The European Bureau of Library, Information and Documentation Associations

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EBLIDA

"Charting the future of libraries"

What is digital literacy?

A matter of indicators and a vision for the future

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DIGITAL LITERACY

lays out 5 digital competence areas

DigComp 2.2

The Digital Competence Framework for Citizens

With new examples of knowledge, skills and attitudes

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Definition of **Digital Competence:**

- combination of knowledge, skills, attitudes

- involves the confident, critical and responsible use of (and engagement with) digital technologies for learning at work and for participation in society
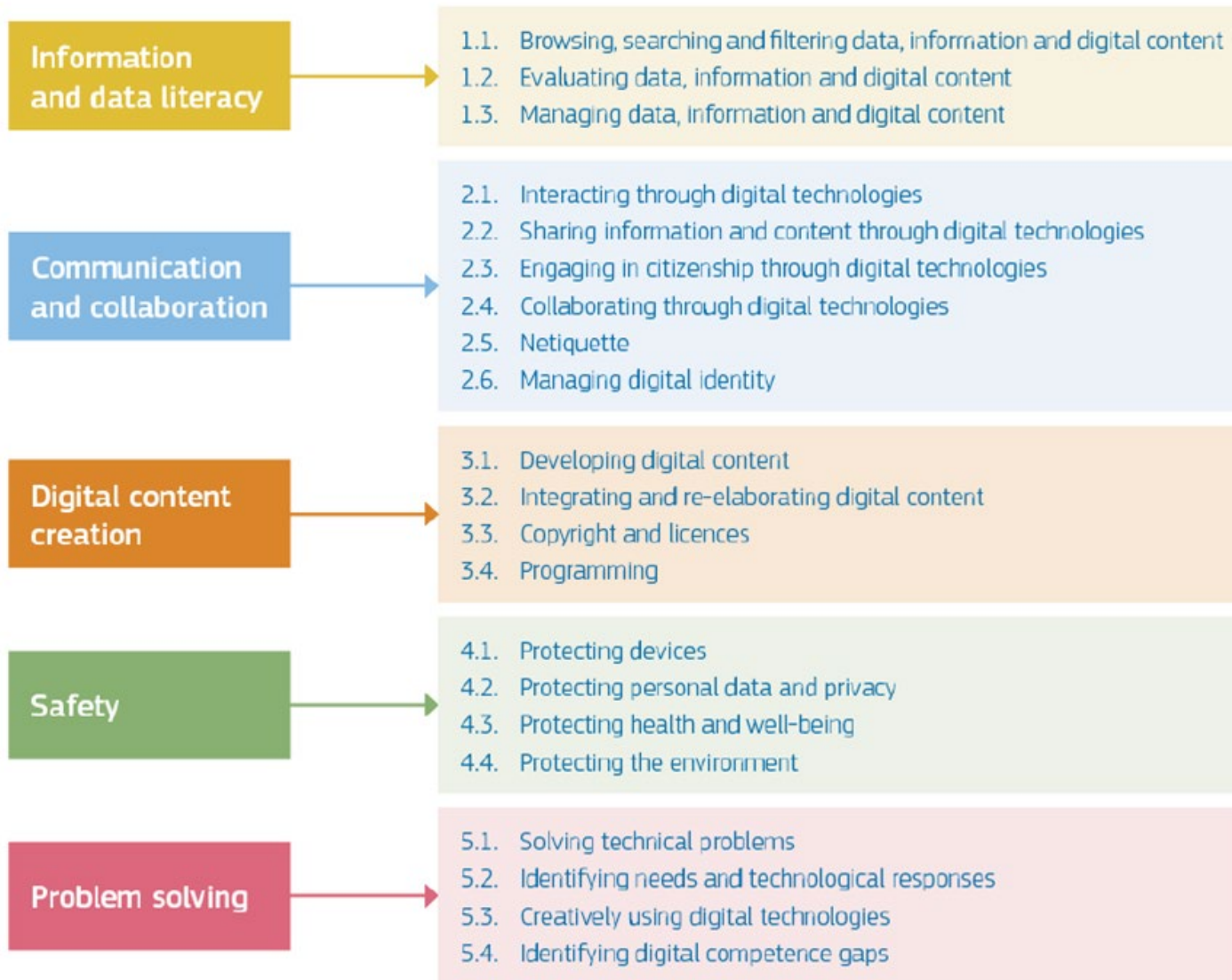
Information and data literacy
1.1. Browsing, searching and filtering data, information and digital content
1.2. Evaluating data, information and digital content
1.3. Managing data, information and digital content

Communication and collaboration
2.1. Interacting through digital technologies
2.2. Sharing information and content through digital technologies
2.3. Engaging in citizenship through digital technologies
2.4. Collaborating through digital technologies
2.5. Netiquette
2.6. Managing digital identity

Digital content creation
3.1. Developing digital content
3.2. Integrating and re-elaborating digital content
3.3. Copyright and licences
3.4. Programming

Safety
4.1. Protecting devices
4.2. Protecting personal data and privacy
4.3. Protecting health and well-being
4.4. Protecting the environment

Problem solving
5.1. Solving technical problems
5.2. Identifying needs and technological responses
5.3. Creatively using digital technologies
5.4. Identifying digital competence gaps

FIG.1   The DigComp conceptual reference model

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Europe's Digital Decade (2020 – 2030) - the course towards a digitally empowered Europe by 2030

https://ec.europa.eu/commission/presscorner/detail/en/IP_21_983

Digital literacy

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Digital_literacy

https://joint-research-centre.ec.europa.eu/digcomp/digcomp-framework_en

❏ Digital literacy is measured by the **digital skills indicator**, which is a composite indicator based on selected activities performed by individuals on the internet in the specific areas:

● until 2019, these included information, communication, problem solving and software

● from 2021 was added safety as an additional area

❏ As of 2021 the following overall **levels of skills** are measured: no skills, limited skills, narrow skills, low skills, basic skills and above basic skills

❏ The data for this indicator comes from the EU survey on the use of ICT in households and by individuals: annual survey conducted since 2002, collecting data on the use of ICT (e.g. the internet, e-commerce, e-government, privacy and protection of personal data, Internet of Things (IoT), Green ICT and digital skills)

Library 4.0 in Croatia

Figure 1. At least basic overall digital skills (% of all individuals), 2023. (56% of people in the EU; 59% in Croatia)

People with at least basic overall digital skills in 2023
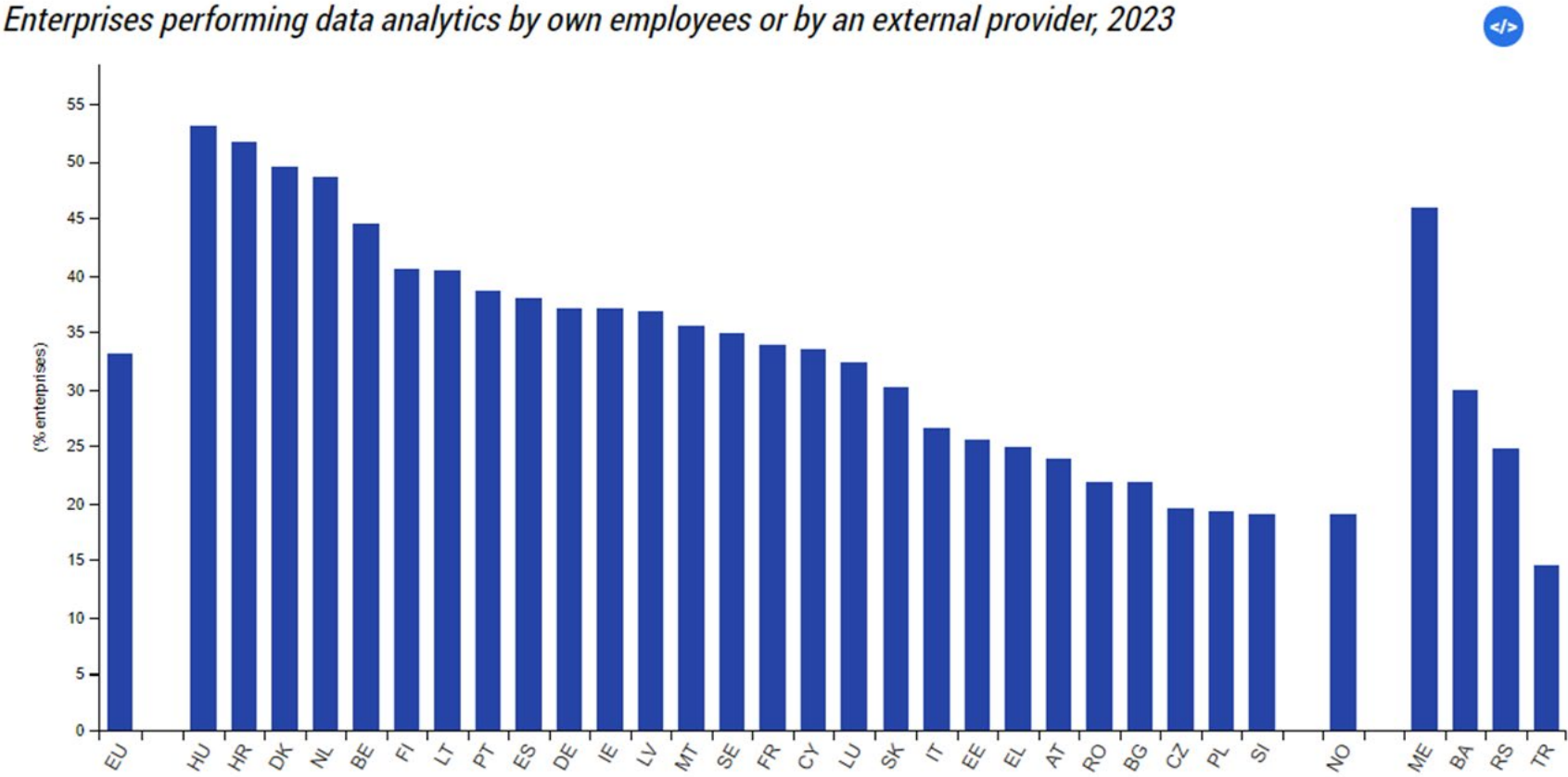(% of people aged 16-74)

Ireland: 2021 data
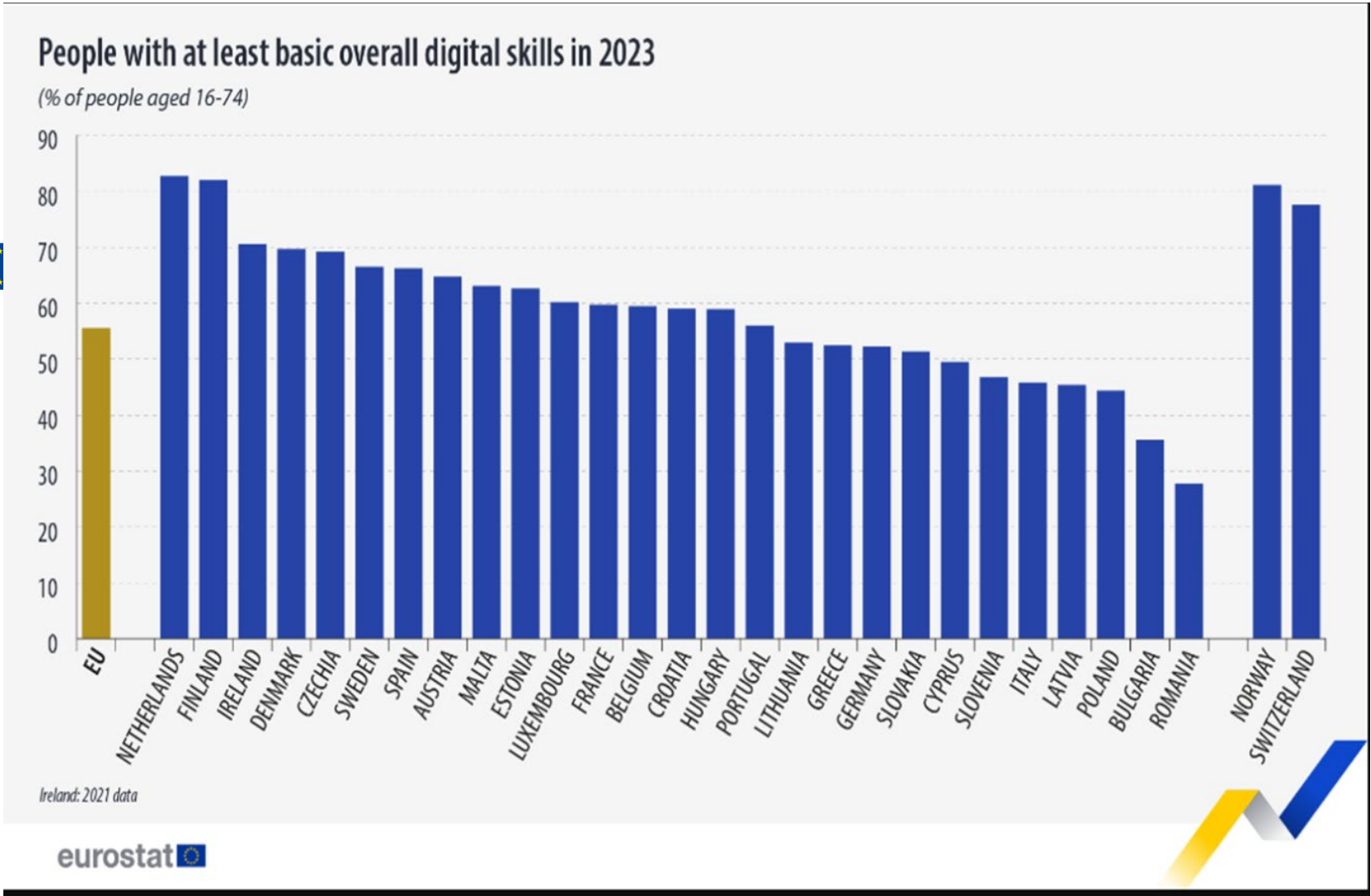
Library 4.0 in Croatia

Figure 2. Enterprises using an AI technology (% of enterprises), 2023. (33.2% EU; 51.7% Croatia)

https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Digital_economy_and_society_statistics_-_enterprises

Enterprises performing data analytics by own employees or by an external provider, 2023

Source: Eurostat (online data code: isoc_eb_das)

eurostat

Legal framework (1)
for the operation of digital libraries and collections

- **Croatian Library Act** (2019, updated in 2022 and 2024)

  https://narodne-novine.nn.hr/clanci/sluzbeni/2019_02_17_356.html
  - includes legal deposit of the digital materials in the National and University Libraray
  - legal provisions laying down regular, free and prompt delivery of 9 copies of all print and non-print publications (meaning books, audio books, audiovisual and electronic materials like compact discs, DVDs, magnetic tapes, floppy disks)
  - online materials (e-books, e-serials, websites, webpages etc.) and digitized copies of library materials)

- **Regulations on Legal deposit** (2020)

  https://narodne-novine.nn.hr/clanci/sluzbeni/2020_06_66_1318.html

  Article 5 - NUL in Zagreb takes care of the protection and long-term preservation of legal deposit of digital and digitized materials

  Article 8 - one copy of the online material is delivered to the NUL in Zagreb

Legal framework (2)

for the operation of digital libraries and collections

- **Standard for digital libraries** (2021)

  https://narodne-novine.nn.hr/clanci/sluzbeni/2021_09_103_1836.html

  Article 4 - The National and University Library in Zagreb is in charge of all digital libraries in the Republic of Croatia that perform the tasks of acquisition, digitization, storage, processing, making available for use and other types of business with digital library material.

- **Regulations on the protection, revision and write off library materials** (2023)

  https://narodne-novine.nn.hr/clanci/sluzbeni/2023_03_27_452.html

  Article 10 - NUL in Zagreb is obliged to create a strategy and a plan for the protection, storage and long-term preservation of digital library material as part of the national system of protection, storage and long-term preservation of digital materials.

- **Guidelines for digitization of cultural heritage** (2020, updated in 2023)

  https://min-kulture.gov.hr/izdvojeno/izdvojena-lijevo/kulturne-djelatnosti-186/digitalizacija-kulturne-bastine-9828/smjernice-za-digitalizaciju-kulturne-bastine/15034

  (Annex: Instructions for the preparation of materials for digitization)

National and University Library in Zagreb - organisational structure

Department:
- Croatian Institute for Librarianship

Divisions:
- Libraries and Librarianship Development Division
- **Croatian Digital Library Development Division** (operates from 2016)
- Academic Centre and Continuous Professional Development Division

Ministry of Culture and Media in July 2022. established National Service for Digital Libraries wich operates in accordance with the Standard for Digital Libraries (2021)

National Service for Digital Libraries is responsible for all digital libraries in Croatia (refers to digital libraries, repository collections) that perform reception, acquisition, digitization, storage, processing, use and other tasks with digital library material.

National and University Library in Zagreb

Register of digital collections and copies (2024):

- under development
- central place for gathering digital collections with information about all libraries that contain digital libraries and/or collections, digitization projects, equipment and important documents for the digitization of materials

- leads to better coordination of digitization of library materials
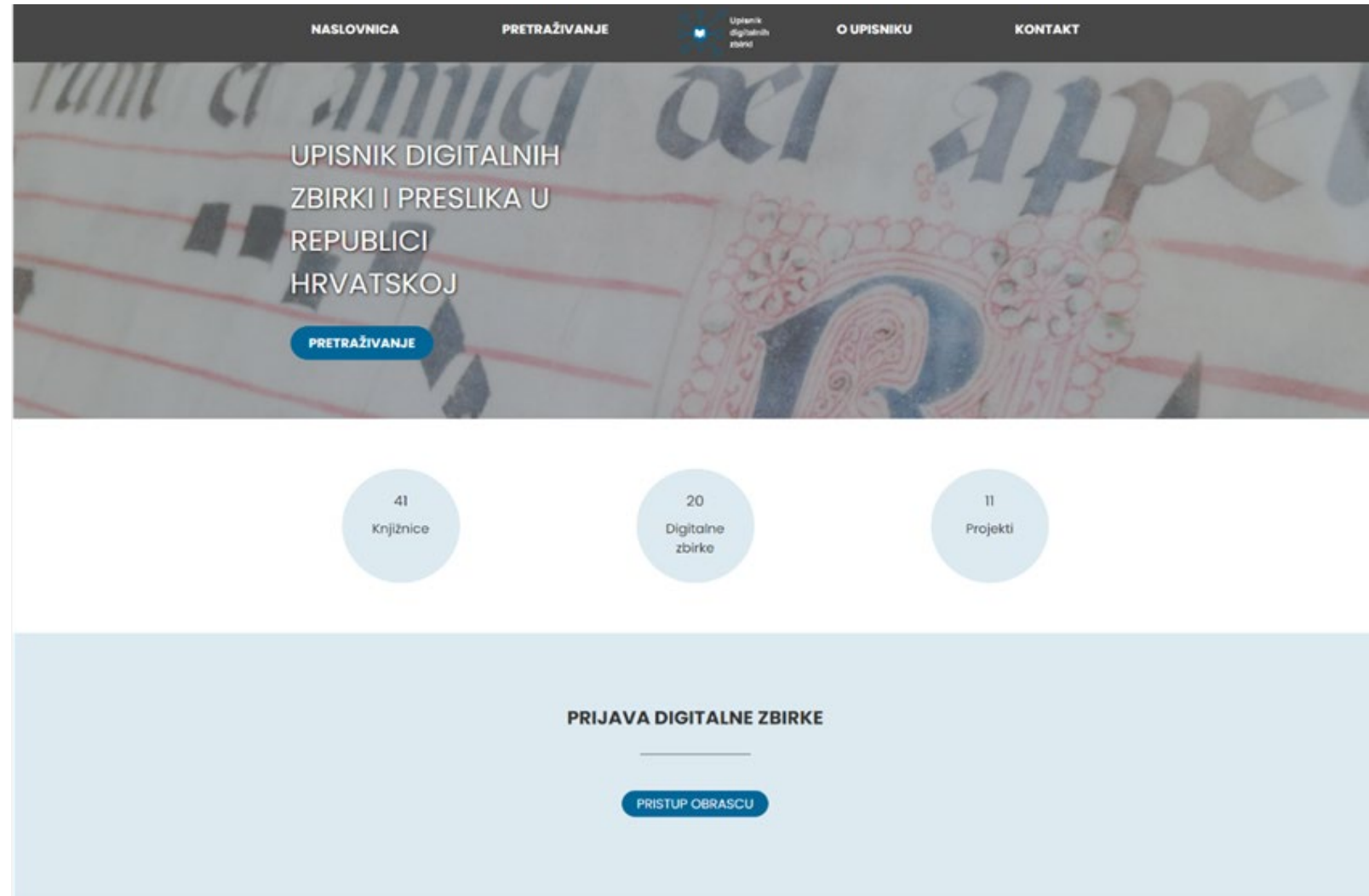
"e-Culture – Digitization of cultural heritage" 2019 - 2023

- The Ministry of Culture and Media implements the project in cooperation with four project partners, the Croatian Radio and Television, the Croatian State Archives, the Museum of Arts and Crafts, and the National and University Libraries in Zagreb

- co-financed within the Operational Program Competitiveness and Cohesion 2014-2020 from the European Fund for Regional Development

- **Guidelines for digitization of cultural heritage** were created as part of the project
  - the goal of the Guidelines for digitization of cultural heritage is to establish and encourage a systematic and uniform approach to the digitization of materials in cultural institutions and to create unique and harmonized norms and specifications regarding the digitization process and parameters

"e-Culture – Digitization of cultural heritage" 2019 - 2023

Results of the project:

- equipment for the digitization of materials was acquired

- Central system for the long-term storage of digital cultural heritage was established in the Shared Services Center (State Cloud)

- e-Culture portal was created and is intended for the digital unification of data on the digital materials of Croatian cultural institutions

- metadata aggregator for Europeana was established

- other elements of system integration and metadata exchange were built for better

  accessibility of the materials of Croatian institutions to international users and the promotion

  of Croatian cultural heritage and the Croatian language abroad

- within the project 20 libraries are registered in the e-Culture system

- around half a million pages have been digitized

"e-Culture – Digitization of cultural heritage" 2019 - 2023

What after the end of the project implementation?

- <u>establish new workflow into the libraries</u>
- continue to digitization of materials on equipment acquired through the project (4 scanners)
- continue current and retrospective storage of digital objects in the Central system for the permanent storage of digital cultural heritage
- continue publishing digital materials on the e-Culture portal
- implementation of the new application for receiving e-legal deposit (eOP)
- creation of virtual exhibitions and promotion of the System
- continue with education for inclusion of libraries in the Central System in order to store digitized materials in the secure repository

Library 4.0 - Intelligent Library

- project **"e-Culture – Digitization of cultural heritage"** of the Ministry of Culture and Media (2019 - 2023)
- preservation of a **legal deposit of the digital materials** in National and University Library in Zagreb
- application **eZaKi** of Zagreb City Libraries

Zagreb City Libraries- eZaKi application

- With your eZaKi profile you can:
  - view and modify your personal data
  - pay online
  - view your reservations, loan history and debts
  - search and browse the catalog
  - borrowing and downloading e-books and audio books

- The eZaKi application is available for use via the website and/or by installing the mobile application.

Croatian Library Association

- **Information Technology Comission** - The primary purpose of the Information Technology Commission is to monitor standards, regulations, principles and practices in the field of information technology in librarianship, and to translate and develop guidelines for their application in Croatia. From this basic purpose comes the work on the permanent education of librarians for the application of information technology in order to improve the work of libraries.
- **International Professional Conference on the Digital Transformation of Official Publications and State Information in the Construction of the Digital Society** - October 26th and 27th, 2023, at the City Library Pula, Croatia.
- Libraries in the Digital Age (LIDA) - conference addresses the changing and challenging environment for libraries and information systems and services in the digital world.

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Commission for Education and Continuous Professional Development of the Croatian Library Association conducted a survey from May to September 2021 with the aim of determining what jobs librarians perform and how they self-assess their competencies.

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Purpose of the survey:

- to examine in which segments there was a need for additional education and improving the knowledge and skills of librarians with regard to everyday life changes and challenges of modern society
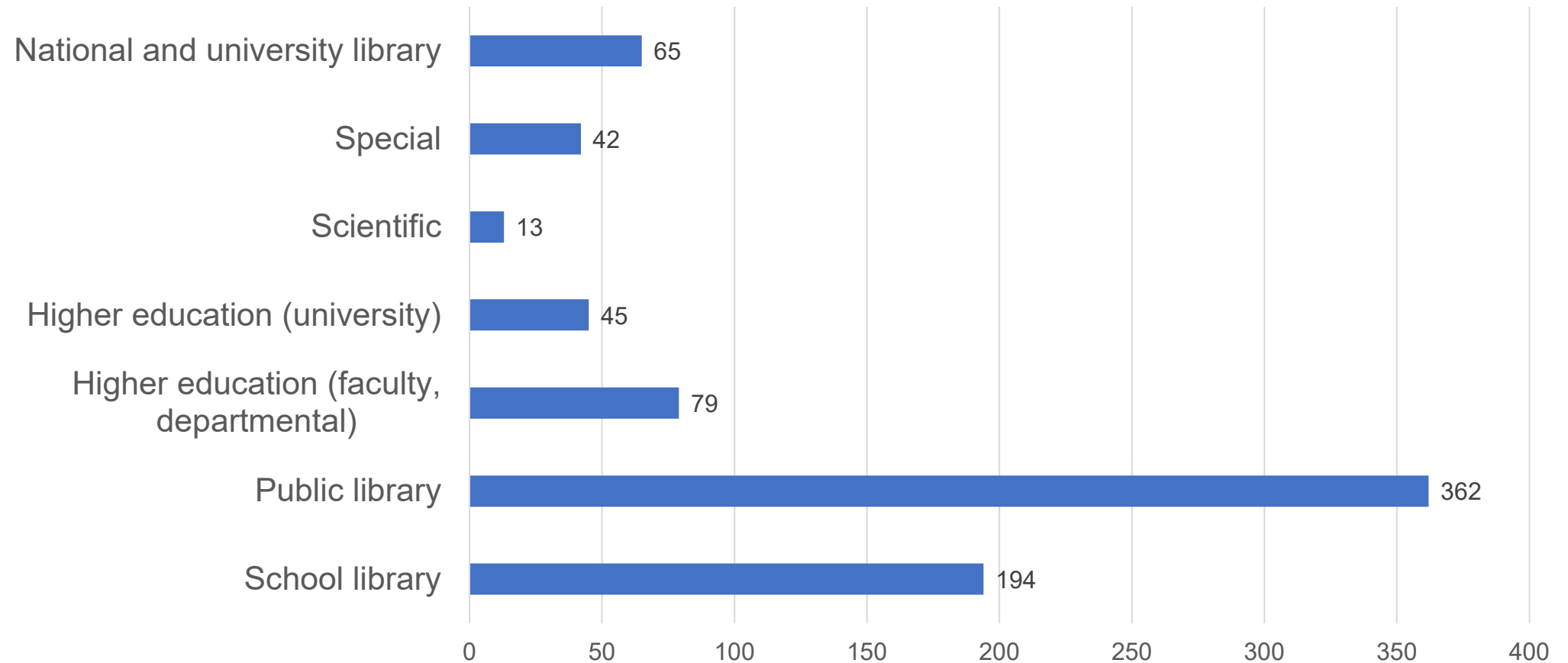
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The questions in the survey were divided into:

- questions related to demographic data and librarian jobs:
  - professional degree
  - type of library
  - job title
  - years of work in the library
  - level of responsibility

- questions about scope of work with possible answers:
  - I do not perform this task at all
  - I rarely perform this task
  - I frequently perform this task
  - I perform this task daily
  - this is the main task I perform

- questions to evaluate competences for the tasks which are performed:
  - I mostly lack competencies.
  - I do not have enough competencies and the possibility of acquiring them.
  - I do not have enough competencies, but I have the possibility of acquiring them.
  - I have sufficient competencies.
  - I have excellent competencies.

Respondent's type of library

National and university library: 65
Special: 42
Scientific: 13
Higher education (university): 45
Higher education (faculty, departmental): 79
Public library: 362
School library: 194
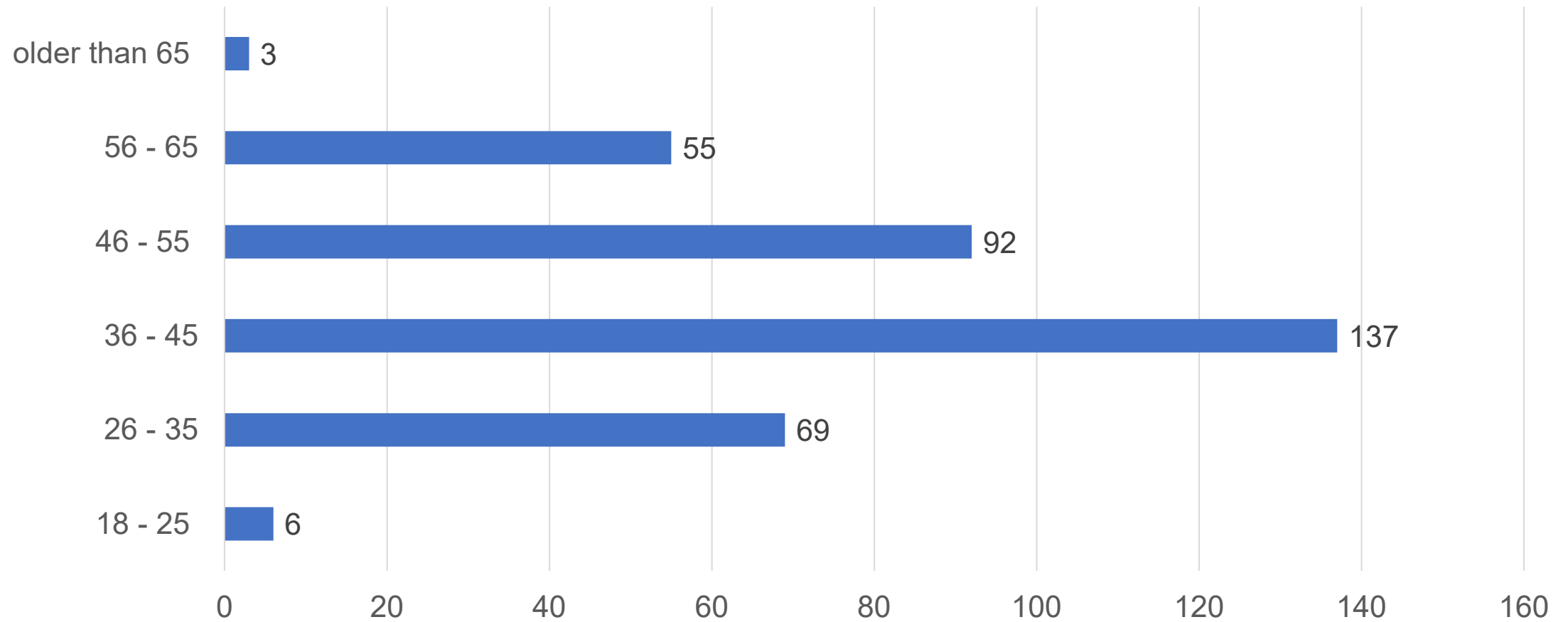
362 respondents from public libraries:

86% are women

80 % are MSc

5% are Ph.D

90% passed state professional exam for librarian

54% have 21-25 years of work

Age of the respondents

Age group	Count
older than 65	3
56 - 65	55
46 - 55	92
36 - 45	137
26 - 35	69
18 - 25	6

How many employees with professional librarian qualifications are in the library?

Gabriel, D. M.; Pleško, J.; 32nd EBLIDA Annual Council and Conference, Lisbon, 2024
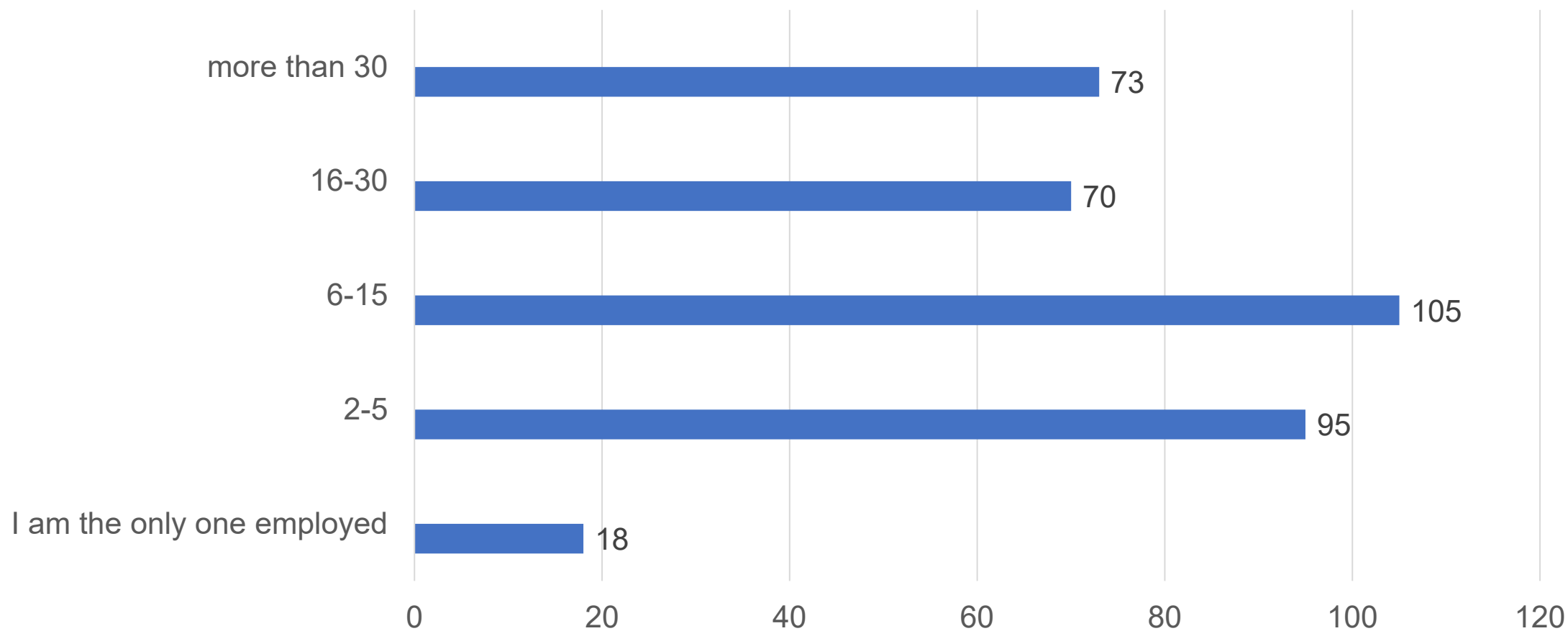
Developing and managing library collections: Digitization

- Storing of digital materials on local library computers
  - do not perform task 53,5%
  - do not have enough competencies 51%
  - have the possibility of acquiring competencies 18%
- Ensuring access to materials
  - perform task frequently or daily 72,5%
  - have sufficient competencies or have excellent competencies 73%
  - have the possibility of acquiring competencies 7,5%

Developing and managing library collections: Digitization

	do not perform this task at all	do not have enough competencies	have the possibility of acquiring competencies
storing of digital materials on local library computers	53,5%	76,5%	35,7%
ensuring access to materials	7%	9%	41%

Developing and managing library collections: Digitization

	do not perform this task at all	do not have enough competencies	have the possibility of acquiring competencies
selection and preparation of materials for digitization	68,5%	76,5%	35,7%
managing copyright and related rights for distribution of digital materials	73%	69,5%	34,5%
working with a scanner or a similar device	62,5%	70,9%	39.2%
processing of digitized materials (metadata)	72,5%	69%	31%

Developing and managing library collections: Digitization

	do not perform this task at all	do not have competencies	have the possibility of acquiring competencies
creating an interface for accessing, tools for searching and viewing digitized materials	78,5%	58,5%	25,5%
developing additional services regarding digital collections (in addition to searching and browsing	77,5%	76,5%	28,7%
negotiating with the company, if digitization tasks are performed outside the library	80%	73,5%	24,5%

Developing and managing library collections: Institutional Repository

	do not perform this task at all	do not have competencies	have the possibility of acquiring competencies
creation and development of repositories	78,5%	76%	25,6%
management / maintenance / input control /corrections in self-archiving (records were entered by the authors)	79%	77,5%	25,8%
Inserting records in the repository	80%	75%	22,6%
Management of copyright and related rights	74%	69%	31,8%

Developing and managing library collections: Institutional Repository

	do not perform this task at all	do not have competencies	have the possibility of acquiring competencies
developing rules and policies for the management and use of repositories (users, content, preservation, storage, rights and licenses, access	78%	72%	24,3%
management of repositories for research data	83,5%	78%	29,5%

Information services

	do not perform this task at all	do not have competencies	have the possibility of acquiring competencies
teaching users information literacy	26,5%	28%	53.57%
teaching users through blogs and social networks	54%	46,5%	41,9%
searching bibliographic and other databases for user needs	8%	12%	31%

Application/Use of information technologies

- Library websites
  - Developing of the library website
  - Maintenance of the library website

- Development of databases, catalogs, and search engines
  - Maintenance and administration of databases
  - Implementation of metadata schemas into databases

- Computer equipment
  - Selection and acquisition of computer equipment for library and user needs
  - Maintenance of computer equipment
  - Installation and maintenance of computer software

	do not perform this task at all	do not have competencies	have the possibility of acquiring competencies
developing library websites	65%	65,5%	29%
maintenance of the library website	48%	49%	17%
application/use of information technologies	35%	49%	34%
maintenance and administration of databases	74%	44%	22%
implementation of metadata schemas into databases	80%	76%	19%

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	do not perform this task at all	do not have competencies	have the possibility of acquiring competencies
selection and acquisition of computer equipment for library and user needs	55,5%	61%	24,6%
maintenance of computer equipment	66%	71%	19%
installation and maintenance of computer software	67%	67%	20%

- Management of metadata, persistent identifiers (ISBN, ISSN, DOI, etc.), UDC, etc. (do not perform this task at all 47,5%)

- Tasks related to the inclusion of publications in indexing publications and/or bibliographic databases (do not perform this task at all 80%)

- Publishing type of work/tasks (do not perform this task at all 48,5%)

If you conduct courses and workshops, please briefly specify the subject/topic and the target audience (e.g., searching online databases for scientists):

- Information Technology for Seniors

- Occasionally, I create guides for database searches and instructions for creating seminar, professional, or thesis papers. I lead a reading group.

- Creative workshops for children and adults, 3D pen drawing workshops for children and adults, art workshops, etc.

- Database search for high school students and pupils, course on using the e-građani (e-citizen) system for retirees.

If you conduct courses and workshops, please briefly specify the subject/topic and the target audience (e.g., searching online databases for scientists):

- Media literacy, database and catalog search for high school students and adult users.

- Programming Basics: users aged 7-18 - Micro:bit, AQ:bit

- Use of video conferencing tools

- Basics of computer usage for seniors

- Searching databases (online) for teachers, high school and elementary school teachers, students; search depends on user needs.

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According to your opinion, what strengthens your competencies the most?

- Available online courses and lectures (70%)
- Independent use of various web resources (90%)
- Reading professional literature (90%)
- Collaboration on projects (81,6)

Future steps

1. **Embrace Digital Transformation**: invest in advanced technologies and modernize

2. **Promote Digital Literacy**: training and workshops for library staff

3. **Enhance Data Privacy and Security**: safeguarding privacy

4. **Collaborate with Tech Partners**: technology companies and academic institutions