



# Digital transformation in the common European data space for cultural heritage: the ENUMERATE case

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Europeana Foundation 02/03/2023

# WHAT ARE DATA SPACES?

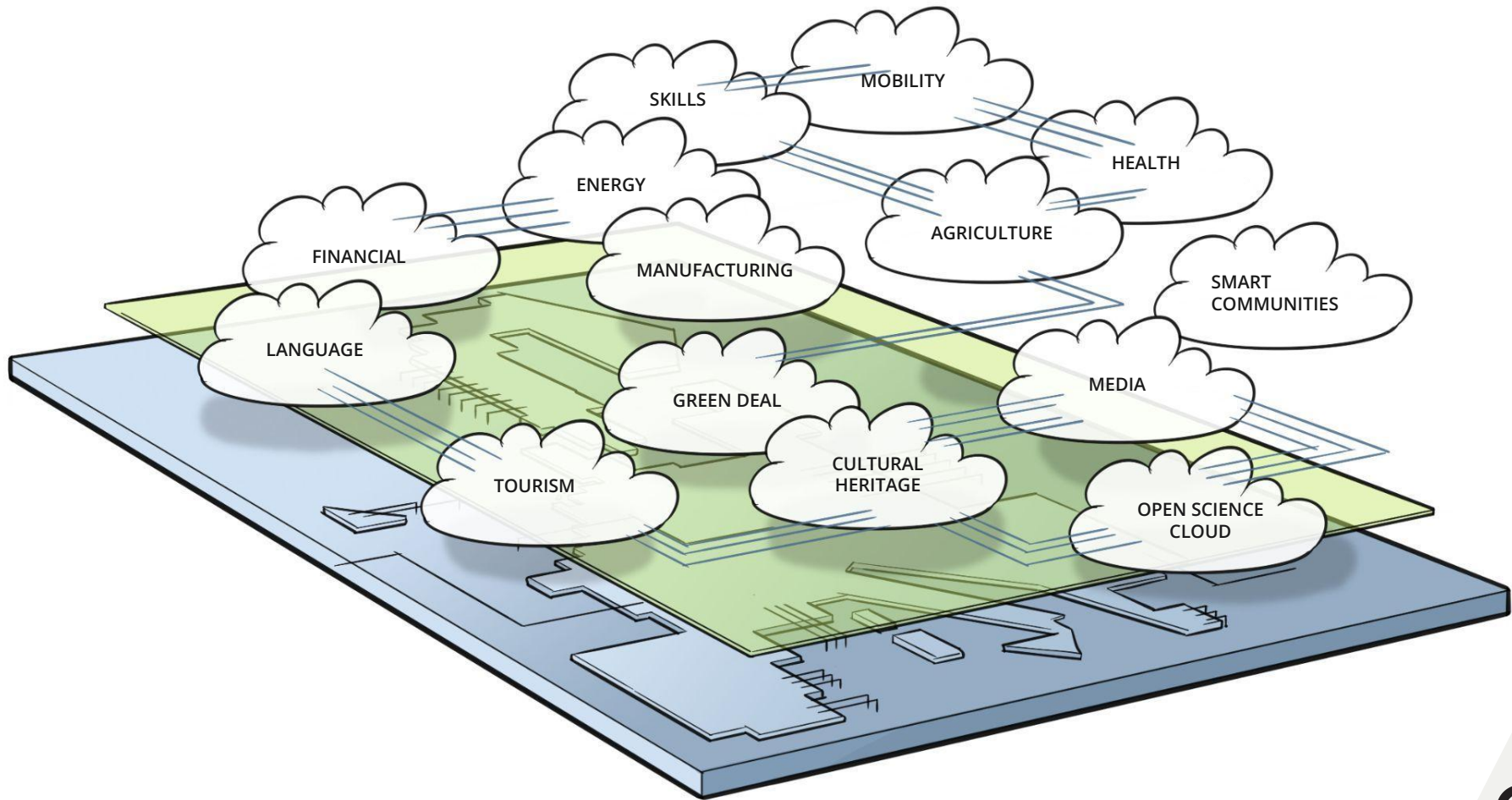
Imagine a society boosted by digital data. Where information moves freely across sectors - securely, easily, usefully. Data spaces are designed to turn this vision into reality.

Data spaces will ensure that Europe has a flourishing ecosystem of data sharing which offers alternatives to private and/or centralised platforms - an ecosystem based on the values of ownership, sovereignty and privacy.

A series of 14 connected data spaces will boost the development of new data-driven products and services in the EU, leading to a more interconnected and competitive EU data economy.

# WHAT ARE DATA SPACES MADE UP OF?

- A secure and privacy-preserving infrastructure to pool, access, share, process, and use data.
- Clear and trustworthy data governance mechanisms allowing the use and reuse of data in a fair, transparent, proportionate and non-discriminatory manner.
- An operating framework fully respecting European rules and values, in particular personal data protection, consumer protection legislation and competition law.



# CULTURAL AND CREATIVE INDUSTRIES EMPLOY

# 8 million

PEOPLE IN EUROPE

# IN THE CULTURAL AND CREATIVE INDUSTRIES

16.4%

OF THOSE EMPLOYED ARE AGED 15-29

CULTURAL AND CREATIVE  
INDUSTRIES contribute

477 billion

Euros - 3.95% OF EU VALUE ADDED

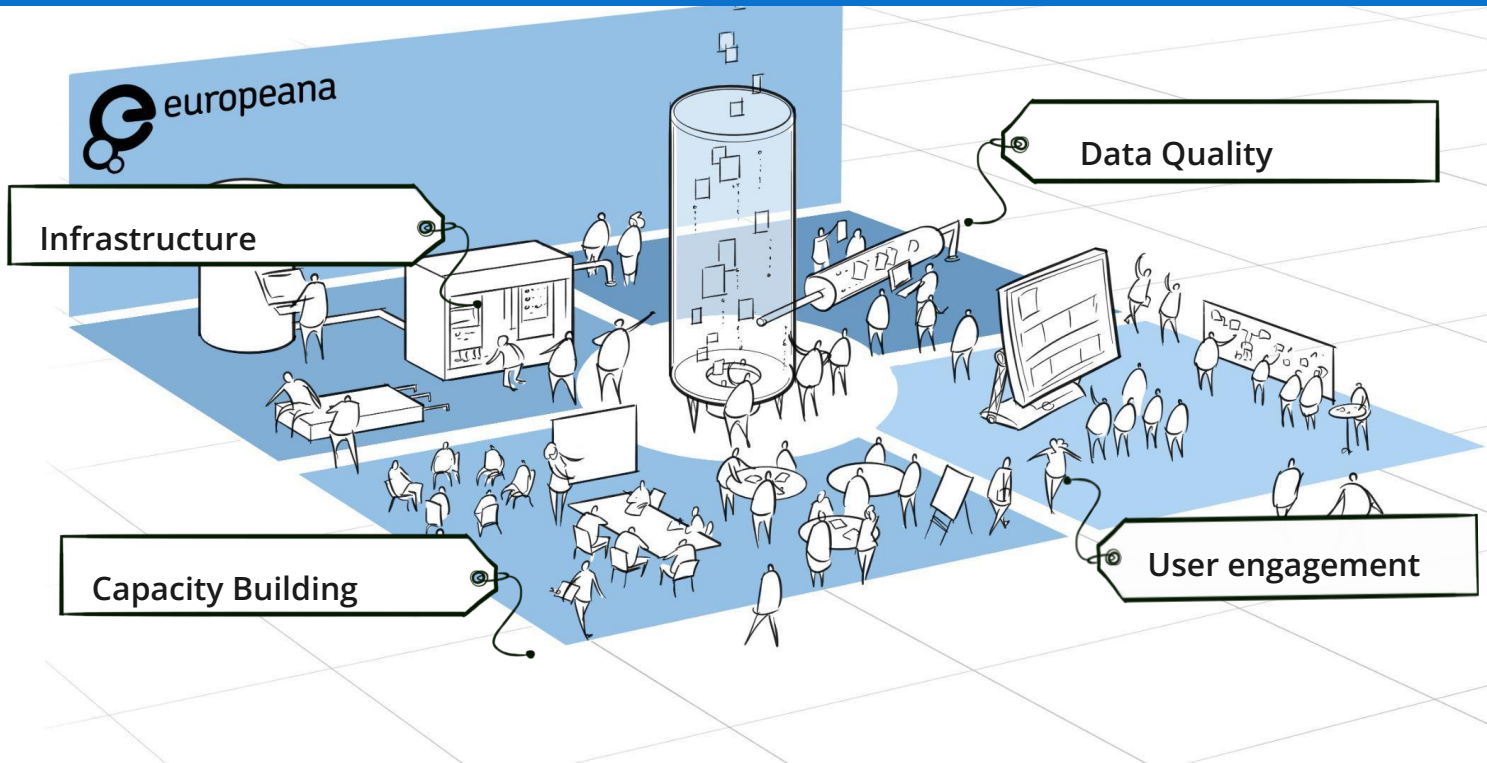
# DEPLOYMENT BY EUROPEANA INITIATIVE



Exerciții de gimnastică în sală, sportul pentru studenți în perioada comunistă, anii 1950-1960 -  
Europeana Foundation, Europe - CC BY-SA.



# DATA SPACE FOR CULTURAL HERITAGE



# CULTURE IS VITAL

'Access to cultural heritage is vital to humankind - to our knowledge and understanding of who we are, where we've come from and what we can become.'

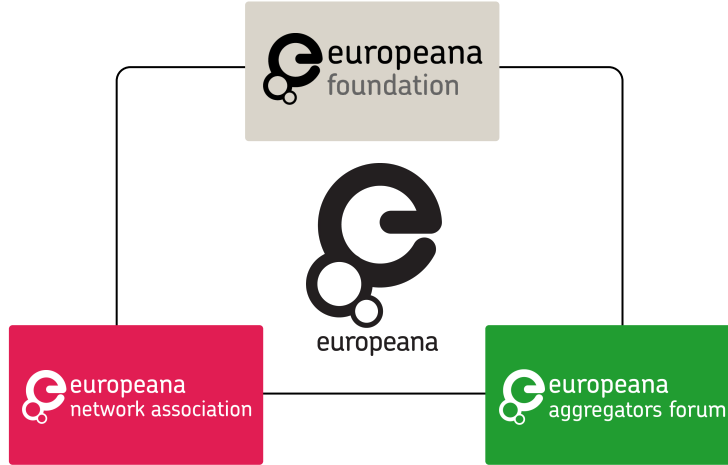
Europeana Foundation - About Us

# VALUES AND QUALITY

Driven by human values of fairness, trust and openness, Europeana is at the heart of a common European data space for cultural heritage.

Continuing our collaborative work, building capacity for digital transformation in the sector, the data space will deliver:

- Higher-quality digital data - for use and reuse
- Advances in 3D - for preservation and restoration and to boost reuses in tourism and creative industries
- Advanced technologies to improve, enrich and visualise data




# FOR DIGITAL TRANSFORMATION

Ultimately, the data space will create and promote the opportunities and incentives for use and reuse that are needed for the implementation of national digital strategies for cultural heritage, leading to the digital transformation of the cultural sector.

The common European data space for cultural heritage also offers the opportunity to reach wider and more diverse audiences, and to create digital environments that are more inclusive, collaborative, and jointly owned.

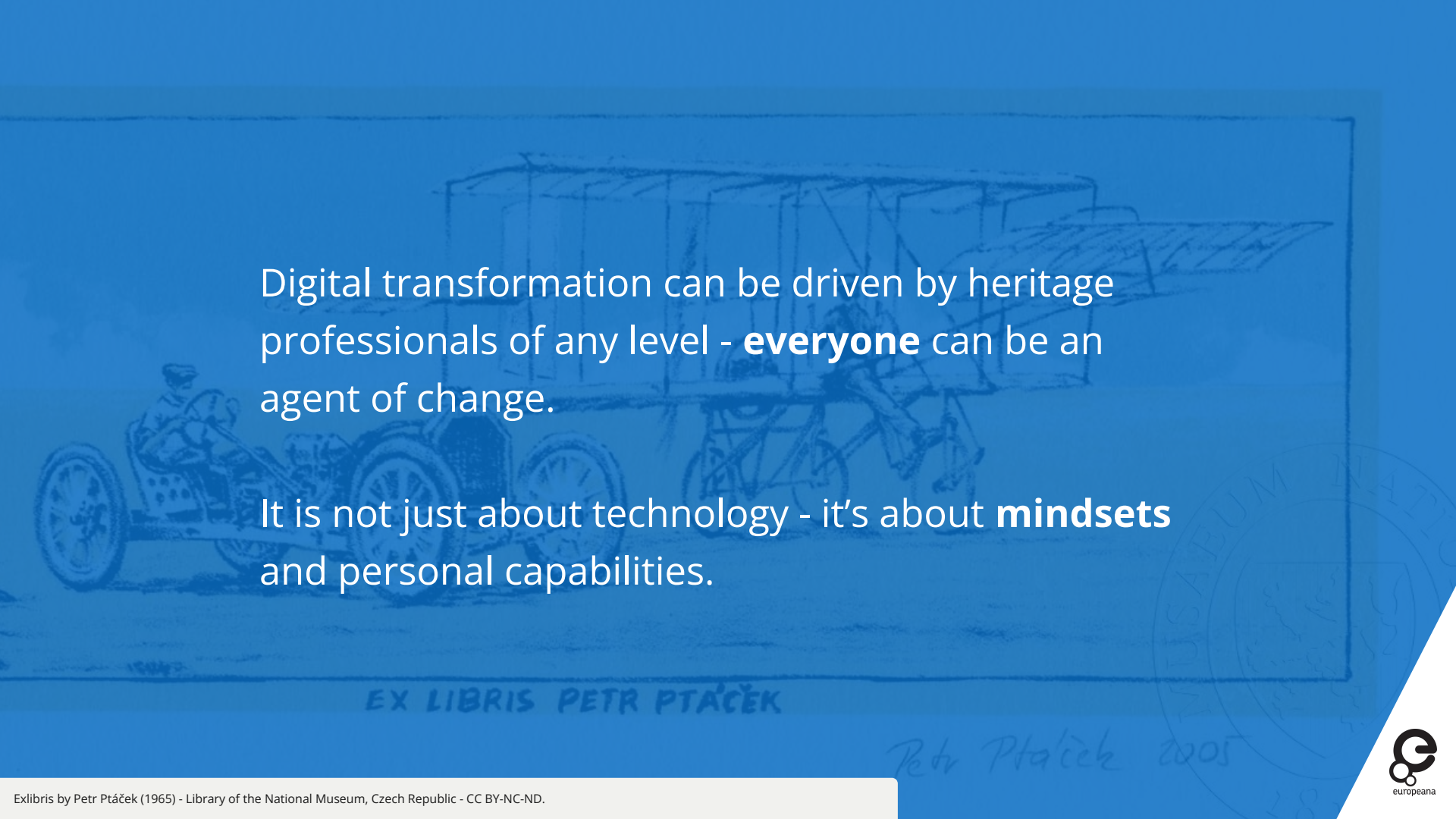
# DEFINING DIGITAL TRANSFORMATION





Digital transformation is both the process and the result of using digital technology to **transform how an organisation works.**

It helps an organisation to thrive, **fulfil its mission** and meet the **needs of its stakeholders.**



Digital transformation can be driven by heritage professionals of any level - **everyone** can be an agent of change.

It is not just about technology - it's about **mindsets** and personal capabilities.

EX LIBRIS PETR PTÁČEK

Petr Ptáček 2005



The **impact** of digital transformation will be different for each individual organisation.

**Each change**, no matter how small, contributes to a cultural heritage sector powered by digital and a Europe powered by culture.

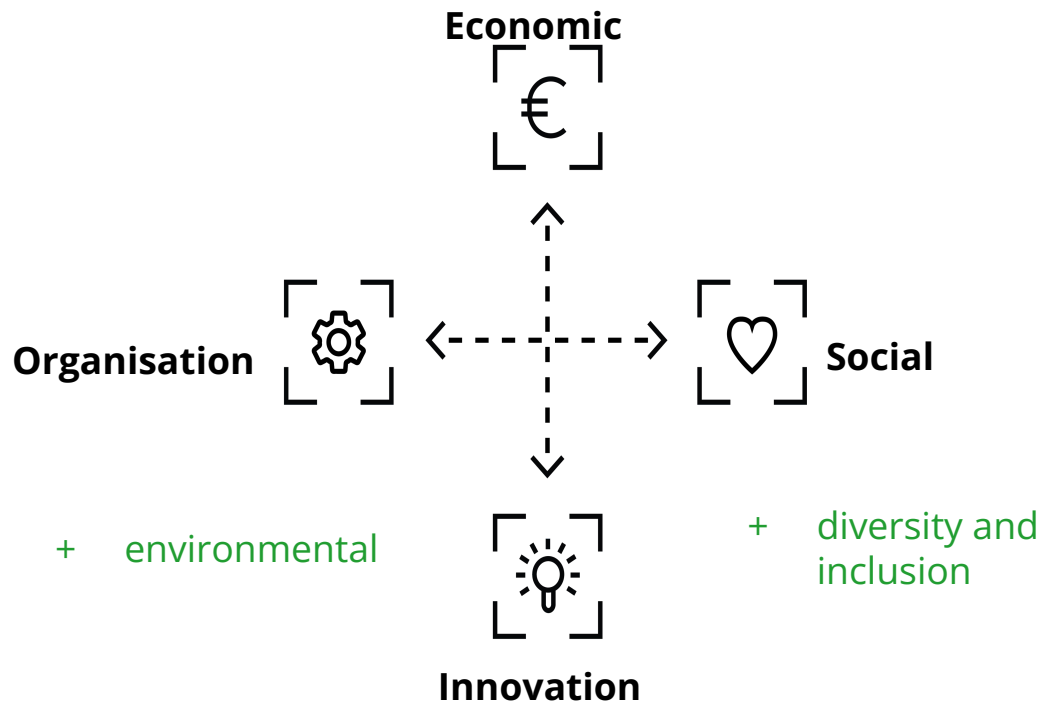
# Europeana and digital transformation

Europeana's focus is on digital transformation relating to the digital discovery of cultural heritage collections. This includes (but is not limited to) efforts that help cultural heritage institutions to develop their leadership and capacity for digital transformation, to strengthen infrastructure, improve interoperability, enrich data, share collections and engage with audiences.

# MEASURING SUCCESS

Indicators for digital  
transformation and data  
gathering

# STRATEGIC PERSPECTIVES



# Measuring and assessing in the CH data space

- How can we measure how digitally transformed the cultural heritage sector is, or has become?
- What are the indicators and corresponding datasets we can use for this?
- How can we get more data from CHIs?

# ENUMERATE

# ENUMERATE HISTORY

- New version back in 2022
- Run in 2013, 2014, 2015 and 2016
- Last report of former project in 2017 - run by DEN
- Previous partners, collections trust in UK, Digibis in Spain, SPK in Germany, Panteia in the Netherlands
- Built on the earlier NUMERIC study of 2008
- Status of digitisation in Europe

# Digging into the data

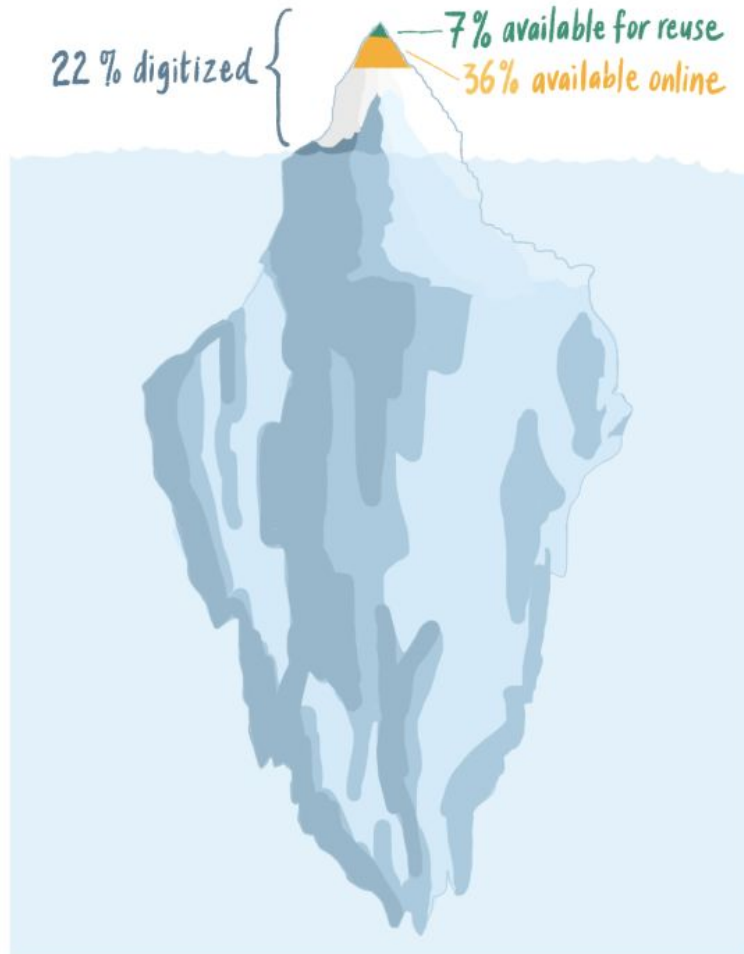
- Low responses
- Hard-work to get the few responses
- Huge network and infrastructure across member states required
- Variation between countries and within countries across years
- Variation (inconsistencies) across responses themselves
- Requirement for large degree of customisation for domains and countries (including language/translation support)

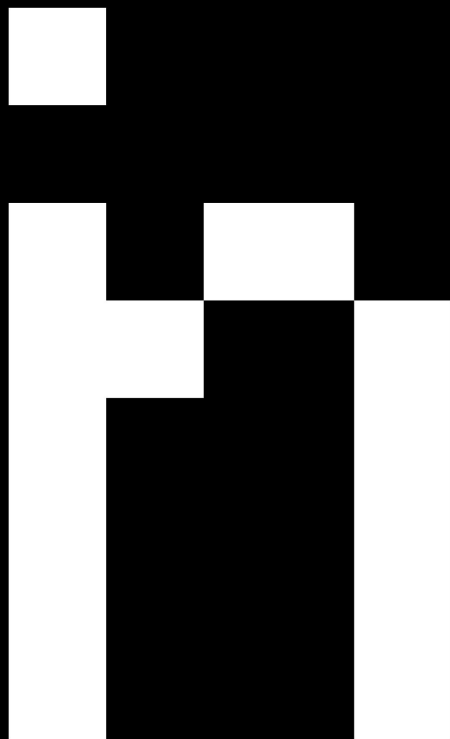


EU 27 Country Name	2022	2017	2015	2013	2011	Eurostat 2019
Austria	6	29	32	36	95	222
Belgium	0	15	7	29	42	
Bulgaria	4	0	1	1	0	52
Croatia	8	0	0	0	0	22
Cyprus	0	1	1	12	21	46
Czech Republic	2	53	9	34	111	152
Denmark	0	5	9	16	58	109
Estonia	0	12	9	16	18	38
Finland	3	37	46	59	89	79
France	0	0	2	2	0	1,292
Germany	2	29	65	279	227	1,084
Greece	1	59	0	10	58	700
Hungary	2	42	31	44	85	389
Ireland	3	0	35	38	0	55
Italy	66	39	50	25	127	1,022
Latvia	1	40	25	4	16	
Lithuania	0	28	54	61	71	34
Luxembourg	0	14	6	15	28	5
Malta	0	0	1	2	4	
Netherlands	3	156	126	143	140	3,057
Poland	91	114	8	23	58	
Portugal	13	35	51	44	85	243
Romania	1	1	2	14	39	394
Slovakia	0	0	3	4	78	117
Slovenia	7	41	54	57	56	105
Spain	6	26	196	180	255	5,064
Sweden	0	144	134	125	33	
Grand Total EU member states	219	920	957	1273	1794	14281

## Resources

- 2014, [ENUMERATE conceptual framework](#)
- 2017, [report on ENUMERATE Core Survey 4](#)
- 2017, [data in Observatory](#)
- 2022, [Study on impact of digitisation and reuse of cultural heritage](#)
- 2022, [partial public results \(rough\)](#)





 [www.indices-culture.eu](http://www.indices-culture.eu)

 @indices\_culture

 @indices.culture

**inDICES**

Measuring the Impact  
of Digital Culture



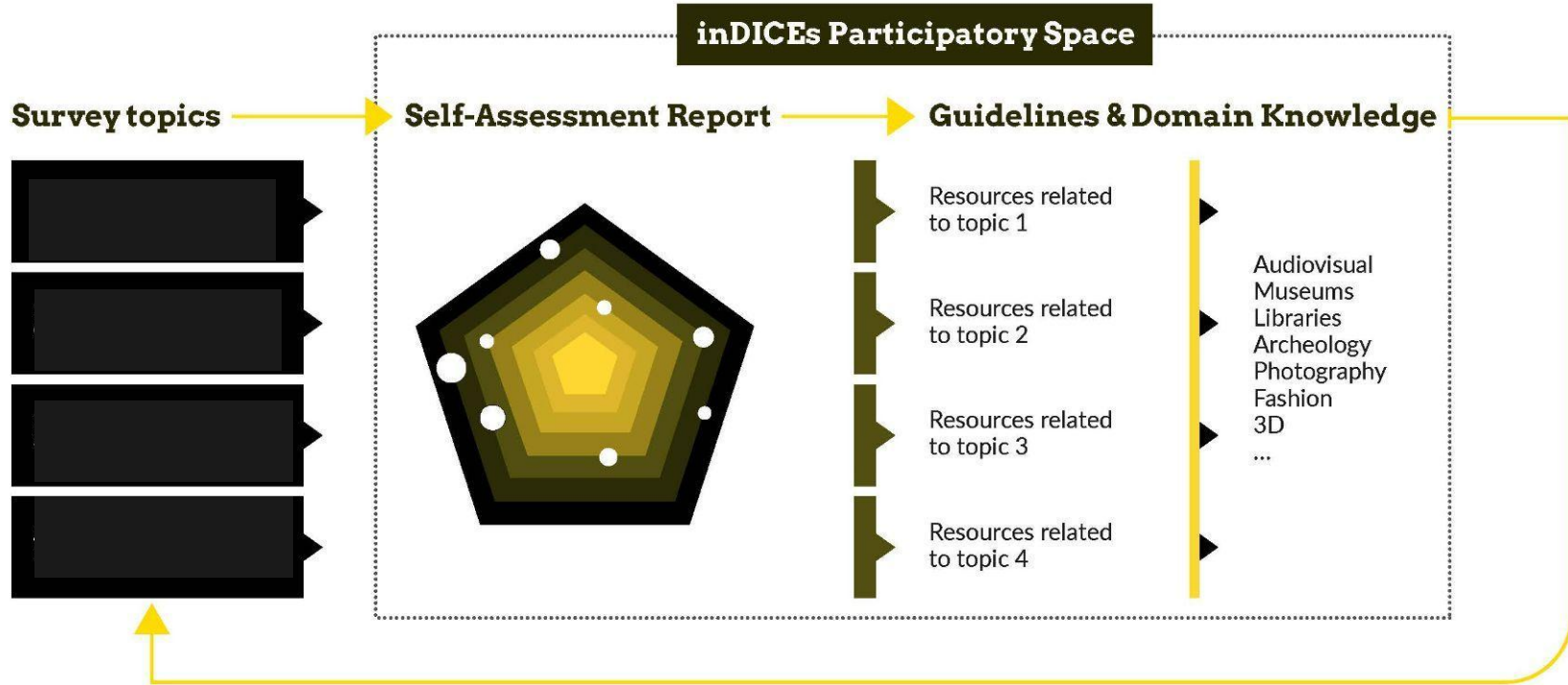
Co-funded by the Horizon 2020 programme  
of the European Union

# ENUMERATE and inDICEs

- Participation and audiences
- Networks
- Size by: finances, collections (digital and physical) and staffing
- Copyright and technical specifications
- Digital strategies
- KPIs

List of the questions [here](#)

# InDICES Self Assessment Tool



Based on project research e.g. 2021, Truyen and Bočytė et. al. - [Guidelines for CHI's digital transformation](#)

# ENUMERATE Self Assessment Tool



**Hannah Baker**  
Hitzhusen

User Engagement  
Director - Europeana  
Foundation



**Fiona Mowat**

Data Analyst -  
Europeana  
Foundation

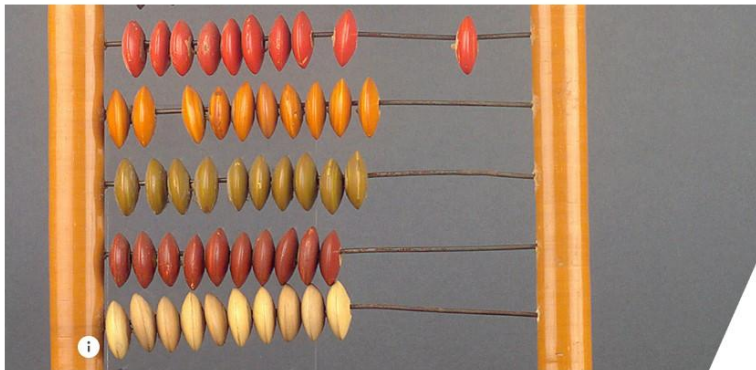


**Frederik Truyen**

Professor - Catholic  
University of Leuven

## The ENUMERATE Self Assessment Tool: gain insight into your institution's digital transformation

ENUMERATE - giving insights into the digital transformation of the cultural heritage sector - is back! The Europeana Foundation ENUMERATE team and inDICES project partners share why you should use the ENUMERATE Self Assessment tool, how to access it and what benefits it brings.



# Self reflection and learnings

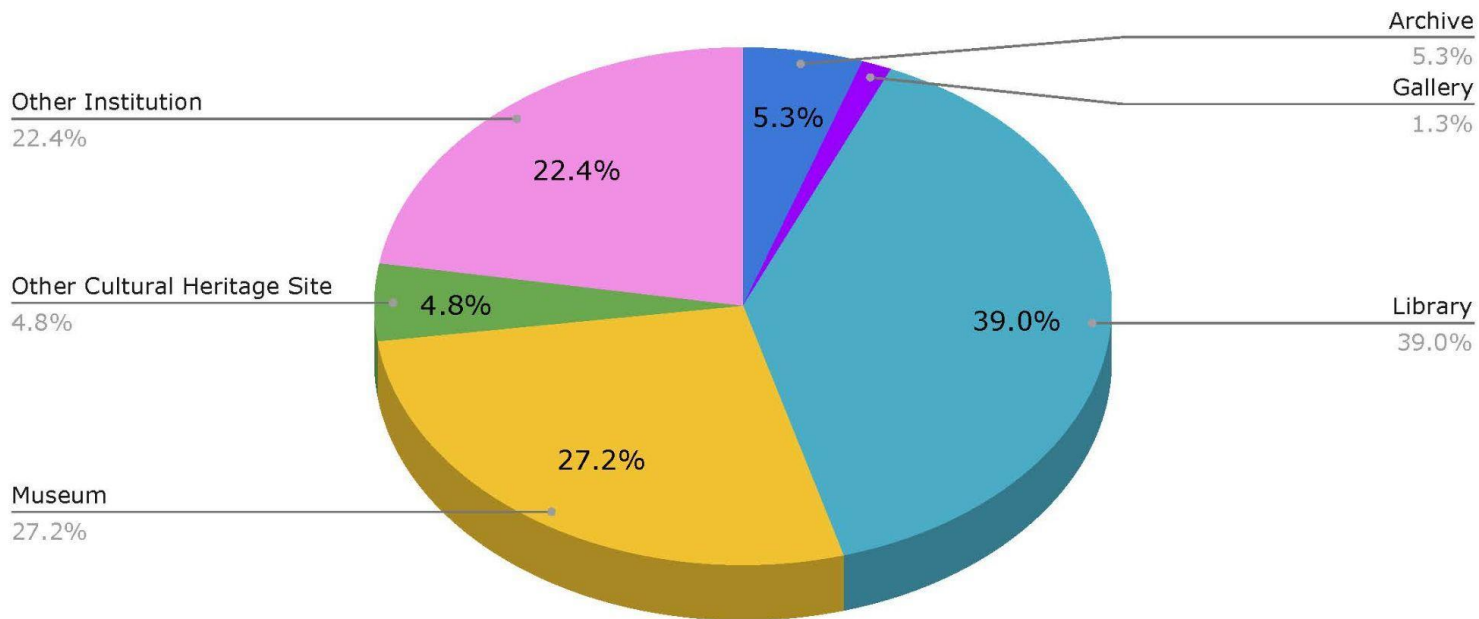
- - Technical issues lead to a data loss
- - Tool too burdensome and can only be used by one user (log-in required for data aggregation)
- - Suggestions not so specific to the user/answers
- - Reluctance to give answers or desire to remain anonymous
- + Value in having discussions within organisations and with heritage professionals
- + Value in the idea of suggestions and benchmarking

# ENUMERATE Results Italy 2022

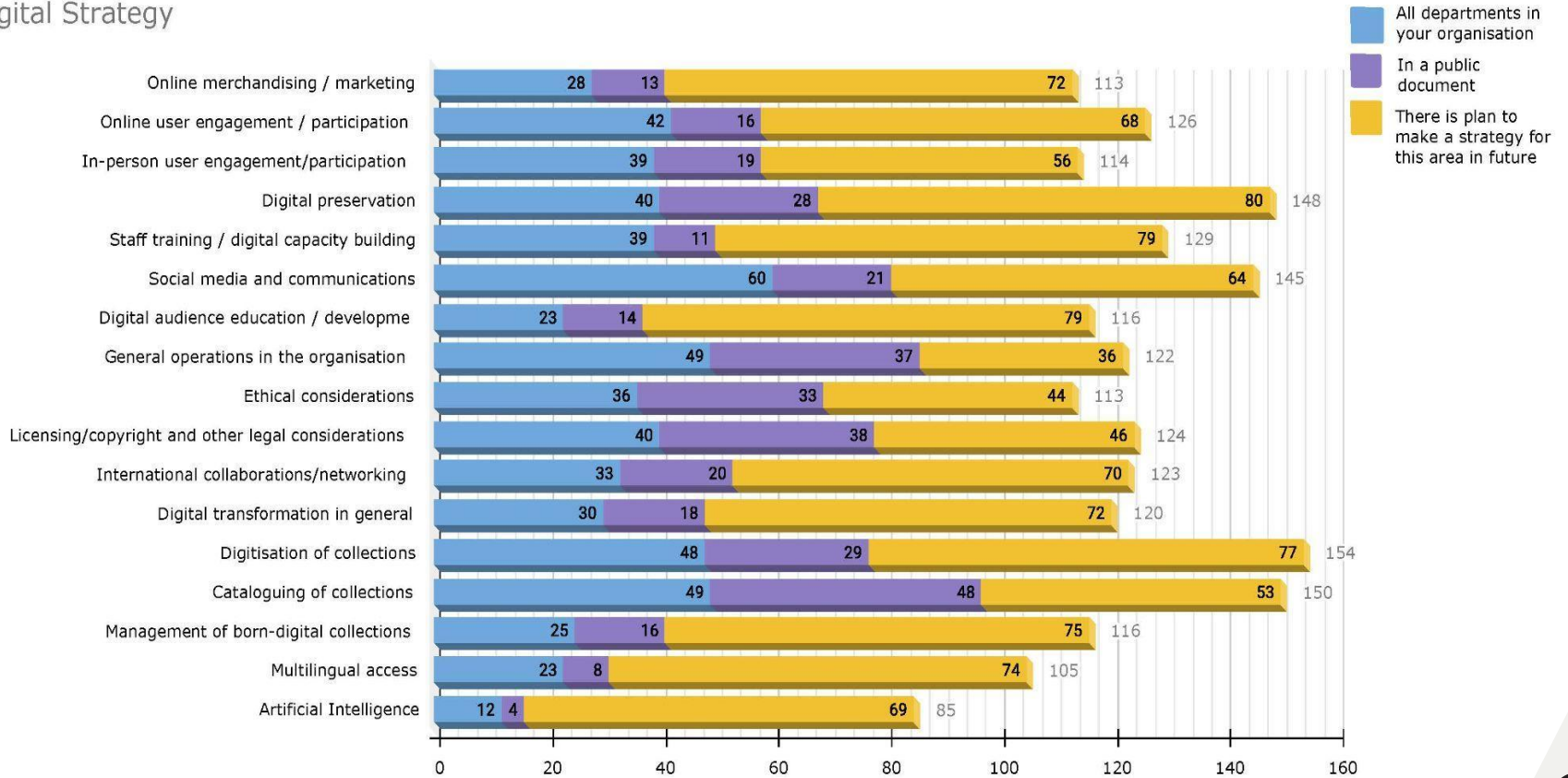




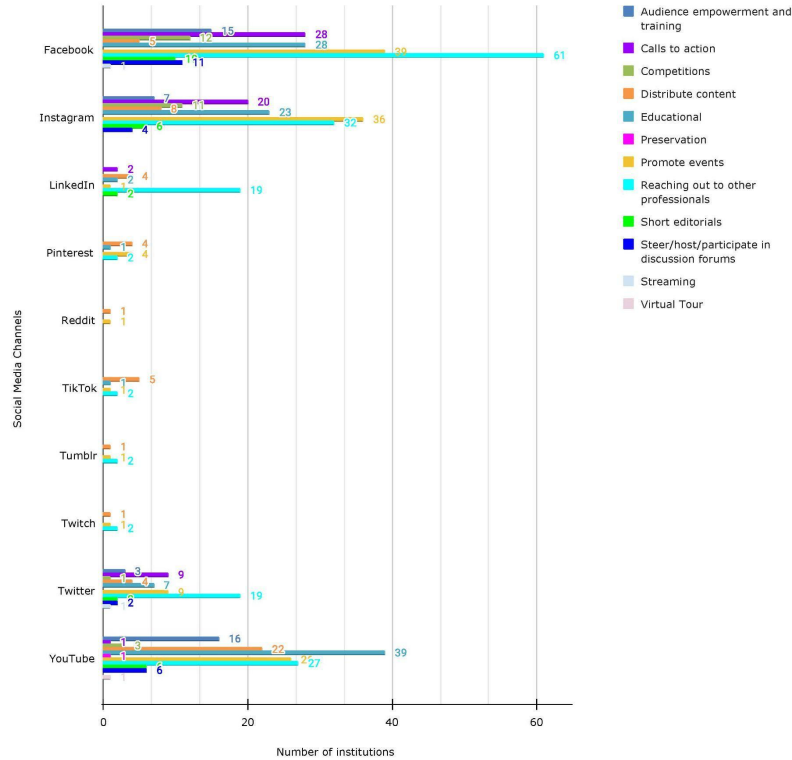
## Domain Response



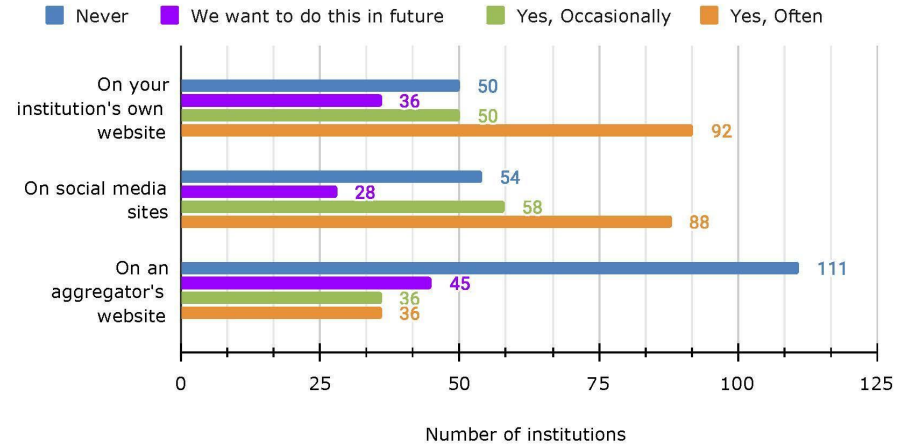
# Digital Strategy



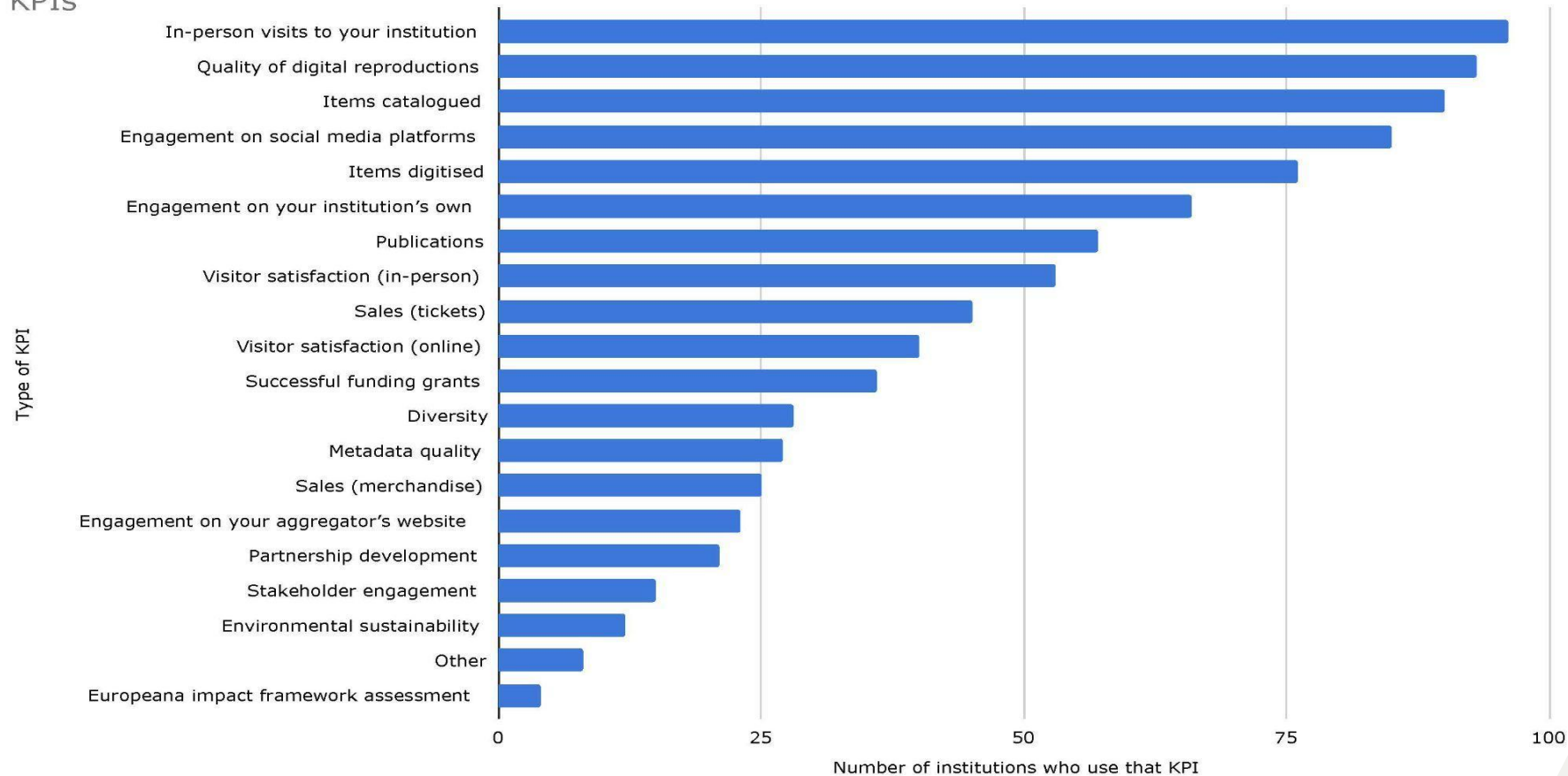
## Use of social media channels



## Monitoring Traffic



# KPIs



# Future

Working together across  
the sector and the data  
space(s)



# Working together

- ENUMERATE invaluable but not (and should not be) the only source of data
- Working together across Europe and data spaces to share quantitative data
- Qualitative data - more market research into our user groups
- Working together across Europe and data spaces to share data
- Agreeing on what we are measuring and indicators
- Not reinventing the wheel - but reinvigorating old ideas

# Next steps

## **Wider Project**

- A new home for ENUMERATE data and other data about the cultural sector and our audiences

## **Tool**

- A new version of the tool that is easier to use
- Export of data for user
- Possibility to compare user data between campaigns
- Data cleaned and analysed for accurate benchmarking
- Improved feedback

## Digital transformation in the data space: measurement and assessment

This Europeana online symposium under the auspices of the Czech Presidency of the Council of the European Union explored how data collection can evidence and further support the digital transformation in the heritage sector.



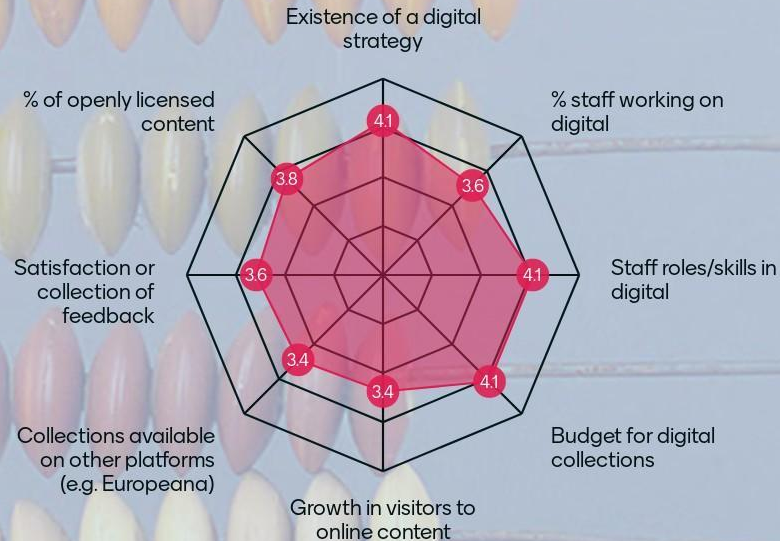
Read more and/or watch the event [here](#)

This Europeana online symposium under the auspices of the Czech Presidency of the Council of the EU explored challenges and opportunities around data collection, and how this could help to evidence, and better support, the digital transformation of cultural heritage institutions. Attendees were introduced to perspectives on indicators and measurements of digital transformation, and the reuse of collections, from important datasets including ENUMERATE.

Members of the European Commission's Expert Group on a common European data space for cultural heritage, relevant representatives from ministries of culture and cultural heritage institutions and other professionals attended to discuss:



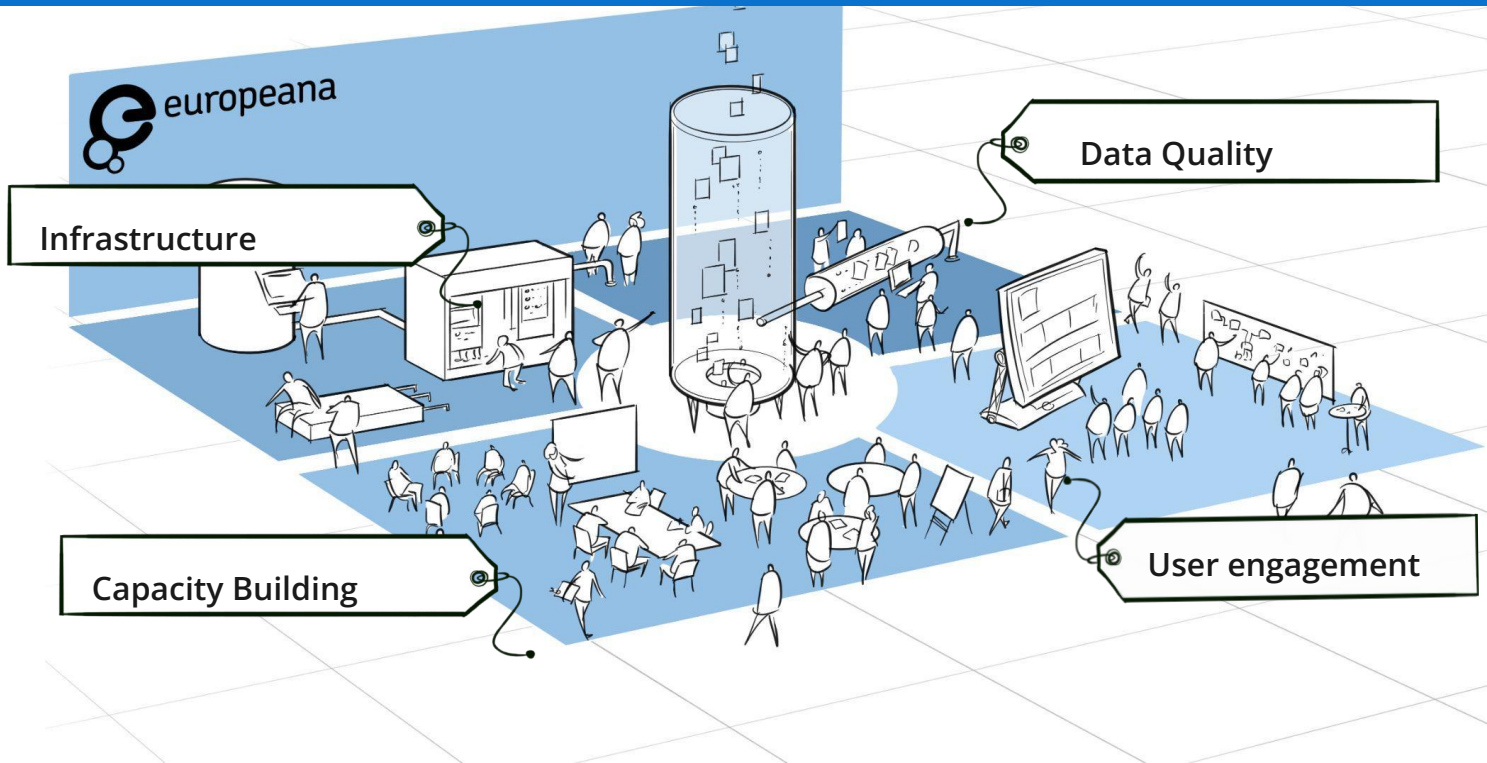
# Rate the following indicators of digital transformation (from not useful to very useful):



# In fewer than three words - what does digital transformation mean to you?

delivering digitally  
new ways engagement  
freedom  
acculturation to data  
improving  
optimise processes  
shifting the ground  
visibility  
public access  
accessibility  
path  
new thinking  
information  
make it accessible  
recreation  
possibilities  
change  
research  
3-d imagery  
modernize  
reuse  
relevance  
access  
using digital in real  
sensitive  
interoperability  
future  
sharing  
change of mindset  
sparking innovation  
faster connections  
intersection  
change in mindset  
modernize  
easy access  
approach openness  
new framework  
virtual environment  
smartphone are powerful

# DATA SPACE FOR CULTURAL HERITAGE





europaena



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