Digital Volunteers Pilot Programme

Evaluation Report

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Preface

The author of this evaluation, Stefan Moritz, is a trained sociologist experienced in qualitative social research methods, with a long track record of EU-project design and management since 1995, mainly for economic development projects. Since 2014 he is Managing Director of the European Confederation of SME Associations called 'European Entrepreneurs CEA-PME', and in this role he also managed from 2018-2020 the pilot project "DigitaliseSME", which had been financed under Horizon 2020 by the European Commission on request by the European Parliament that wanted to support the digitalisation of SMEs in Europe. The project DigitaliseSME was implemented together with 5 Digital Innovation Hubs in Czech Republic, Germany, the Netherlands, Romania and Spain, and its Final Conference took place in Brussels on 18th of February 2020. The final technical evaluation report of that project can be found on the project website.

The author would like to thank very much the Directorate-General for Communication Networks, Content and Technology of the European Commission for the trust into his experience and work.

Executive Summary of the Evaluation Report

The Digital Volunteers Pilot Programme is an initiative of the European Commission, aimed at supporting the digitalisation of Micro-, Small and Medium-sized Enterprises (MSME) in Europe. The Pilot Programme has been run between May 2021 and March 2022, in collaboration with the Conseil de Cooperation Economique, and involved 41 voluntarily pledging large companies from many different sectors and European member states, which agreed to support MSMEs with mentoring in their digitalisation processes. Thanks to this 84 MSMEs received training, mentoring as well as know-how in digital technologies, meant to improve their performance and competitiveness.

The present evaluation report found out in summary that the Digital Volunteers Pilot Programme proved to have **very much met the needs of the mentored MSMEs**, which often received a **tailor-made**, **well organised mentoring support** by larger companies and **their well experienced staff**, that mainly **co-designed** and **implemented together** with each single company the projects for them. The **added value** of initiated or even completed digitalisation steps, projects or processes, **is clearly seen** and **positively judged** by the large majority of beneficiary MSMEs. The approaches and methods of the single projects did in some cases allow a **considerable economic impact** as also **mutual learning from each other**, for the benefit of both sides, mentors and mentees.

The main limit of the Digital Volunteers Pilot Programme is the not-representativeness of benefitting companies: less than 20% of mentees were micro-enterprises, while nearly 50% were medium-sized companies. A second structural deficit was in some cases the limited control the European Commission could exercise on the projects, given that being Digital Volunteers Pilot Programme a voluntary, not a co-funded and hence not thoroughly "steered" program. This might have led to some uncoordinated interpretation of the project's approach and not always to the desired results.

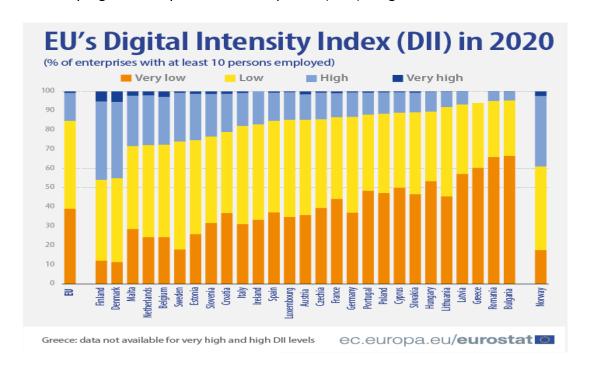
The report also syntheses **recommendations for further improvement**, trying to compensate the under-representation of micro & small companies, and to allow a more a coordinate approach, adding more positive incentives.

Digital Volunteers Pilot Programme

1. Background

1.1. The digitalisation level of SMEs in Europe

Digitalisation is a central tool to improve the economic situation of Small and medium-sized enterprises (SMEs), and that has become even more clear during the economic crisis caused by COVID-19. Eurostat data show the level of European SMEs' digitalisation, through the EU's **Digital Intensity Index** (DII)¹ a composite indicator that measures the use of different digital technologies and its score (0-12) is determined by how many of the 12 selected digital technologies the enterprises use (the higher the score, the higher the digital intensity of the enterprise)². In 2020, the EU's DII indicated that small SMEs (with 10-49 employees) have mainly a low (46%) or very low (39%) level of technology: only 1% of EU micro SMEs (with 1-9 employees) reached a very high level of digital intensity while 14% reached a high level. On the other hand, 9% of the EU's large enterprises had a very high DII and 42% a high level, while only 2% of medium-sized companies registered a very high-intensity level and one-quarter (25%) a high level.³



¹ How digitalised are EU's enterprises? - Products Eurostat News - Eurostat (europa.eu)

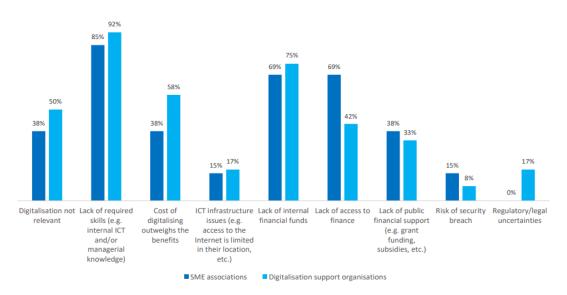
² <u>How digitalised are EU's enterprises? - Products Eurostat News - Eurostat (europa.eu)</u>

³ How digitalised are EU's enterprises? - Products Eurostat News - Eurostat (europa.eu)

This data indicates that the digital transformation of SMEs still present different challenges in Europe. Such challenges can be grouped in three main categories:

- Lack of awareness about and availability of digital technologies, including the lack of good connectivity, digital tools and services;
- 2. Lack of capacity to engage in digital transformation in terms of skills, time and funding;
- 3. Lack of capability to combine digital strategy with a concrete business model.⁴

The EU-Commission's Annual Report on SMEs 2020/2021 highlights the key factors that delay SMEs digital transformation, which are, among others, lack of information about the benefits, a lack of required skills and a lack of financial resources.⁵ These factors need to be considered in order to develop policies aimed at encouraging SMEs' digitalisation.



Source: Survey of SME associations and SME digitalisation support organisations run by LE Europe

⁴ SME Annual Report - 2021.pdf

⁵ SME Annual Report - 2021.pdf

1.2 Digital Volunteers Pilot Programme

The **Digital Volunteers Pilot Programme** is an initiative, made possible by the cooperation between the *European Commission (DG CNECT)* and the think-tank of big European companies called *Conseil de Cooperation Economique*. It aims at supporting European SMEs in their digital transformation journey by growing their employees' digital competences, thanks to the collaboration with skilled mentors from larger businesses, that share their digital competences, on a pro-bono basis.⁶

The programme has been introduced, in March 2020, in the *EU SME Strategy for a sustainable and digital Europe*. The strategy claimed that the European Commission would have "also launch(ed) a programme for "digital volunteers" to <u>allow young skilled people</u> and <u>experienced seniors</u> to <u>share their digital competence with traditional businesses</u>."

The EU economy counts on the presence of approximately 25 million SMEs that employ around 100 million people (two out of three jobs in the EU), produce more than half of Europe's Gross Domestic Product (GDP) and play a key role in adding value in every sector of the economy. The EU SME Strategy for a sustainable and digital Europe is based on the acknowledgment that digitalisation can provide great opportunities for SMEs to improve the efficiency of production processes and ability to innovate products and business models.

The strategy aims at increasing the number of SMEs adopting digital technologies, and do so through actions based on three main pillars:

- Capacity-building and support for the transition to sustainability and digitalisation;
- Reducing regulatory burden and improving market access;
- Improving access to financing.⁹

"Using advanced disruptive technologies, such as blockchain and Artificial Intelligence (AI), Cloud and High-Performance Computing (HPC) can dramatically boost SMEs competitiveness". ¹⁰ However, only 17% of SMEs have successfully integrated digital technologies into their businesses, compared to 54% of large companies, and many SMEs are still not able to understand data and are very vulnerable to cyber threats. In addition to that, contrary to large companies, SMEs are challenged

⁶ <u>Digital-Volunteers-Pilot-Programme-Participation-Guide-July-2021.pdf</u> (europa.eu)

⁷ SME strategy launched by European Commission | Shaping Europe's digital future (europa.eu)

⁸ SME Strategy for a sustainable and digital Europe (europa.eu)

⁹ SME Strategy for a sustainable and digital Europe (europa.eu)

¹⁰ SME Strategy for a sustainable and digital Europe (europa.eu)

by a lack of skilled employees, and often of the economic resources to invest in training. The lack of skills is mostly related to new technologies and digitalisation. ¹¹

A solution proposed by the European Commission is to intervene on training, crucial for both managers and employees in SMEs, and to help matching the need of skilled workers in SMEs with the labour market supply. In this context, it launched the "**Digital Volunteers**", to allow skilled professional and qualified people to share their digital expertise "with traditional businesses"-meaning probably SMEs with a low digital intensity.

Moreover, the programme is addressing the important lack of digital skills in the EU: only 54% of people have at least basic digital skills and 64% of large enterprises and 56% of SMEs reported difficulties to fill ICT specialists' vacancies, particularly targeting the SMEs that are a 7% using cloud services and only 12% using big data analytics.

The aim of Digital Volunteers is to help reaching the target values of the **Digital Decade Communication**, a set of digital transformations to be reached by 2030, presented by the European Commission. The EU's Digital Decade Communication proposes - among other targets - to better develop digital skills, aiming at raising the number of IT specialists to 20 million and have a better gender parity in the field, plus reaching an 80% of the population with at least basic digital skills. According to the programme, this goal can also be reached through allowing "young skilled people and experienced seniors to share their digital competence with traditional businesses, but also supporting and interlinking SME intermediaries such as clusters, to help upskill staff of SMEs in the area of sustainability." ¹²

Digital Volunteers is meant to be implemented in two phases: a Pilot phase and the Permanent Programme.

The **Pilot Programme**, started in May 2021, brought together digital experts from **large companies** (around 40) from approx. 10 member states who worked as **mentors for SMEs** to digitally upskill their employees and digitalise their business activities. In this phase, the mentors had to be appointed among the staff, the beneficiary SME had to be identified by the large company, and at a certain point they had to agree on the structure and the time period of the digital support, i.e. how many meetings would have been carried out in a week/month, what was the form in which the

¹¹ SME Strategy for a sustainable and digital Europe (europa.eu)

¹² SME Strategy for a sustainable and digital Europe (europa.eu)

programme was implemented, in presence or online/hybrid mode. Some of the activities of this phase included among others:

- Integrating digital marketing tools to increase the company's presence and online visibility
- Co-design and integration of CMS (content management system) or CRM (Customer relationship management) tools for more efficient and improved business relationships and more transparent and efficient processes with costumers
- Improving the digital footprint (website, social media, Search Engine Optimisation) of SMEs
 to increase their visibility
- Introducing new digital technologies into production processes
- etc.

At the end of this phase, the companies participating provided feedback on the experience. Based on the experience gained during this first pilot phase, to be summarised with this evaluation report, the Digital Volunteers Pilot Programme might be later scaled up to support the transfer and sharing of skills between large companies and SMEs all over in Europe.

This second phase, the **Digital Volunteers Permanent Programme**, readjusted and shaped in a more structured manner, on the basis of the feedbacks received and after an analysis of the Pilot, will take off in 2022. The **objective of the second phase is to open the programme to all companies and to give any SME the possibility to ask for targeted support. The digital mentors, in this phase, will contribute solving a specific challenge related to digitalisation identified jointly by the mentee company and its mentor. Naturally, the Permanent Programme will be open to the companies that have participated to the Pilot phase. The European Digital Skills & Jobs Platform also hosts a dedicated matchmaking tool between SMEs and the Volunteers to enable targeted support.**

The structure of the Pilot programme was a flexible scheme, requiring from large companies three key conditions:

- Helping at least 1 company, recognised as SME by European criteria, in its digitisation process;
- Sharing **digital knowledge and know-how with the employees** of the beneficiary SME so as to allow skills transfer and positive digitalisation effects in time;

- Respecting all confidential information and making sure that the mentoring will not result in a lock-in for SME with the tutor company imposing their own methods or software.

First, the volunteering large companies had to choose, if needed also with the help of the European Commission, one or more SMEs to coach and mentor on tailored solutions for different challenges present in the digitalisation process of the SMEs. Then, they had to deliver a first "Reporting Fiche" indicating different details about the Mentor company and the Beneficiary SMEs, such as the industry sector or the relation between the two companies, and a first proposal of the mentoring scheme and the digitalisation challenge, which would have been addressed. Starting from May 4th 2021, participating companies that were ready to work, started to deploy their mentors in the beneficiary SMEs (more time was allowed for those companies that needed to finalise the process). After completing the first "Reporting Fiche", the companies were requested to register their organisation on the Pledge Viewer¹³, and doing so demonstrate their active contribution to supporting the acquisition of digital skills and be welcomed as members of the Digital Skills & Jobs

Close to the conclusion of the Pilot phase at the beginning of 2022, a series of webinars of the Digital Volunteers Pilot Programme were organised to give participating companies the opportunity to present their mentoring schemes and to receive preliminary feedback from the large companies and SMEs on their work. These webinars took place on January 20th, February 10th and 17th where all companies presented their mentoring work done.

Coalition, a community supported by the Commission that enables stakeholders to propose

initiatives to improve the digital skills situation in Europe, but also to provide a network for

2. Participants of the Pilot Programme

exchange.

The Pilot Programme benefited from the participation of **in total 41 Volunteer Mentor businesses**, helping one or more SMEs each in the process of develop their digital approach. A number of companies, about 15, were not able to continue the programme, either not completing the Reporting Fiches or not finding the right SME to follow with their mentors. Having a flexible scheme for the programme, the volunteer companies discussed and decided, together with their beneficiary SMEs, what implementation to work on, and based on this they proposed a mentoring project. It is

¹³ https://pledgeviewer.eu/pledges

possible to allocate the mentoring projects to different categories, based on the similarities of their approaches and the methodology of the mentoring schemes adopted.

A first group are mentoring projects that were focused on digitalisation and optimisation of processes, such as the improvement of data collection and managing, the creation of a cloud system, setting up or improving digital administration or introduction of digital technologies in the production processes. A total of 20 companies focused on improving the digitalisation of processes to better organise the structure of the SMEs' business.

No.	Volunteer Company	Mentoring scheme	Beneficiary SMEs
1	a2a	Implementation of WorkForce Management system	Solco Brescia, medium
2	Airbus	Creation of IoT technologies and support in the transition to a paperless environment	SAPRENA, medium
3	Banca Comerciala Romana	Launching of a SalesBridge Platform to reach and connect entrepreneurs, help them with digitalisation and basic technology	34 Self-employed, Small enterprises and NGOs
4	BNP Paribas Fortis	Workshops on digitalisation of data and on cybersecurity	Ateliers Jean Del'Cour, medium
5	Brisa	Implementation of a tool that measures stakeholder satisfaction (Net promoter Score) and make data interpretation easier	Habidom, small
6	Crèdit Agricole	Focus on different aspects, such as finance and accounting digitalisation, HR training and cybersecurity	Group MADEHO Enterprise CHARPENTIER Group HIFIELD SCEA de la Croix Fortier, medium
7	EDP	Development of digital capabilities of staff persons	JAYME DA COSTA Energias, medium
8	ENEL	Implementation of the SekurClick, project that provide digitalized documentation for workers and reduce safety risks	Mario Guerrucci s.r.l, medium
9	ENGIE	Implementation of a new set of functions (API: application programming interface) that allow one application to access other applications	Comatelec, medium
10	Evotrust	Introduction of digital HR services (for instance, electronic files and digital hiring)	SB Accounting & Counsulting SA, medium

No.	Volunteer Company	Mentoring scheme	Beneficiary SMEs
11	Maersk	Increase of the automation and decrease of risk of errors when mapping sensor data	Danelec Marine, medium
12	Neuropublic	Development of a Blockchain infrastructure for food traceability, based on the open source Hyperledger Fabric platform	Arcadian Agricultural Cooperative "H ENΩΣΗ", small
13	NOS Communication	Optimization of cloud-based infrastructure; promotion of Modatta's brand	Modatta, small
14	Nova Liubljanska banka	Planning, upgrading and configuring server infrastructure; Implementation of IT Security, and cloud system	Pekarna Pečjak d.o.o; STILLES D.O.O., INŽENIRING IN NOTRANJA OPREMA SEVNICA, both medium
15	Podravka Croatia	Automatization of the administrative part of the business through Cloud technologies	OPG Habi family farm, small
16	Prysmian	Support and formalizing a mapping of the current IT processes and tools, proposal of possible solutions	Reggiani Spa illuminazione, medium
17	SUEZ	Organization of workshops on how to better collect and integrate data, with proposal of potential solutions to improve data management	HESUS, medium
18	Telecom Italia	Digital transformation of data analysis and internal communication; implementation of cyber security	Agricola Reitana Company, small
19	Telelink	Design of cloud-based infrastructure and Pharma SaTT Platform, an end-to-end serialization, aggregation and traceability solution	SoftGroup AD, medium
20	Thales Alenia Space France	Combining data in order to create innovative digital solutions in civil and defence domain	GeoTrend, small

17 mentoring projects instead concentrated on solutions aimed at improving the mentees' marketing, outreach and increase in visibility, together with all those services that could improve the user experience of websites and digital communication tools like CRM of the SMEs.

No.	Volunteer Company	Mentoring scheme	Beneficiary SMEs
1	Accenture	Support for the creation of a digital marketing campaign, and design of a CRM platform	KeyCrime, small
2	Atos	Analysis, evaluation, practical improvements on customer experience through digital channels	Dos Fuentes, medium
3	Avio Aero	Design and deployment of a Content Management System	ELLENA spa, medium
4	AXA	Improvement of content management, such as chat bot, user experience and the creation of a digital health platform	Youth Against AIDS from OHHH Foundation, micro
5	BNP Paribas Fortis	Implementation of digital marketing, through a new website, mentoring on cybersecurity	Ateliers Jean Del'Cour, mid-cap
6	Capgemini	Improvement of the economic model of the e-commerce platform	YuAct, micro
7	CEZ	Redesign of website and e-shop	Revenium, small
8	CTT Correios de Portugal	Helping the SMEs in their online trading capabilities, with the use of e-commerce and digital marketing strategies	HMS Sports Consulting Forbidden Merch Moto Clube de Faro Talho Alvitense / Enchidos da Zezinha, small and micro
9	EFACEC	Design and implementation of a cloud-based Customer digital platform/portal	QUADTEL Montagens Elètricas, medium
10	Ferrovie dello stato italiane	Finding digital solutions in order to support journey in the tourism segment	Qiibee and iThalia Yookyec VirtuItaly Deduce data solutions, micro/small
11	Foyer	Launch of an e-commerce platform	Golf Planet SARL, micro
12	Generali	Training on omnichannel interaction, digital marketing and social media	Sorelle Ramonda SpA, medium
13	Hapag-Lloyd	Help on customer acquisition, fund raising	Ai-omatic solutions, small

No.	Volunteer Company	Mentoring scheme	Beneficiary SMEs
14	MSC Cruises	Identification of new business possibilities and enhancement of mobile app	Winelivery SRL, small
15	Raiffeien bank	Deepening the knowledge about marketing, but also machine learning implementation	6 micro SMEs
16	Thyssenkrupp	Building of all digital market tools, website, email marketing and social media presence	De Metaalzagerij BV, micro
17	Unipol group SpA	Digitalization of the journey of each wine, making it available to the customers through a QR.	Tenute Del Cerro S.p.A, medium

A last group composed of four companies, worked on the **replacement**, **or innovation**, **of technical processes**, **machines**, or part of machineries, in order to make the production faster and more efficient.

No.	Volunteer Company	Mentoring scheme	Beneficiary SMEs
1	Ansaldo energia	Implementation of a digital	ATLA Srl, medium
		inspection procedure (3D model)	
2	Engineering	Equipment of machineries with	BioSpremi startup, micro
		sensors capable of collecting data,	
		process them and making them	
		easily accessible to the producer,	
		identify anomalies	
3	Naval group	Implementation of Augmented	SOFREBA, medium
		reality for quality inspection	
4	Post Luxemburg	Asset Tracking that enables	LISE & FILS SA, medium
		monitoring of tools and vehicles,	
		measurement of the temperature,	
		hair pressure and humidity, in this	
		way can detect machine failure	

As we can see, the mentors represent a quite condensed list of **very big and well-known companies**, active in many fields, from **banking** and **insurances** to **industry**, from **technological services** through **food** to railways, energy or **public utility companies**, and **big consulting firms**.

The digitalisation or digital capacity building projects implemented by the mentor companies are **quite varied and offer a large range of cases**, which are impossible to be compared between one and the other, if we do not **look into the details of the methods** adopted and the outputs produced.

That means we have to measure their effectiveness and appropriateness through the **benefits they produced for the SMEs** involved.

3. The benefits for SMEs

The evaluation of the approach of Digital Volunteers must be focussed mainly around the benefit for SMEs, as this is the large group of companies lagging too much behind in terms of digitalisation in Europe's economy. Finding ways to catalyse this process for many, to speed it up or even to become a widespread ecosystem of innovators, would all find the strong support of decision makers. Therefore, Digital Volunteers, such as other national and European schemes supporting digitalisation (e.g. the Network of Digital Innovation Hubs or the Horizon 2020 Pilot Project DigitaliseSME on European level), might have positive aspects that should be identified in order to be replicated or emphasized, while other features might need to be improved to bring better results.

Indeed, the basic approach of Digital Volunteers – based on voluntary pledges by larger companies to take over responsibility for one or more SMEs, and share with them *free of charge* their knowhow in a structured manner – could bear several critical moments that might be counterproductive or at least limit the efficiency, the ampleness and the replicability of the programme.

For instance, the voluntary character of commitment and the free of charge engagement could be compensated by other aspects that count for the "donors" (the mentor companies) but not for the "receiver" (the mentees), like image gains or – if the companies are linked to the value or supply chain of the mentors – higher degree of dependency of a provider or a client company. Also, efficiency gains within a mentored SME that then delivers to the mentor company at better conditions, faster, with higher quality, or simply with a smoother, machine-supported communication process without loss of information or even allowing a better control of processes by the large company, all these aspects could count as a welcome benefit for the mentoring company. But all these compensations and benefits for the mentors must not necessarily be perceived as advantages also for the receiving companies.

The programme management has correctly insisted that "locking-in" an SME into IT-systems owned, managed or ruled by the larger, mentoring company shall not be allowed as part of the Digital Volunteers Pilot Programme. Nevertheless, this can't be really controlled, as there is no sanction in

case it happens anyway, because the projects are not financed by the EU-Commission, thus there are no rules about "ineligible" actions or expenses.

And exactly also this last aspect could be seen as critical: on one hand side, the absence of EU-funding might make the process quite fast and smooth, but on the other hand side rules and processes could be difficult to be governed, and evidence of success might not be easy to be demonstrated to full credibility, as reporting is also voluntary, resulting in possible limits to its truthfulness.

Finally, the need for identifying an SME by the mentoring company, leads automatically to look into their own networks of suppliers, customers and value chain partners, and rarely to simply "some SMEs" in their countries with digitalisation needs, not easy to be identified. This lead necessarily to a certain bias in selecting the final beneficiaries, intended or not.

All these potentially critical aspects have to be supposed heuristically in order to be able to define an evaluation scheme, in order to ask the right questions allowing to find out pitfalls and limits, as well as advantages, or even to prove if some critical assumptions were wrong (falsification).

For a more detailed evaluation of the benefits for SMEs the evaluator designed a questionnaire and collected 17 answers. With a total universe of 89 SMEs involved - many of them (34) through the Commercial Bank of Romania (BCR), with a majority of micro and small companies, very difficult to be reached with a survey in English and having practically all received the same support – these 17 answers represent nearly 8% of the total number of benefitting companies, and give us insight on more than 41% of the projects implemented by the 41 mentors. A sample of between 5 an 10% is considered more than sufficient to represent the general total. Hence, in relation to the number of projects this sample is highly representative.

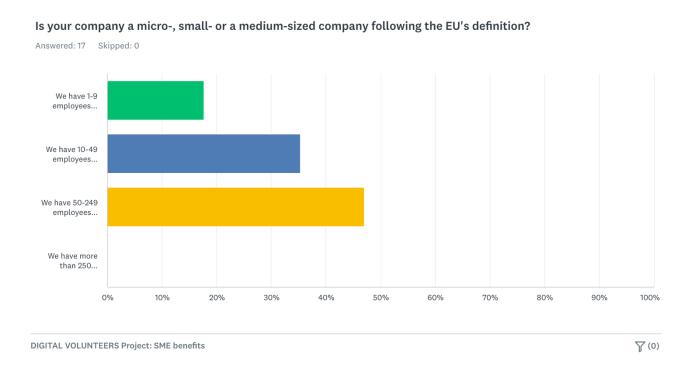
The survey sample, as well as the overview above, show both that a large group of companies are small (10-49 employees) and medium sized (50-249), while micro enterprises represent a minor group, if it wouldn't have been for BCR, that alone accounts with 31 micro companies and 3 NGOs for approx. 38% of the total. In addition to BCR, also other 4 mentors supported more than 1 mentee, but in smaller quantities, like between 2 and 6.

While BCR and the other 4 have done a great service to many micro- and smaller enterprises to raise their digital skills and performance, for a more coherent evaluation of the different "project cases" we consider the numbers of SME equal to the number of mentors, as each mentor implemented

one type of mentoring project, which in five cases was simply replicated as a more or less fixed format, to 2, 4, 6 or even 34 micro- and small companies (MSE). This is justified by the assumption that the quality of the different projects is important and not the quantitative comparison. Thus, we need to focus on the projects. Which brings us again to look at the methods and the outputs, more than on the quantities. Nonetheless the statistical distribution of qualities is an indicator for significance of a quality.

3.1. The profile of the benefitting companies

Counted 41 "mentoring project cases", only 17,65% of the mentees were micro-enterprises, 35,3% small and the remaining 47% medium-sized with more than 50 employees. I.e. the micro-, small and medium-sized enterprises (MSMEs) involved in the Digital Volunteers Pilot Programme *do not* represent the "normal" distribution of MSMEs, whereas statistically the distribution of enterprises represent is normally between 85-95% of micro, 7-10% small and 1-3% medium-sized enterprises. Even if we calculate the incidence of medium-sized companies on the total sample of beneficiary MSMEs (of 89) we obtain nearly 26%, which still exceeds the statistically "normal" range.



Nearly **30%** of the sample was in the value chain of the mentor company already before the project, and **23,5%** were clients, so slightly more than half have already been in economic relationship with the mentors, while 47% did not. After the project, the relationship did not substantially change for

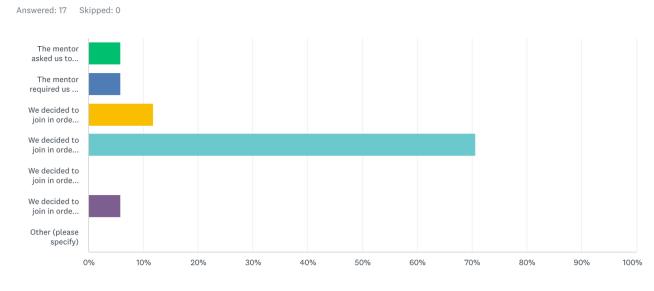
nearly half of the companies, while 17,65% even increased the importance of their relationship with the mentor after the project, and only 6% reduced it. 23,5% remained outside the value chain. That means also that approx. a quarter of the SMEs entered the value chain of the mentor during the project, either as suppliers or client.

3.2. Motivation of the companies to participate

The overall majority of companies – 76,5% – decided to participate to the scheme with an **authentically rational motivation**, either in order to **improve digital skills** of the team or to **improve the company's economic performance**. To this can be added 12% that wanted to **improve their relationship** with the mentor, a more commercial consideration than an intrinsic motivation to improve performance through digitalisation, but anyway a rational decision.

Another 12% instead were "invited" or maybe even pressed to join the project by their mentors, in order to **keep the relationship** or to **improve their performance** in the large company's value chain. Of course, this might be only the perception by the SMEs, but represents anyway a bad motivation to start a digitalisation project.



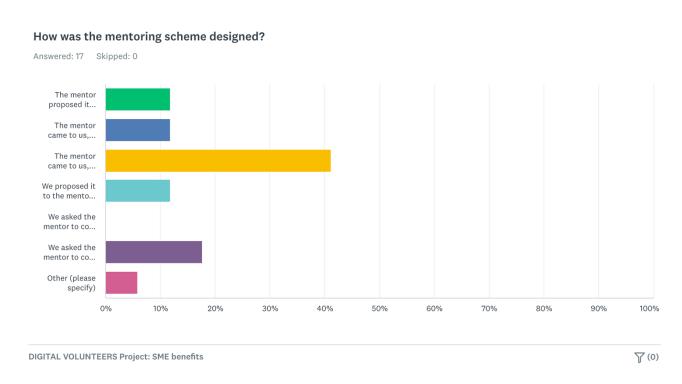


DIGITAL VOLUNTEERS Project: SME benefits

3.3 Design of the project scheme, complexity and effort needed

In nearly 30% of cases the proposal for the subject came from the mentees, while in 65% it was the initiative of the mentor. That is well justified by the better technological know-how of the bigger companies.

In approx. **60% the project schemes have been co-designed** among mentor and mentee, either on proposal and with the analysis of the bigger companies (41,2%) or of the benefitting SME (17,65%). This is a very important aspect, as an effective innovation project on company level requires the active involvement of (parts of) a company, co-designing and therefore consciously deciding about the method and the objectives for a change.



Only in 12% of cases the mentor proposed a scheme and the SME accepted it as such, without going for a tailor-made approach based on a case analysis, which instead was the approach in another 12% of cases: analysis-proposal-approval. On the other hand, also nearly 18% of the SMEs defined clearly their needs and ideas on their own, and the mentor accepted to support them without further analysis, which at least indicates trust or availability to help unconditionally.

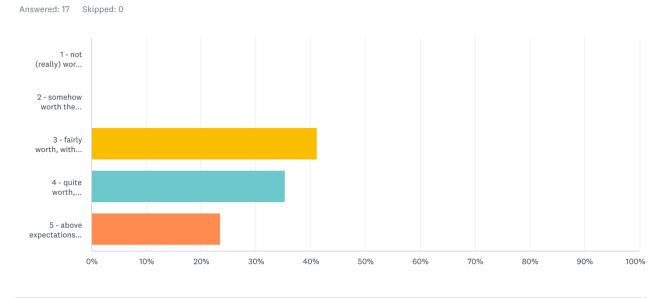
Regarding the **complexity** of the mentoring scheme to be implemented, 94% of the SMEs considered it from their side *quite easy* (59%) or *reasonably easy*, and not too difficult (35%). Only a minority (6%) thinks it was quite difficult to comply with the challenge.

The average company invested **1-5 hours per week** of **2-5 employees**, for at least **5-8 weeks**, and in **many cases also more**. This makes a comprehensive average effort of 70-90 hours in total, approx. half a month of a full-time employee. This can be estimated as a quite **low investment** in terms of time and costs by the involved SMEs.

A consultancy company would have clearly costed more and produced probably less understanding, staff engagement and thus effectiveness. Therefore, compared to the costs **the objective cost-effectiveness relation is quite advantageous**. Logically, there might have been also cases that caused higher costs, as some others with even less.

Indeed, **41%** of the companies considered the scheme **fairly worth** the effort in terms of resources and engagement from their side, with space for improvement, another **35% think it was quite worth and satisfactory**, and even **23,5% feel it was above their expectations**. No single enterprise says it was not or only very modestly worth the effort. But with the very low cost the worthiness could have easily be higher, a higher estimation of quite of even very worthy, with values over 66% or even 75% would have been a coherent expectation. The "only" 41% of fairly worth are to be explained.



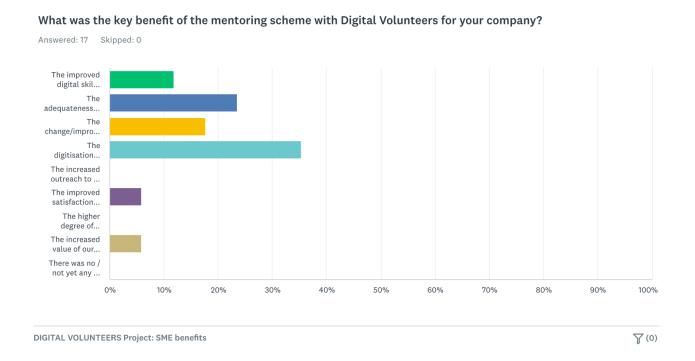


DIGITAL VOLUNTEERS Project: SME benefits

3.4 Added value and quality of the method

Apparently in contradiction with the former judgment, in terms of added value, nearly **60% esteem they could not (yet) measure any added economic value**. This might be due to the early stage of evaluation after finalising the project. But **41% see processes simplified or speeded up,** and **sales already increased**, which is – at this stage – a good sign.

The added value in qualitative terms are distributed as follows:



12% think the **improved digital skills** of one or more employees is decisive, well **23,5%** say the **adequateness of the technology chosen for the company and its business model** made the difference, 17,65% mention the **change or improvement** of one or more of the **internal processes**, and in particular **for 35,2% of companies** the added value is mainly the **digitisation of one or more processes** that were formerly managed analogically, mechanically or manually. Only for 6% the improved **satisfaction of their customers** counted, and another 6% consider the increased **appreciation of their products or services** the real added value.

Regarding the quality of the mentoring methods the highest appreciation is formulated for the fact that the schemes were conducted by very experienced persons of the mentoring companies (4,24/5), that they had the appropriate duration (4,13/5), and that it helped to acquire more advanced digital skills (4,12/5). Also, the fact that the mentoring schemes were hands-on and adapted to everyday working reality (3,94/5) and that the mentors agreed flexibly with the SMEs'

employees the objectives and way how to implement it, was fairly well appreciated. Practically, no aspect of the different categories received less than 3 out of 5 points.

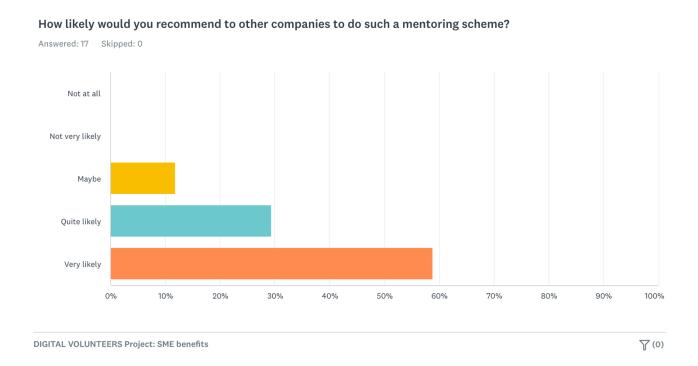
The most **important aspects of the mentoring approach** were, that is was

- focused on **improving use of technology**, to improve processes and performance (4,41/5);
- adequate to the **company's time and capacities** (4,12/5);
- tailor-made to **needs and business model** of the SMEs (4,06/5), and that they
- were mentored by **experienced people** that **knew their businesses** (4,00/5)

Also in case of the approach to the mentoring, the SMEs give a generally positive vote, which never goes below a score of 3 out of 5 points.

3.5 Overall judgment

With this overall positive appreciation, it is not surprising that more than **88% would quite or very likely recommend the Programme Digital Volunteers to other companies**. And another 12% would at least consider to maybe recommend it, i.e. no one would advise to avoid it.



Practically, the **only critical aspect** of the Digital Volunteers Pilot Programme seems to be the **over-representation of medium-sized companies** and the apparent **inappropriateness** of the scheme for **micro- and small enterprises** outside the supply and value chains.

But there are also other hints for further improvement. For instance, focussing more on **economic** added value in the definition of the schemes would raise the ambition, making co-design of schemes a condition could improve the impact, as well as requiring a higher effort by medium-sized companies in terms of investment would benefit especially these medium-sized companies more – and hence the whole economy.

4. Best practices

In the context of the Digital Volunteer Pilot programme, based on the self-evaluation and the presentation of the projects during the webinars in January and February 2022, the evaluator has chosen five companies that were interviewed via video-meetings of approx. 30 minutes in March and April 2022, and were selected for their representativeness in terms of:

- well-structured mentoring approach with clear objectives and a clear mentor-mentee
 relationship with one or more companies
- wide range of sectors represented (services, industrial, public utilities, agro-food and retail)
- representing those countries that mainly participated to the programme, like Italian,
 Romanian, Croatian and Portuguese companies (with also France being well represented,
 and except few single exceptions, other areas of Europe were quite underrepresented, e.g.
 Germany, Northern and Central Europe or the Baltic States, etc.)
- **clear added value** of their projects for the involved SMEs.

By means of these 5 showcases, the evaluator intends to **synthesize important aspect**s on how large enterprises can or should work for a successful digitalisation of MSMEs – also in their own interest.





A2α is a public utility company, with more than 12.000 employees, that has been working in energy distribution, water cycle, waste collection and urban hygiene, material recovery and more.

During the programme, they mentored *Solco*, the first consortium of social cooperatives



born in Italy, in 1983. Solco is a medium-sized company, with around 140 employees, working in the public utility distribution network. The SME expressed the interest in adopting, and adapting to their work the supplier's management tool used by a2a, an instrument that can be used from tablet or mobile, and can be applied to many different areas.

The activity included a phase of analysis and mapping of the Solco data model within the solution in order to configure the solution in the context of Solco and start the Pilot phase. The project, named Work Force Management & Scheduling (WFM) enabled to assemble real time data and convey theme in a single channel.

What could be achieved with the WFM was a higher quality and accuracy of data, with fewer errors and punctual mapping of the activities, as well as workforce optimisation. It is a system that allows scheduling the work order through tablet and mobile, a programme that can be also applied to other aspects of the company.

This project was an authentic digitalisation project that enabled an SME to improve with a very simple tool its processes which allowed to save costs and time. It is of course also in the interest of a2a that Solco could do this, but it was not compulsory that a2a did choose Solco. In addition to that, and bearing in mind the fact that a large part of Solco's workforce has diverse abilities, shows also a2a's social engagement in supporting an inclusive company that offers jobs to people disadvantaged on the job market, raising the company's competitiveness through digitalisation.



Banca Comerciala Romana, active in the sector of banking and social finance, participated to the Digital Volunteers Pilot Programme addressing a larger group of beneficiaries: 31 enterprises and 3 NGOs, clients of the bank, were trained and supported by mentors of the company.



BCR started 5 years ago the BCR money schools, in order to raise financial literacy of individuals, and decided then to integrate this initiative with different projects in the field of coaching of and support to the growth of start-ups and NGOs. BCR focused on the implementation of a new platform, called **Sales Bridge**, powered by BCR's Business School platform, as another free of charge non-financial benefit included in the group's offer to client companies. The mentors already had a relationships with their clients for usual business purposes like (online) banking and financing, but in the search for the right mentees for the Digital Volunteers programme the company focused on:

- Beneficiaries located in Romania, and
- representing a wide range of different sectors, such as, for instance, transportation, retail,
 construction, distribution, manufacturing, services, but also NGOs.

The platform's aim was to provide digital training in the field of management and online banking to SMEs, schemed on the previous experience of the mentors. The mentors provided training and advisory to the selected client within the Sales Bridge platform, helping them in different challenges, such as obtaining a website for their business, expanding their network of companies, managing the sales process digitally.

In terms of digitalisation BCR's intervention has served basic needs of mainly very small enterprises and NGOs with training and coaching, focussing on digital marketing and sales management (CRM). To this has to be added that BCR mentored clients not suppliers, offering them an added non-financial value for their trust in the bank's services, and improving their competitiveness. This might also lead to better turnovers and stability of these client enterprises, and thus better business also for the bank (=> de-risking). BCR sticks out for the organised training and coaching approach for 34 micro-enterprises.



Ansaldo Energia is an internationally operating company, counting approx. 3.300 employees, in the power generation industry, working on turnkey power plants construction, power equipment, manufacturing, services and ancillary activities.



ATLA is an Italian medium-sized company (counting 170 employees) specialized in manufacturing and maintenance activities of high-tech gas turbine parts for Aerospace, Defence and Industrial applications. ATLA was selected among Ansaldo's suppliers, both agreed on doing a digitalisation project that would result as useful for both sides, because gas turbine parts inspections, in particular hot blades, represent a significant source of information. The challenge was to digitalise a traditional method already used by the SME, i.e. to transform a consolidated 2D-based procedure into a digital procedure with 3D output, for hot gas components inspections in order to assess hardware status, to collect all data useful to set up a digital twin in order to improve the design of parts, and to use native digital data to be stored finally in a common database. The use of a digital tool for every step of this process would have made the inspection faster and reduced potential mistakes.

The project, developed from May to November 2021, has been a co-designed solution, focused on the SME's capacity of collecting, interpreting and managing 3D data and developed with digitalisation strategy for future investments in tools with the goal to automatize step by step the internal processes. The aim was to develop a new digital inspection procedure for turbomachinery parts, the creation of a new inspection method able to transfer relevant information about defects from the real part to the simplified digital model, using a 3D digital twin.

The expectations of Ansaldo Energia - to help the SME to obtain good results thanks to this tailor-made digital solution — were confirmed and helped to accelerate the digitalisation of the whole value-chain (and not only the big companies). These aspects of putting into a "digital value" the special competences of a supplier and hence improving performance alongside the value chain, increasing the competitiveness of both — as to say: a real win-win situation — is the specific exemplary value of Ansaldo Energia's and Atla's common project.





EDP is a multinational public utility company, present in four continents, with more than 12.000 employees and main seat in Portugal.

Their mentoring project was directed to *Jayme Da Costa*, an engineering company located in

Porto, a medium-sized supplier company of

EDP with 75 employees, founded in 1961.



The aim of the project, co-designed together with the SME, was articulated alongside three axes:

- Design of processes to implement a scalable methodology to map and identify improvement opportunities based in digital tools;
- Identification and up-skilling of digital competences of the company's staff; and
- Deployment of systems, where the identified specific opportunities to jointly deliver a digital solution, based on the process mapping and improvement, was put at the centre.

The overall process started in March 2021 and ended in February 2022. The results of EDP's project together with Jayme Da Costa, were a considerable reduction of errors and waste of time, with a very good increase in efficiency, higher flexibility in new product design, a better traceability of materials and a better resilience in cybersecurity. This can be identified as the result of a very robust analysis undertaken that allowed a better control of all information regarding materials, timing and other indicators, which made it eventually possible to release the teams from manual uploading.

This project stands out for the definitely considerable positive effect in terms of simplification, richer data assets and economic added value resulting from it. This was possible because EDP invested into a relatively cost-intensive mapping of all processes of the SME involved and into an organisational improvement thanks to digital processes, skills and tools. This can't obviously be taken as an example, but shows what is possible, when a large company uses its highly qualified internal resources and replaces external organisational consultancy, from which a smaller company would refrain to invest on due to very high costs and unknown added value. The cost-benefit analysis of this project might be interesting to motivate more companies to do similar investments.



Podravka, company in the food processing industry, one of the leading companies in the South-East, Central and Eastern Europe. During the programme Digital Volunteer, the company has proposed a solution for digitalise and automate the administrative area of micro family farm business.



The project started with *Habi family farm*.

The scheme of the project was designed by Podravka, together with the owner of Habi: a tailor-made scheme, the volunteer company analysed all the processes, identified what could be digitised and proposed it to the farm, that eventually decided which steps to digitize. The focus of this project included keeping records of various types of stock, such as seeds, plant products, but also of agricultural machineries, the implementation of an automated notification system, available both for desktop and mobile, which can enter all the data and use them in the form of structured reports for analysis of the previous period and planning of future activities.

With the implementation of this solution, the added value for the beneficiary company have been the speeding up of management activities, an easier management of the documentation and records with a clearer overview of the activities, of employee tasks and monitoring of business, plus a reduction in the operating costs.

The future perspective of Podravka is to use this experience, and the knowledge gained, to continue to offer help to other micro and small family farms in their supply chain, improving their competitiveness and reducing or optimising costs.

A peculiar aspect pointed out by the mentor is that Podravka's staff itself learned how (traditional) processes work in the family farms that deliver products to them, and this enables the mentor now to plan for future similar interventions in favour of other farmers.

5. A look forward: how to improve the programme and what to change

Summing up the various outcomes of the evaluation of the Pilot Programme Digital Volunteers we might now try to paint the following picture: The Digital Volunteers Pilot Programme proved to have very much met the needs of the mentored companies that received often a tailor-made, well organised mentoring support by larger companies and their well experienced staff, which mainly co-designed and implemented together with each single company the projects for them.

The **added value** of an initiated or even completed digitalisation step, project or process, **is clearly** seen and **positively judged** by the large majority of beneficiary MSMEs.

The approaches and methods of the single projects did in some cases allow a **considerable economic impact** as also **mutual learning from each other** in terms of *knowing better your supplier*, which might lead even to a better integration alongside the value chains of companies, for the benefit of both sides, mentors and mentees.

The main limit of the Digital Volunteers Pilot Programme scheme was the not-representativeness of benefitting companies: less than 20% of mentees were micro-enterprises, while statistically these are often more than 90%, small enterprises accounted for around one third or slightly more, also this exceeding the statistical "normal", while nearly 50% were medium-sized companies, which in the economy represent maybe 5% of enterprises, if much. This is due to limits in the selection process of beneficiaries, which the large mentoring companies did on the basis of their own networks of suppliers, clients and business partners. That clearly biases the significance of the results. While on the one hand side the added value in terms of economic impact of digitalisation projects might be higher with medium-sized companies, micro- and small companies are somehow left behind, despite their potentials and great number.

A second **structural deficit** seems to be the **limited control** the European Commission can exercise on the projects, given that being Digital Volunteers a **voluntary**, **not a co-funded programme**, rules or principles set out by the EC are applied only as far as the project partners and beneficiaries want to apply them, and tools for result verification are equally of limited impact. The voluntary aspect leaves great liberty in the choice of approach, means and methods, which is positive, and it costs few in terms of administrative burdens for companies and in terms of funds for the EU. But it leaves also less space for a coordinate improvement.

But if we focus on the two main limits on one hand side, and on putting in value and enhancing the positive aspects of Digital Volunteers (indications deriving from the survey analysis and ideas suggested by interviewed companies), some improvements may be suggested.

- 1. As the European Commission's objective for the second phase of Digital Volunteers is to open the programme to <u>all companies</u> and to give to <u>any SME</u> the possibility to receive targeted support, it is paramount to tackle the problem of under-representation of micro and small enterprises, as it was the case of the Digital Volunteers Pilot Programme. It would be advisable for instance to enlarge the scope of the EU's Digitalisation Support Programmes for SMEs and offer in total 3 different and complementary strands, which could be:
 - a. Digital Volunteers 2.0 covering primarily small and especially mid-sized companies in
 the value and supply chains of large companies (in the same countries);
 - b. DigitaliseSME 2.0 see <u>www.digitalisesme.eu</u> catering for those Micro and Small enterprises that are outside the value and supply chains of large companies, and which are visited and assisted by accredited *Digital Enablers* in their countries;
 - c. **European Digital Innovation Hubs** to support *innovative digital solutions* and *digitalisation processes leading to innovation* in all kinds of MSMEs all over Europe.

The 2 pilot experiences taken – DigitaliseSME and Digital Innovation Hubs – have had both their strengths and limits, but could perfectly overcome these limits and make a set of complementary instruments to cater for all needs of micro, small as well as midsized companies.

DigitaliseSME for example, a Horizon 2020 Pilot programme requested by the European Parliament and implemented under the supervision of DG Connect between 2018 and 2020, was very successful with micro- and small enterprises (MSEs), as it simply focussed on making the existing business model of MSEs more successful and competitive. In addition, the mentors – called *Digital Enablers* – came *into* the company, visited it and accompanied it from the analysis to the project planning, outlining technological and organisational scale-ups and training needs.

It was less successful with medium-sized enterprises, which normally are already beyond the simple improvement of the business model, and which want to seriously upgrade their processes by digital means. Moreover, the need to send Digital Enablers from one EU-

Member State to companies in other EU countries (due to the necessity to show "European Added Value") limited strongly the number of MSEs able to participate, as only a few know English. This – by the way – was never a problem during the Digital Volunteers Pilot Programme, as the mentoring companies found normally their mentees in their supply and value chains locally or nationally.

Digital Innovation Hubs on the other hand side, active since 2017 and often with a University or Research Institution at its centre, could offer high levels of technological knowledge and business labs for many companies, but their outreach to MSMEs is also quite limited as the two worlds – research and MSMEs – don't interact very well one with the other. Hence, the majority of companies assisted by DIHs are large and midsized companies, and only rarely small companies or even smaller.

The author of this evaluation achieved these insights when managing the DigitaliseSME project with the European Confederation of SME Associations 'European Entrepreneurs CEA-PME' as lead partner, together with 5 DIHs in the Netherlands, Czech Republic, Germany, Spain and Romania, which all had their specialisation and were strongly RTD focussed. But as testbeds and labs for digital innovation processes in MSMEs they would work quite well, also beyond national borders on EU level, but only provided they are put in a European network of interested companies and digitalisation experts.

This widening of the scope aimed at **enhancing the digitalisation of companies of all sizes and different interests**, would combine all good practices already collected, improve them, standardise and focusing them better to those groups of beneficiaries that need specific kinds of support.

- 2. In order to open space to the European Commission to be able to better steer and direct the Digital Volunteer programme, instead of "controlling" with administrative burdens linked to financial support, there could be privileges, benefits and public appreciation as incentives to follow the rules defined by the Commission. In this sense, the interviewed best practice companies and the evaluator propose to:
 - a. Set up an EU-wide database of interested SMEs, ready to co-finance their internal digitalisation process with at least 25% of the costs. Only pledging large companies with digitalisation experts (or *Digital Enablers*) in their staff can have access to this database, helping them to identify the right mentees.

- b. Set up an EU-wide database of Best practices in digitalisation support for MSMEs, from which to get inspired as Digital Volunteers, Digital Enablers and MSMEs. Only accessible by Digital Enablers of pledging large companies or accredited experts.
- c. Set up an **EU-wide Community of MSME-Digitalisation Practitioners** (*Digital Enablers* each inside pledging large companies, as well as inside EDIHs and accredited experts that go to MSEs as under DigitaliseSME 2.0) with different fields of competence.
- d. Arrange and finance **regular meetings and conferences on EU-levels** for these Digital Enablers to allow an active exchange about methods, good practices, digitalisation know-how and approaches among Digital Enablers, with the aim to raise the quality and innovate continuously the way of supporting MSMEs on their way to digitalisation.
- e. Organise European Digitalisation Awards (e.g. in the framework of the European Enterprise Promotion Awards of DG GROW during the SME Week / SME Assembly) for different categories: Best Digital Competitiveness Gain, Best New Digital Business Model, Most effective digitalisation support, Most innovative digital processes in MSMEs, Best Digital to Green Projects, Best Digital to Social Projects.

All these five tools and measures would allow to incentivise mentoring companies under Digital Volunteers to e.g. accept to always co-design the mentoring schemes with the mentees, which was identified as a best practice, as well as to prove economic added value as a result of mentoring projects, and prepare for investments where auspicial. Those companies that would receive privileged access to information (databases of MSMEs and best practices), training (community of practitioners, meetings and conferences), as well as public appreciation (European Digitalisation Awards) would supposedly accept as much as possible "the rules of the game" set by the Commission, if there is real advantage for them. In addition, these five measures / tools can be shared also with digital innovation experts working in EDIHs and with Digital Enablers accredited for coaching services like it had been done within DigitaliseSME, allowing in this way to widen the range of beneficiaries, quality improvement and methodological innovation in order to always better reach out to all kinds and to much more MSMEs as any of the 3 pilot activities alone could achieve until today.

The Digital Volunteers Permanent Programme would therefore look like this:

 Pledging large companies have privileged access to EU-wide databases of MSMEs interested to digitalise and best practices on approaches and projects;

- Their internal experts for digitalisation are also members of an EU-wide Community of MSMEs Digitalisation Practitioners called "European Digital Enablers", where they exchange about methods, know-how and approaches also with digital innovation experts of Digital Innovation Hubs and with MSE-digital coaches;
- The mentoring projects are always co-designed together with the benefitting small and midsized companies, increased dependencies are excluded, economic added value is the measuring key for monitoring of success and investments by the companies are envisaged;
- In case of good success, the performing companies mentor and mentee are candidates for the European Digitalisation Awards, allowing to gain publicity and public appreciation;

The DigitaliseSME approach, with independent Micro- and Small Enterprise Coaches that visit the companies can for instance **be upgraded to DigitaliseSME 2.0** by allowing that experts visit only businesses in their language region, without obliging MSEs to have somebody speaking English inside their teams. Furthermore, an accreditation system can be set up, that uses e.g. the Community of Practitioners as (mixed national and European) juries to verify the capacity of these coaches. Moreover, their performance will be steadily improved by participating to the exchanges of this CoP, paid by the EC. And finally, the MSMEs to be assisted have already declared to be ready to co-finance with 25% their digitalisation process.

Together with the new European Digital Innovation Hubs, all three programme frameworks would cover all sectors and needs of MSMEs in Europe in terms of digitalisation, making the intention of the European Commission complete to strongly foster digitalisation of MSMEs in Europe, as well as overcoming the limits of each of the sub-programmes Digital Volunteers, DigitaliseSME and DIH.

In conclusion, the Digital Volunteers Pilot Programme proves to have been a promising step forward in terms of approaching and initialising a more wide-spread and in-depth digitalisation of SMEs. But due to its intrinsic size — large enterprises are only a few and even less of them are ready to voluntarily support SMEs in their digitalisation — and due to its structural limits, it could for the moment reach out only to a limited amount of companies, mostly the larger ones, many medium-sized and more than average small businesses, but definitely too few micro-enterprises. To reach out to more companies the EC should widen its scope and (re-)activate complementary programmes for digitalisation of SMEs, and for a better governance complete the Digital Volunteers programme with important building blocks, which have been suggested in this report.