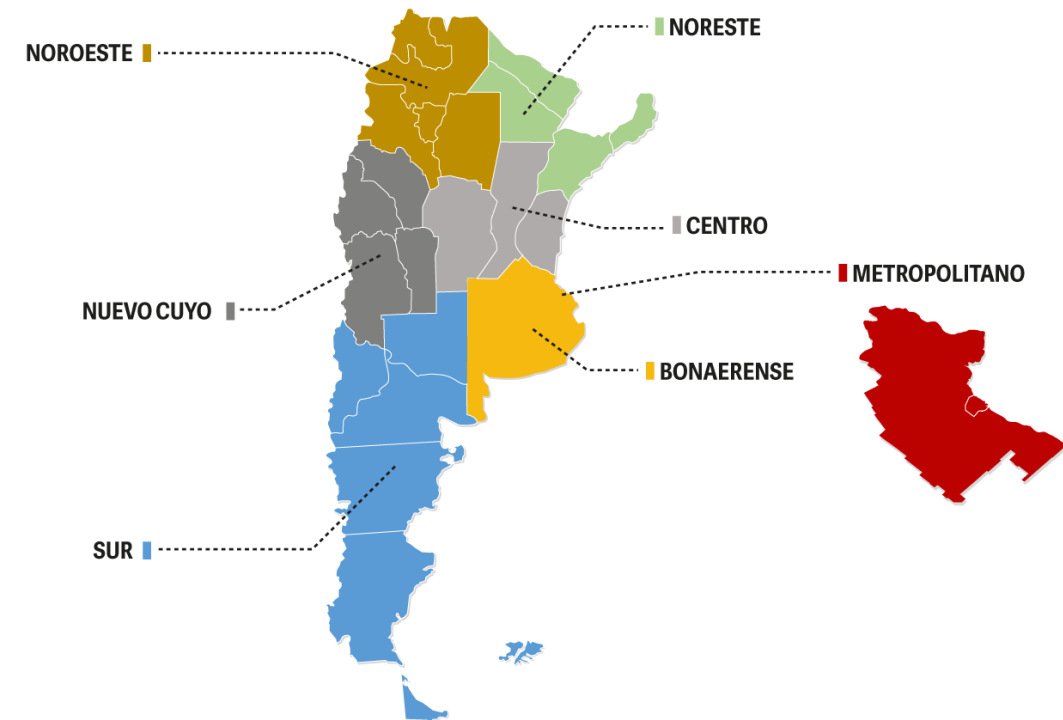
# METHODOLOGY – PROJECT CONTEXT

Within CIN, universities are grouped into 7 Regional Councils:

- 1) BONAERENSE (BON)
- 2) CENTRO (CEN)
- 3) METROPOLITANO (MET)
- 4) NEA – North East of Argentina
- 5) NOA – North West of Argentina
- 6) NUEVO CUYO (NUC)
- 7) SUR

To fulfil one objective (building alliances), there was a commitment to extend the involvement to other universities.

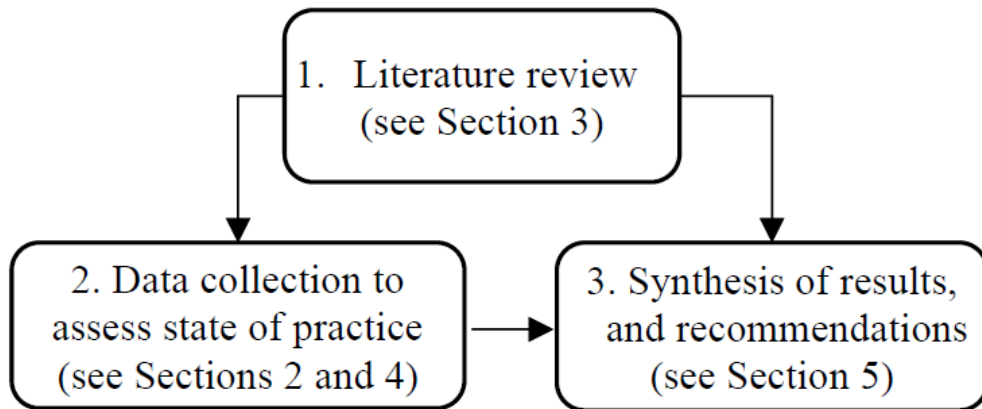
## Consejos Regionales de Planificación de la Educación Superior (CPRES) de Argentina



# METHODOLOGY – ACTIVITIES

It was officially launched in April 2023 by the CIN in collaboration with 9 universities of the Consortium.

Given that the objective #3 is to build alliances between academia, the public and private sectors, and civil society for digital transformation, there was a commitment to extend the involvement of other universities beyond the five initially part of the consortium.



- 1 assessing the global state-of-the-art in building human capacity for digital transformation and major barriers
- 2 collecting primary data, considering: 1) a multi-stakeholder perspective and 2) geographical coverage
- 3 synthesizing results and formulating recommendations

# DATA COLLECTION

#	Host University	City, Province	#Part.
<b>Regional Council: BON</b>			
1	UN de La Plata	La Plata, Bs.As.	58
2	UN del Noroeste de la Provincia de Buenos Aires	Junín, Bs.As.	33
3	UN del Centro de la Provincia de Buenos Aires	Tandil, Bs.As.	28
<b>Regional Council: CEN</b>			
4	UN de Entre Ríos	Paraná, Entre Ríos	41
5	UN de Córdoba	Córdoba, Córdoba	123
6	UN del Litoral	Santa Fé, Santa Fé	46
7	UN de Rosario	Rosario, Santa Fé	71
<b>Regional Council: MET</b>			
8	UN de San Martín	San Martín, Bs.As.	22
9	UN de Avellaneda	Avellaneda, Bs.As.	36
10	UN de La Matanza	La Matanza, Bs. As.	25
11	Univ. Tecnológica Nacional	C.A.B.A.	44
12	Univ. de Buenos Aires	C.A.B.A.	70
<b>Regional Council: NEA</b>			
13	UN de Chaco Austral	Saenz Peña, Chaco	33
14	UN del Nordeste	Corrientes, Corrientes	49
15	UN de Misiones	Posadas, Misiones	23

<b>Regional Council: NOA</b>			
16	UN de Jujuy	Jujuy, Jujuy	59
17	UN de Salta	Salta, Salta	27
18	UN de Catamarca	Catamarca, Catamarca	25
19	UN de Tucumán	Tucumán, Tucumán	108
20	UN de Santiago del Estero	Santiago del Estero, Santiago del Estero	48
<b>Regional Council: NUC</b>			
21	UN de Cuyo	Mendoza, Mendoza	50
22	UN de San Luis	San Luis	61
23	UN de La Rioja	La Rioja	181
<b>Regional Council: SUR</b>			
24	UN de Tierra del Fuego, Antártida e Islas del Atlántico Sur	Ushuaia, Tierra del Fuego	25
25	UN de Patagonia Austral	Río Gallegos, Santa Cruz	46
26	UN de Patagonia San Juan Bosco	Comodoro Rivadavia, Chubut	30
27	UN de Río Negro	Viedma, Río Negro	72
28	UN del Comahue	Neuquén, Neuquén	63
29	UN de La Pampa	Santa Rosa, La Pampa	56
<b>Total Number of Participants</b>			<b>1553</b>

- 29 workshops
- 1553 participants:
  - ✓ 879 (56%) academia
  - ✓ 370 (24%) government
  - ✓ 181 (12%) industry
  - ✓ 123 (8%) NGOs
  - ✓ 815 (53%) women
  - ✓ 729 (47%) men

## FINDINGS – PROJECTS (EXAMPLES)

We identified projects conducted by academia, the public and the private sector, and in some regions, by NGOs:

BON	digital signatures, digital repositories for educational and administrative use, and programs to train middle school students in programming and entrepreneurship (academia)
CEN	digital medical records and automated management systems for transforming health-related services (government)
MET	adoption of ERP and CRM systems to improve operational efficiency and customer service (industry)
NEA	document management systems using platforms (GDE), digital signatures, capacity-building for supporting the DT of Small and Medium-sized Enterprises (government)
NOA	administrative digitalization, database creation, and the automation of administrative processes, through the standard information systems - SIU, Sistemas de Información Universitaria (academia)
NUC	integration of digital solutions like CRM systems, e-commerce platforms, and mobile applications to improve customer service and operational efficiency (industry)
SUR	“Neuquén Agency for Innovation for Development” and the “Pampas Agency for Science, Technology and Open Innovation”. They are pioneering projects in agriculture, healthcare, and tourism (government)

# FINDINGS – BARRIERS

BARRIERS		REGIONS						
TYPE	DESCRIPTION	BON	CEN	MET	NEA	NOA	NUC	SUR
TEC	lack of connectivity and poor infrastructure	X	X	X	X	X	X	X
TEC	lack of access to ICT devices			X		X		X
ORG	lack of tools			X				
ORG	lack of technical standards						X	
ORG	concerns related to cybersecurity and data privacy	X		X	X			
FIN	lack of financial resources	X	X	X	X	X	X	X
REG	lack of regulatory frameworks	X	X	X	X	X		X
REG	outdated policies and lack of long-term policies		X			X		
HHR	lack of qualified human resources	X			X			
HHR	low digital literacy and generational gaps in digital literacy	X				X		
HHR	resistance to change and innovation	X	X	X	X	X		X
HHR	limited understanding of digital transformation		X				X	
HHR	fears of job displacement				X	X		X

## FINDINGS – TRAINING NEEDS

- *Technologies for digital transformation* – training on AI and its applications, Internet of Things, blockchain, cybersecurity, data governance, and ethical use of data and technology.
- *Legal and data frameworks* - understanding new legal frameworks to support digital transformation, including data security, privacy, and preservation.
- *Digital business models* – raising awareness of new business models, digital business, changes in the economy and labor, and their impact on human resources.
- *New educational models* - sensitizing leaders and building capacity for modernizing educational institutions and practices to align with the digitalization of society, including integrating digital tools into curricula, and building the capacity of educators.
- *Awareness and sensitization efforts* – conducting workshops, seminars, and courses to raise awareness among decision-makers in public and private organizations and citizens who must adopt new digital technologies and applications.

## FINDINGS – RECOMMENDATIONS

- *Inclusive training programs* – designing training initiatives that cater to persons of different ages, skill levels, and sectors, ensuring equitable access to digital education.
- *Intersectoral and multidisciplinary collaboration* – fostering partnerships among academia, government, and the private sector to address the multifaceted challenges of digital transformation, with a multidisciplinary approach.
- *Investment in infrastructure* – prioritizing investments in digital infrastructure, particularly in underserved areas, to ensure equitable access and affordability.
- *Policy modernization* – updating regulatory frameworks to support digital innovation while ensuring data security, privacy, and ethical use of technology.
- *Continuous education* – implementing lifelong learning programs to keep pace with rapid technological advancements and evolving labour market demands.

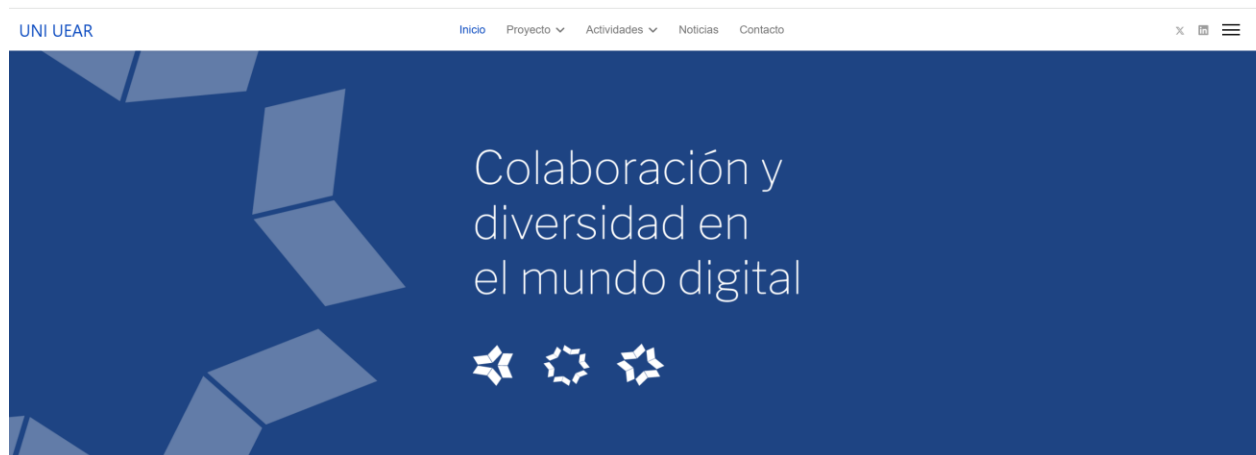
# CONCLUSIONS

- The main contribution of this study is to landscape ongoing DT efforts in Argentina, based on the experiences of multisectoral actors, identifying barriers and training needs.
- The synthesized knowledge is relevant for government decision-makers and policymakers to plan adequate national and regional policies, and for academics to design educational and training programs that prepare the necessary qualified human resources.
- The value-added of this research relies on the process of primary data collection, which engaged the leading actors working hands-on in digital transformation initiatives.
- DT efforts need to be tailored to the local needs. This paper contributes insights for conducting such initiatives in Argentina.

# ACKNOWLEDGEMENTS

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For more information, please visit: <https://uniuear.cin.edu.ar/>



Cooperación



Conocimiento



Alianzas



Many thanks!

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