



Digitalisation of QA processes Results of the survey

Iordan PETRESCU - ARACIS
Petrișor L.ȚUCĂ - ARACIS



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Digitalisation of Quality Assurance processes

Main objectives of WP7

The main objectives were to map the situation of quality assurance systems in EHEA countries from the perspective of digitization, including changes due to the COVID-19 pandemic and data management and sharing, and to reflect on a vision of a medium-term plan for technology improvement QA based processes and procedures.



Proposed methodology

- ✓ Activities undertaken will examine how quality assurance agencies are integrating digital tools and technologies into their QA existing processes.
- ✓ A survey was conducted to investigate the activities of quality assurance agencies and assess the digital maturity of their processes, resulting in a comprehensive map of the current digital landscape.
- ✓ The data management, external quality assurance processes, data sharing and their security were investigated, including proposed directions of action.
- ✓ Interviews with selected QAAs (to be conducted)
- ✓ The outcomes will be presented and discussed to develop recommendations for action.



Survey Structure

The questionnaire is structured into 7 sections:

- ✓ General data – 3 questions
- ✓ Internal work, procedures and external quality assurance – 7 questions
- ✓ Sustainability and security – 4 questions
- ✓ Partnership and communication – 6 questions
- ✓ Risks – 1 question
- ✓ Perspectives – 1 question
- ✓ Other experiences and approaches – open answer

Most questions contain a variable number of items as potential responses, using a 5-level intensity scale

The questionnaire was sent to ENQA member agencies with a request to complete it online:

<https://forms.office.com/e/cJ71FNeWW8>

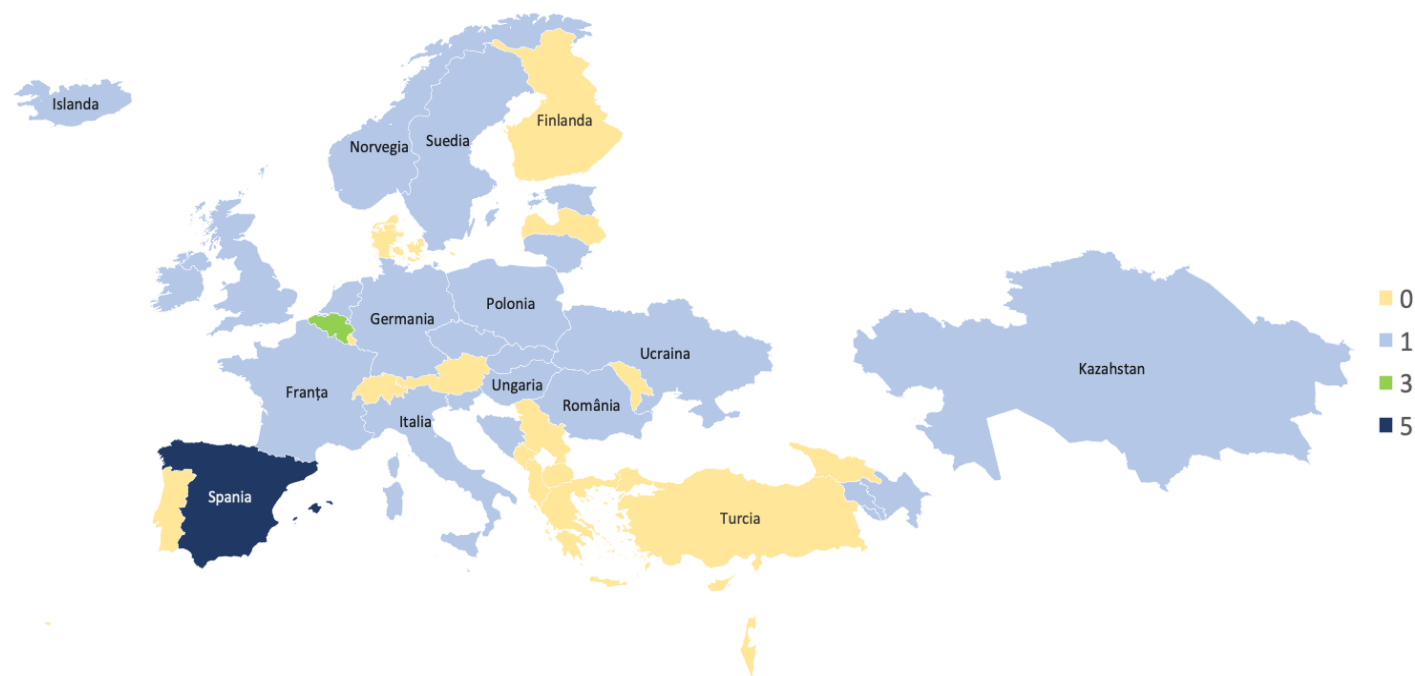


Survey data analysis

- ✓ Survey respondents profiles
- ✓ Unpacking the Data: Insights from Each Questionnaire Section
- ✓ Conclusions at three levels of expectation
- ✓ Examining Relationships Between Responses: A Cross-Tabulation Analysis by Question Category (validation of the responses)
- ✓ Examining the **differential impact** of strategic planning on addressing digital transformation across Quality Assurance Agencies (stratified approach)

Survey respondents profiles

QAA who completed



The questionnaire was distributed online to QAA in 46 countries with 32 respondents from 26 countries. Typically, there was one respondent from each country, except for Spain, which had 5 respondents, and Belgium, which had 3 respondents.

Position of the person filling in the questionnaire

ARACIS Council member
Area Senior Adviser I
Chief Executive
Chief specialist for international cooperation
Director
Director ad interim
Director of Education
Director of Integration
Director of International Affairs
Director of Quality Assurance Department
Director General
Executive Director
Head accreditation, quality assurance and validation of non formal and informal learning
Head of Accreditation Department
Head of agency cooperation and development
Head of Internal Quality Unit
Head of Legal and International Affairs
Head of the agency
Head of the Institutional and Programme Accreditation Division
Information- and Communication Manager Head of Higher Education
Internationalisation and projects manager
Internationalisation Quality Assurance Technician
Member of the Governing Board
Policy advisor
PR and international cooperation specialist
Quality Assurance Officer
Quality Manager
Quality technician
Senior Analyst
Senior Officer for QA

QAA personnel
holding key positions



Unpacking the Data: Insights from Each Questionnaire Section



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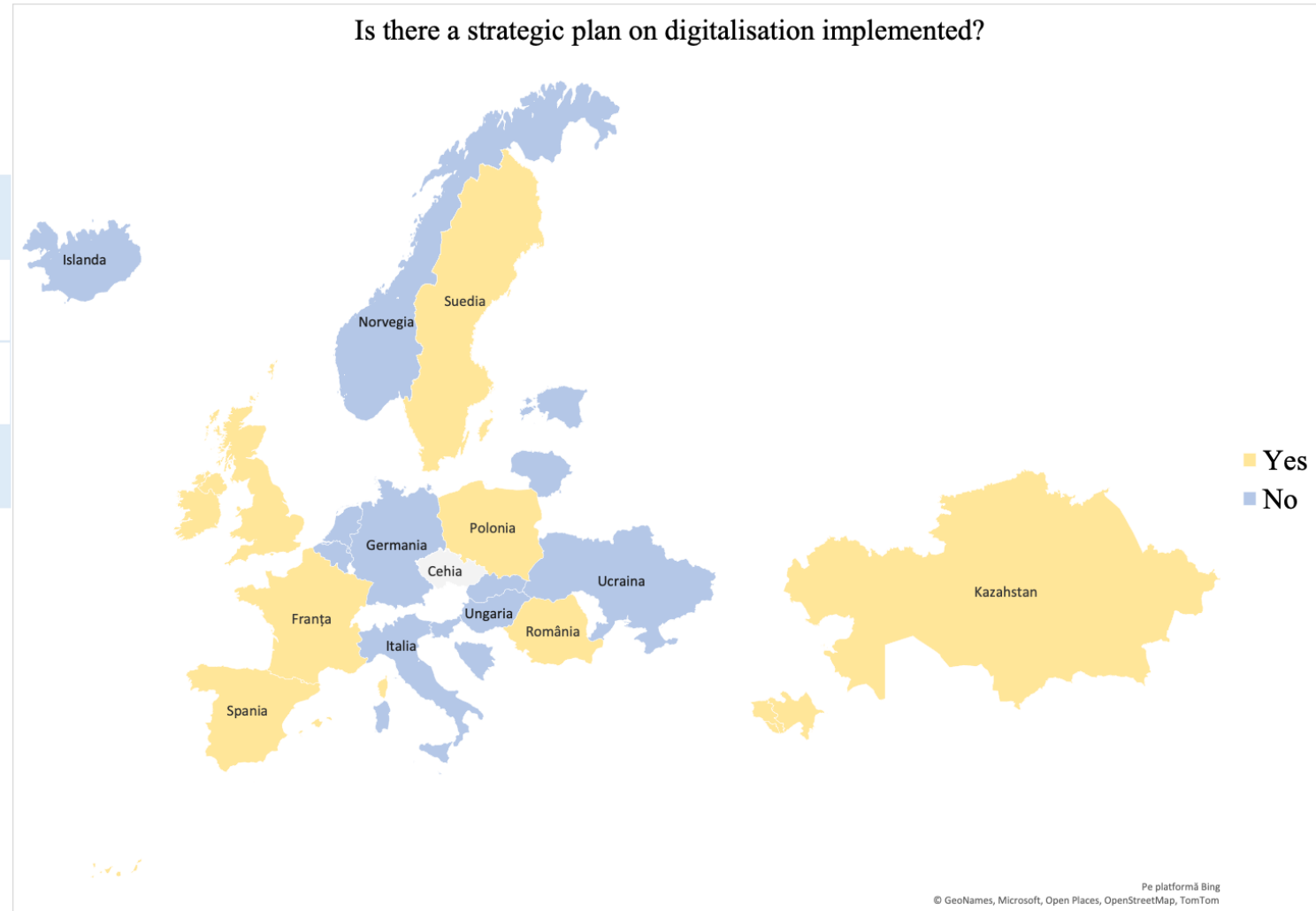


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Section 2. Internal work, procedures and external quality assurance

Q 2.1. Is there a strategic plan on digitalisation implemented?

Variant	Count	Structure %
Yes	14	43,75
No	18	56,25
Total	32	100



Strategic plan implemented

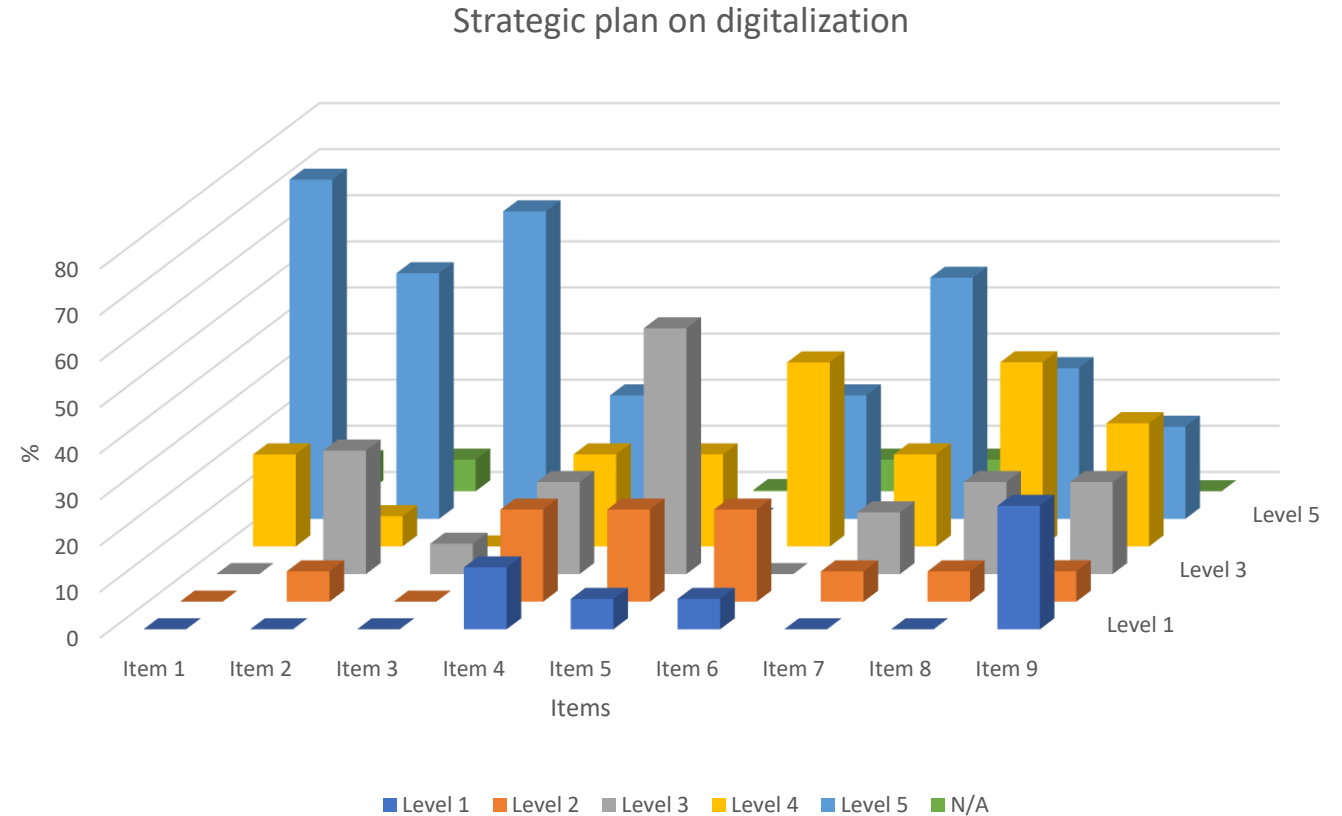
Q 2.1.1 The strategic plan tackles the following:	Count	Structure %
a) Agency's internal processes	2	14,3
b) Both	11	78,6
c) Other answers: Agency's internal processes EQA procedures also targeted but not yet implemented	1	7,1
Total	14	100%

Q 2.1.2. The decision-making body of the Agency adopted the strategic plan	Count
a) Yes	9
b) No	2
c) Other If other, please explain:	3
<ul style="list-style-type: none"> Since NAB is a body of public administration and an organisational unit of the Ministry of education, the digitalization follows from strategic digitalization plan of public administration sphere and the Ministry of education It is not a plan per se, but rather a series of activities led by our data and IT department to simplify the internal processes of the agency (new HR software, new application platform for experts, project management platforms, cybersecurity sensitisation, etc) In progress 	
Total	14

Q 2.1.3. The strategic plan is :	No.
a) Annual	1
b) Multiannual (please specify for how many years): = average 3,67 years	13
2 years	1
3 years	3
3-5 years	1
4 years	1
5 years	3

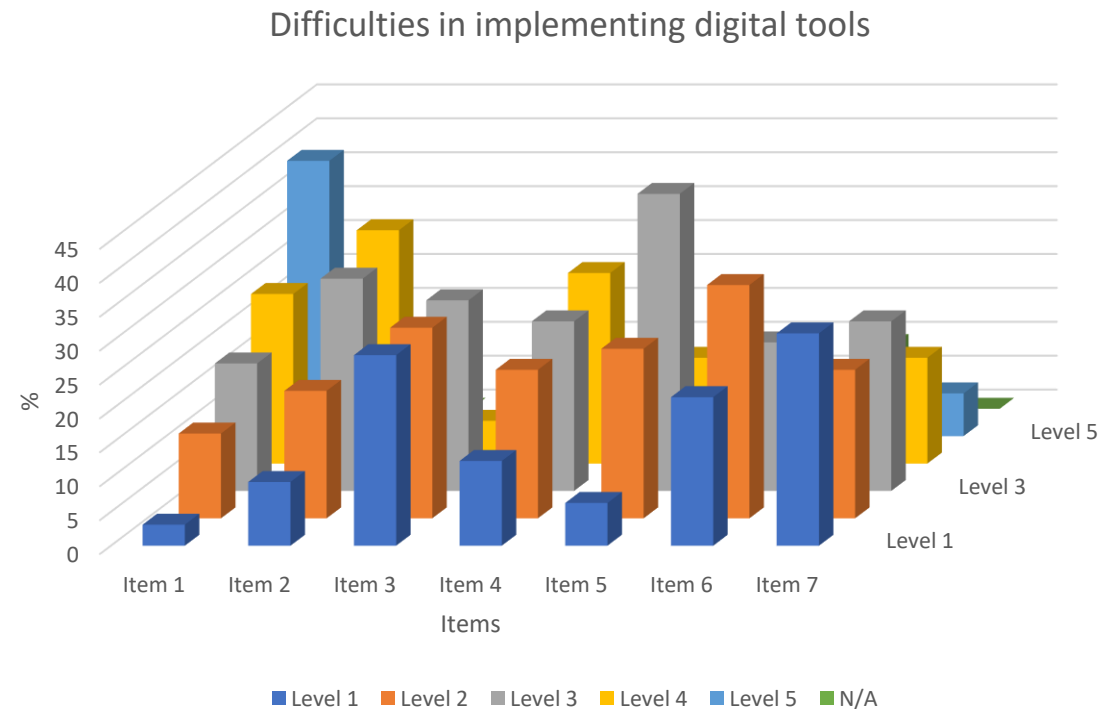
Q 2.1.4. Which of the factors were determinant in elaborating a strategic plan on digitalization

Digitalising specific processes would lead to improved efficacy of internal processes	Item 1
Digitalising specific processes would bring added value to external quality evaluations	Item 2
Information management and data sharing would benefit from digitalisation	Item 3
Optimising costs	Item 4
Need to ensure staff training regularly	Item 5
Responding to conclusions from QA agency internal quality assurance processes	Item 6
Build an integrated data-sharing system including HEIs, public authorities and other stakeholders	Item 7
Ensuring data security and personal data protection	Item 8
External requirements provided by legislation	Item 9



Q 2.2. Which are the main difficulties in designing and implementing digital tools?

Resources needed and costs	Item 1
Staff competences	Item 2
Resistance to change within the organisation	Item 3
Interoperability and compatibility between new and old systems	Item 4
Data security and protection	Item 5
Resistance from HEIs to the implementation of digital tools	Item 6
Outdated or inadequate infrastructure	Item 7





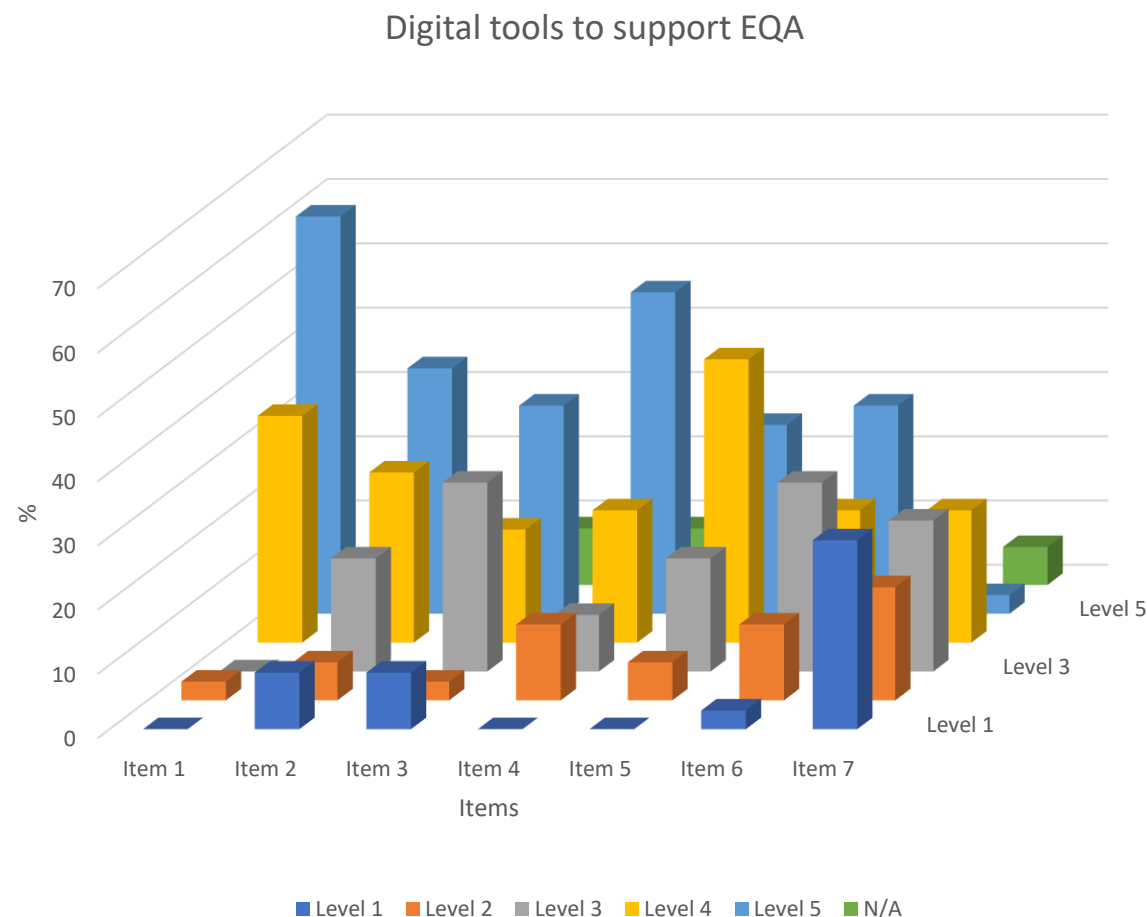
Cross-tabulation analysis on digital tools to support the strategic plan

A cross-tabulation analysis of the digital transformation strategic plan was conducted to examine the relationships between strategic objectives and the obstacles experienced during the implementation of digital tools. aiming to identify key areas for improvement and alignment:

- ✓ The cross-tabulation analysis highlight the importance of aligning strategic priorities with operational realities to overcome implementation challenges.
- ✓ **Effective resource management, comprehensive staff training, and robust data management practices are crucial for successful digital tool adoption.**
- ✓ Additionally, addressing organizational resistance through effective change management strategies and continuously refining digitalization approaches are vital for sustained success.

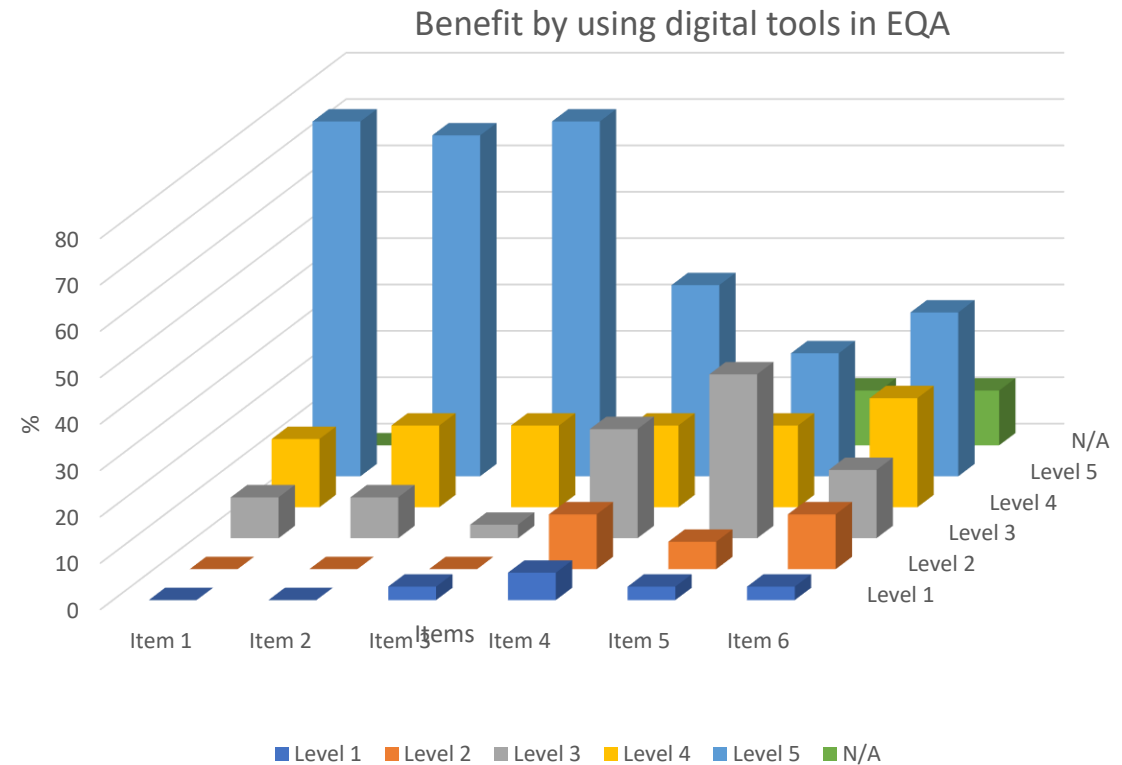
Q 2.3 Which are the main objectives of your agency for using digital tools to support external quality assurance processes?

Increased efficiency by using digital tools such as online platforms or mobile applications	Item 1
Improving assessment outcomes by using specialised platforms developed in-house and by incorporating advanced algorithms and data analysis techniques	Item 2
Automation of evaluation processes such as data collection and report writing. including infographic reports	Item 3
Increased accessibility of assessment results for HEIs. students. academics. employers and other stakeholders. as well as the public authorities	Item 4
Increase collaboration and communication between various stakeholders to support quality assurance transparency	Item 5
Increasing the flexibility and adaptability of the external assessment process to respond rapidly to the changing needs of the education system	Item 6
Integration of AI. Machine Learning and/or robot process automation (RPA) in the platforms used within the agency.)	Item 7



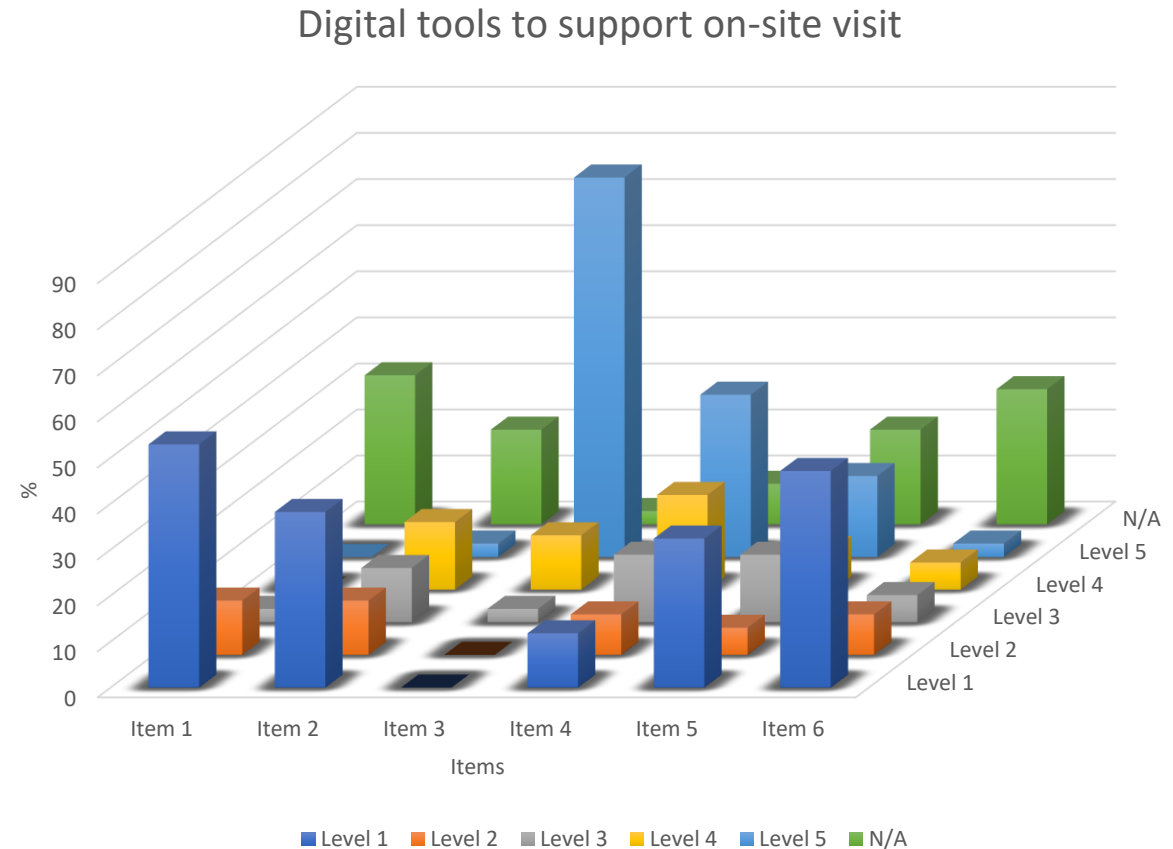
Q 2.4 Which are the main benefits observed or anticipated to be obtained by using digital tools to support external quality assurance processes?

Increased efficiency and automation	Item 1
Increased access and better management of information and data-based decision making	Item 2
Collect and analyse data in real-time. leading to swift adaptation to beneficiaries' needs	Item 3
Integrated quality assurance processes and use of data analysis tools	Item 4
Real-time monitoring and reporting systems. leading to increased transparency	Item 5
Increased flexibility and accessibility for the beneficiaries	Item 6



Q 2.6 Which of the following digital tools your Agency uses to support on-site visits?

360 virtual views that allow users to explore a location or virtual space through a web interface or app	Item 1
Virtual tours involving guiding the user through different points of interest or different areas of a location	Item 2
Video conferencing allowing users to communicate in real-time with people in another location through an Internet connection and a video conferencing application	Item 3
Online presentations of information about a location or space using a multimedia presentation that can be accessed online	Item 4
Live streaming allowing the live transmission of events or activities from a location or space through an Internet connection and a live streaming application	Item 5
Mobile applications used to provide access to information about visited places or activities and to allow users to interact with them	Item 6





Cross-tabulation analysis on digital tools to support external quality assurance processes

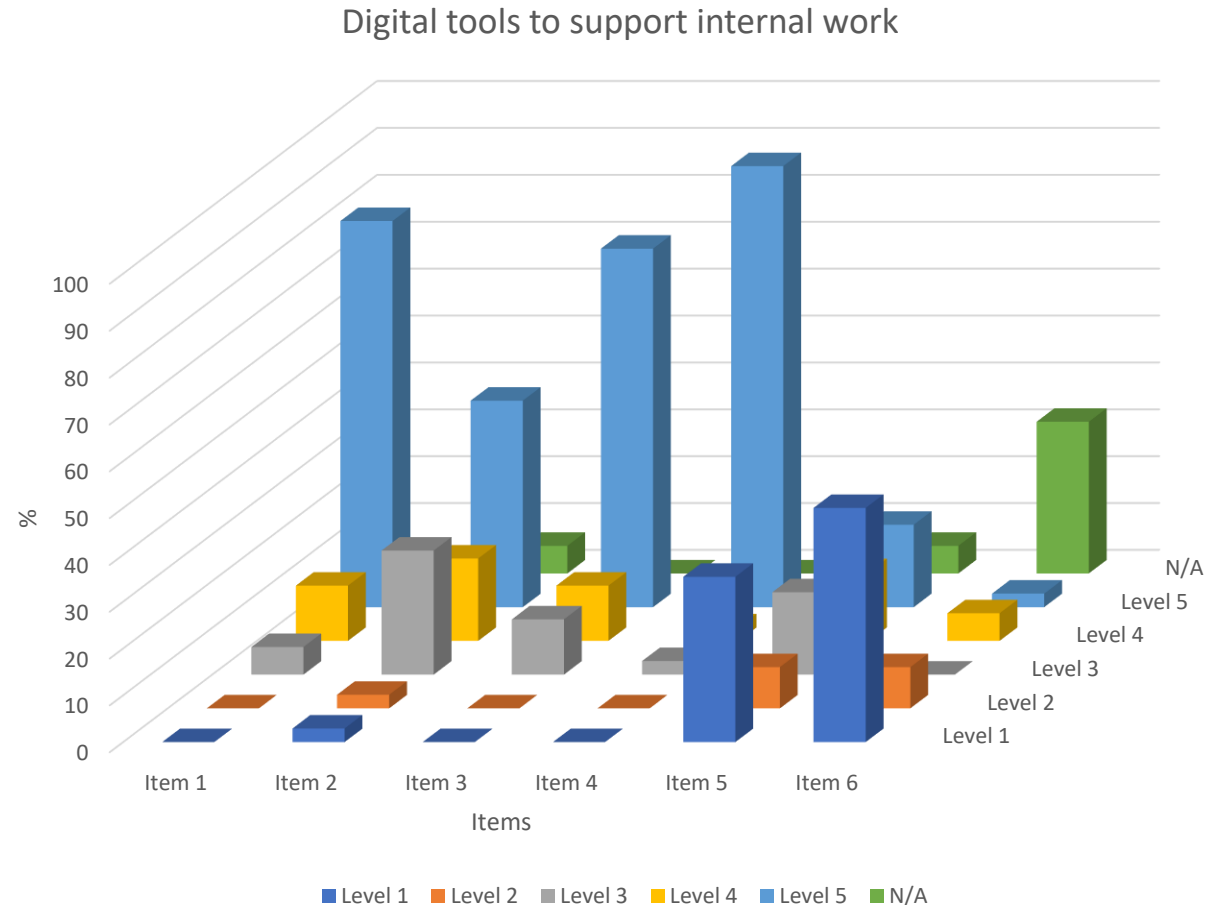
A cross-tabulation analysis of digital tools to support external quality assurance processes was conducted in order to highlight the relationship between tool adoption and the effectiveness of quality assessments across various QAA institutions.

Summary:

- ✓ The cross-tabulation analysis indicates **a comprehensive and strategic approach by QAAs towards employing digital tools** for enhancing external quality assurance processes.
- ✓ **There is a clear consensus** on the importance, relevance, and prioritization of digital tools, aligning them with key objectives such as efficiency improvement, outcome enhancement, accessibility promotion, transparency fostering, collaboration facilitation, and flexibility enhancement.
- ✓ By **investing in and prioritizing the right digital tools**, QAAs aim to optimize their quality assurance processes, meet stakeholder needs, and drive innovation in the education sector.

Q 2.7. Which digital tools are used to support the internal work of the Agency?

Online collaboration platforms like Google Suite. Microsoft Teams etc. or developed in-house. which allow different departments to work together on documents. discuss and plan activities in real time	Item 1
Document Management Systems (DMS) that enable electronic documents to be stored. edited. shared. managed and accessed in an organised and controlled manner	Item 2
E-mails and calendar for planning and organising meetings	Item 3
Video conference (in: Zoom. Google Meet. etc.) for team discussions and meetings	Item 4
Specialised mobile applications that allow communication and access to data and information at any time and from anywhere	Item 5
Artificial intelligence technology that enables the automatic analysis of assessment data. the identification of trends and strengths and weaknesses. and helps to make decisions based on real-time information	Item 6





Summary - digital tools used to support the internal work of the Agency

Based on the data provided about the digital tools used to support the internal work of the Agency and their levels of relevance, we can derive the following insights:

1. Online Collaboration Platforms: like Google Suite and Microsoft Teams, or those developed in-house, are considered highly relevant

2. Document Management Systems (DMS): that enable the storage, editing, sharing, and control of electronic documents are also perceived as important, with a substantial relevance rating

3. E-mails and Calendar: E-mails and calendars for planning and organizing meetings are rated as highly relevant highlighting their essential role in communication and scheduling activities within the Agency.

4. Video Conferencing: like Zoom and Google Meet are considered very relevant for enabling team discussions and meetings, especially in remote or distributed work settings.

5. Specialized Mobile Applications: Specialized mobile applications allowing communication and access to data from anywhere received varying levels of relevance.

6. Artificial Intelligence (AI) Technology: for automatic analysis of assessment data and decision-making based on real-time information is perceived as less relevant for for the moment.

Section 3. Security and Sustainability

.1. Has your Agency established a dedicated digitalisation department? YES/NO

Row Labels	No. respondents
NO	27
YES	5
Grand Total	32

How many part-time positions are in the structure?

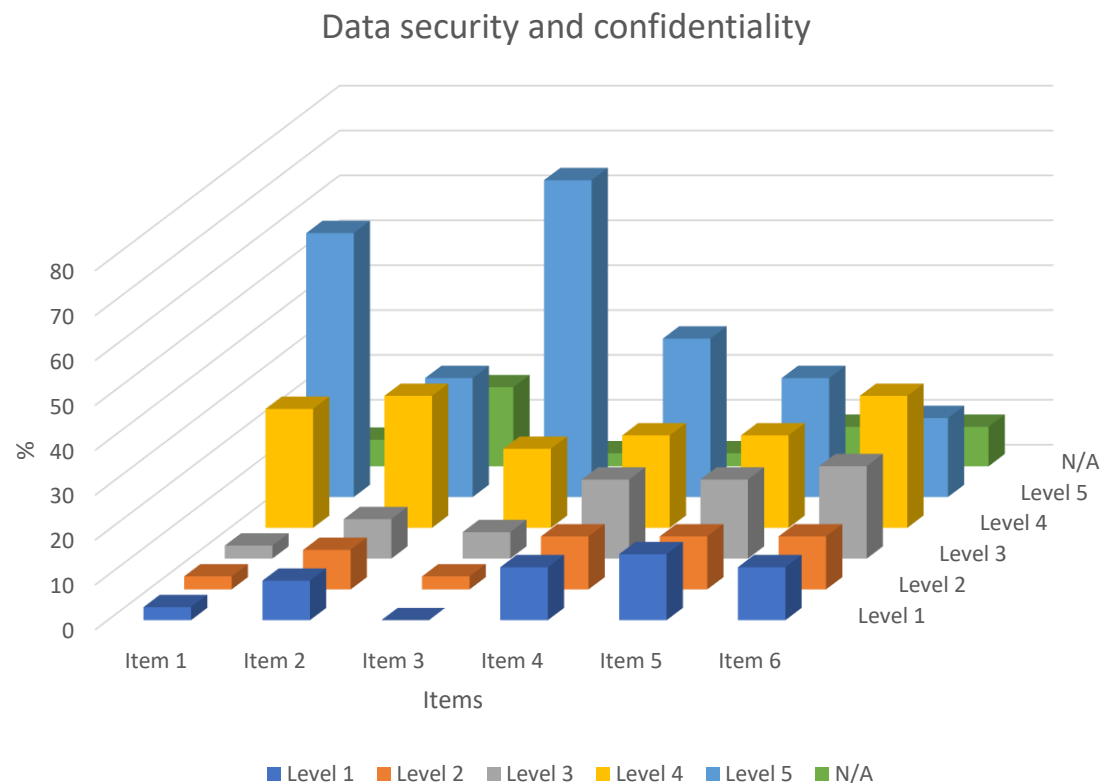
Answer	No. respondents
0	1
0.5	1
2	2
Extensive use of dev-ops contractors alongside staff	1
Total	5

Is the staff hired based on a permanent contract?

Answer	No. respondents
1.5 permanent and 3 external consultants	1
Both. depending on the staff (some are permanent and civil servants while others are recruited to work up to 6 years at Hcéres)	1
Part hired on permanent contract. part with other contractual forms	1
Yes	2
Total	5

Q 3.2. What measures do you implement for data security and confidentiality in the work of the Agency?

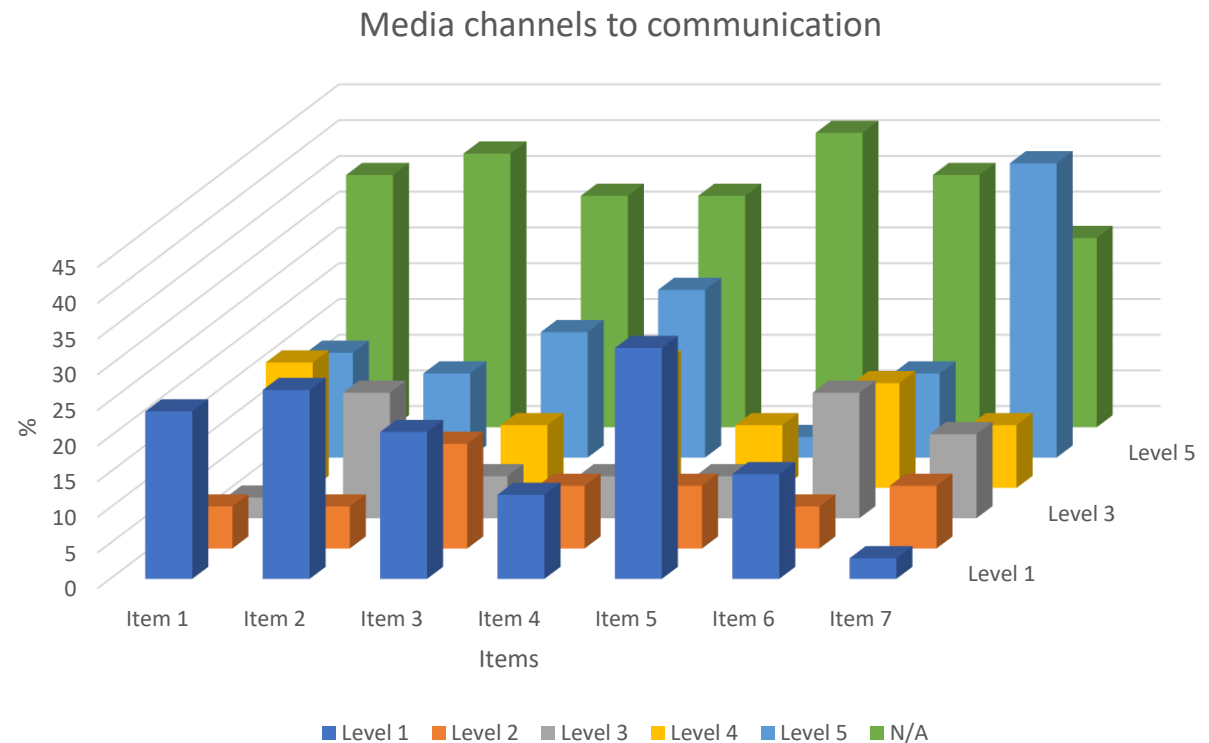
Implementing a data security policy that complies with applicable standards and regulations. such as GDPR or HIPAA	Item 1
Using encryption to protect sensitive data	Item 2
Limiting access to collected data to authorised personnel only	Item 3
Staff training on security practices and data protection	Item 4
Conduct security breach testing and continuous assessment of security systems	Item 5
Development of an action plan for security incidents and its implementation	Item 6



Section 4. Partnerships and Communication

Q 4.1.1. Which media channels are used by the Agency to disseminate information and communicate with the beneficiaries and stakeholders?

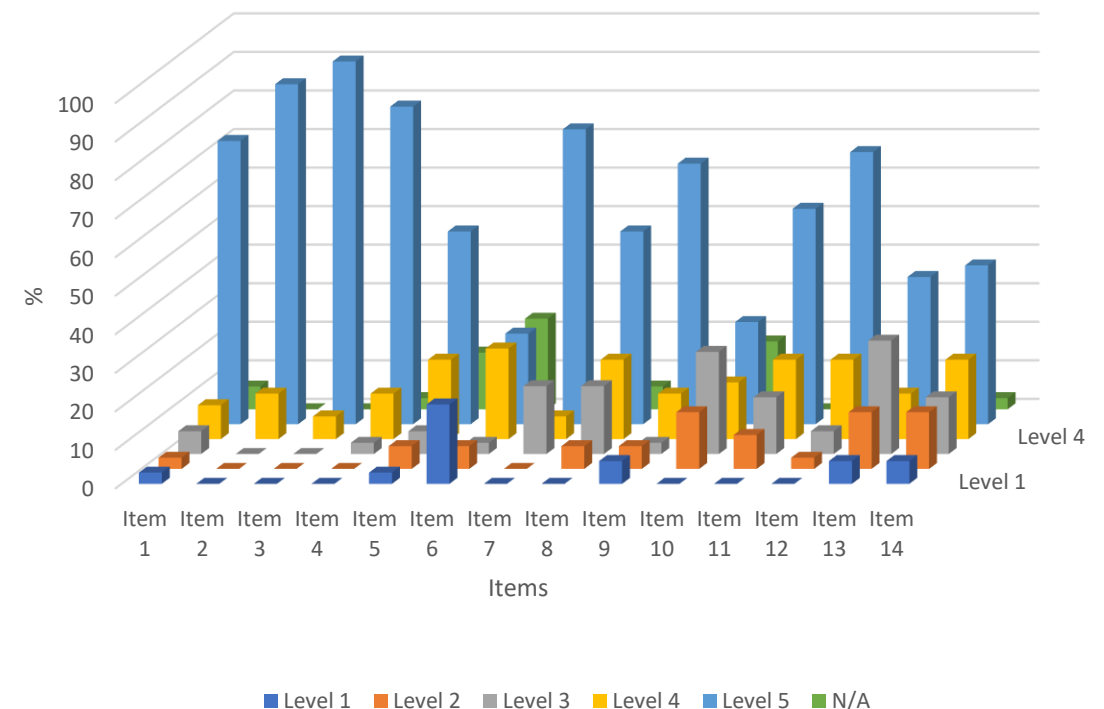
Facebook: Used to create agency pages. post updates and interact with beneficiaries	Item 1
WhatsApp or similar: instant messaging application that allows communication with beneficiaries and partners through private or group messages	Item 2
Twitter: Used to post news and quick updates and to interact with beneficiaries and partners	Item 3
LinkedIn: used to build professional networks. find partners and promote products and services	Item 4
Instagram: used to showcase products and services and increase brand visibility	Item 5
YouTube: Video platform used to create and share videos. including tutorials. product presentations and marketing messages	Item 6
The Agency website is optimised for the use of mobile devices	Item7



Q 4.3. Which information and tools are accessible for the beneficiaries on the Agency website?

Agency contact information: e-mail addresses and phone numbers for various departments or persons	Item 1
Information on national or international quality standards and policies that govern the assessment process	Item 2
Guidance and references for HEIs preparing for external assessment to help them understand the external assessment process and support them in preparing documentation	Item 3
Detailed information on the stages of the assessment process. application procedures by assessment type. the methodology used. assessment criteria and standards. conditions for obtaining accreditation and its recognition	Item 4
The evaluation schedule. including deadlines for submitting documents and evidence and scheduling evaluation visits	Item 5
Information about the evaluation panel including expert profiles or their curriculum vitae	Item 6
Evaluation results. including final reports and decisions	Item 7
Appeals and complaints procedures and outcomes	Item 8
Information on follow-up procedures	Item 9
Information on support opportunities for the evaluated HEI	Item 10
Press releases and news	Item 11
Information on events	Item 12
Links to other relevant resources. quality assurance agencies or educational organisations	Item 13
Information on other agency activities such as projects	Item 14

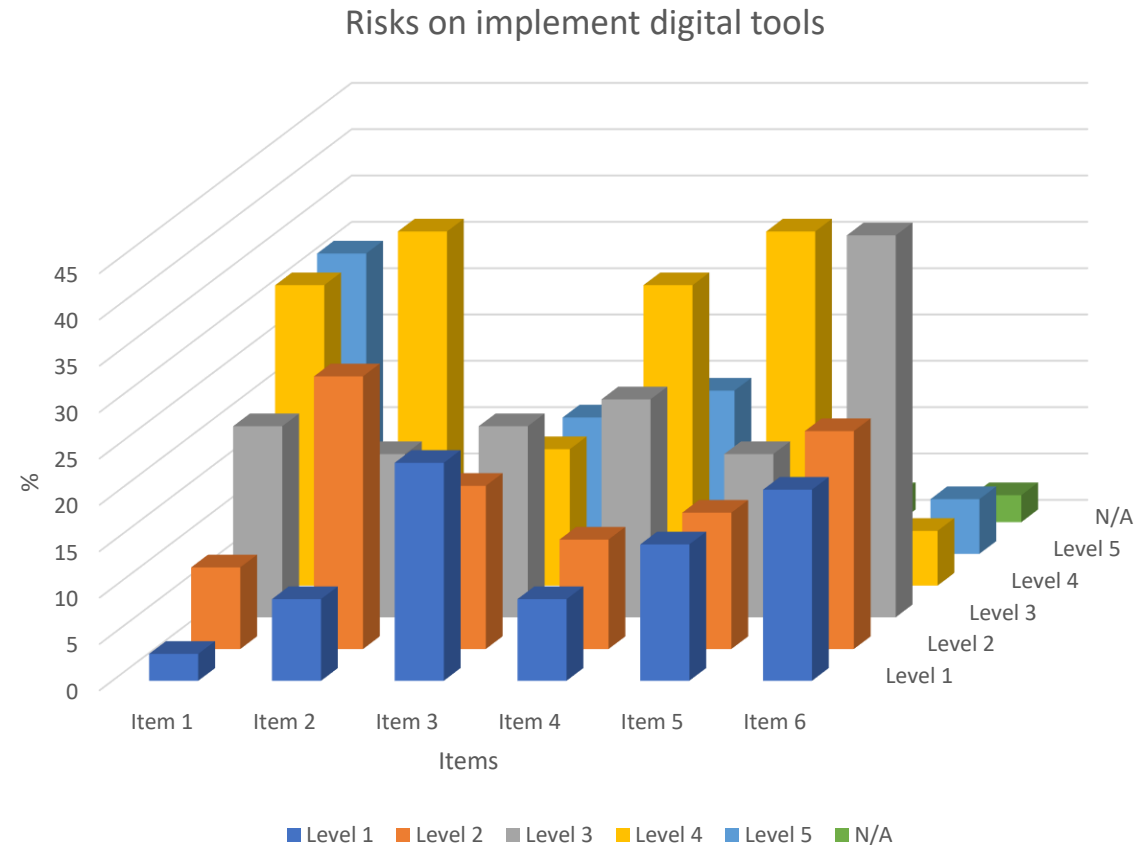
Information accessible on Agency website



Section 5. Risks

Q 5. Rate the risks related to the implementation of digital tools.

Cybersecurity risks may affect the security of data and IT systems. compromising confidential information and personal data	Item 1
Difficulties in ensuring all users access. regardless of their level of digital skills or availability of the necessary equipment	Item 2
Difficulties in adapting the technology to the specific needs of each HEIs for each study program	Item 3
The risk of increased technology implementation, maintenance and upgrade costs	Item 4
The risk of becoming too dependent on technology leading to the impossibility of functioning in case of failure and data loss	Item 5
Uncertainties related to the validity and reliability of information collected	Item 6



Comparative analysis

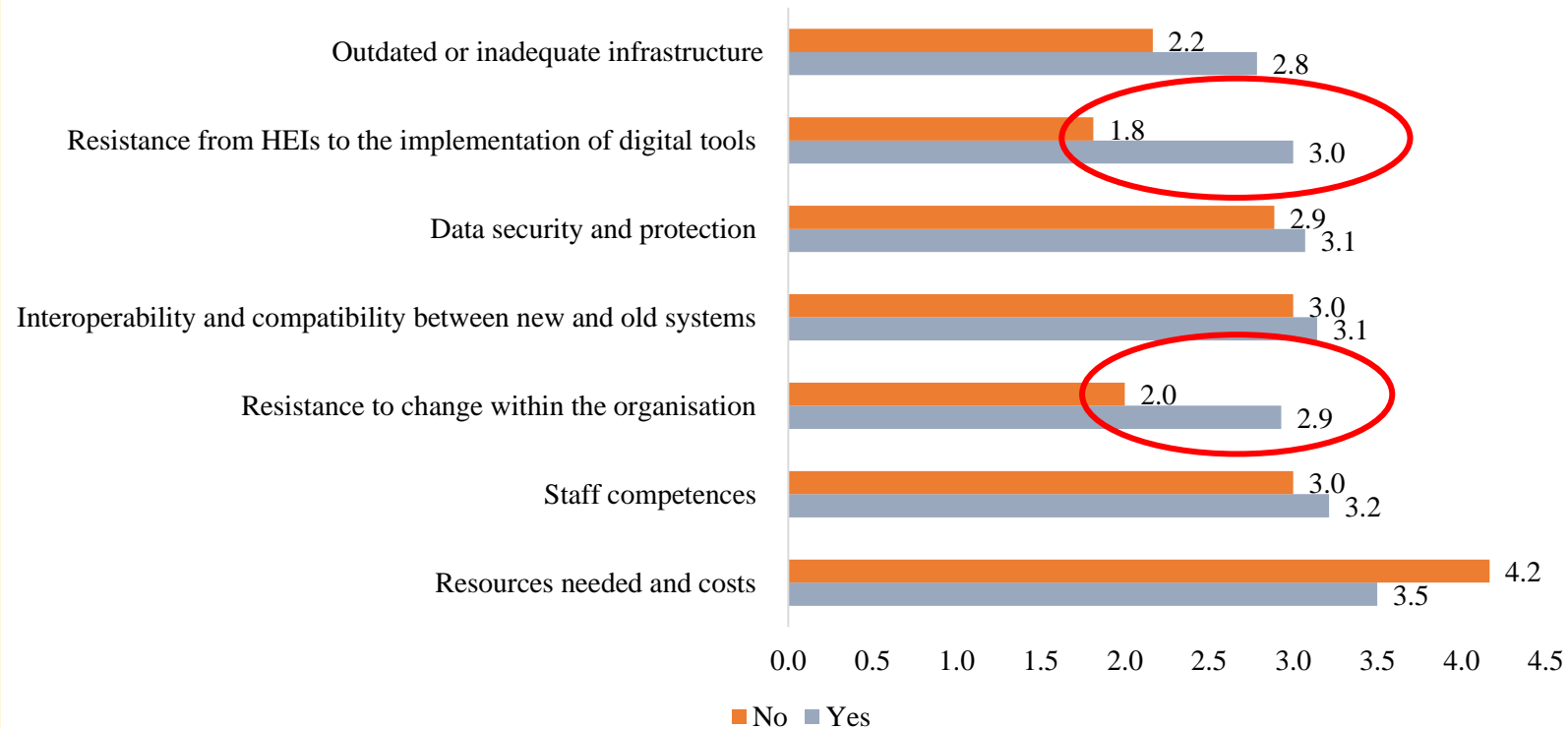
The Yes-No Gap Analysis that will be developed represents the differences in priorities and emphasis between QAAs that have a strategic plan for digital transformation (Yes) and those that do not (No). The analysis compares various factors, showing how much more (positive gap) or less (negative gap) they are prioritized by organizations with a strategic plan compared to those without one.

Q 2.2. Which are the main challenges in designing and implementing digital tools?

Item question	Average Yes =14	Average No=18	Total	Yes-No gap
Resources needed and costs	3.50	4.17	3.88	-0.67
Staff competences	3.21	3.00	3.09	0.21
Resistance to change within the organization	2.93	2.00	2.41	0.93
Interoperability and compatibility between new and old systems	3.14	3.00	3.06	0.14
Data security and protection	3.07	2.89	2.97	0.18
Resistance from HEIs to the implementation of digital tools	3.00	1.81	2.34	1.19
Outdated or inadequate infrastructure	2.79	2.17	2.44	0.62

A yes-no gap analysis is a method used to identify discrepancies or differences between what is expected (yes) and what is actually occurring (no) within a particular context or process.

Which are the main challenges in designing and implementing digital tools?



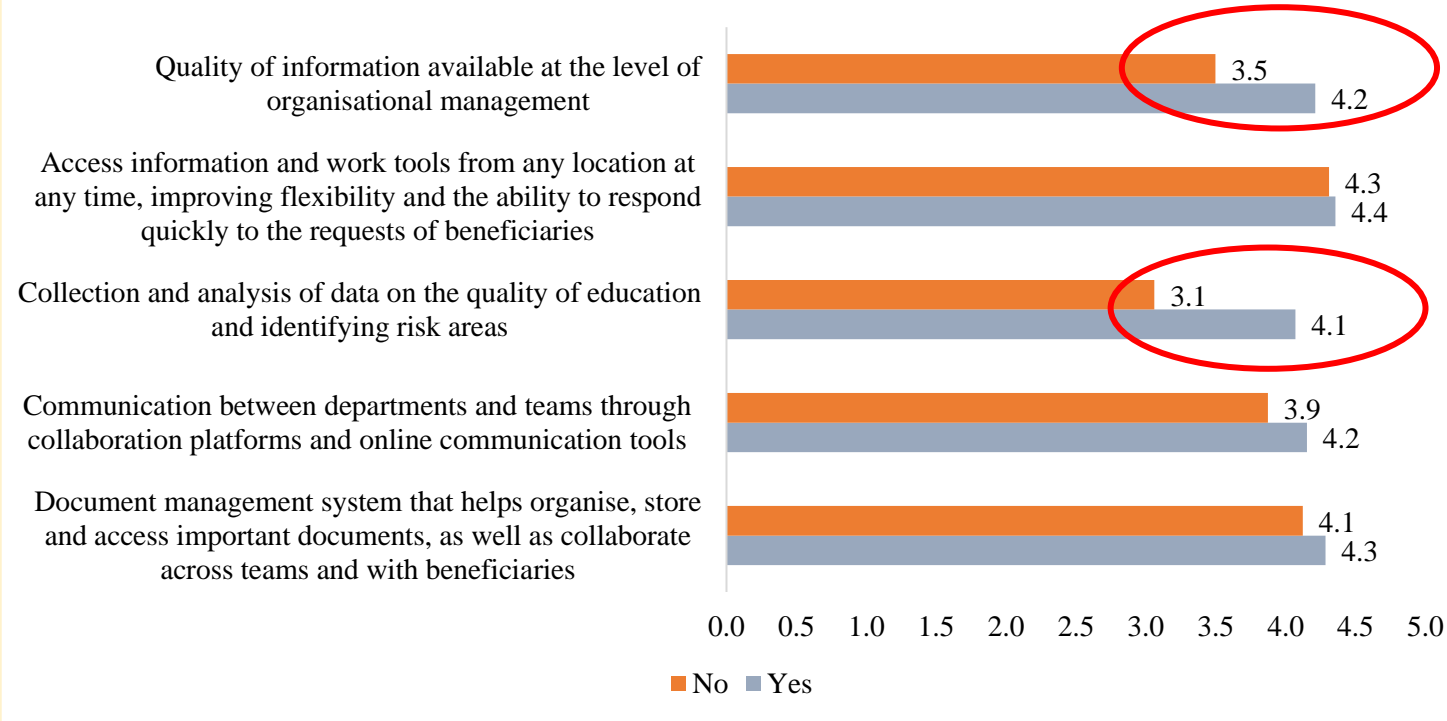
- **Resistance from HEIs** represents the most significant challenge, suggesting a substantial gap between those acknowledging the issue and those not. This resistance can stem from institutional inertia, skepticism about digital tools' effectiveness, or concerns about the disruption caused by such implementations.
- **Organizational resistance** is another major barrier, indicating that employees and stakeholders might be reluctant to adapt to new technologies due to comfort with existing processes or fear of increased workloads.

Q 2.5 Which of the following aspects of the Agency's internal work has been improved due to digitalisation?

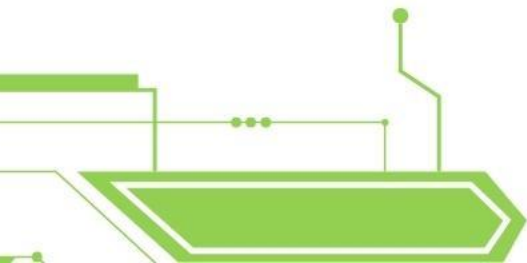
Item question	Average Yes =14	Average No=18	Total Average	Yes-No gap
Document management system that helps organise, store and access important documents, as well as collaborate across teams and with beneficiaries	4,29	4,13	4,20	0,16
Communication between departments and teams through collaboration platforms and online communication tools	4,15	3,88	4,00	0,28
Collection and analysis of data on the quality of education and identifying risk areas	4,07	3,06	3,53	1,01
Access information and work tools from any location at any time, improving flexibility and the ability to respond quickly to the requests of beneficiaries	4,36	4,31	4,33	0,04
Quality of information available at the level of organisational management	4,21	3,50	3,81	0,71



Which of the following aspects of the Agency's internal work has been improved due to digitalisation?



- **Collection and Analysis of Data:** Largest positive gap (1.01), indicating that organizations with a strategic plan place significantly more value on this improvement.
- **Quality of Information Available at the Level of Organizational Management:** Positive gap (0.71), showing higher appreciation in organizations with a strategic plan.





Conclusion and recommendations

Preliminary Recommendations for Quality Assurance Agencies on Digital Transformation:

1. Enhance Internal Efficiency and Data Management:

- ✓ Implement advanced data management systems and platforms to improve internal efficiency, quality of evaluations, and data management.

2. Prioritize Staff Training and Competency Development:

- ✓ Develop continuous training programs to enhance staff competencies in using digital tools and methodologies. Focus on seamless system integration to ensure smooth operations.

3. Secure Funding and Optimize Costs:

- ✓ Explore various funding opportunities, such as grants and partnerships, to support digital transformation initiatives. Conduct cost-benefit analyses to balance cost optimization with operational impact.

4. Adopt Effective Change Management Strategies:

- ✓ Develop robust change management plans to mitigate resistance to change. Engage stakeholders through clear communication about the benefits of digital transformation and ensure their buy-in.



Conclusion and recommendations (cont.)

5. Implement High-Priority Digital Tools for On-Site Visits:

- ✓ Prioritize the adoption of video conferencing and mobile applications to enhance communication and information access during on-site visits. Consider utilizing 360 virtual views, virtual tours, online presentations, and live streaming just to supplement these activities.

6. Leverage Online Collaboration Platforms and Document Management Systems:

- ✓ Utilize highly relevant online collaboration platforms like Google Suite and Microsoft Teams to facilitate communication and teamwork. Invest in document management systems to streamline document storage, editing, sharing, and control.

7. Focus on Automation and Real-Time Data Analysis:

- ✓ Implement automation tools for data collection, report generation, and evaluation processes to increase efficiency. Use real-time data collection and analysis tools to adapt swiftly to the needs of stakeholders and enhance decision-making.



Conclusion and recommendations (cont.)

8. Ensure Data Security and Compliance:

- ✓ Implement robust data security measures to protect sensitive information. Regularly audit security protocols to maintain compliance with data protection regulations.

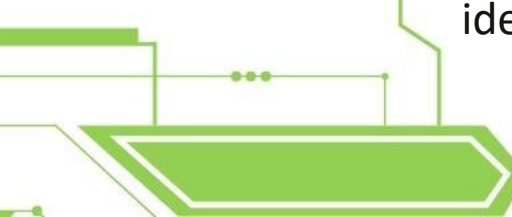
9. Regularly Assess and Upgrade Infrastructure:

- ✓ Conduct regular assessments of the digital infrastructure and plan for necessary upgrades and maintenance to support new digital tools and processes.

10. Utilize AI Technology for Future Applications:

- ✓ While AI is currently perceived as less relevant, explore its potential future applications for automatic analysis of assessment data and decision-making based on real-time information.

11. Establish a Robust Data Security Framework:

- ✓ Comprehensive Security Policy: Develop and implement a data security policy that complies with international standards and regulations (e.g., GDPR, HIPAA).
 - ✓ Access Control: Limit data access strictly to authorized personnel to maintain confidentiality and enhance access control.
 - ✓ Regular Security Testing: Conduct proactive security breach testing and continuous assessments to identify and address vulnerabilities.
- 



Conclusion and recommendations (cont.)

12. Prepare and Train Staff on Data Security:

- ✓ Incident Response Plan: Develop a detailed action plan for security incidents to ensure a rapid and structured response.
- ✓ Security Training Programs: Even though staff training on security practices is a lower priority, it is essential to focus on educating employees about security protocols and best practices.

13. Ensure Comprehensive and Accessible Information:

- ✓ Critical Information for Beneficiaries: Provide easy access to contact information, quality standards and policies, guidance for HEIs, detailed assessment processes, and evaluation results as these are most critical.
- ✓ Ensure availability of evaluation schedules, appeals and complaints procedures, information on events, and evaluation panel details.

14. Enhance Data Validity and Reliability:

- ✓ Implement proactive measures to improve data accuracy and trustworthiness, even if it is a lower immediate priority.

What comes next?

- ✓ Interviews with selected agencies
- ✓ Based on the outcomes of the mapping process and interviews, a report will provide recommendations regarding the direction for development, aiming to integrate digital tools into the activities and functioning of a quality assurance agency,.



Thank You



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