

Design Options Paper



DigiJourney: Digital transformation journey for SMEs



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Executive Summary

The Digital Transformation Market was valued at USD 342.20 billion in 2019 and is expected to reach USD 923.80 billion by 2025. By that year, Europe could see its manufacturing industry add gross value worth 1.25 trillion euros by taking full advantage of the effect of digitisation. It is estimated that digital technologies, such as Big Data Analytics, Artificial Intelligence (AI) or the Internet of Things (IoT), have the potential to add 1.5 million jobs to the EU's digital economy, and that Small and Medium Sized Enterprises (SMEs) can grow two to three times faster when they integrate digital technologies into their business models. For Europe to remain competitive internationally, its companies must be able to benefit from digital opportunities, which would lead to higher value products and smarter processes.

The digital revolution brings opportunities for big and small companies, but many of them still find difficult to know in which technologies to invest and how to secure financing for their digital transformation. SMEs are particularly slow in integrating digital technologies: only one out of five SMEs in the EU are highly digitised, yet they represent over 90% of all businesses in Europe.

DigiJourney idea raises from the participation of two innovation agencies and a research institute, FUNDECYT-PCTEX, LUXINNOVATION and IPA-SA, in European projects related to digitalisation and their expertise in the field. These innovation agencies have a common interest in continuously improving their capacity and needs assessment methodologies, and currently face the common challenge of applying new digitalisation assessment and support techniques tailored to SMEs. For that purpose, a twinning advanced mechanism was set up among the three partner agencies in order to allow them to jointly evaluate their digitalisation approaches and, based on the input gathered, design a digitalisation journey for SMEs that enables innovation agencies to improve their support to companies in the field of digitalisation.

The DigiJourney project aim is, therefore, to enable the participating innovation agencies to exchange knowledge on digitalisation methodologies and tools through peer learning activities and to design a digitalisation journey for SMEs that address their actual needs in terms of digital transformation and allows them to increase their competitiveness thanks to a tailor-made digitalisation support based on digital solutions in line with their current business.

To design such journey, it has been necessary to identify and analyse methodologies, experiences and good practices on digitalisation implemented by project partners and by other European actors. In addition, some Digital Innovation Hubs have been involved in the process with the purpose of exchanging information and, later on, incorporating new and added-valued digitalisation services to their portfolio.

As a result of the peer learning process, this Design Options Paper (DOP) provides other European innovation agencies with recommendations for improving their digitalisation support services for companies in their territories through a well-designed digitalisation client journey aligned with other supportive schemes that favour the implementation of digitalisation measures to improve companies' competitiveness. Since the document explores options to address the digitalisation challenge and shows that certain decisions made in the design preclude some other options, it might guide similar innovation agencies that become interested in the topic only later and did not have the chance to participate in the initial twinning+ project.

1. Digitalisation

1.1 Introduction

Industry is one of the pillars of the European economy – the manufacturing sector in the European Union accounts for 2 million enterprises, 33 million jobs and 60% of productivity growth. Europe stands on the brink of a new industrial revolution, driven by new-generation information technologies.

European industry is strong in digital sectors such as electronics for automotive, security and energy markets, telecom equipment, business software, and laser and sensor technologies. Europe also hosts world-class research and technology institutes. However, high-tech sectors face severe competition from other parts of the world and many traditional sectors and SMEs are lagging behind. There are also large disparities in digitisation between regions.

The European Commission launched the Digitising European Industry initiative (DEI) in April 2016. As part of the Digital Single Market strategy, the DEI initiative aims to reinforce the EU's competitiveness in digital technologies and ensure that every business in Europe – whichever the sector, the location or the size – can draw the full benefits from digital innovation.



Pillars of the Digitising European Industry initiative

Source: The “Digitising European Industry” initiative, Digital Single Market, EC

The digital transformation of EU business and society presents enormous growth potential for Europe. It is estimated that digital technologies have the potential to add 1.5 million jobs to the EU's digital economy, and that SMEs can grow two to three times faster when they integrate digital technologies into their business models. European industry can build on its strengths in advanced digital technologies and its strong presence in traditional sectors to seize the range of opportunities that technologies like IoT, big data, advanced manufacturing, robotics, 3D printing, blockchain technologies and AI offer. This will enable the European industry to capture

a share in the emerging markets for the products and services of the future. For SMEs in particular, digital technologies provide an unmissable opportunity to enter the market with specialised, differentiated and smart products and services.


However, EU businesses are not currently taking full advantage of these advanced technologies or the innovative business models offered by the collaborative economy. Even though SMEs are highly sensitised to the importance and the potential of digitalisation for their business, their orientation, know-how and hands-on solutions in line with their current business should be improved. In addition, digitalisation services in too many occasions do not take into account the rapid changing innovation ecosystem and the emerging of new technologies. This change requires a modernisation effort to ensure that Europe’s industry is well equipped to overcome the challenges it faces and to stay competitive in global markets. The challenges include the need to develop a truly digital entrepreneurial culture and to stimulate investments in new technologies.


THE BUSINESS LANDSCAPE IN THE EU


EUROPEAN STRENGTHS:


A thriving and diversified economy: 26 million active enterprises with some 144 million persons employed in the business economy.


Traditional sectors:



Construction


Food & beverage


Craft industries



Textiles



Publishing & printing


Manufacturing


The European manufacturing industry accounts for 2 million enterprises and 33 million jobs.


Europe has a world market share of 33% in robotics, 30% in embedded systems, 55% of automotive semiconductors, 20% of semiconductor equipment and 20% of photonics components.



Electronics for security & energy



Robotics


Electronics for automotive & aerospace


Telecom equipment


Business & professional software


Laser & sensor technologies


World-class Research & Technology institutions

Strong regional ecosystems of SMEs, mid-caps, large industry and research across all sectors of the economy.

CHALLENGES:

There are still big differences in the level of digitalisation of industry across sectors, Member States and regions.

Only 1 out of 5 companies across the EU are highly digitised.

Around 60% of large industries and more than 90% of SMEs feel lagging behind in digital innovation.

Europe is lagging behind on online platforms, EU industry cannot afford losing leadership in digital industrial platforms.

90% of future jobs will require some level of digital skills while 44% of Europeans lack basic digital skills.

OPPORTUNITIES:

Digitalisation of products and services can add more than **€110 billion of annual revenue** for industry in Europe until 2020.

Digitising Industry factsheet

Source: The “Digitising European Industry” initiative, Digital Single Market, EC

1.2 Objective, partners and scope of DOP

Objective

In order to cope with the aforementioned environment, it becomes necessary to set the stage for advanced and tailor-made digitalisation services to be provided by innovation agencies for approaching clients with better value propositions that address their actual needs in terms of digital transformation. For that purpose, a digital transformation journey, as part of the company's overall journey to growth, will empower them to better face the challenges of the Single Market. In particular, needs assessment tools should be in place in order to recognise the client's digitalisation potential and to be able to offer them special advisory services.

The objective of DigiJourney was to enable the participating innovation agencies to exchange knowledge, know-how, and good practices on advanced methodologies and tools for digitalisation assessment to SMEs and provision of customised support services. In particular, the project aimed to cover peer learning activities for three advanced digitalisation approaches, which are based on initiatives and tools for an in-depth and contextual assessment of client needs, and the design of a digitalisation journey for SMEs with better value propositions that address their actual needs in terms of digital transformation and allows them to increase their competitiveness thanks to a tailor-made digitalisation support based on digital solutions in line with their current business.

Partners

The Innovation Agencies participating in the project are putting forward three advanced digitalisation methodologies, which they apply to SMEs to assess their digitalisation needs and capacities, as well as their potential to adopt digital technologies in order to remain competitive:

✓ FUNDECYT-PCTEX

FUNDECYT Science and Technology Park of Extremadura is a non-profit organisation based in Extremadura (Spain) since 1995 with the aim of contributing to the social and economic exploitation of science and technology in the region, supporting and promoting scientific and technological development and a better use of research and innovation outcomes.

It has provided support to the Government of Extremadura in a number of policies currently in place, which seek to address the integration of digital technologies at regional level, namely the Digital Agenda of Extremadura, the Smart Specialisation Strategy or the Industry 4.0 Strategy.

As Digital Innovation Hub, with a team of 50 people, working on a distributed model for providing services to SMEs, it conducts the programme "DigitaliseSME", aimed at enhancing SMEs' capacity to go international and innovate through the connection of companies with digital enablers that provide them with support for their digital optimisation or transformation.

It is tightly connected to regional and local authorities working on digitalisation such as the Ministry of Economy, Science and Digital Agenda of Extremadura, the Badajoz County Council and the DIH, being able to involve them in the service definition process of DigiJourney and in the dissemination of the project's results, in particular, this DOP.

✓ LUXINNOVATION

Luxinnovation is Luxembourg's national innovation agency. It is a public-private partnership composed of the Ministry of the Economy, the Ministry for Higher Education and Research, the Luxembourg Chamber of Commerce, the Luxembourg Chamber of Skilled Crafts and FEDIL – The Voice of Luxembourg's Industry.

It encourages and supports companies to innovate and to grow, whilst facilitating their collaboration with public research players. It offers a wide portfolio of services to companies and public research organisations in order to foster innovation, thus supporting the Government's economic development objectives.

Luxinnovation implements the programme "Fit 4 Digital", aimed at supporting SMEs wishing to take advantage of information and communication technologies in order to get the right digital tools for their business and to gain competitiveness.

It is tightly connected to national authorities working on digitalisation such as the Ministry of Economy, the House of Entrepreneurship (subsidy from the Chamber de Commerce) and the L-DIH, being able to involve them in the service definition process of DigiJourney and in the dissemination of the project's results, in particular, this DOP.

✓ IPA-SA

IPA-SA is the main Romanian Institute of Research and Design in informatics-automation, currently employing about 130 people. The Institute has in operation two Technological Transfer Centres and is member of the Romanian Chamber of Commerce and Industry and of the Romanian Employers Association for Research.

It promotes entrepreneurship for SMEs, start-ups and spin-offs, develops computer systems for creative businesses, and provides advice and business consulting support services to regional companies.

Its staff, trained by the IMP³rove Academy, has been implementing Digital Innovation Quotient, a programme to assess companies' actual performance in digital innovation, compared to the benchmarks provided by companies across the world, and to provide them with tailor-made digitalisation support.

It is connected to national and regional authorities working on digitalisation such as the Romanian Ministry of Economy, Energy and Business Environment, the Romanian Chamber of Commerce and Industry and the DIH "Smart eHUB", being able to involve them in the service definition process of DigiJourney and in the dissemination of the project's results, in particular, this DOP.

Scope

Based on a Twinning+ methodology, the peer-reviewing was used to analyse the mode of operation of each partner agency and to identify best practices related to the digitalisation assessment of SMEs. The results of the peer-review process, namely, a digitalisation journey for SMEs based on the experiences shared has been compiled into this Design Options Paper (DOP), that will allow adapting schemes to the specific national or regional environments.

This DOP aims, therefore, to enable the transfer of a complete good practice from one agency to another, not only for those participating in the project but for innovation agencies across the EU. By using collective experience and knowledge, the innovation agencies will be able to address the identified shortcomings and failures of existing practices, in sustainable and effective ways, and will improve their digitalisation support services for SMEs.



Twinning advance methodology and outcome of the DigiJourney project

Source: Own elaboration

2. Methodological approach towards digitalisation

2.1 Peer review on digitalisation tools

The three participating partners have applied the Twinning Advanced methodology (Twinning+) to exchange views and collaboratively tackle a common innovation support challenge: digitalisation. By using partners' collective experience and knowledge, they have developed an approach to address the challenge in a new and better way. In particular, this peer learning scheme has allowed partners to jointly evaluate the digitalisation approaches developed by themselves and, accordingly, design a digitalisation journey for SMEs that enables innovation agencies to improve their support to SMEs in the field of digitalisation.

Each organisation has introduced the other two partners in an advanced digitalisation initiative that its staff already uses when assessing SMEs. Specifically, the initiatives exchanged were: DigitaliseSME, programme conducted by FUNDECYT-PCTEX since June 2018; Fit 4 Digital, initiative implemented by LUXINNOVATION since January 2018; and Digital Innovation Quotient, IMP3rove proprietary utilised by IPA-SA since October 2017. The methodology used was joint workshops with training provisions for each tool from the responsible partner. After each workshop, a questionnaire was used for assessing each tool (see Annex I).

DigitaliseSME

Overview

DigitaliseSME supports the digital transformation of small and medium-sized companies as well as of mid-caps in Europe, connecting the companies to digital experts, referred to as "Digital Enablers", whose role is to identify the digitalisation needs of a company in question and propose a viable digitalisation strategy. The initiative makes the collaboration of SMEs with Digital Enablers, whose needs for digitalisation match their expertise, possible and easy by providing the service to a company towards the digital transformation of their business during an exchange period of approximately one month - two weeks remotely and two weeks "on the spot" - in the country in which the companies are located. During this period, the Digital Enabler helps the company to set up and initiate a project that will address its digitalisation needs, gradually during six months up to one year.

Prior to the exchange, the participating SMEs are surveyed (pre-evaluation survey) on the constraints and reasons for the digitalisation with the objective to collect data on real awareness of their digitalisation needs, and to make them understand that they need to go digital by comparing either with other SMEs operating in the same commercial area or with larger corporations operating in the same field. As getting aware of their real digitalisation necessity, when the DigitaliseSME pre-exchange survey asks the companies what did prevent them from going digital on their own, most of them answer that they did not have enough funds to allocate to the consultations services and execution of the digital solutions. Others point out the lack of knowledge among members of the management and employees, or emphasized the impossibility to reach out to and rely on experts.

The DigitaliseSME methodology helps the companies to make the first step towards digitalisation. During the first week of collaboration, the Digital Enabler describes an analysis and evaluation of the SME's current situation into an "intake summary", identifying the needs, proposing strategies and providing a short benchmark overview among different appropriate solutions for the digital improvement of the SME's business activity, describing exactly how could the proposed solutions help the company to improve external and internal processes, as well as access to new markets, growth of the business, outreach to new clients and target groups.

This first diagnosis leads to set up a "development roadmap outline" at the end of the second week, to indicate what are the objectives and expected results of the expert's proposed digitalisation project, what is the strategy to address and reach these objectives and expected results, and providing a short work programme including milestones, deliverables and target deadlines. This roadmap also reflects the risks of failure and how should these risks be addressed and reduced, which are major concerns, difficulties or doubts of the company, the management and the employees / single departments, and if the company owner or CEO approves the proposed project outline or considers to implement it.

This second stage of the Digital Enabler's analysis is to be concluded with the fulfilment of a "terms of references (ToR) for digitisation start-up" at the end of the exchange period where to provide strategic guidelines for implementing the digitalisation project, detailed ToR for technological needs, such as purchases, restructuring, etc., and adding cost estimations for it. These ToR also include provisions for organisational changes, such as who will manage the digitalisation project from now on inside the company, which departments must be actively involved into the project from the beginning, and if new professional positions are to be created, who should be supervising, monitoring and evaluating the results. For the training, which additional skills do the employees need and how much time does it take to master the new processes / technology / service, which training plan to propose, etc., and explain if part of the intervention was also some kind of digital skills training for the management or for the use of digital tools (apps, software, databases, online services) by employees.

After finishing the collaboration, both companies and Digital Enablers are asked to complete the post-evaluation survey with the objective to capture the execution of the exchanges, satisfaction of SMEs, the created results, and finally providing evidence of how DigitaliseSME, on a smaller scale, created a partial solution to the underlying problems of companies that wish to go digital.

All this process helps to increase SME's visibility in the digital market and become more competitive at international level. For their expert work, each Digital Enabler receives a grant of 8,000 € from European funds. FUNDECYT-PCTEX is in charge of the connections between Digital Enablers and regional companies and provides these companies with support for their digital optimisation or their digital transformation.

Main target group

The tool is very useful for scale-ups and SMEs but not so much for start-ups or large companies. The reason is that start-ups are not usually ready for digitalisation at early stages, whereas large companies do not need external support.

As regards sectors, the tool is useful for companies working in any field of activity. As far as experienced, it suits well ICT and agrifood companies, as the most represented sectors are agriculture, including food production, farming and aquaculture; tourism and hotel industry; and SMEs dealing with online marketing and IT services, mobile software development and consulting. The variety of industries comprised education, sport, wastewater treatment systems, creative industries, plastic, automotive industry, etc. This shows that lack of digitalisation is not an industry-specific problem, and companies in many sectors are facing similar issues when it comes to “going digital”. Therefore, further action should not address a particular industry but rather target SMEs as such.

Competences of the digitalisation consultant

The Digital Enabler role is comparable to a strategic consultant who helps the company set up a project but does not implement it him/herself. In order to become Digital Enabler, experts need to provide their field of specialisation, relevant professional experience, previous works carried out, references of companies assisted during their digitalisation processes, and their availability at agreed periods. The two reference letters should be from companies they have helped realise a digitalisation project. What constitutes a proof of professional independency of the Digital Enabler, this should prove that the Digital Enabler is not a shareholder in a company competing in the same sector as the company the Digital Enabler is matched with.

The expert must also give evidence of language skills, either bringing official certificates or examples of professional interactions and engagements for a period of at least three years, though not necessarily consecutive, in the language that must be proven.

Once selected by the innovation agency, a half-day training is necessary to be able to use the tool. Tutorials have been created to facilitate preparation.

Preparation of companies

DigitaliseSME aimed at educating, promoting and raising awareness about the importance and benefits of digitalisation for SMEs, and to develop a comprehensive programs and tools enabling digitalisation. The fear of change and dependency on standardised “old” practices, together with the lack of knowledge and financial constraints, is holding back a lot of SMEs and scale-ups from taking action in the field of digitalisation. Due to the fact that digitalisation is directly related to the competitiveness and efficiency of the businesses, a failure to take action could eventually lead to the termination of their operation. Therefore, a well preparation of the companies is essential in order to take the action towards the change. In general, the director or someone who has decision-making power in the company should take the assessment. Additionally, staff involved in digital innovation activities might participate too.

As regards the procedure, companies just have to register on the platform, which takes about 10 minutes. But, before registering, it is recommended to discuss with the innovation agency about their digitalisation needs (20 minutes), in order to insert clear information in the platform. Afterwards, about 1 month is needed for the exchange of information and the design of the customised action plan for the company. The Digital Enabler assigned to the company provides them with support during the whole process, that is, contacts the company to assess its digital

needs and supports the company during the action plan preparation phase until the roadmap is agreed and handed over.

Benefits and drawbacks of the tool

The main benefits for the companies is they do not need to spend time researching the profiles of different experts since the innovation agency staff matches each company with the Digital Enabler most suitable to put in practice its specific digitalisation process. Companies benefit from a tailored action plan aimed at increasing business efficiency through digital technologies and tools.

The main limitation of the tool is the difficulty for the implementation of the action plan. No additional services are provided at the moment due to economic resources limitation.

Suggestions for improvement

There is space for improving the tool in many ways: e.g. automatic matching of companies with Digital Enablers or impact assessment.

Some Digital Enablers suggested that introducing some sort of “technical assessment” would perhaps more effectively identify the digital need, and therefore, at the same time it would potentially make matching process more effective. In any potential scale up phase, this would just potentially make a matching process itself more efficient and faster and therefore consequently increase the number of matches.

Regarding the implementation phase, additional services would allow, besides the identification of the digital needs and the provision of an ad-hoc action plan for companies, the implementation of that action plan in order to put in place the right business models, solutions and approaches for digitalising their business. For that purpose, agreements with stakeholders would be advisable since they might provide companies with support in the form of specialised services or public funding for the implementation of digitalisation actions.

Fit 4 Digital

Overview

Fit4Digital is an initiative to help Luxembourg-based small and medium-sized companies benefit from digital tools by leveraging knowledge from digitalization experts while receiving financial support. Fit4Digital is an example of public-private partnership, as it is operated by Luxinnovation and the Luxembourg ministry of economy while the digitalization experts are private firms. The digitalization experts – referred to as “Fit4Digital consultants” – are chosen and accredited by Luxinnovation, and are the sole interlocutor of the beneficiary company through all the stages of a Fit4Digital project. A Fit4Digital project usually lasts twelve to eighteen months, and is composed of two consecutive phases, an analysis and an implementation phase.

When a company is interested in participating in a Fit4Digital project, it first has to choose one of the accredited Fit4Digital consultants. Depending on its sector, size or project first idea,

Luxinnovation provides indications of consultants who might be a good match to the company. Once the company has met several potential consultants and has chosen one, it must prepare an application through a dedicated online application assistant. After the company has completed the online form and sent its application, Luxinnovation reviews it and checks whether the company is actually eligible or not to Fit4Digital according to size, financial and sector criteria. When appropriate, Luxinnovation validates the application of the company and notifies the ministry of economy who is in charge of the financial support part of Fit4Digital through providing the company with public subsidies.

The first phase of Fit4Digital then begins, and consists of an audit of the company's structure and the digital tools that support the company processes. The Fit4Digital consultant that the company has chosen conducts this audit, and has to understand the business of the company and how it functions. During this audit phase, the Fit4Digital consultant also has to list the IT tools that the company is equipped with, identify their strengths, their weaknesses and point out some opportunities (improve the use of these current tools or implement new solutions). The Fit4Digital consultant does this analysis for all of the divisions of the company, from planning to operations, going through accounting, marketing, distribution channels and information security. From all these observations, the Fit4Digital consultant then consolidates a list of recommendations, which are then organized in an action plan over a period of twelve months. The Fit4Digital consultant must provide an estimation of the budget considered for each item of the action plan, and must explain the gains that these recommendations will bring to the company. A Fit4Digital audit report gathers all this information from the first phase, and gives the company the whole picture of the digitalization project it could engage. Luxinnovation reviews the report written by the Fit4Digital consultant and in case needed asks the consultant for corrections or additional details. When the report is suitable, Luxinnovation validates it so that the consultant can share it with the participating company. At this stage, the ministry of economy proceeds with sending the public lump-sum subsidy of 5000€ HTVA to the company, which can then use it to pay the consultant for the Fit4Digital audit. With the Fit4Digital audit report, the company manager is able to take a decision to continue with the second phase of the Fit4Digital project or not.

The second phase of Fit4Digital, should the participating company choose to engage it, is the implementation of the action plan drafted by the consultant in the first phase. The company has a total control over the Fit4Digital project: it can thus choose to continue benefitting from the advice of the Fit4Digital consultant who conducted the initial audit, select another consultant or proceed on its own for the implementation phase. All of the costs supported by the company during the implementation phase are also partly covered by public subsidies, disbursed to the company at the end of the project based on actual expenses. These costs are advisory costs from the Fit4Digital consultant, as well as investments costs for new hardware, software licenses or developments. Luxinnovation follows up regularly with the consultants and participating companies during the implementation phase, in order to make sure that everything is going well as planned. At the end of the implementation phase, a meeting is organised between Luxinnovation, the beneficiary company and the consultant, where a debriefing of the project is made and where the company explains the first benefits observed from the digitalisation project. At this stage, the company gathers all invoices and proofs of payment and requests the public subsidy to the ministry of economy. The public subsidy shall cover from 10% to 50% of

the Fit4Digital project costs according to the nature of the expenses, consultancy being more incentivized than investments.

Main target group

Fit4Digital is intended for SMEs in general – based in Luxembourg – and makes more sense for small entities than for medium-sized companies. Startups can also benefit from the programme, but experience shows that Fit4Digital is not the best support tool for such entities. Large companies are not eligible to Fit4Digital, and it would not be an appropriate tool for their needs in any case.

Sector wise, there are some activities which are not eligible to Fit4Digital for legal reasons because they are not eligible to the associated public subsidies. Besides the excluded sectors, Fit4Digital is appropriate for any field of activity.

Competences of the digitalisation consultant

Within Fit4Digital, the consultant chosen by the participating company is a key partner of the whole action. He must act as a guide and support the company during the entirety of the Fit4Digital project. Therefore, the Fit4Digital consultant must have a certain set of skills and experience, in particular the competences of project management, experience with company management, proficiency in digitalisation tools applied to SME needs, demonstrate an independency from any software company, and understanding of company procedures and process in general.

Luxinnovation organises regular calls for applications, on which the candidate consultants are evaluated and interviewed. In addition, the consultant chosen by a participating company must not have an interest in the company such as being shareholder.

Once selected by Luxinnovation, the consultants are provided with templates to help them draft the audit report linked to the first phase of a Fit4Digital project.

Preparation of companies

Since Fit4Digital intends to guide SMEs in their journey towards taking advantage of digital tools, the companies are not expected to prepare anything besides being ready to evolve their organisation and allocating internal people to spend time on the project. The Fit4Digital consultant that the company chooses takes care of everything else.

In terms of administrative procedure, the company must send an application to Luxinnovation through the online form. Should the company have in possession all supporting legal documents, this online application is usually a matter of 30 minutes.

It is nonetheless recommended that the company meets Luxinnovation team prior to sending an application, in order to make sure that Fit4Digital is actually the right support measure to match the company's needs and situation.

Benefits and drawbacks of the tool

The main benefit for the companies is that they do not need to know a lot about digitalisation to be able to benefit from it. Indeed, the consultants act as a guide throughout all the process, from the initial audit to the end of the implementation. Nonetheless, companies must be ready to invest work force in the project, as the consultant is an enabler but no magician. Another benefit is that the company remains in the driving seat during the whole process, and can choose to stop the project or change consultant at any time. Finally, public support measures contribute to help companies finance the digitalisation project, as they most of the time represent a certain amount.

The main limitation is the absence of a standardized methodology to conduct the audit phase of Fit4Digital, there is only a standard audit report template.

Suggestions for improvement

Many improvements have been identified by Luxinnovation, the participating companies as well as by the Fit4Digital consultants. For example, the lack of a standardized methodology to conduct the initial audit, though there is an audit report template, still causes some discrepancies in terms of quality of the audit from a consultant to another.

Other suggestions were about the public subsidies disbursements, because while the voucher system is unanimously praised by companies for the audit phase, it is not yet used in the implementation phase where companies still must advance the expenditures.

Digital Innovation Quotient

Overview

Digital Innovation Quotient is an IMP3rove proprietary tool focused on the assessment of the company's actual performance in digital innovation based on a thorough questionnaire. It provides a structured assessment of the firm's current performance in digital innovation compared to benchmarks provided by digital innovation champions and average companies across the world. The score for the digital innovation champions companies represents the average performance of the top 10% of all companies from the selected benchmarking class, whereas the score for the average similar companies represents the average performance of all companies in the selected benchmarking class.

A Digital Innovation Quotient report at the completion of the assessment process resume the company performance results. The company is evaluated from the point of view of DIQ level of implementation and efficiency, using an evaluation report based on the following five dimensions: Digital Innovation Strategy (general strategy, objectives, digital innovation trends), Digital Business Model (digital economic indicators), Digital Processes (time to market of digital services versus traditional services, business impact on digital marketing), Digital Ecosystem and Culture (general digital capabilities, new ideas generation, digital training curricula for employees) and Enablers for Digital Innovation (development of digital capabilities, IT Process efficiency, average share of revenue spent on digital projects in the last years). The company

DIQ evaluation, based on the mentioned five dimensions, will be made by comparing this SME with DIQ champions and average similar companies.

The DIQ evaluation report needs to be discussed and analysed by the DIQ facilitator with the evaluated company. Based on the report's results, DIQ facilitator elaborates an action plan that will comprise concrete activities, terms, responsibilities and milestones in order to overcome the weaknesses identified and to develop company's capabilities in line with its specific digital needs.

The implementation of the DIQ methodology to a company is expected therefore to result in a successful development and commercialisation of new: products, services (e.g. remote services), business models (e.g. eLearning, eBusiness platforms), innovation processes (e.g. process control systems, Artificial Intelligence systems integrated into technological processes like Expert Systems, Neural Networks, Genetic Algorithms).

IPA-SA was trained by IMP3rove Academy trainers in the use of the tool in a workshop held in September 2017 and since then it is providing digitalisation services to its regional companies, including, in addition to Digital Innovation Quotient, Artificial Intelligence systems for business development and digital business ecosystems support services.

In order to complement the DIQ instrument, it is worthy for a complete evaluation to analyse additional components of the SME digitalisation process. Solutions and approaches for increasing the SMEs level of digitalisation might include, on the one hand, Informatics Systems for Businesses Development, which comprise topics like information systems, advanced technologies and innovative business models offered by the collaborative economy, methods and concepts for business development by electronic means, among others; and, on the other hand, Digital Business Ecosystems as support services for company's sustainability that could ensure, at local and regional level, the increasing of the competitiveness and the stimulation of the business environment in a certain economic domain thanks to the harmonious coexistence of companies that have even options to choose the right partners and to use the resources of the open ecosystem for the development and promotion of their own businesses and services.

Main target group

The tool is designed for companies of all sizes, ages, and industries, seeking to assess, benchmark and develop their digital innovation capabilities. Nevertheless, according to experience, it suits better companies from at least 10-15 workers. For very small companies it is too complex and for start-ups it is not appropriate since they do not have track record and some crucial information would not be available for its inclusion in the system, which would directly affect the conclusions and reduce the impact that the assessment would have on the company. Likewise, it is not useful for large companies, which have sufficient economic and human resources to ensure the sustainability of their businesses in terms of digital intelligence.

Competences of the digitalisation consultant

The digitalisation consultant must be certified by the IMProve Academy. In this sense, consultants and intermediaries searching to provide meaningful and substantial support in

digital innovation through the DIQ methodology need to be trained in the use of the tool by IMP3rove Academy experts in a 2-day course.

In addition, consultant should have a versatile training, including long-term higher education, advanced computer skills, proven entrepreneurial skills and advanced level of English language. Knowledge in the field of SMEs internationalisation and access to finance would also be an asset since funding might be needed for the implementation of the measures suggested in the action plan.

Preparation of companies

Before starting the assessments, it is convenient to prepare a list of potential companies that might benefit from the digitalisation assessment. This list might include as criteria of choice the location of the company, its profile, the criterion of being predominant SME or the economic-financial evolution of the last 3 years. Individual discussions with companies follow, reaching a final list to start the assessments.

As regards the procedure, first of all the company is provided with a description of the evaluation process, specifying clearly the benefits for the company resulting from such evaluation. Normally up to 1-week time is granted for the company preparation before taking the assessment. A meeting with the company is arranged then at the company premises for further discussion. At that moment, company appoints a representative, preferably an innovation or project manager, able to complete the complex evaluation questionnaire necessary to generate the evaluation report. Questionnaire completion should not take more than half day but, taking into account the limited time of companies, it usually takes longer. The company's representative fulfills the questionnaire directly in the platform, but with the support of the DIQ consultant. Once completed, discussion with the company about the leakages points resulting from the evaluation report takes place and an agreed action plan is prepared with deadlines, clear tasks and milestones to address company's digitalisation needs. Finally, there is a follow-up of the company's fulfillment of the Action Plan.

Benefits and drawbacks of the tool

Companies can benefit from the DIQ methodology free of charge when assisted by organisations that belong to the Enterprise Europe Network. They obtain a benchmarking report according to any of all of the following criteria: size, age, industry and geography. Moreover, companies receive a tailored action plan with measures that might lead to a better management of digital resources and optimisation of their usage, potential increase of eBusiness as part of the company online sales strategy, potential increase of productivity or improvement of competitiveness by meeting, for instance, customers' demands with new eProducts. Finally, companies appreciate the acknowledgement of being assessed through the Improve Academy methodology.

The main limitations of the tool are the complexity of the questionnaire, that involves too much effort for companies, and the difficulty for the implementation of the action plan without additional services nor funding that make difficult for companies to implement the suggested measures to avoid lagging behind in terms of digitalisation.

Suggestions for improvement

It would be desirable to shorten the questionnaire, which is too long and has limited practical questions, though. Furthermore, fulfillment of the questionnaire by the company without the presence of the digitalisation consultant might lead to wrong conclusions in case no close support is provided.

Regarding the implementation phase, additional services would allow, besides the identification of the digital needs and the provision of an ad-hoc action plan for companies, the implementation of that action plan. To do so, innovation agencies in charge of digitalisation assessments might make use of structural funds to offer vouchers to companies that facilitate the implementation of digitalisation actions.

Other digitalisation tools

Despite digitalisation has been identified as one of the major trends changing business and many actors agree in the need to understand the digitalisation needs of companies as a starting point, there are few available tools free of charge for that purpose. Besides the three tools of the participating partners analysed in depth during the peer review, some other digitalisation tools have been identified and reviewed:

- Digital transformation tool

In the framework of a project funded by the European Union under the Erasmus+ Programme, the consortium created a self-learning tool that can be accessed online as well as materials for learning and planning. The main objective is to help SMEs to understand the opportunities and risks of the digital transformation by developing and implementing an individual strategy that would enable them to sustainably increase their productivity.

The quick check tool gives companies an initial idea of their current position. With the help of short learning units, they might learn on this basis about the most important technological developments such as blockchain, big data and artificial intelligence. They take companies through an individual process of digital transformation with step-by-step instructions, that it is followed by a prioritisation tool, an instrument to help companies decide how to act first.

- DigiMaturity tool

DigiMaturity is a tool created by VTT Technical Research Centre of Finland that can be used as a free-of-charge self-service web tool. It refers, firstly, to an organisation's readiness for digitalisation: its motivation to change, and its ability to adopt new technologies and new operations models; and secondly, to an organisation's performance based on digital technology.

The tool gives a baseline of current digitalisation capabilities and maturities in six main dimensions, which can be used for recognising the most important and urgent development targets depending on nature of the business and size of the organisation. The dimensions include strategy, business model, customer interface, organisation and processes, people and culture, and information technology. The tool also enables a comparison of the organisation's digimaturity using a control group based on segment, turnover and/or headcount.

- Digital Diagnostics tool

Digital Diagnostics is a tool developed by Enterprise Estonia with the aim of raising awareness of digitalisation and automation in the industry. It provides an overview of the current state of digitalisation and automation in the enterprise, map the relevant development positions and suggest specific solutions. It is based on a self-assessment questionnaire, and the consultant team processes the questionnaire in the form of a discussion.

In particular, it provides the company with an overview of the bottlenecks in the entrepreneur's strategic management and business model, the production planning and human resources, quality system and follow-up service processes, among others; an estimate of the priority of tackling bottlenecks; an estimate of the cost of digitalisation and automation solutions for bottlenecks; and an estimate of the payout period of the proposed solutions for bottlenecks and impact on the economic performance of the entrepreneur.

- Digital Journey Tracker

Digital Journey Tracker is a tool that offers a broad overview in digital tactics operated by Sirris and Agoria in Belgium. It provides a guidance to a digital journey for companies on how and where to digitalise and an overview of starting points for different types of business. The framework is Simple framework based on three impact areas: offering, business model, organisation; three types of businesses: physical products, digital products, services; and 18 recurring tactics with success stories of Belgian companies.

The tool can be used by companies and their service providers. On the one hand, companies get an overview of opportunities that help them determine the strategy and learn from examples of peers, whereas companies with an offer in digitisation are able to clearly position their own offer and to understand new challenges of industry and service companies.

- Diag Numerique tool

Diag Numerique is a free online self-assessment questionnaire made for SMEs, helping them to evaluate their level of digital maturity. The tool is operated by the French employer federation MEDEF. Thanks to a very easy-to-use interface company managers answer a total of 40 questions organised under 5 themes covering "Sales and customer relations", "Value proposition and stakeholders' relations", "Internal organisation and human resources", "Business strategy" and "Company context". After answering the questionnaire, participants get an evaluation report, summarizing their digital maturity and benchmarking to other companies in their sector and region.

Besides the self-assessment, Diag Numerique offers a collection of good practices and tutorials that SMEs can rely on to improve their level of digital maturity.

In addition to the tools for analysing the digitalisation needs associated to expert advice or training, there are some programmes that provide funds to implement digitalisation projects or actions. As pointed out in the DOP elaborated in the framework of the P2P Digital project, the following programmes offer vouchers for digitalisation purposes:

- Digital Bonus

Digital Bonus is a voucher program to promote digitisation for SMEs operated by seven local district councils, together with the Ministry of Economics of Germany. Funding focuses on digital products, processes and services as well as IT security. Consulting services, implementation, hardware and software are also included.

Many companies have plans or ideas for digitalisation and this program gives them the last little push to get started, offering a voucher of 10,000€ per company. It covers between 30-50% of project's costs, depending on the company's size.

- e-wallet

E-wallet is a regional voucher scheme of Flanders, operated by Flanders Innovation and Entrepreneurship. It aims to improve the quality or professionalisation of the company through the provision of funding for training and advice. It is demand driven, the process is automated via web application, and the management is carried out by accredited service providers.

This voucher system has a general aim, that is, it is not specifically addressed to digitalisation. The maximum amount of support is 7,500€ per year, and companies are free to decide whether they use it on advice to improve the functioning of the company or on training of the staff for improving the current or future operation of the enterprise.

- Voucher for Digitisation

Voucher for Digitisation is aimed at helping small sized businesses to develop their business through digitisation. The voucher is intended to contribute to the sustainable growth and competitiveness of the business. It is operated by Tillväxtverket in cooperation with county administrative boards and business support organisations.

They offer about 5,000-24,000€ per voucher, and are able to fund up to 50% of eligible costs. As regards impact of the programme, around 95% of the companies that participated found that the voucher helped them to increase their digital maturity and their competitiveness.

- Go-Digital

Go-Digital is an initiative from BMWi, the Federal Ministry of Economy in Germany. It has been developed to tackle digitisation considered as one of the biggest challenges for small and medium-sized enterprises. Go-Digital consists of three modules "Digitized Business Processes", "Digital Market Development" and "IT Security", and offers practical advice to SMEs through expert consulting companies.

Up to 30 consultant days can be funded under Go-Digital, with a funding rate of 50 percent of the consulting fees capped at 1100€ per day. Interestingly, SMEs can find an online interactive map of the qualified advisors on the Go-Digital website.

- Digital Diagnostics voucher

Besides the initial digital diagnostics aforementioned, Digital Diagnostics offers companies funds for investing on the basis of the digitalization roadmap report that is prepared as a result of the

digital diagnostics. The expectation of the programme is that companies implement all or most of the recommendations given in the diagnostics reports.

Companies receive funding for a maximum of 70% of the diagnostics project, whereas the remaining 30% has to come from the company itself. The concrete amount depends on the turnover of the company in the previous year: for a turnover of 200K-1M, funding is 5K eur; for a turnover of 1-5M, funding is 10K eur; and for a turnover of 5M or more, funding is 15K eur.

Therefore, it becomes clear that there are complementary funding schemes that might be complete the digitalisation journey for companies that have already identified their digitalisation needs but have difficulties to implement the digitalisation measures with own resources.

2.2 Involvement of Digital Innovation Hubs

Due to the fact that there are strong differences in the level of digitalisation across the EU, depending on the sector and region, the EU proposed Digital Innovation Hubs (DIH) as a key priority in the Digitising European Industry Initiative in order to bridge the current divide.

DIH can help ensure that every company, small or large, high-tech or not, can grasp the digital opportunities. With technical universities or research organisations at the core, DIHs act as one-stop-shops where companies —especially SMEs, start-ups and mid-caps— can get access to technology-testing, financing advice, market intelligence and networking opportunities.

Member States and regions should invest in the creation or reinforcement of DIH that support their national/regional digitalisation strategy. They should secure the necessary financial means, for instance through regional development funds.

The EU supports the collaboration of DIHs to create an EU-wide network, where companies can access competences and facilities not available in the DIH of their region. This network will lead to knowledge transfer between regions and will be the basis for economies of scale and investments in the hubs. For this, the European Commission is investing EUR 100 million per year from 2016 to 2020.

Helping companies accomplish their digital transformation also means ensuring that the employees have the necessary skills to work with new ICT technologies. Digital Innovation Hubs can play a key role in this respect, as they offer access to training and skills development. This element will be further reinforced by the European network of Digital Innovation Hubs, especially by building on the experience of EIT Digital, a leading European digital innovation and entrepreneurial education organisation driving Europe's digital transformation.

The Pan-European Network of DIH might embrace the digital transformation journey for SMEs reflected in this Design Options Paper, especially in the case of DIHs that are currently becoming operational and need to incorporate new and added-valued digitalisation services to their portfolio. For that purpose, the DIH of the participating regions were invited to the project meetings. They shared information about their structure and services, and showed great interest in the tools reviewed and in the outcomes of the DigiJourney project.

In the case of Extremadura, the DIH is already set up and working on potential technologies and services to foster digital transformation of regional companies, in particular in relation with the efficiency concept as a key factor for competitiveness in the four areas that shape the technological orientation challenges for Extremadura: Energy, Economy, Ecology and Equality.

In the case of Luxembourg, the DIH operates at national level and it aims at being the single platform to provide digital transformation services with partners focused on Industry 4.0. They are currently identifying providers, developing services in accordance to European Commission interests and defining industry needs for the DIH in key strategic sectors.

In the case of Romania, the DIH “Smart eHUB” pretends to become a model for the country, to create a culture of co-creation able to provide digital services to both private and public sectors and to offer the best expertise and skills in technologies needed for digital transformation, such

as electronic manufacturing services, design for manufacturing, data processing, IoT, industry 4.0, Artificial Intelligence, robotics, etc.

3. Enhancing capabilities

3.1 Challenges

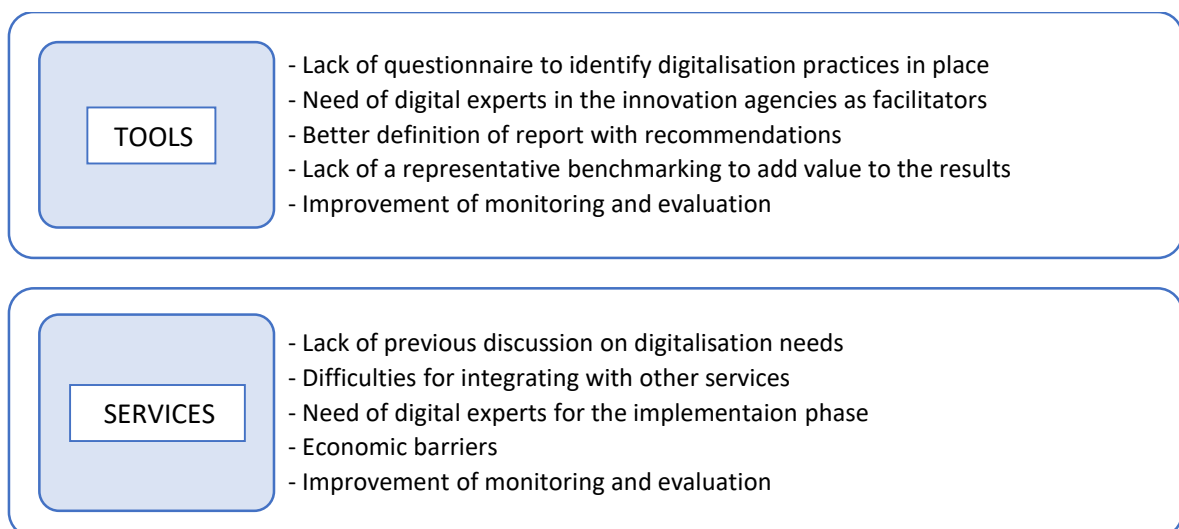
Digital technologies have created new markets and unprecedented business opportunities. Europe's industrial companies must become more digitally mature if they are to take advantage of the opportunities afforded by the digital transformation. Nevertheless, many companies still find difficult to know in which technologies to invest and how to secure financing for their digital transformation.

On the other hand, innovation agencies are willing to continuously improve their services. Since digitalisation is a recent need that has not been yet being tackled, innovation agencies face the common challenge of applying new digitalisation assessment and support techniques tailored to SMEs. The integration of digitalisation services would allow them to meet the companies' current needs and to widen their portfolio according to the changing ecosystem.

The main challenge identified during the analysis made in the DigiJourney project relates to the lack of a complete instrument that covers all the stages to get companies ready for the digital future. In particular, tools for diagnosis seem insufficient when there are not additional services such as professional consultancy and/or training associated, nor funds to help companies implementing the pertinent digital measures.

In terms of tools, the ones analysed differ from each other, but, in general terms, they entail many difficulties regarding the initial assessment questionnaire, the requirements for conducting the interviews with the company and the results to be obtained.

In terms of additional services, most of them involve funding for the implementation of digitalisation measures, but are not necessary linked to a previous diagnosis of the main digital needs of the company.



Main challenges for the implementation of digitalisation in SMEs
Source: Own elaboration

3.2 Lessons learned

As regards the tools to identify the main digitalisation needs in companies, there are significant differences among them, as showed in the summary of the main examined tools (see Annex II). On the one hand, not all of them are based on a questionnaire and those that are, cover different digitalisation aspects, being some of them more complete than others. For those more complex, facilitators in innovation agencies might need to have digitalisation skills. On the other hand, not all tools offer a standard report with recommendations nor a benchmarking to add value to the results. Nevertheless, most of them provide an action plan to cover the main digitalisation needs of the company, that however is not monitored and evaluated afterwards to ensure its implementation. Just like the three tools of the participating partners analysed in depth, the other European digitalisation tools reviewed show similar benefits and drawbacks.

The analysed additional services linked to tools suggest that they are key to facilitate the implementation of digitalisation measures in companies. In some cases, though, those additional services are not linked to a particular tool. Yet, for the digitalisation journey be coherent, the previous discussion on digitalisation needs and a previous diagnosis of the main digital needs of the company are highly advisable. According to both the additional services linked to the tools shared by the participating partners and those offered by other European organisations, they usually involve experts' advice and funding that, however, are not available in all territories. Moreover, they do not have an associated monitoring and evaluation system in place.

Reflecting on the lessons learned from the analysis made in the DigiJourney project, one can conclude that innovation agencies need both tools and services to properly address the support to SMEs for their digitalisation. Therefore, organisations increasingly need to tackle more digitalisation-related aspects through tools, practical guidance, advice on market solutions and R&D and/or implementing outsourcing. The same trend can be observed in regional stakeholders, as digitalisation requires to strengthen the collaboration between different actors in order to succeed. In this sense, DIHs seem a natural ally that offer connections and solutions for the companies' digitalisation purpose. In addition, it is important that innovation agencies have direct contact with regional and national authorities (Ministries, County Councils...) and stakeholders (Chambers of Commerce...) responsible for digitalisation support and policies in order to assure an effective transfer and to maximise the impact of digitalisation.

3.3 Recommendations

The analysis made in the DigiJourney projects points out, first of all, the need to combine digitalisation tools with vouchers or similar schemes in order to promote and support the digitalisation of SMEs.

Additionally, the results suggest that there is a logic digitalisation journey to address the complete process, increasing the adoption of digital measures by companies. Therefore, the good practices analysed allow to identify the main requirements of each phase of a digitalisation journey: identification of needs, preparation of a roadmap and implementation of measures.

The DigiJourney project highlights two main recommendations for the right implementation of digitalisation in SMEs:

- ✓ The necessity of combining different but complementary measures
- ✓ The need to establish the requirements for each digitalisation phase



Summary of recommendations for the digitalisation journey of companies
Source: Own elaboration

The digitalisation journey suggested illustrates that for innovation agencies to provide a complete service to companies, it is necessary to offer support during the whole digitalisation process of the SME, including the analysis phase to identify gaps in implementation and capabilities, the roadmap phase to spotlight the main recommendations and actions to be taken, and the implementation phase to effectively address the digital transformation of the company.

Analysis phase – Main recommendations

Preparation

Companies should be selected according to the innovation agencies experience and knowledge about the regional industrial fabric. Once selected, the facilitator should prepare the interview in advance. Facilitator should arrange a meeting, email or phone call with the company to set a date for the interview and to discuss who should be at it. Preferably, there should be at least the director or someone who has decision-making power and staff involved in digital innovation activities in the company. To send the questionnaire in advance might also be helpful.

Questionnaire

It is advisable to have a questionnaire simple but complete that addresses all the necessary digitalisation-related issues for companies to gain a holistic view on the most important aspects of digital innovation. The questionnaire would allow to identify the main strengths of the company as well as its weaknesses in order for them to be aware of how digital innovation contributes to the company's overall business performance.

It would be desirable that information could be captured through a modern and user-friendly way (by means of a tool or online platform) and, ideally, that it would offer benchmarks against other firms.

In this phase, innovation agencies could address the preparation and the interview with own staff. Consequently, no digital experts are needed at this point.

Roadmap phase – Main recommendations

Report

The output of the analysis phase is a roadmap for digital transformation. The report should highlight where the company is positioned in terms of digitalisation, its strengths and weaknesses, and some recommendations for improvement. It would be useful for innovation agencies to have an automated report with some general recommendations, that would be completed with ad-hoc advice and/or training.

It is worthy to present the report in person rather than posted or emailed, and to do the follow-up with the company in the following months to make sure that the roadmap is being implemented.

Assistance

For the provision of assistance, innovation agencies might have own resources specialised in digitalisation and, therefore, able to provide companies with further advice, or might count on external experts. Likewise, training to overcome the digitalisation barriers identified could be provided in-house, via online learning units about the most important technological developments such as blockchain, big data and artificial intelligence, or through training experts. Moreover, success stories or examples from other companies that already experienced the digitalisation process could be used as guidance.

In this phase, the collaboration of innovation agencies with Digital Innovation Hubs would be very valuable since companies could get access to market intelligence, technology-testing or training and skills development.

Implementation phase – Main recommendations

Funding

In the case of innovation agencies able to provide funds to companies, it would be advisable to launch a programme such as vouchers or loans for the implementation of digital measures, according to the needs identified in the previous phases of their digitalisation journey. If innovation agencies do not provide funding, it would be desirable to establish collaboration agreements with stakeholders that offer subsidies for digitalisation purposes to companies.

Monitoring and evaluation

It is worthy to put in place a monitoring and evaluation system of the whole process in order to be able to measure impact and implement future improvements. Innovation agencies should continue with the follow-up of companies after the roadmap phase and might prepare a final report with the main impacts for the company in terms of digital maturity and increase of competitiveness. An appropriate evaluation system would allow innovation agencies to improve the digitalisation journey of companies, if needed.

In this phase, innovation agencies unable to provide funding should establish collaboration agreements with stakeholders operating in the digitalisation field and able to cover companies' costs for implementation of digitalisation measures.

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Annex I: Questionnaire for peer reviews on tools

01 Is the tool available for any agency? Is it free of charge? If not, would be feasible to reach an agreement with the proprietary to use it and under what conditions?

02 Is it training necessary to be able to use the tool? How much time do you expect to spend on studying the tool, before you start using it with client companies?

03 How much time do you think that the client company needs to prepare before taking the assessment?

04 Would the client company need support to get prepared before the assessment?

05 Who should take the assessment within the client company? Is it enough to have one representative of the client company taking it or should additional staff take it as well to have a holistic vision?

06 How much time do you estimate that it takes to complete the assessment?

07 Would the client company need support to take the assessment? If yes, in which ways

08 Is the tool easy to use? If not, please list the difficulties you experienced

09 Is the tool useful to one or more of the following types of companies: start-ups, scale-ups, micro-SMEs, SMEs, large enterprises? According to your opinion, what type does it suit best?

10 Is the tool useful for any sector? According to your opinion, what sector/s does it suit best?

11 Are the outputs of the assessment useful to your client companies? Please, explain in which ways.

12 What kind of support would your client company need from your agency to realise the potential of the assessment

13 Is there space for improving the tool? Please, identify ways in which the tool could be improved.

14 Do you intend to recommend to your agency to include this tool in its services, and why. If not, are you familiar with a tool that would better answer your clients' needs in assessing digitalisation? Please, name it and list a few of its advantages in comparison to the assessed tool

15 Would you recommend this tool to the Enterprise Europe Network or to other innovation agencies? Please, justify.?

16 Are there additional/further services beyond the tool? If yes, please specify which are and if they have a cost.

17 How could your agency assure the implementation of those additional services in the client company?

18 Is there space for improving the additional services? Please, identify ways in which the services could be improved.

19 Do you intend to recommend to your agency to include the additional services related to the tool in its portfolio, and why?

20 Would you recommend the additional services related to the tool to the Enterprise Europe Network or to other innovation agencies? Please, justify.

Annex II: Summary of the examined tools

| Tool Examined | DigitaliseSME | Fit 4 Digital | DIQ <small>Digital Innovation Quotient</small> |
|------------------------|---|---|---|
| Target group | Scale-ups, SMEs | Small companies | Companies with 10-15 employees |
| Preparation of company | 30 minutes | Not needed | 1-2 days |
| Consultant competences | Field of specialisation Professional experience Reference letters | Project management Company management Digital tools proficiency | Certified by IMProve Ac. Digitalisation and entrepreneurial skills |
| Process | 1 month (info exchange) 1 month (action plan) | 1 week (info exchange) 2-4 weeks (action plan) | 2 weeks (info exchange) 1 month (action plan) |
| Benefits | Experts matching Tailored action plan | Available resources for implementation | Benchmarking report Tailored action plan |
| Drawbacks | Implementation of action plan | No standard methodology | Implementation of action plan |
| Complexity (1-5) | 2 | 2 | 4 |