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Future Fit

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Abstract

This report examines drivers and barriers to adult learning aimed at empowering workers with the skills they need for the future of work. The reports centers on "Digital Chance Agent", a course designed by NESTA and Google.org to provide office and retail clerks from the Danish trade union HK with digital tools and competences to spark digital transformation at their workplace.

Ethnographic studies and surveys conducted at the beginning and end of the course as well as three months after its completion revealed that participants were generally satisfied with the course, and a majority felt it helped them develop both professionally and personally, notably by strengthening their digital skills. However, some felt that the scope of the course was too broad, leaving some key themes underexplored.

The typical participant was a woman, around 50 years old, and employed in a private company with more than 250 employees. It proved difficult to recruit participants, particularly from the main target employer group of SMEs.

Participation was primarily motivated by participants' own initiative rather than an encouragement from their workplace, and several participants were less attracted by the specific theme and objective of the course than by a general interest in further education. This provided participants with a strong motivation to learn, but proved to be a barrier for the aim of the course to engage participants' managers in selected modules, and to support subsequent application of new skills in learners' workplaces. Indeed, almost two thirds did not define objectives for their participation, or possibilities for applying new skills, with their employer. Other barriers for participants to act as digital change agents included feeling that, as clerks, they had little influence on decisions about e.g. new technology use in their organizations, and that their lower degree of digital competency compared to e.g. younger colleagues made it difficult for them to drive digital change processes in a credible manner.

Contents

1. Introduction

The labour market is changing rapidly, and more than half of all employees will require upskilling or reskilling within few years. Additionally, 54 % of all employees will require extensive upskilling or reskilling by 2022 (WEF 2018) and 85 % of jobs in the EU now require at least a basic level of digital skills (Cedefop 2018). However, the low skilled and skilled workers are also the employees using the lifelong learning options the least (OECD 2017), which is a challenge for the private and public sector as well as for the individual, who doesn't seize the opportunity to develop their own human capital.

Future Fit is a programme designed by NESTA and Google.org, with the purpose of dealing with the challenge of adult learning in the future workplace. The objective is to gain greater understanding of what works in re- and upskilling the 25 to 64-year-olds. Sweden, Finland, The Netherlands, Denmark and Belgium have been selected as they lead the way in digitisation and broadband internet accessibility. Future Fit is focused on improving outcomes for workers with union representation who are at risk of job displacement or changes to their roles (Kapetaniou 2019).

This report is concerned with the evaluation of the Danish part of Future Fit, a 5 module-course called Digital Change Agent. In Denmark the partner-union has been HK Privat[1], and the courses have been developed and completed by the organisation Iværkst[2]. HK is a union with approx. 67,000 members within administration and service, and Iværkst is an organisation, originally funded by the government in 2005, but now funded by members, delivering free advice and courses for entrepreneurs and small businesses.

The course, Digital Change Agent, was carried out from September 2019 until May 2020, with some postponement due to a lack of participants, and some of the courses completed with online teaching due to COVID-19. A total of 92 participants have completed the course.

The purpose of the research is to map the barriers and driving forces in providing valuable training in new technology, and how this was experienced by learners (participants) during and after the training. Furthermore, an objective of the research was to identify which barriers the participants experienced in relation to signing up for the course and how the new knowledge was implemented in the workplace several months after the course. This knowledge will be valuable for future courses held in Denmark, in relation to recruitment of participants as well as course content and the effect of the course in the workplace.

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[1] Danish Union for the retail sector and administrative staff
[2] Is an organisation offering free consulting and courses for entrepreneurs and small businesses

2. Literature and Danish Context

Denmark is a country with 5.8 million inhabitants, member of the EU and with strong social partners: 81 % of the full-time employed workforce is member of a union (appendix 1), while 80 % of the employees are covered by a collective agreement; 75 % in the private sector[3] (DA 2019).

As figure 1 shows, compared to the Netherlands, Sweden, Belgium, Finland and OECD and EU23 average, the educational attainment of the 25-64-year-olds does not differ much between the countries or EU23, OECD. In Finland 45 % of the population has a tertiary education compared to the EU23 average of 36 %. The share of the population with tertiary education is 38 % in Denmark and in the Netherlands and just below the OECD average. Belgium has with 22 % the largest share of the population with a below upper secondary degree as their highest attained education.

Figure 1 // Educational attainment of 25-64-year-olds (2018
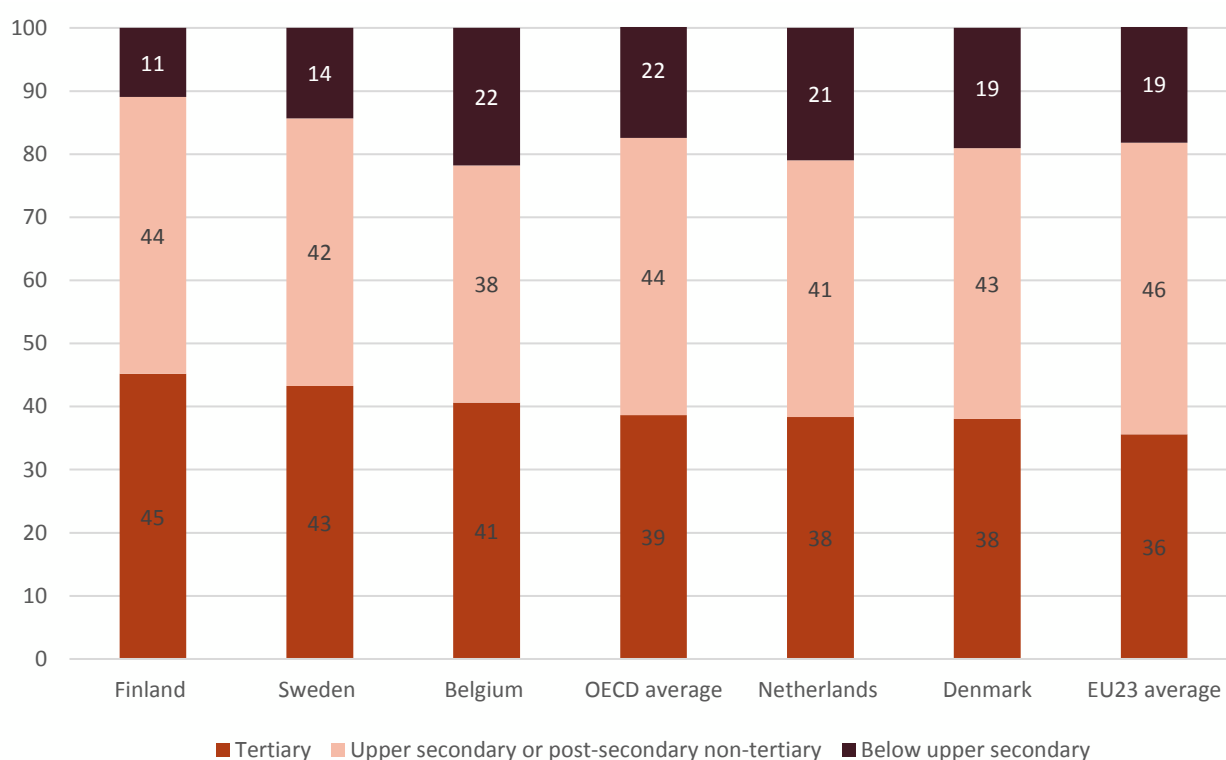
Source: OECD (2019), Table A1.1, Education at a Glance Database.

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[3] It is not mandatory to be a member of a union, but the collective agreements still apply for the non-members.

Figure 2 shows that Denmark is placed above the EU23 average for participation in formal education and training. But when it comes to participation in non-formal and informal education and training, Denmark is placed lower than the Netherlands, Sweden and Finland.

Figure 2 // Participation of 25-64-year-olds in education and training, by formal/non-formal status (2016)

▲ Participation in formal and/or non-formal education and training
◆ Participation in non-formal education and training
— Participation in formal education and training
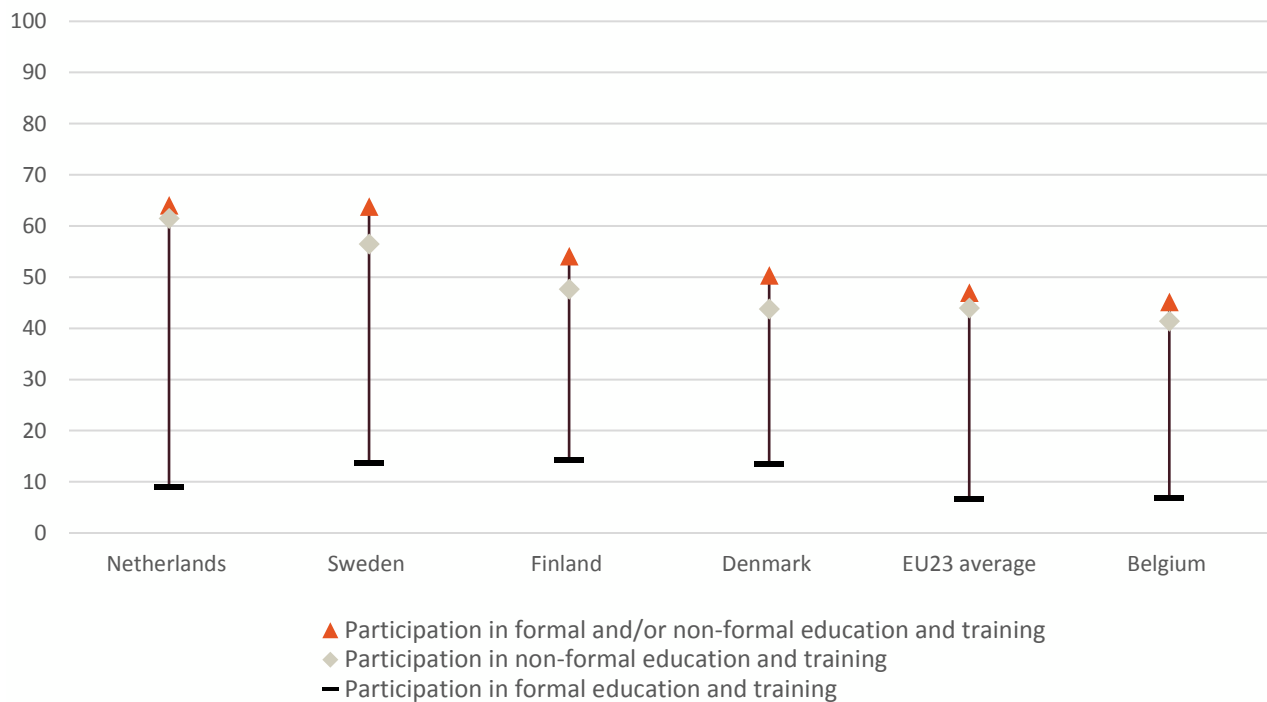
Source: OECD (2019), Table A7.1, Education at a Glance Database.

2.1 The Danish Education System

In Denmark, education from lower secondary programmes to Ph.D. is free of tuition fees. Almost 70 % of a youth cohort chooses to attend general upper secondary programmes, and 20 % VET; the vocational education and training (VET) is a dual system, meaning apprenticeship is a crucial part of a VET. The adult learning system is parallel to the ordinary system, consisting of:

- *General adult education (AVU), ISCED 241*
- *Preparatory adult education (FVU), ISCED 241*
- *Higher preparatory single subject courses (individual course), ISCED 244*
- *Continuing VET (AMU), ISCED 253*
- *Further adult education programmes (academy & diploma educations), ISCED 554*
- *Master programmes, ISCED 757*

(Andersen & Helms 2019)

The social partners are represented by the governing bodies in continuing VET (CVET) as well as further adult education programmes. Especially within VET and CVET (AMU), the social partners play a crucial role in administering and defining the course content. (DEA 2019c)

2.2 The Importance of Adult Education

The labour market is changing rapidly: 54 % of all employees will require extensive upskilling or reskilling by 2022 (WEF 2018) and 85 % of jobs in the EU now require at least a basic level of digital skills (Cedefop 2018). Several studies show that the most vulnerable groups are the blue collar and skilled workers (Frey & Osborne 2013; CEDEFOP 2016, DEA 2019). However, the low skilled and skilled workers are also using the lifelong learning options the least (OECD 2005, OECD 2017). This poses a challenge – for society, the labour market, private and public sectors – and for the individual, who by not participating in adult education, miss the opportunity to develop personal human capital. Furthermore, Covid-19 represents a still unknown impact on education, teaching and workplaces, and has already increased digitalisation, e.g. the use of online meeting platforms.

2.3 Existing Literature and Research within the Field

Research regarding motivation for participating in adult education is comprehensive, and this paragraph only covers a narrow section of existing research and evidence. The field of research has a long history; from Cyril Houle (1961), who mapped-out 3 different kinds of learners, based on 22 interviews: Goal-oriented, activity-oriented, and learning-oriented, where the latter represents the most motivated learners. She found a connection between the level of previously obtained education and the probability of being an active learner; job, education and income were central factors for the participation in adult education. This was also found in 1965 by Johnstone & Rivera in "Volunteers for learning: A study of the educational pursuits of American adults". Newer research supports that this also affects psychological areas such as identity, self-esteem, self-confidence, education confidence, academic self-concept (Görlich & Katznelson 2013, Norman & Hylland 2003) and negative experiences with education (Illeris 2006). Another barrier towards participating in adult education, is low academic self-esteem, related to the type of academic self-concept within the individual (Bandura 1995, Zimmerman et al. 1992).

Furthermore, the institutional perspectives, such as the regime of the welfare state and structures in individual societies, have been in focus as a motivator or barrier for participation in adult education (Rubenson & Desjardins 2009). Others again focus on the culture of the surrounding society, at the workplace and in the education institution (Rhodes 2018). Boeren et al (2010) argue that motivation is grounded in "the individual's interest in the learning activity and the personal value attached to it, or from an external pressure, which forces the individual to participate in order to obtain rewards or to avoid sanctions." (Boeren et al 2010, p. 50)

Different terminologies and models have been introduced to explain the different levels of factors influencing the participation in adult education. Radovan (2012) emphasizes barriers divided into the dispositional (psycho-social), situational (current position and circumstances of the individual) and institutional (related to the educational institutions) barriers, whereas Brüning & Kuwan (2002)

present a model with subjective, social, structural and political barriers, divided into a micro, meso and macro level context. This model has been further developed by Boeren et al (2010, p. 57):

Micro Level:
Socio-economic, socio-demographic, socio-cultural, psychological factors and relevant others (family, employer, reference group)

Meso Level:
Organisational institutions, including institution size, marketing, quality system and geographical location.

Organisation programme: Group size, didactics, teacher's attitude.

Macro Level:
Economic context, labour market context, welfare context, initial education system.

DEA (2019a, 2019b) has previously researched members of the HK union employed in the health care sector, and factors that are of importance to their participation in continuing education. Here, it was found that factors included challenges such as navigating the different educational opportunities, uncertainty regarding whether the continuing education is the employer's or the employee's responsibility and a sense of responsibility in regard to who will manage the day-to-day assignments while for instance a medical secretary is taking continuing education.

Data from Eurostat shows that the most common barriers towards participation in adult education is lack of a suitable education or training activity (13.9 %), the schedule (12.1 %) and cost (8.9 %). All these three factors are generally below the other participating countries in the database. (Kapetaniou 2019)

Adult learning is a broad term, and the participants – the learners – are a diverse group of people. Where trained handworkers experience one type of barrier, medical secretaries experience other barriers. If the type of welfare regime and economical context plays a central role in the participation in adult education, it may be difficult to transfer influencing factors in one country to another. This research contributes with knowledge on clerical workers and their motivation for participating in Digital Change Agent, how they experienced the course and the possibility of embeddedness, or spill-over effect of their new knowledge, within their workplace.

3. Research Design and Methods

The aim of the Danish evaluation is to contribute to the knowledge base for the wider, comparative study undertaken by NESTA in connection with the FutureFit programme, and generate knowledge to support the development of more effective training for learners at risk of job displacement or a substantial change in their roles due to automation and other technological advancements.

Main research question

> *What are the barriers and drivers in providing valuable training in adaptation to and use of new technology experienced by learners during and after the training?*

The research question was approached through the assumption that to understand the effectiveness of the training to become a digital change agent during the course, we needed to look outside the classroom and the actual course, and include the background of the participants – with an explorative approach.

3.1 Mixed Methods

The analysis is based on survey data and qualitative research and data collected in October 2019 - June 2020. We have applied a mixed methods strategy, combining observation studies, interviews and online questionnaires - the research design is described in appendix 4.

Observation Studies and Interviews

A total of 16 in-depth interviews with a total of 10 course participants and 20 informal interviews were held with participants from the course. Informal interviews took place at the site of the training during breaks or immediately before and after the training. Most in-depth interviews were conducted face-to-face using a semi-structured interview guide. 7 interviews were done via phone. Interviews were done in three different stages of becoming a digital change agent; during, at the end and 3-6 months after the course. Participants were selected for interviews based on their age, gender, the location of the course, their motivation for joining the course, the size of the company/organisation and their role at work. Qualitative insights were also gathered through participation in and observations during two courses, 5 modules each.[4]

Survey

To complement insights derived using anthropological methods, survey questionnaires have been sent

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[4] The intention was to follow and interview course participants at their workplace before the 1st module of the course to gain an in-depth understanding of their starting point. This proved difficult for several reasons, some of which are directly related to the reasons why the participants signed up for the course, as will be touched upon in this report. Further, visiting union members at a private workplace did not sit well with course participants, as union affiliation is considered disclosed information. As a result of these challenges in conducting fieldwork before the beginning of the course, interviews were done during the course and the participants were asked to present thorough descriptions of their workplace, tasks and responsibilities. This enabled us to gain an understanding of a typical day at the office and a sense of the work environment surrounding the interviewed course participants.

directly to the course participants' emails – except the first survey to 2 teams, who, due to issues with email lists and GDPR, received a common/shared link on the Facebook page of the course. Participants received an invitation to fill out a survey questionnaire shortly before participating in the training, just after completion of the training, and 3-6 months after completing the training - with the exception of two classes who received the survey 2 months after completing the course. The survey was developed in dialogue with HK and Ivækst. The response rate can be seen in table 1 below.

Table 1 // Survey response rate		
Survey No	Timeframe	No of responses and response rate
1	Course beginning	32 completed responses (35 % response rate)
2	Course completion	46 completed responses (50 % response rate)
3	3-6 months after completion	34 completed responses (37 % response rate)

Interviews with HK and Ivækst

The report further draws on interviews with the developers and providers of the course (HK Privat and Ivækst) to collect information on key objectives of the training, contents of the training (including which skills are taught), training format (including how training is undertaken), recruitment (how participants are selected/recruited). Interviews were undertaken as semi-structured interviews, informed by written material provided in advance by HK Privat and Ivækst.

3.2 Research Reliability and Validity

With the combination of a survey and an ethnographic approach, the objective was to create both reliable and valid results, since the two methods complement each other: Where the ethnographic method is limited in the number of interviewees, but has its strength in the depth of the study, the survey has its strength in the number of respondents, but limitations in depth and the opportunity to follow up on answers and lacks the ability to build relationships with the respondents.

However, in the course of the study there have been several different challenges that challenge both the reliability and validity, including missing email addresses for sending out the first survey, which was therefore sent out via a shared link in Facebook groups for the individual courses, and therefore survey 1 has slightly fewer responses than survey 2. Due to a lack of registration for the courses, they were postponed, and when survey 3 was sent out to the last two teams, it was during the summer holiday period and following after an extended shutdown period due to Covid-19.

Covid-19 also meant that the course shifted from physical attendance to online teaching – again a factor that can affect the results of the study. Finally, Covid-19 also made physical interviews impossible, and the last follow-up interviews were conducted by telephone.

To a certain extent, the results are in line with previous studies and research, including, for example, that it is difficult to get potential participants to sign up for the course; that responsibility is unclearly placed between manager and employee. However, the results should be both reliable and valid for this specific target group – clerical workers with a predominance of women 50-years-old who have signed up for a course on their own.

4. Findings and Discussions

> *It is a really good idea with this type of course. It's good for all of us who are vulnerable and who were perhaps a little frightened. It's a really good way to get started. It is a kind of introductory course to the digital world. That's the way forward.*
> *Kirsten, unemployed in her 50's*

Projections show that members of HK will be hit hard by the digitalisation, especially in small and medium-sized companies – and they are therefore in need of upskilling. This was the starting point for the pilot project – the first part of Digital Change Agent. (Cedergren, 2019; Engell, 2019). The aim of the course is for HK employees to learn new skills that can be used to change their workplaces so that they are better equipped for the changes brought on by digitalisation. The course website states that employees will be equipped to create change in their company on the basis of new knowledge and are taught to create value through digitalisation. (digitalforandringsagent.dk, 2019).

4.1 Participant Target Group and Recruitment Procedures

The target group for the course has been employees and their managers from small and medium-sized companies (Engell, 2019), and the course is specifically aimed at employees within administration, customer service, retail, accounting, HR, sales & purchasing or communication (digitalforandringsagent.dk, 2019). The goal for the number of participants was 300, and HK has primarily been responsible for the recruitment. Ivækst has to a limited extent participated in this part of the process, primarily by publishing videos and hosting information meetings. During the recruitment process, it became clear that HK's general marketing model with articles in HK's magazine, handouts and emails was not enough, and both HK and Ivækst have experienced that relational recruitment, e.g. through personal phone calls and by meeting HK members at other courses, has been far more effective.

However, recruiting people from small and medium-sized companies has proved to be a challenge. Engell (2019) believes that small and medium-sized companies have problems with simply surviving, and therefore continuing education is not a priority. Instead, he suggests that recruitment can be optimized by building relationships with people who interact with small and medium-sized businesses on a daily basis, or by devoting additional resources to relationship building.

The ambition was that all participants should have an agreement with their manager concerning the participation in the course, so that the participant would return to the company and, with the support of management, spread their new knowledge. Both day and evening classes were established to make it easier for everyone to participate in the course, but it has been difficult to get the managers to participate in the course, partly because the participants are motivated by a desire to develop their own competencies rather than by a wish from their manager. (Engell, 2019, Cedergren 2019).

Out of 45 respondents, 38 participated in the course on their own, 7 with one or more colleagues and no one had their manager with them on the first and last day of the course.
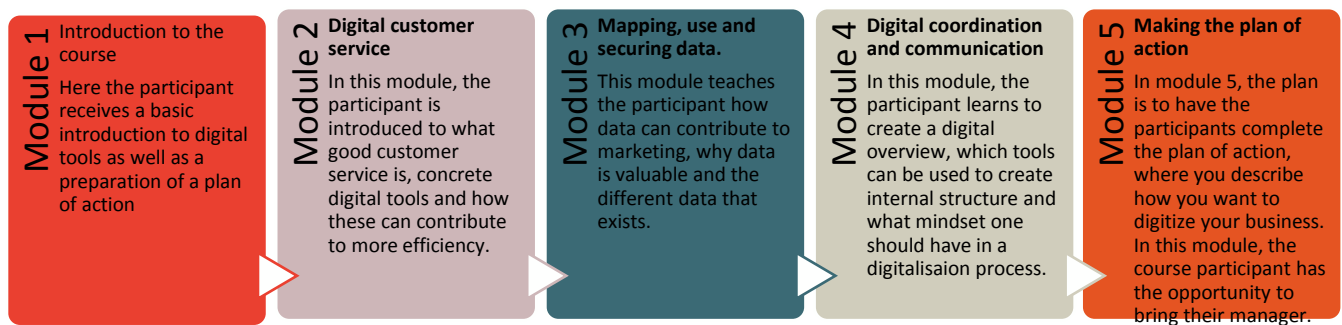
4.2 The Training

The course was originally built up around two different tracks: "trade/business" and "Service, IT, Media, Industry". This was to ensure the relevance for all HK's members regardless of their job description. Due to demands from the course participants, these two tracks have been merged. The courses required the participants to be physically present, and courses have also been offered outside the capital of Copenhagen – in both Slagelse and Roskilde.

The course is organised so that there is a high degree of group activity and involvement of the participants. The course modules are not intended as lectures but teaching that provides space for personal dialogue between the participants and the teacher (Cedergren, 2019). The course is made up of five course modules, where the course participant prepares a plan of action along the way for how the company can become more efficient (digital forandringsagent.dk, 2019). The plan of action is intended as a tool through which the participants get the opportunity to conceptualise their knowledge (Cedergren, 2019).

Content of the Training

The development of the content of the course is based on survey and telephone interviews with companies and members of HK and contains developed concrete tools, so that the participants can work better with "internal communication, managing your time, your customer service and all your data." (digitalforandringsagent.dk 2019). The structure of the course can be seen in figure 3 below.

Figure 3 // Structure of the Course

Module 1 Introduction to the course

Here the participant receives a basic introduction to digital tools as well as a preparation of a plan of action

Module 2 Digital customer service

In this module, the participant is introduced to what good customer service is, concrete digital tools and how these can contribute to more efficiency.

Module 3 Mapping, use and securing data.

This module teaches the participant how data can contribute to marketing, why data is valuable and the different data that exists.

Module 4 Digital coordination and communication

In this module, the participant learns to create a digital overview, which tools can be used to create internal structure and what mindset one should have in a digitalisaion process.

Module 5 Making the plan of action

In module 5, the plan is to have the participants complete the plan of action, where you describe how you want to digitize your business. In this module, the course participant has the opportunity to bring their manager.

Source: digitalforandringsagent.dk, 2019

4.3 The Course Participants

Table 2 below shows descriptive statistics of the course participants based on survey answers.

Table 2 // Descriptive Statistics of Course Participants	
Demographics of course participants	
Age	Mean age: 50 years
	Median age: 54
	<table><tr><td>Age group</td><td>Frequency</td><td>Percent</td></tr><tr><td>21-35</td><td>8</td><td>13 %</td></tr><tr><td>36-45</td><td>6</td><td>10 %</td></tr><tr><td>46-55</td><td>25</td><td>41 %</td></tr><tr><td>56-64</td><td>22</td><td>36 %</td></tr></table>
Gender	83 % women
Education	32 % have completed vocational education and training (VET)
	27 % have completed a medium-cycle higher education
	19 % have completed short-cycle higher education
Occupation	69 % are employed – 56 % in a full-time and permanent position
	11 % are unemployed
Sector	78 % work in the private sector
	5 % work in the public sector
Organisation size	36 % work in organisations with more than 250 employees
	27 % work in organisations with 10-49 employees
	27 % work in organisations with 50-249 employees
	11 % work in organisations with less than 10 employees
Received salary during course	47 % received salary during the course (the share is 51 % among respondents in employment)

Data consists of combined responses from survey 1, 2 and 3. Respondents who answered multiple survbeys only appear once.

The table, based on the survey, shows that the original intentions, that the course should be targeted at employees in SMEs, seem to not quite have been met: 36 % of the respondents are from a large company with more than 250 employees, 27 % are from a company with 50-249 employees and 38 %

from a company with either less than 10 or between 10 and 49 employees. Furthermore, women are strongly overrepresented with 83 % of the participants, and nearly half of the participants have a higher education.

4.4 Academic Self-Concept

A barrier for participating in adult education, is low academic self-esteem, related to the type of academic self-concept within the individual (Bandura 1995, Zimmerman et al. 1992). Research points to the participation in adult education having the ability to positively change the academic self-concept, and the academic self-esteem will increase. This approach is most suited for low-skilled workers – and as approx. half of the course participants had a higher level of education than what was expected, they all had a relatively high level of academic self-concept. As shown in figures 4a and 4b, almost all course participants believed they were good at learning, good at solving tasks and planning and preparing for class. Similarly, the majority of participants had high levels of faith in their ability to, for instance, concentrate during class, hand in assignments on time and do homework. This is also reflected in their own assesment of their participation, which will be elaborated on later in this report.

Figure 4a // Academic Self-Concept (1/2) (n=33)

| | To a high degree | To some degree | To a lesser degree | Not at all | Don't know |
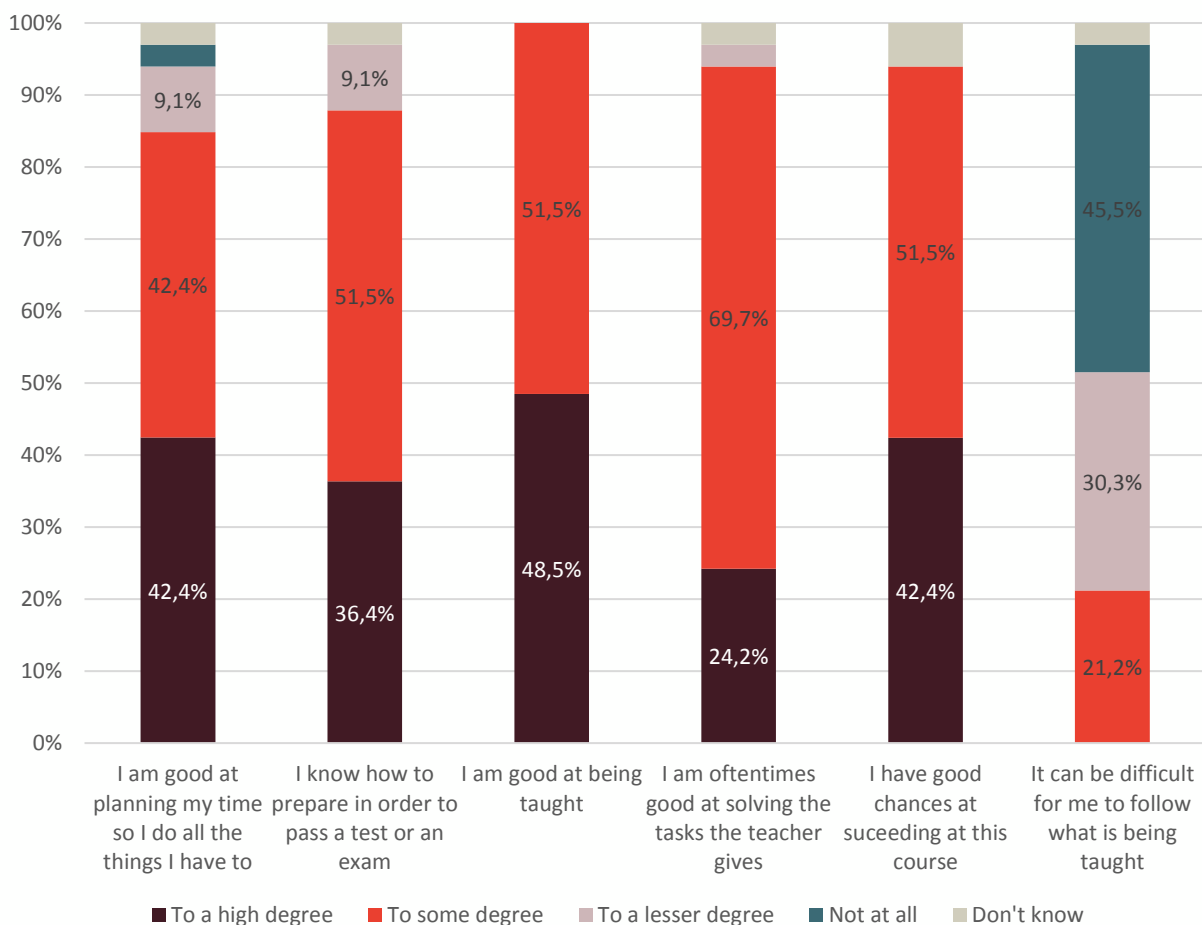
Note: This part of the survey was developed with inspiration from Flowers et al 2013

Figure 4b // Academic Self-Concept (2/2). "*How confident are you that you can...*" (n=32)

	Not at all confident	A little confident	Somewhat confident	Very confident	Completely confident
Participate in discussions with the other course participants		6,3%	34,4%	34,4%	25,0%
Find a place to prepare for class			28,1%	40,6%	31,3%
Remember information from textbooks or class		12,5%	25,0%	43,8%	18,8%
Prepare myself for class		9,4%	21,9%	40,6%	28,1%
Concentrate on what is being taught		9,4%		53,1%	34,4%
Do homework when there are other interesting things to do		31,3%		21,9%	37,5%
Hand in assignments on time		6,3%	21,9%	21,9%	50,0%

4.5 Learners' Motivations

This chapter outlines key characteristics of the course participants in terms of reasons and motivations for signing up for the course and their learner identity. Understanding these aspects is crucial to help the evaluation of the outcomes and effectiveness of the training provided through "Digital Change Agent".

Motivations for Participation

- *The course participants are a diverse group with several different reasons for signing up for the course*
- *One common trait is, however, that a large majority of participants signed up to the course on their own initiative and not because their colleagues or manager suggested they do so*
- *Across age groups, job descriptions and gender, the participants point to words such as "digital" or "Digital Change Agent" were especially decisive for their decision to sign up for the course*
- *The participants can be described as keen and curious learners, who are always on the lookout to learn something new*
- *A third of the survey respondents state that they participated in competency development several times a year*
- *The participants share a positive view of digitalisation and can see both personal and professional opportunities in digital technology*

Expectations: Better Task Solving and Professional and Personal Development

Almost all participants hoped to a high or to some degree that the course would increase their ability to solve future tasks (97 %), lead to professional development (94 %), personal development (90.9 %) and improve their job performance (88 %), as shown in figure 5, with professional development being the most expected. Only around half of course participants hoped that the course would help them keep their current job or lead to a pay raise.

Figure 5 // Expected Course Outcome. *"What do you hope to gain from your participation in the course? "* (n=33)

Legend: ■ To a high degree ■ To some degree ■ To a lesser degree ■ Not at all
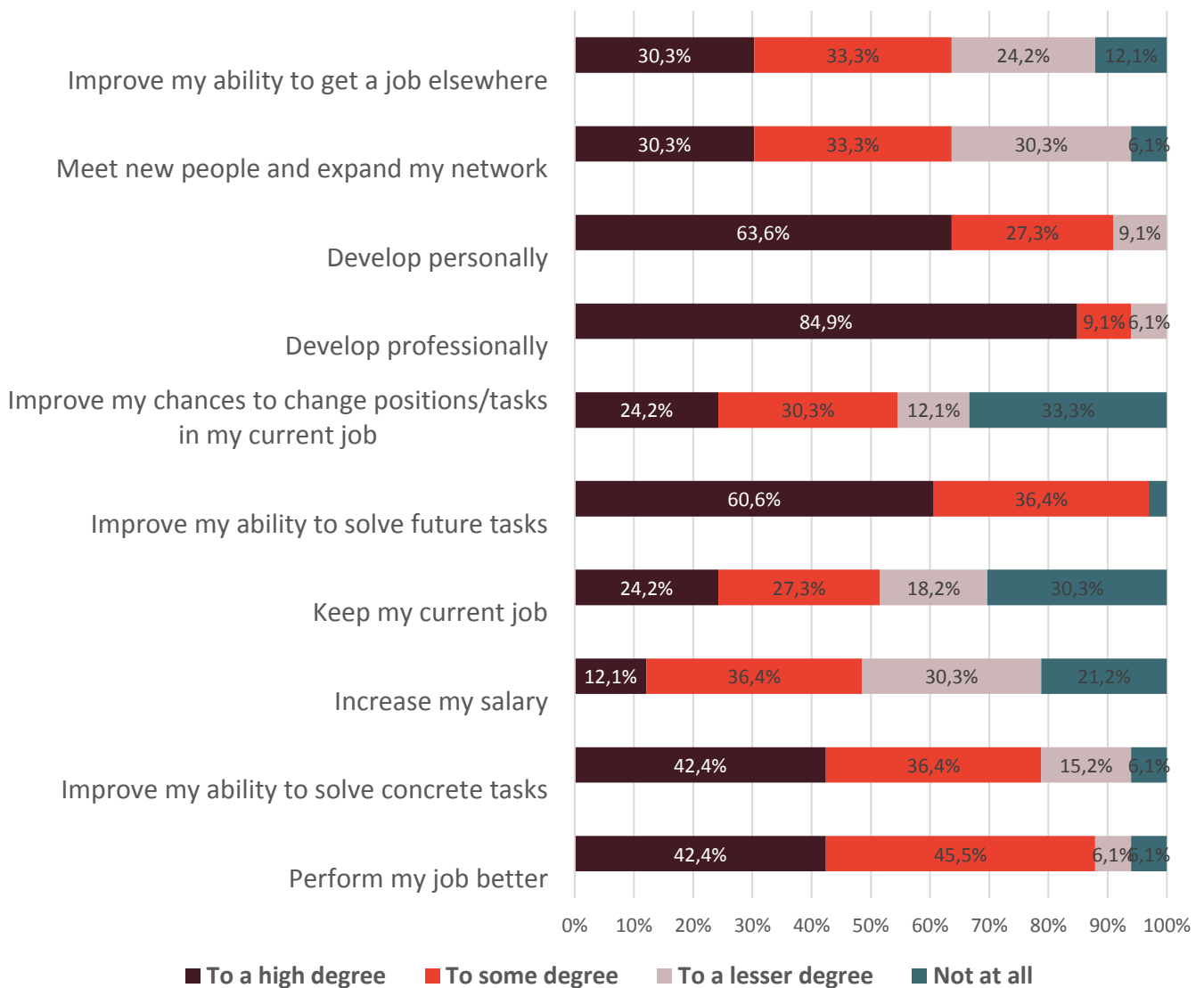
Different Reasons for Signing Up

As stated in previous sections, the participants constitute a heterogenous group in terms of a wide range of factors such as educational background, job descriptions, and age. This is also reflected when we in interviews have asked why they had signed up for the course. Although many different explanations are

given, we have identified a number of main trends, including the fact that almost all participants have signed up on their own initiative. In addition, a positive view of the digital development and the possibilities of digitalization also play consistent roles in the participants' reasons for signing up to this particular course. In conclusion, we point to the tendency among one group of the course participants to sign up for many courses, which is why their participation in this particular course cannot be seen as purpose-driven, as the course description suggests in several places.

Overall, this points to a composite group of course participants who have all sought out the course on their own initiative, and based on a positive view of the digital development and the built-in potential of being a digital-minded person, leading to many different reasons of signing up for the course.
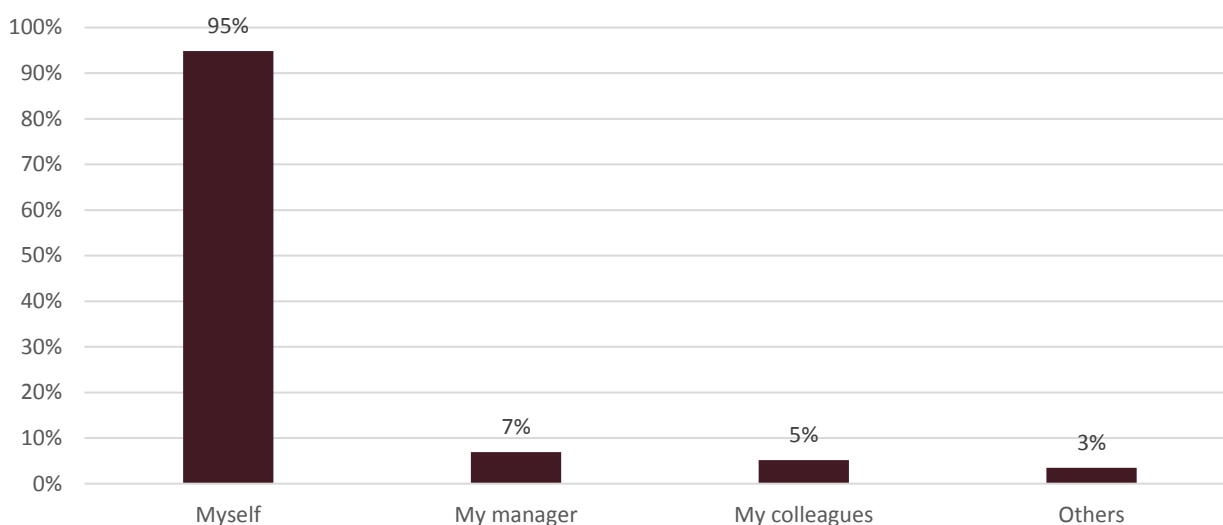

Figure 6 // Different Reasons for Signing Up

- *to improve résumé by signing up for several courses, including Digital Change Agent*
- *to "top off" basic knowledge on digital skills*
- *as a way of keeping up and being "part of the conversation" at work and in general*
- *to prepare themselves for specific tasks at work*
- *to keep up with younger generations*
- *to stay relevant in new ways in their current position at work*
- *to gain something from their union membership fee*
- *as part of a general interest in digital trends*
- *to explore different career pathways because of profound changes in personal life*
- *out of curiosity*

The reasons stated in this figure are based on interviews and conversations where the course participants were asked to share their initial thoughts and reasons for signing up for the course.

A key objective of the course is to enable the course participants to spark a digital transformation in their organisations. Consequently, employers and managers are invited and encouraged to participate in certain segments of the course to help develop a plan of action for this digital transformation for the course participant and digital change agent-to-be to carry out after the end of the course. However, no employers were present at the intro meetings, the first module nor the final module of any of the courses. In addition, the employers were hardly mentioned at all by the course participants when inquiring about their motivation for signing up to the course. The survey data supports this tendency, as shown below. As can be seen in figure 95 % signed up on their own initiative, while only 7 % participated due to their manager's suggestion and 5% due to the suggestion of their colleagues.

Reasons for Signing Up

100%	95%		
90%			
80%			
70%			
60%			
50%			
40%			
30%			
20%			
10%	7%	5%	3%
0%			
Myself	My manager	My colleagues	Others

Data consists of combined responses from survey 1 and 2.

As stated in an email from an HK employee to the future course participants (see appendix 2), HK softened the description of the purpose of the course and downplayed the change agent aspect. But other factors further contributed to the managers being largely absent both in conversations and physically. Several participants expressed the view that it was not natural to involve their manager to a greater extent than to inform them and get a yes or no on participating in the course during working hours and, for example, have the transportation costs covered. Among other reasons, this was because the manager did not express any significant interest in the course or that the employees were not in the habit of discussing courses with their manager. In addition, some participants were not happy to reveal their trade union affiliation to their manager, which can be problematic, especially in the private sector. Furthermore, several of the unemployed participants highlighted the course as part of an effort to make themselves more attractive for potential employers. And in one case, the manager was of the opinion that digitalisation was not the way forward for the company.

> *I've been working at a retailer for the past two years. My boss is very sceptical of this digitization-thing. I'm doing the course for my own sake. I might not get any use out of the course in my current job or workplace, but I'm doing it because I want to strengthen my own qualifications. You are never too old to learn. Age is but a number. You only grow old up here (points to the head) if you don't stay active.*
> *Pavel, retailer in his 50's*

As opposed to the initial ambition of the course to involve employers in the course to maximise transfer of skills and knowledge and create room for embeddedness, this participant has signed up for the course not because of the employer but in spite of the employer. Rather, the course offers a chance for personal and professional development unrelated to their current job situation.

While it was possible to sign up on their own initiative, participate alone but still engage a manager or boss, this was not the case for most of the course participants. Out of 53 respondents, 34 say that theyhave not defined an objective for their participation in the course with their colleagues or management and 32 % have not discussed with colleagues or management how participation in the course can support the organisation's overall work (see appendix 3). When further inquiring through interviews into the employer's awareness about their employees attending the course, it became clear that they were not expected to report back from the course with the exception of participants who got paid during the course. As a result, many participants explain that they do not have an active and ongoing dialogue with their manager before, during and after the course on how to implement skills and tools introduced during the course. This is supported by the survey, where 14 out of 49espondents do not know if their manager supports their participation in the course.

But even though participants to an overwhelming degree have signed up on their own initiative, participate in the course on their own, and the managers are entirely or partially absent, this does not rule out that signing up for the course has a professional objective – also in relation to the course participant's current job.

> *Talking to Ib, who works in commerce. He signed up for the course because he wanted to "get on board". "If you are not, and you want to be down with the younger generations, then you need to know about this sort of stuff. It is very simple. I've messed around with different digital features at work but lack knowledge regarding online customer service and Google My Business. I think it is a lot of fun. This course is all about strengthening my stock for my own sake.*
> *Excerpt from fieldnotes*

This section of fieldnotes describes a course participant and his thoughts on signing up. He views the course as a way to prepare himself for future tasks at work. This reason for signing up is clearly work-related but seen as ultimately beneficial for the individual.

As will be explored further in the next section, this potential of both personal and professional development is closely related to the theme of digitalisation.

Digitalisation as an Investment in Unknown Digital Futures

> *It began with me getting an email about the course from HK. It said something about digital. I saw it and then asked my family if they thought it would be a good idea to participate. They said, "good idea". Everything that has to do with digital – do it! There is so much digital development happening all the time. We have many things we are forced to do online. Everything is done online.*
> *Maryann, cashier in her 20's*
>
> *In general, I think I am behind on the digital, so that's why I have signed up for the course.*
> *Jannik, storage clerk in his 20's*

> *If you don't get on the train (the digital train) you have no chance.*
> *Ib, works in E-commerce in his 40's*

> *I might as well retire if I resist digitalization.*
> *Inge, bookkeeper in her 60's*

> *It will only benefit me sometime in the future. If you seize the initiative now,*
> *considering that more and more things take place online. So, preparing*
> *yourself and making yourself ready, so you don't fall behind. It's too late when*
> *the train has already left the station. If you are not prepared and look ahead*
> *and don't have the knowledge, then it will become difficult.*
> *Mads, trainee in his 20's*

Across age groups, job descriptions and gender, the course participants in interviews and conversations point out that words like "digital" or "digital change agent" in the course description were particularly decisive for their decision to sign up for the course. It made them curious about the course since they felt it seemed a little different from other courses. This curiosity either made them sign up for the course right away or seek out more information about it.

In the above quotes from a selection of the course participants, a special understanding of "the digital" also appears, partly as something very general and partly as something fundamentally good. This tendency is supported by data from the survey, where the respondents have on average appointed a value of 5.9 out of 7 to the question of how positive their view is on how digital technology will affect their work over the next five years.

Across various reasons and purposes of signing up for the course, and regardless of whether it is for work or for private reasons, a positive belief in the digital is pervasive and is therefore not seen as a threat or something to be feared. As a result, engaging in digital upskilling makes sense for the participants as an investment in the future, even without a specific future purpose. How this profound digitalisation will affect them is not known yet, but what seems to be a general understanding is that they, themselves, need to 'get on the train' now, or risk being left behind.

The same trend is seen in the survey. As was shown in figure 5, more than 90 % respond that they to a high or some degree hope to become better at solving potential tasks in the future

Main Motivational Profile: Keen and Curious Learners with a General Interest in Doing Courses

Many of the participants attending the course described themselves as very curious and always on the lookout to learn something new, with some saying they continuously participate in courses. One example of this is Inge who expressed her interest in learning in the following way:

It's almost a bit of a lifestyle for me – being on the lookout for courses and signing up. Just because I'm in my 60's doesn't mean I know it all. Some of the stuff I know is outdated now. I'll never be done learning, never be done improving my skills.
Inge, bookkeeper in her 60's

As Inge highlights, her eagerness to learn is almost a lifestyle – a point of view and an approach to courses which she shared with quite a few of her fellow course participants. This points to the fact that many course participants considered themselves particularly eager to learn.

This is also reflected in the survey where a third of respondents say that they participate in competency development several times a year, as can be seen in figure 8 below.

Figure 8 // Participation in Work-Related Training. *"How often do you participate in work-related training?" (n=32)*

- Several times a year
- Once a year
- Rarer
- Don't know
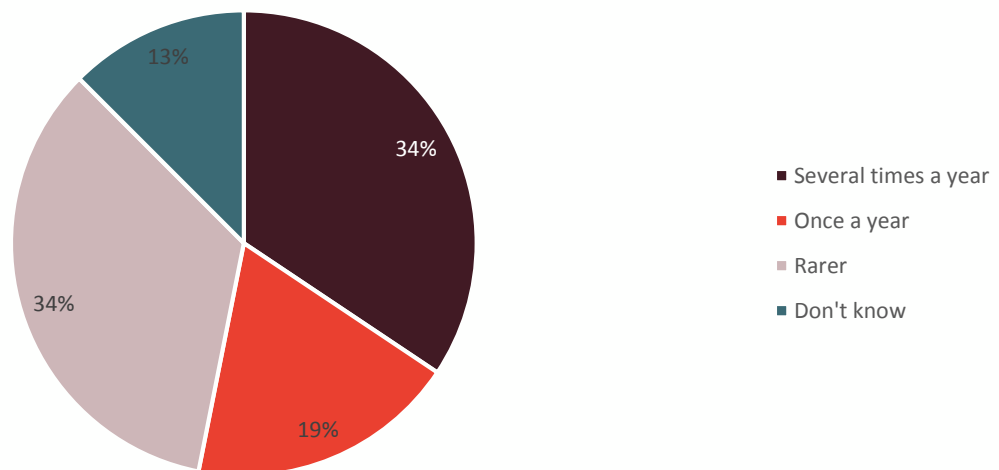
However, some of the participants were slightly more reserved about doing courses, with Digital Change Agent being one of the few courses they had done in recent years. But the overall trend was that many participants were looking for courses with the primary criteria being that it just had to spark their interest and curiosity. This was also a criterium for Inge, who said that if a course sounded interesting enough, she would sign up for it – even if it was not entirely clear to her what exactly she would gain from the course. As long as it sounded interesting enough to get her there and enable her to be in a state of open mindedness and curiosity.

These keen and curious learners point to different reasons that make them especially likely to often sign up for courses. First and foremost, some of the interviewed participants also described courses as

something that had a crucial role in their change of careers with the following quotes from Eva and Inge being some of the examples:

> *I did an e-conomic course in accounting as it was required in many part-time jobs that I was looking for. It was quite a big change from my previous jobs, but I needed a job that was more well-defined.*
> *Eva, administrative employee in her 60's*

> *I'm originally trained in a different field, but 20 years ago I had to deal with a lot of unemployment. I did some courses in accounting and have been working as an accountant ever since, and I love it!*
> *Inge, bookkeeper in her 60's*

Olga, another participant, had worked many years in a different field before now working as a consultant, stated that since she did not officially have a degree, she was dependent on courses in order to have something to put on her resume. Just as in the cases of Eva and Inge, Olga had also actively sought out courses in order to upgrade and qualify for her current position. In Eva's case it meant that she was employed based on the courses she had done, whereas her original and higher education was currently less relevant in her employment.

This pattern is also supported in the survey data since approximately 85 % of respondents have positive experiences from attending previous courses and only 7 % had not previously participated in courses (see appendix 3).

With the idea about the keen and curious learner presented in this section, we highlight a tendency among the group of participants where the actual content and objective of the course was not the main reason for signing up for the course. The act of participating in the course was itself also a central part of the reason why some of the participants chose to sign up for the Digital Change Agent course.

Support from the Workplace

6 out of 32 the respondents in the survey answer that they are good at sharing their knowledge and learn from each other at their workplace. 17 answer that this is only the case to a certain extent. At the same time, 8 out of 39 respondents answer that they to a significant degree experience support from their colleagues to participate in the course, while 15 answer that they don't experience any kind of support from their colleagues (See appendix 3). This is interesting to compare with the keen and curious learner – which is not necessarily a learner identity that is supported and developed in the workplace.

4.6 Participant's Starting Point for Digital Change

The starting point refers to the circumstances and context in which the skills and tools introduced during the course are to be implemented. This makes clear which barriers and drivers the participants are faced with when trying to implement and embed knowledge obtained from the course. To gain an understanding of this, we have among many other questions asked the participants to describe their main tasks and responsibilities at work, how they go about dealing with difficult tasks at work, what they consider their role at work to be, and what kind of support they receive in these situations.

This section deals with these aspects, illustrating how many participants feel preoccupied with day-to-day tasks rather than decision-making and development, which from time to time causes them to feel side-lined and out of touch with decisions made on a higher level in the company. Furthermore, a number of participants point to the fact that they are placed in the category of being a non-digital user (or a less skilled user) both by themselves and others, which further ascribes several people in a role almost disparate to that of a change agent.

Starting Point for Digital Change:

- Many course participants feel preoccupied with day-to-day tasks rather than decision-making and development, which causes them to feel sidelined and out of touch with decision made on a higher level in their workplace
- Several course participants highlight that they are not perceived as digitally skilled both by themselves and their co-workers. This create poor conditions for the participants to drive digital change at their workplace

Day-to-Day Tasks Removed from Higher Level Decision-Making and Development

Among the participants, common jobs encountered in the qualitative research were titles such as bookkeepers, administrative employees, storage clerks in warehouses, store employees and cashiers – positions characterized by repetitive tasks with the purpose of managing the day-to-day operation.

> *Because of my knees I work as a check-out assistant. I make sure I have coins and the banknotes ready, so I don't have to call up other people too much. Then I sit down and start scanning the items. Then I'm asked to go to lunch. Before my knee injury I worked the news-stand, the post department, the milk department, the cheese department, the butchery. But never the office. Two managers and a lady who does bookkeeping work in there. Marketing is done at the main office – it doesn't have anything to do with us.*
> *Maryann, cashier in her 20's*

Maryann describes an everyday routine in which she carries out a repetitive set of tasks. She also describes herself as removed from the office and the managers who oversee bigger decisions. This is an example of an overall trend between the participants: that they often manage day-to-day tasks that ensure everything is running smoothly. This is in line with the survey findings, in which approximately half the respondents have not discussed with neither colleagues nor management how the course can support the organisation's work in an overall perspective. Some participants also mention that they, in addition to their repetitive tasks, handle the more unforeseen ones – for instance a set of tasks that nobody else had time to do or practical matters like a lift unexpectedly breaking down.

For some participants in the qualitative research, the consequences of dealing with repetitive, and sometimes leftover set tasks is a feeling of being a bit on the outside and detached from decisions. An illustrative example of this feeling comes from Eva, another participant who is in her 60's and works as an administrative employee. She talks of being a bit "sidelined" or even "excluded" from the decision-making with a lot less influence compared to previous jobs. The company where Eva works has a strategy

of digitalization in the works, but the head of communication as well as a team of young employees are in charge of that. She has not yet been told about the content of the strategy. Inge, who is now a self-employed bookkeeper, described similar experiences of frequently being sidelined in her previous job:

> *It bothered me not being in touch with what was going on. Sometimes you'd*
> *see an invoice and you would think to yourself: what's that about? And then*
> *there were a lot of other people who did know. That gives you kind of an "urrgh"*
> *feeling.*
> *Inge, bookkeeper in her 60's*

While the overall trend is the fact that many of the participants are not actively involved in major strategies or setting a direction for the future of the workplace, some participants in the qualitative research did speak of a role that came with more freedom and a say in what goes on.

Closely related to the experience of being "sidelined" and not in touch with "what's going on" was a feeling of being unappreciated or lack of insight of their colleagues or boss into the importance and toil of their work. This is what Eva describes here:

> *Being a HK means that you're often the glue holding everything together,*
> *making sure everything works. But you don't get a high salary or any*
> *recognition. It's a bit like being a mum – you do so much, but no one notices.*
> *It's only if you stop doing it that someone will notice all of the things you*
> *normally do.*
> *Eva, administrative employee in her 60's*

In this description of her job, Eva heavily emphasizes her feeling of not just being unappreciated but also carrying out a job that, although she considers it crucial, no one else even notices – it is invisible. Across their different job descriptions and educational backgrounds, though some had a slightly more optimistic outlook on their role, quite a few other participants shared this. For instance one participant described how she had been hired and asked to do procedures for the rest of the employees on how to treat customers, but when she had made them, no one wanted to listen and she was told that the manager would handle all the contact with customers.

Although the participants were arguably a diverse group in terms of their jobs, one of the common features was that they often did not work alongside colleagues with whom they shared a profession and/or had similar tasks. This can also contribute as an explanation of why so few have discussed their participation in the course with colleagues and managers, as can be seen in appendix 3.

> *There's only one other colleague who sits here as well - that's the store*
> *manager, but she's in the store a lot. I don't collaborate with anyone else on the*
> *work I do. The buyer sees what I do and approves it. In some ways I miss the*
> *feedback, but on the other hand it's nice to know that they trust me.*
> *Lise, graphic designer in her 40's*

Other participants spoke of closer collaboration with colleagues, but usually no one else was employed in the same position. For some this had the implication that they found it difficult to receive (the right) support, as few or no other colleagues had to carry out the same tasks – meaning they did not have the kind of insight that would allow them to help with suggestions.

It is important to note that although many of these descriptions leave an impression of participants who have little room to manoeuvre, many of them do in fact see opportunities for themselves to adjust or alter their role in the workplace slightly. Even Eva, the informant who compared her role to being an underappreciated mum, thought the course Digital Change Agent might be an opportunity for her to reposition herself at work.

"Sometimes I find it difficult just to keep up" – Age as the Defining Factor of Being Digital

In the qualitative research, a number of participants mentioned the term "digital native" which was used to describe the young generation, who simply by virtue of being young are seen as far ahead in terms of digital knowledge and skills. This concept of digital natives was used by both old and young.

One of the course participants explanations of what it means to be a non-digital "native" can be read in the following excerpt from an interview with Eva, one of the participants from the course:

> Eva: "Some of my young colleagues, they're faster at all this stuff. They know all of the functions better. They're usually quite nice to show me. But if you're not a digital native like them, you're not as fast at it."
> Interviewer: "Who are the digital natives?"
> Eva: "How old are you?"
> Interviewer: "I'm 31."
> Eva: "Then you're probably a native, right? It's a question of age. I can tell with my son as well. When you've worked with it since you were a kid, gone to school with digital solutions... I've done some of that stuff as well, but it's been learning by doing – it hasn't been part of my education. It takes a lot longer for me, because I'm in my 60's."

On the one hand, Eva's definition suggests that age is the sole criteria defining whether someone is a digital "native". For instance, the interviewer is (probably) placed in the category of being a digital "native" even though Eva has never actually seen her use a computer. On the other hand, Eva's view on digital natives is based on actual experiences: seeing her son and young colleagues work much faster digitally than she herself can do. Another participant, Inge, phrased it this way:

> I didn't grow up with a cell phone or an iPad in my hand. I was born before this entire revolution. I don't just know this stuff by heart. Sometimes I find it difficult just to keep up... This constant development that happens so quickly. Even though I am definitely not thinking of retiring any time soon, I can tell that I'm getting older – when it comes to this. When everyone else uses all these words – technical words within digitalisation. "Then you just do this and this and this

> *on Facebook". "But please show me how?" I find that difficult. It doesn't come natural to me. It's a challenge.*
> *Inge, bookkeeper in her 60's*

Like Eva, what Inge describes is not just the feeling of being more uncertain or older – it is the actual experience of not being able to keep up. Interestingly, one of the younger participants from the course shared this view of the older participants being at a disadvantage:

> *I have a lot of respect for older people who are attending this course – they are way out of their comfort zone. Like if I joined a knitting club.*
> *Mads, trainee in his 20's*

This suggests that it is not just the older participants who label themselves as trailing behind. It is also a view that people around them share, which might be a barrier in terms of taking on the role as a digital change agent. In light of this, it is interesting to relate the objective of the course with the positions some of the participants have at their workplace. This will be taken into consideration when looking at the effects and outcomes of the course.

The concept of digital natives and non-digital natives is interesting not as a way of determining digital skill levels. As the previous statements show, also younger course participants shared a feeling of having to stay updated to keep up, suggesting that the seemingly digital natives also feel estranged. It nonetheless illustrates who is typically considered digitally competent and incompetent, which further creates different conditions for carrying out digital change in a workplace.

4.7 Impact of the Course

In this paragraph we investigate the impact of the course in terms of the course participants' overall satisfaction with the course and different course elements, immediate outputs from the course, and embeddedness at the workplace 3-6 months after the course ended.

Engagement and Satisfaction with the Course

First of all, the participant's self-evaluation of their engagement in figure 9 shows that they felt they participated actively in the course by paying attention during class, engaging in discussions and kept working on tasks even when they were difficult.

Figure 9 // Self-Assessment of Participation. *"To what degree was the following that case for you?"* (n=46)
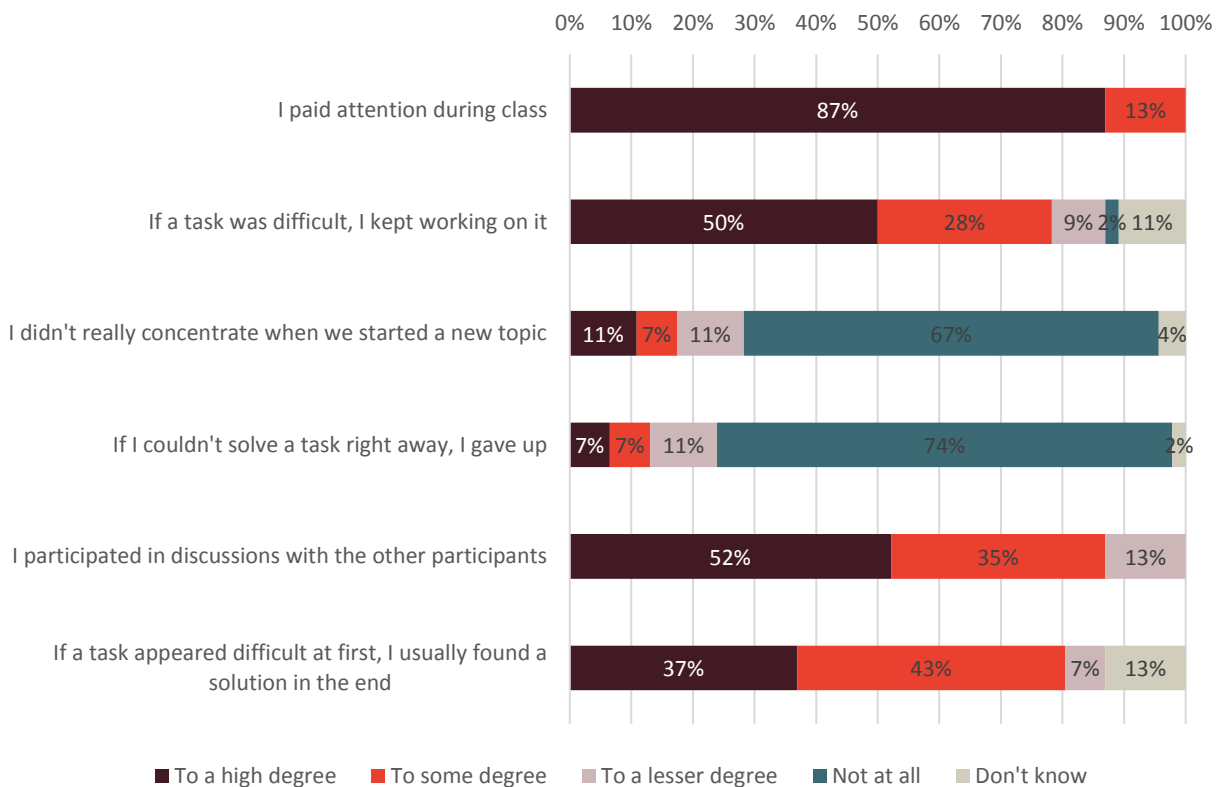
The participants are also generally satisfied with the course, with 43 % of respondents being satisfied, 39 % somewhat satisfied and only 7 % somewhat dissatisfied with the course overall (see appendix 3). Participants with higher levels of education were generally less satisfied with the course, although the data is insufficient to conclude whether this is a general pattern. In the qualitative research, participants also highlighted their satisfaction with the course:

> *Each time, there is something that I take away from the course. I almost feel a bit high driving home, thinking "that was clever" and "can you do that too?" Having it presented like that, and that it's easy understand – I mean, you can't Google what you don't know yet. I like to feel secure in what I do – and some of the stuff I haven't felt secure in doing until now. I've learnt so much on that course.*
> *Lise, graphic designer in her 40's*

However, some participants thought that the scope of the course was a little too broad at the expense of practicing what they were taught and getting a chance to exchange experiences with fellow course participants. There was particularly high satisfaction with the ability of course teachers to communicate what the participants had to learn, and they found that the course material was easy to understand. Almost 85 % found that the course was well-designed, whilst a larger proportion felt that not all modules were relevant.

Figure 10 // Experience with the Course, Material and Teaching. *"To what degree was the following that case for you?"* (n=46)

Legend: To a high degree · To some degree · To a lesser degree · Not at all · Don't know
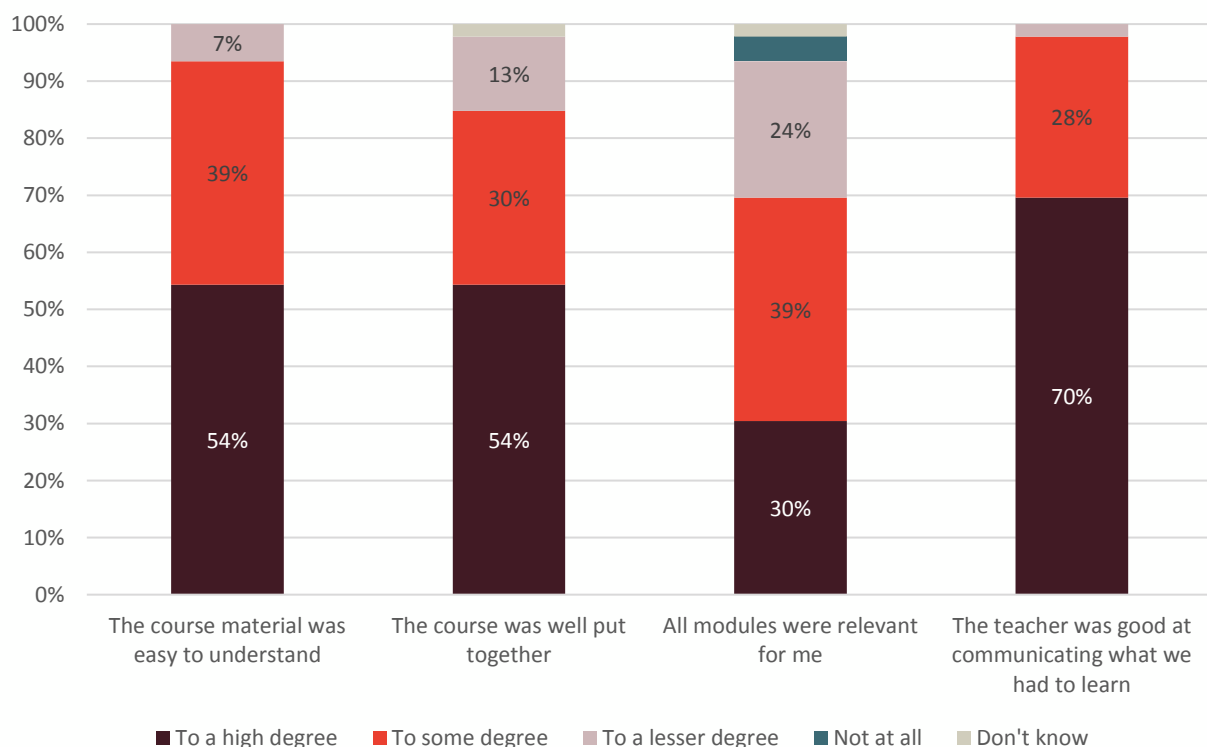
Despite the general satisfaction, some participants did in the qualitative research say that they thought the scope of the course was a little too broad.

> I thought of it as information that I could use for whatever purpose, I saw fit. It was really interesting, but it's also just huge! It was difficult to really go in depth with something. But I've liked all of the modules. I can tell people had very different skills going in and came from different companies. I would have really liked to hear more about how the other participants planned to use it. That would have been interesting.
> Helle, secretary in her 50's

> "If they wanted us to get more out of it, it would have been good if the teachers had spent more time speaking directly with us about how we wanted to use it. We just sat there, each on our own, you didn't really get a chance to exchange knowledge with some of the more professional ones.
> Eva, administrative employee in her 60's

The quotes from Helle and Eva also touch on the importance of being able to share and exchange thoughts on how to use what they learn from the course in their respective workplaces. The desire to do so makes sense considering what was highlighted previously in this report in the chapter on the participants' starting point: that quite a few of those who were interviewed said that they were a bit isolated in dealing with their tasks. In the quote below, another participant, Hans, speaks of a similar wish, but also the fact that the participants did not have enough time to really gain something from the exercises of the course:

> There was very little time for the exercises. Either they should have focused more on them, had fewer of them or taken them out completely. Not working thoroughly through them, makes it too vague. Sometimes you had 5 minutes to do an exercise – that's not enough. It's good to have exercises, but if there's not enough time it's better to do just one and have time to process it afterwards and share each other's point of view.
> Hans, works in commerce and in his 50's

In light of these statements, it is interesting to consider the survey data, in which 29 out of 46 respondents thought that the course was suitable in length, but 14 felt it was too short. The qualitative research suggests that this might be because there was simply too much to learn and not enough time to do so.

The participants are generally satisfied with the course modules as shown in figure 11. The third module on "mapping, use and security of data" was the module that the course participants were most satisfied with. The qualitative research highlights that the knowledge on this subject seemed very transferrable into the setting of both work and private life.

How satisfied are you with the five different modules? (n=46)

Legend:
- Satisfied
- Mostly satisfied
- Neither satisfied nor dissatisfied
- Mostly dissatisfied
- Dissatisfied
- Didn't participate
- Don't know
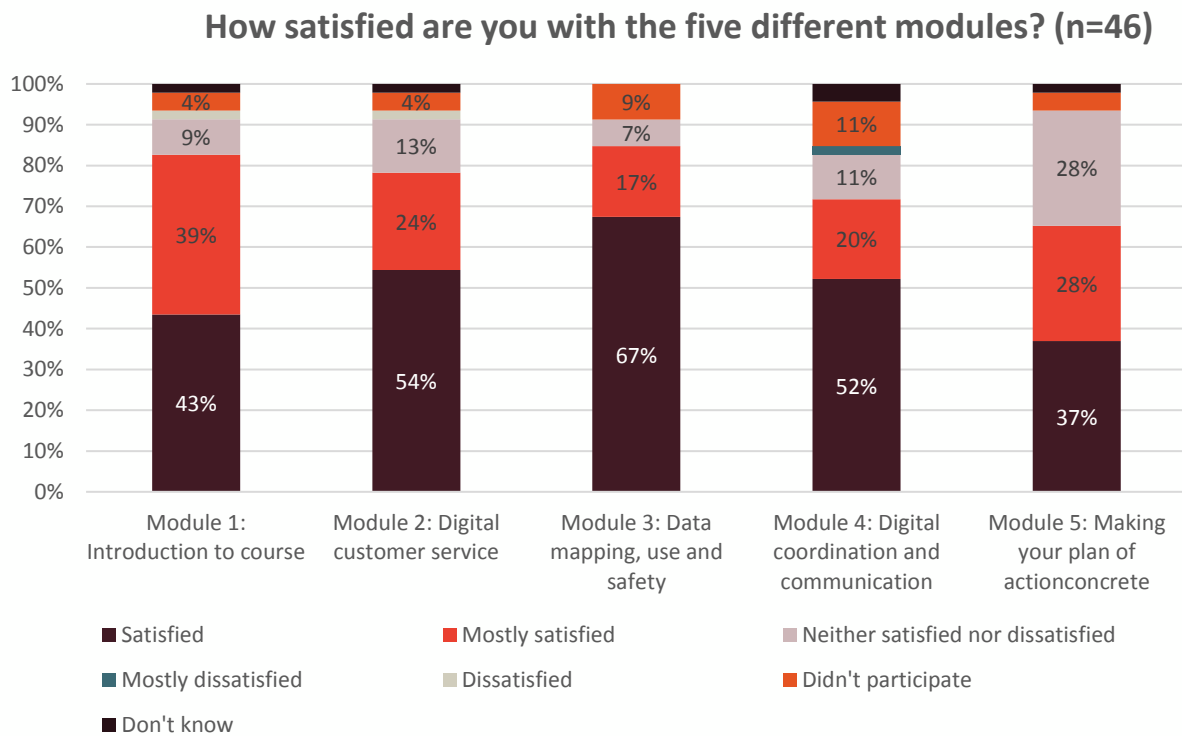
In the qualitative research the participants also emphasized that the module on mapping, using and securing data had been one they enjoyed and could take a lot away from.

> *After the course I've spoken with a colleague who is in charge of GDPR. We have used some of the material on GDPR from the course. The teacher was really good at communicating about GDPR – it was a really great thing about this course. Me and my colleague are working together more closely because of it.*
>
> *Eva, administrative employee in her 60's*

During the ethnographic fieldwork, it was also noticed how this particular module seemed to resonate quite well with the participants, as they could use the content of the module both in the sphere of work and their private life. The last module where participants had to make a plan of action was the module that the participants were the least satisfied with; in the qualitative research, participants said they thought it was too rushed:

> *I don't think we worked that thoroughly with the action plan. The teacher said: "You can work with your action plan" but a lot of us didn't know how to use it. My action plan ended up being very fluffy. I didn't really finish it. I haven't used it.*
> *Olga, consultant in her 40's*

Figure 11 and Olga's statement underscore that the participants were the most unsatisfied with the final module of the course. One point that many respondents had was that the action plan was very loosely defined and hard to work with. This might explain why roughly 1 in 4 participants didn't experience that all modules of the course were relevant, as shown in figure 10 on the previous page.

Immediate Output of the Course

As mentioned in the previous section, participants were generally satisfied with the course, and as the figure below illustrates, most of the participants have left the course with a feeling of having increased their digital skillset and their digital knowledge. Roughly 72 % state that they to a high degree or some degree achieved better digital skills through the course.

Figure 12 // Immediate Output of the Course (n=46)

Immediate output of the course (n=46)

Legend: To a high degree · To some degree · To a lesser degree · Not at all · Don't know

Categories (x-axis):
- Did the course help impove your professional profile?
- Have you acquired better digital skills through the course?
- Have you acquired new digital knowledge through the course?
- Did you learn something from the course which you can use on a personal level?
- Do you expect to use what you've learned in your daily work?

Values:
- Did the course help improve your professional profile?: 15,2% / 50,0% / 26,1% / 4,4%
- Have you acquired better digital skills through the course?: 13,0% / 58,7% / 26,1%
- Have you acquired new digital knowledge through the course?: 26,1% / 60,9% / 13,0%
- Did you learn something from the course which you can use on a personal level?: 23,9% / 41,3% / 26,1% / 8,7%
- Do you expect to use what you've learned in your daily work?: 18,6% / 46,5% / 27,9%

Similarly, 86 % of respondents reported having achieved new digital knowledge to at least some degree through their participation in the course, and 65 % stated that the course helped improve their professional profile, understood as the ability to get a new job or start a business. Furthermore, 65 % and 28 % of the respondents in the survey stated that the course to a high or some degree made them want to participate in more continuing education.

Improved Basic Knowledge and Awareness of Digital Trends

The survey data also points to a more general and personal-related benefit from the course since 65 % of respondents thought the course taught them something they could use on a personal level.

Many of the interviewed course participants refer to how the course has provided them with a new and improved basic knowledge regarding digital trends and digitization. The participants highlight in interviews a number of specific, positive outcomes, they have experienced due to the general introduction to the digitalisation and digital technology.

> *The course gives you a basic knowledge of digital trends and tools. You don't really get to the meat of things as was my expectations before the course. I realized that the course was about scratching the surface when we started. So, if you are curious and interested in certain aspects, it is up to you to dive further into the subject. But you gain a basic knowledge and understanding of how things function. And some expressions and words that confused me before have become more familiar and known.*
> *Olga, consultant in her 40's*

Olga in the quote above explains how she has come to view the course as an introduction to digital tools and trends that provide the participants with basic knowledge. While she expected that the course would be more in depth on certain topics and was instead about general digital knowledge, she still felt that the course has given her something. The general introduction to how things work, has given her a familiarity and comprehension of words, phrases and terminology in the digital world. Other participants similarly mention how their newfound knowledge on the basics of digitalisation from the course have enabled them to not only keep up with conversations on digital topics in lunchbreaks etc. but to actively contribute to these conversations.

Another participant, Kirsten, describes the same experience of the course as "a general introduction to the digital world". The course gave the participants a "digital boost", as she describes it. She emphasizes that the digital boost has given her a good starting point and foundation to work from. With the course as a stepping stone, she has signed up for more advanced courses in subjects such as digital marketing and has become more active on the social media platforms.

> *I learned a lot about how the world of websites, social media, marketing etc. works. Everyone could benefit from such a digital boost that this course provides. A digital boost that helps you think of other ways to do things, so it becomes easier and faster. Just the experience of demystifying all things digital and then considering how to do things differently from the old way.*
> *Kirsten, unemployed in her 50's*

In the statement, Kirsten hits on another consistent experience among the interviewed course participants, which is about the ability of the course to demystifying the digital.

Many of the people I met on the course were very scared of everything digital. They were my age (50's) and said: "I'm not going on Facebook". "I am not doing this or that". "We have no idea how to do that". I mean, come on! Luckily, that's not how I felt. They were far more scared than I was. The course certainly didn't throw people into the deep end of the pool. They were given the chance to simply tick their toe in.
Kirsten, unemployed in her 50's

As described earlier, the average course participant was a woman in her late fifties or in her sixties. A group, where some, as previously mentioned, placed themselves in the category of "non-digital natives" due to their age and inexperience in comparison with the younger generations. Kirsten's experience with the course as a careful introduction to the digital world, appears to resonate with this group and could be part of the reason why the course was generally satisfying to most participants and had a high score on assessment of the personal benefit as illustrated in figure 12.

4.8 Outcomes Three Months Later

This section focuses on the effect of the course for participants and their workplace approximately three months after they completed the course. First of all, it is interesting to look at participants' self-assessment of their digital skills. Figure 13 graphs the share of respondents who gave themselves a rating of at least 5 on a 7-point scale at the beginning of the course, the end and three months after.

Figure 13 // Development in Self-Assessment of Skills. Share of Respondents with High Self-Assessment of Skills (min. 5 out of 7).
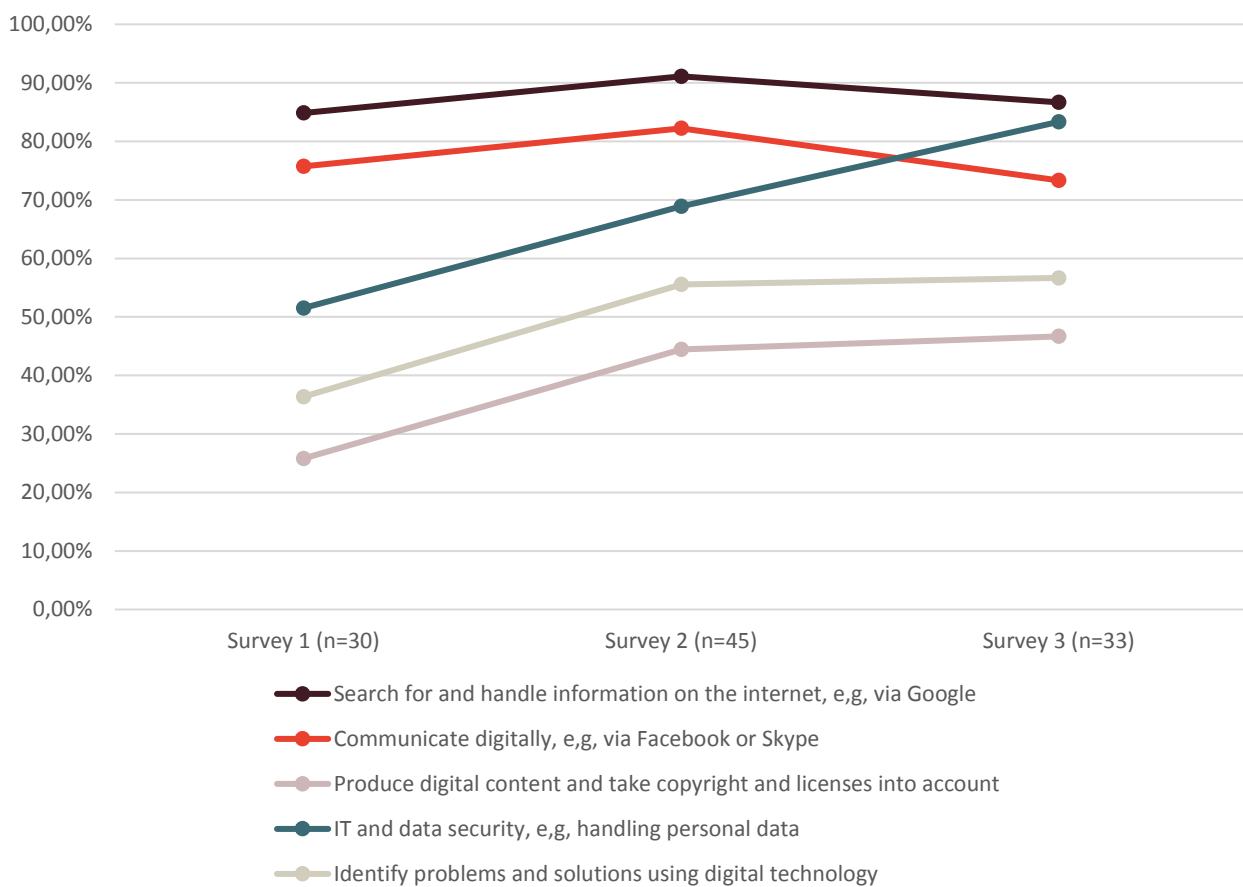
Since it is three different samples, they cannot be directly compared. However, it does show that the proportion of high ratings is higher for the survey conducted immediately after the course, and it is more or less the same three months later for most skills. For IT and data security the share is even bigger after three months. One possible interpretation is that it is connected to the high levels of satisfaction with module 3 where this was the subject – i.e. course participants experienced the highest learning outcome and even managed to apply this in their workplace. However, it might also be caused by a selection bias in the sense that the respondents with the highest self-assessment answered the surveys distributed after the course. If we turn to the degree to which these skills were put to use, figure 14 shows that most participants have used the digital skills that were taught during the course (with the exception of producing digital content) at least a few times.

How often have you used the following digital skills from the course in your work? (n=25)

Often   A few times   Never   Don't know
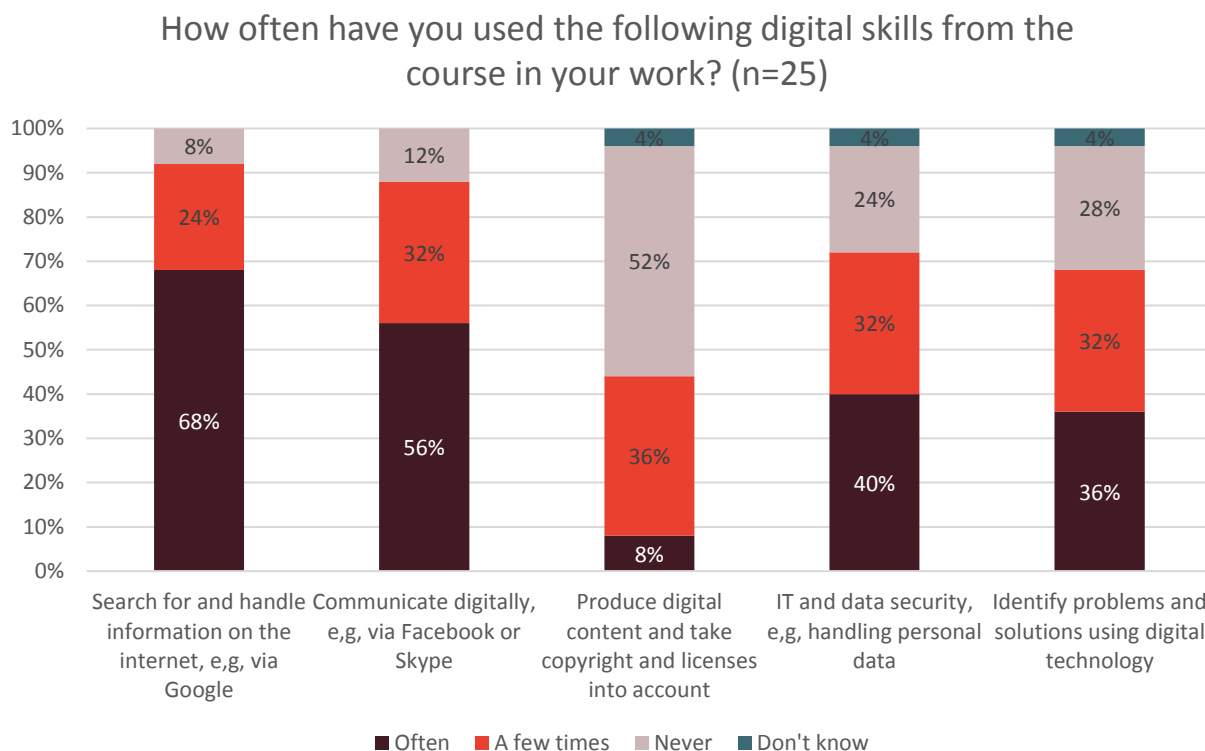
Searching for information online and digital communication have been used most frequently. This is no surprise since these tasks are most likely common across different jobs, whilst producing digital content might only apply to certain types of positions.

If we turn to the job-related outcomes for participants after three months, it is clear that it has not yielded important changes in their tasks or areas of responsibilities as shown in figure 15 below. This supports the point emphasized previously that course participants find themselves in job roles where it is difficult for them to exert influence and are removed from e.g. decision-making.

Figure 15 //   New Tasks or Responsibilities after the Course (n=25)
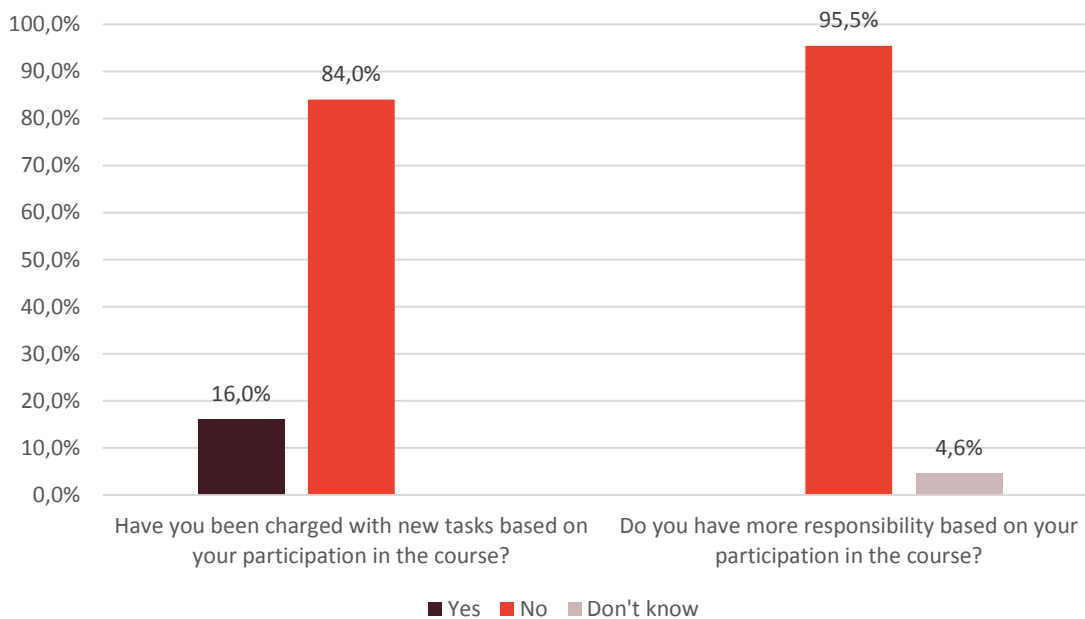
The same is the case if we look at other outcome parameters in figure 16 which compares outcomes from the course immediately after it finished and three months later. For survey 2, respondents could choose outcomes on varying degrees (only to a high degree" or "to some degree" are graphed here), whereas they in survey 3 had to report whether it had an outcome at all.

Figure 16 // Long-term Outcome from Course. *"What have you gained from taking the course?"*
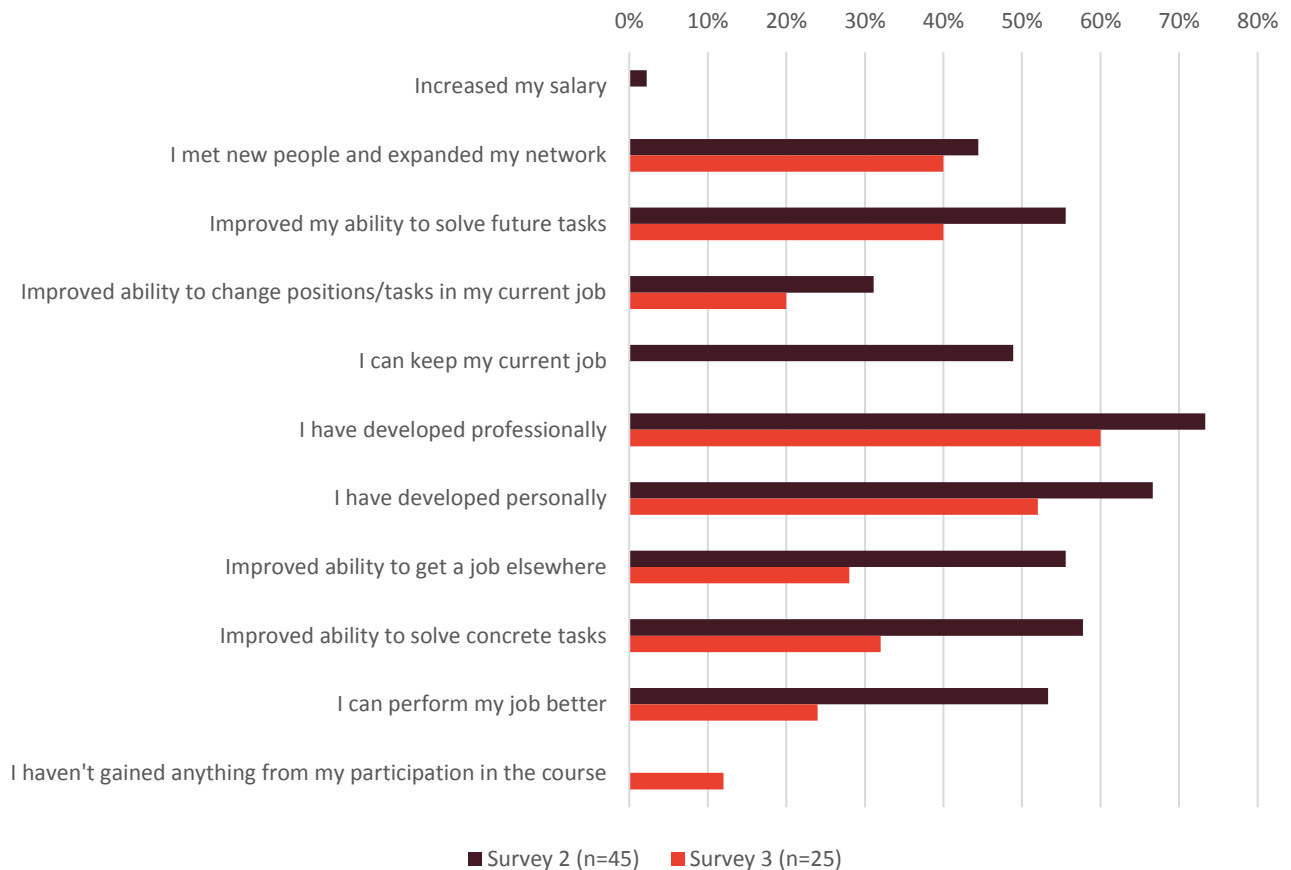
First of all, respondents in survey 2 generally seem more optimistic than three months later (although they cannot be directly compared) especially regarding ability to get a job elsewhere and to solve concrete tasks as well as job performance stability. No respondents experienced an increase in salary and only few experienced an improved ability to change tasks in their current positions. However, even after three months nearly two thirds of respondents felt they've developed professionally, and half of the respondents said that they had developed personally. Something which further speaks to the influence of their role in the workplace. It is, however, important to keep in mind the event of Covid19, that changed the frameworks for normal working life.

Embeddedness in the Workplace

As was pointed out earlier, both the survey and interviews indicate a substantial personal benefit from the course. At the same time, as has also been referenced throughout the report, there is a clear trend that the workplaces are only to a small degree involved, and that the participants' starting point is characterized by a high level of routine work, which makes it hard for them to become a catalyst for digital change. There is a large difference between the experienced benefit on a personal level and the benefit for the workplace. This suggests that a successful evaluation of the course does not necessarily translate

into a successful implementation in the workplace. In other words, new knowledge does not necessarily benefit the workplace, which was the intention of the course. In the next section we will look closer at some of the central trends in how the course participants shared their knowledge and tools at their workplaces after the course.

Sharing of Knowledge from the Course: Digital Tips and Tricks to Pass On

In this section we look closer at the sharing of knowledge and what characterizes the knowledge shared with the colleagues.

> *I think that I will more likely pass on my knowledge and provide input when we*
> *start up a new assignment, because there I will most certainly be incorporated.*
> *So that it can get a good start and then pass on the baton.*
> *Hans, works in commerce and in his 50's*

The aim of the course is to turn the course participants into digital change agents that can lead and catalyse digital change and digitalisation at their workplace. As is apparent from the email disseminated by HK (see appendix 2) and as a result in the challenge in trying to recruit managers to participate in the course, the plan of action has not been prioritized by the course teachers and the objective of turning participants into digital change agents has been toned down. In that context it makes sense that the participants we interviewed did not consider the prospect of becoming a digital change agent as a key outcome of the course. In answer to the question of how they have been able to use the knowledge from the course in their workplace, the participants point out how they have given advice and passed on ideas to other employees at the workplace and "passed on the baton", as Hans puts it.

The specific tools and actions taught during the course seem to resonate more with the course participants. Tips and tricks such as to remember to display the CVR of the company on your website, an online tool to test the loading speed of your company's website, to make sure the drop-down menu is on the right side of the screen to improve iPhone-usability, or that Google only includes +90 second visits to a webpage in the SEO.

These tips and tricks provide the course participants with pieces of information and advice regarding digitalization that can be transferred to and benefit the workplace in general. Interestingly, some course participants do not, however, consider this information as relevant for their own position and tasks – but they point to the IT-department, E-commerce etc. who is responsible for dealing with websites, google analytics, UX/usability etc.

> *First, the teacher talks about the good domain name. It has to be written without the Danish letters æ, ø and å. The next issue is loading time. They have to check their own website's (their company's) loading time, which the teacher shows them. I am looking over the shoulder of my neighbour. Her company, where she works as a finance trainee, displays a particularly slow loading time "This will make our graphic designer happy", she exclaims. The graphic designer has made the argument that it should be changed – the website – with fewer photographs etc.*
> *Excerpt from fieldnotes*

This excerpt from the fieldnotes is an example of how the course provides the participants with an opportunity to contribute with specific, tangible suggestions and tools – what we call tips and tricks – but not necessarily act as an agent of change and be part of a strategy of digitization.

This can also be seen in the survey, which shows that knowledge and skills are shared informally and mainly with colleagues.

Figure 17 // Sharing Knowledge and Skills from the Course. *"Have you shared your knowledge or skills from the course with…"*
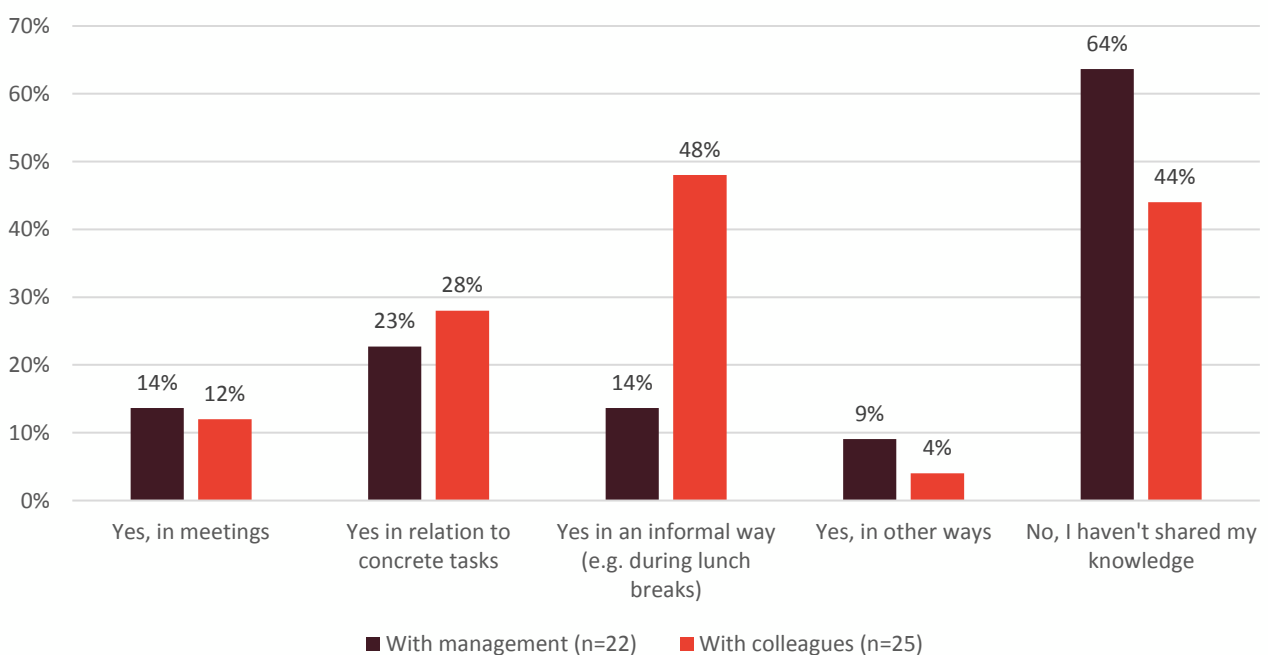
Figure 17 indicates that knowledge is primarily shared with colleagues in informal settings. 48 % say that they have shared their knowledge with colleagues in informal settings and an additional 28 % in connection with actual work assignments. One course participant offers an illustrative example of how knowledge is shared informally among colleagues. A course participant expresssed that it was especially during lunch breaks, she had given it everything by talking about Snapchat and TikTok with her younger colleagues, who almost fell over backwards due to her enthusiasm.

The statement points back to the experience of having improved one's general knowledge of the digital world. A knowledge that allows the participant to join a conversation with younger colleagues about subjects that previously might have been out of range. While this is not directly connected to the ambition of the course, the participants new experience of being able to partake in conversations about digital topics points back to some of the reason given for participating in the course to begin with, such as being able to be "part of the conversation" and "being able to keep up with younger generations".

Nearly 2/3 of the course participants give the impression that they have not shared knowledge or competencies from the course with the management at their workplace, and more than 1/3 have not shared anything with their colleagues. The high proportion of participants who have not involved the management at all after the course reflects that 95 % signed up for the course on their own initiative. It also reflects, as can be seen in appendix 3, that defining objectives as well as discussing how the course relates to the organisation's work have only been done to a very limited degree. Therefore, it can be argued that the course, and the knowledge and competencies acquired through it, does not give cause to engage with the management when this was not the intention from the starting point. At the same time, the interviewed course participants who did involve management point out that they do not sit in positions in their workplace where it is relevant that they provide knowledge and skills within the digital field.

> *My boss knows I'm taking the course, but I mostly met apathy from my boss. I actually explained to him that management was encouraged to participate in different parts of the course. But the manager in charge of IT and the digital is placed 4 levels above me in the organisation.*
> *John, warehouse clerk in his 30'es*

"My boss knows I'm taking the course, but I mostly met apathy from my boss. I actually explained to him that management was encouraged to participate in different parts of the course. But the manager in charge of IT and the digital is placed 4 levels above me in the organisation." (John, warehouse clerk in his 30'es)

> *My boss knows I'm taking the course, but I mostly met apathy from my boss. I actually explained to him that management was encouraged to participate in different parts of the course. But the manager in charge of IT and the digital is placed 4 levels above me in the organisation.*
> *John, warehouse clerk in his 30'es*

Other participants similarly state that someone else in the company, for instance employees in the IT-department, are responsible for tasks within the digital field. This, along with the quote above, point to an organisational barrier to implementing knowledge. The course participants' job description and position in the company simply do not allow them to work with the knowledge and tools that are introduced during the course and it is thus less obvious to involve their manager. This barrier points back to the participants' starting point, which was described earlier in this report. Namely, that they as a starting point handled operational tasks rather than development and decisions at a higher level.

It Takes More than Extra Work to Implement New Knowledge

Several of the interviewed course participants state that they would like and have tried to move forward with some of the topics they have been introduced to during the course. However, they experience running into challenges that make it a demanding process. Challenges that seem mutually exclusive and largely a result of their starting point, as described earlier.

> *The management is really hard to talk to about some of these things. So, there is not really anyone to spar with. So, I have to make a decision about what is important that we do first? And then I have to stick to it and keep insisting that we hold some meetings about it.*
> *Helle, secretary in her 50's*

Here, Helle expresses that she has no one to spar with about the things she brings with her from the course. There is not much support, which is why it takes a lot of legwork to get anything done. Legwork that is made further difficult by managers who do not support giving new assignments to the employees.

> *They (the bosses ed.) also get a little annoyed when I come up with new things after I've been gone. They are skilled professionals where things have grown around them and then they have become managers. Part of what has become important for many companies: emails, websites, communications – it's annoying in their view! They think: Now we have this website, isn't that enough? It is seen as another demand (if I come up with something new). When I say GDPR, etc., they find it annoying.*
> *Helle, secretary in her 50's*

The workplace does not always see the point of introducing new initiatives and other assignments come first. Since the workplace is not involved to a large degree, there is rarely an environment that ensures that the course participants have the time and space to work in new ways or with new assignments.

Several other interviewed participants point out that it is not only the boss who sets the limits. It is generally stated that there is a lack of time for the new assignments.

> *I have not really gotten started with what I was supposed to after the course. There has been a sale, salary payments and then it will soon be Christmas. So, it's extra busy – I have been able to do everything within working hours, but all the new things I was supposed to do, I don't have time for that. The other assignments have had to be finished by a certain time.*
> *Lise, graphic designer in her 40's*

> *I've been thinking about this thing: Google My Business, whether we could do that too so people would find us. But I haven't done it yet. I haven't done it because because there are many things, so you have to prioritize - there is also the daily operation. There are the primary tasks that I have to deal with. But that is a point on the to-do list.*
> *Olga, consultant in her 40's*

These two statements illustrate how the new assignments are considered less important and therefore must give way to the normal and primary tasks. This experience is of course strengthened if the manager at the same time does not have an ambition to make room for new assignments. Then it will instead be something you have to fight to fit into your schedule. A struggle that for some will require that their free time has to be used, for instance.

Overall, the above statements indicate that there is a significant part of the knowledge and tools introduced on the course that lies outside the individual participant's organisational space for action. They are both limited in their position in relation to trying to instigate digital change themselves and at the same time it is difficult to do so through the managers. However, the high degree of informal sharing of knowledge and tools with colleagues shows that there are other ways to implement knowledge from the course in companies.

The trend is also clearly seen when looking at the course's spill-over effect. The spill-over effect from the participant to both management and colleagues is low which is demonstrated in figure 18. Very few agree to the statements that management and colleagues have improved at using digital technology. Most striking is that nearly half the respondents answer that they don't know. This could both speak to the picture painted previously about the role of the participants in their workplace.

Figure 18 // Spill-Over Effect to Managers and Colleagues . *"How much do you agree or disagree with the following statement..."* (n=22)

Chart: Bar chart showing two questions

After my participation, my management has improved at using digital technology in the daily work
- Don't Know: 45%
- Strongly + mostly disagree: 45%
- Strongly + mostly agree: 9%

After my participation, my colleagues have improved at using digital technology in the daily work
- Don't Know: 45%
- Strongly + mostly disagree: 36%
- Strongly + mostly agree: 18%

Legend: ■ Strongly + mostly agree   ■ Strongly + mostly disagree   ■ Don't Know

However, we have encountered a few exceptions that seem to confirm this rule. This included participants who in their day job worked as graphic designers or in an e-commerce department where they had the opportunity to pursue new opportunities. For those participants, the course has been an important and rewarding source of inspiration with new tools. One participant from this group of participants could, for example, return to each module and tell a new story about how he had now introduced or used what they had learned about during the previous course module such as Google My Business, online customer service or something else.

These examples can help inform the findings in figure 19 below. Here, a small majority of respondents agree that the course has helped to solve tasks using digital tools, and that knowledge is easy to apply and communicate, and interestingly that roughly 2/3 of respondents agree it has enabled them to make digital changes in their workplace. Only 40 %, however, agree that it has helped add value to their workplace.

Figure 19a // Workplace Related Outcome (1/2). *"How much do you agree or disagree with the following statement…"* (n=25)
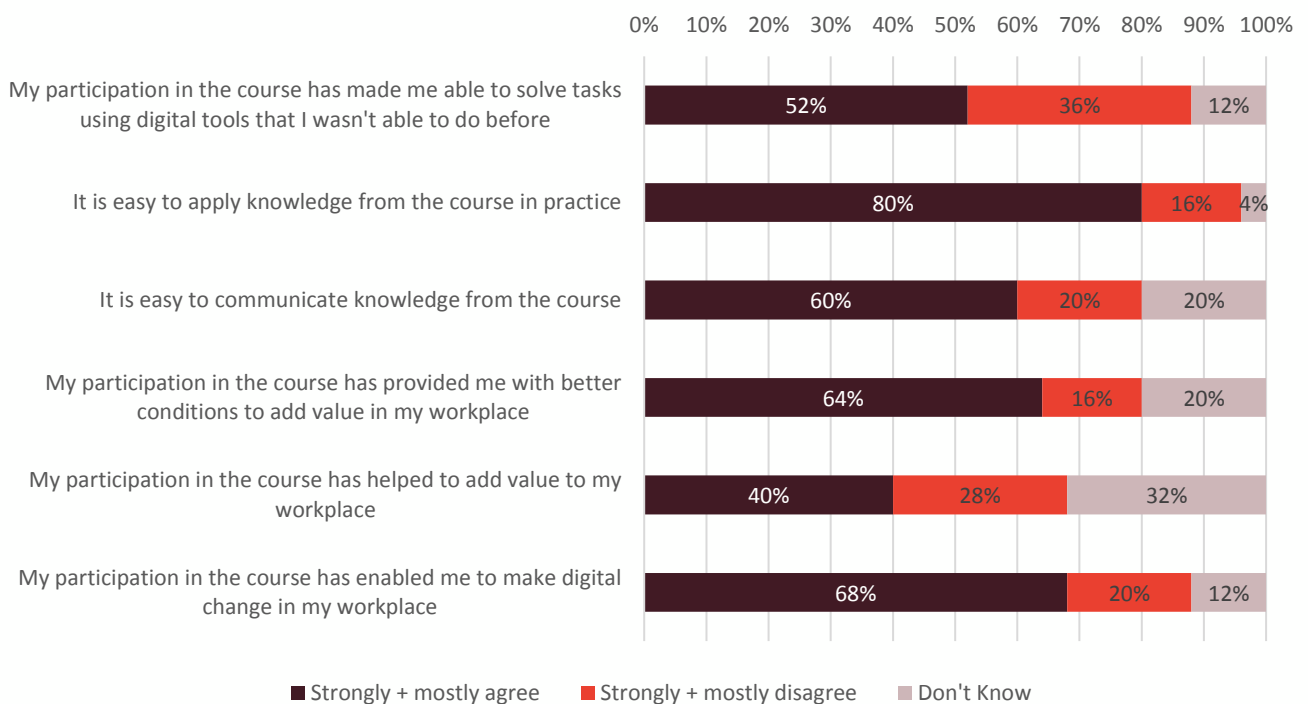
If we take a closer look at how the course has contributed in a more concrete way to the workplace, it becomes clear that respondents especially think their participation has contributed to the production of digital content see figure 19 b below.

Figure 19b // Workplace Related Outcome (2/2). *"To what degree has your participation in the course contributed to the following in your workplace?"* (n=25)
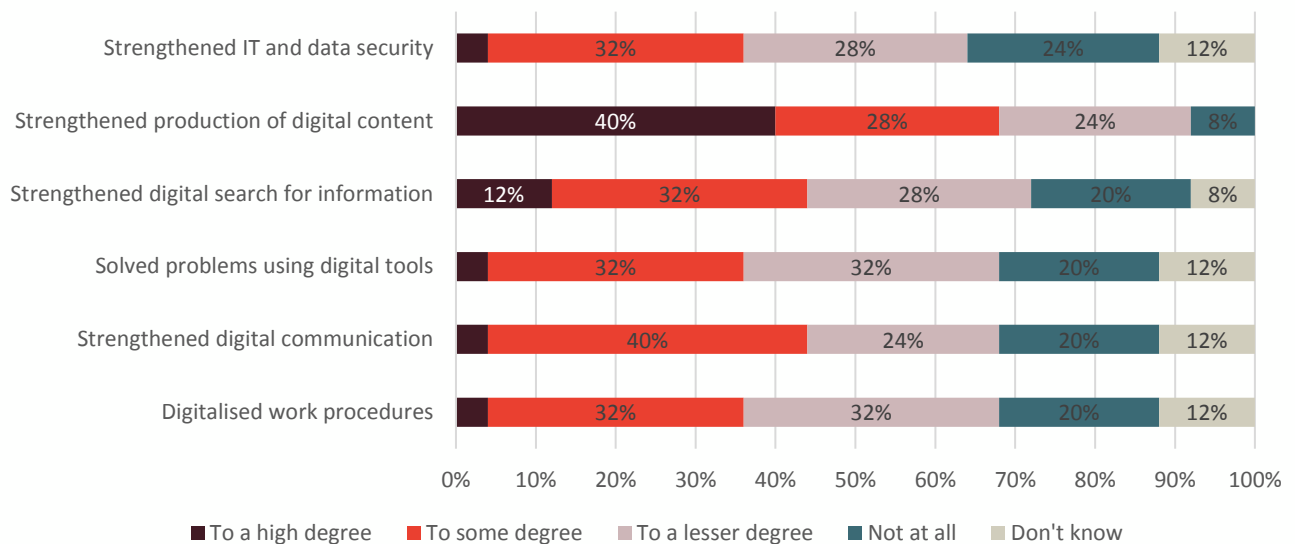
Together, these two figures support the picture that the skills participants learned from the course especially come into play in a more informal and ad-hoc manner. This is interesting since it is also the skill which they reported using the least (see figure 14). For the remaining categories such as solving problems using digital tools and digitalising work procedures, around half of the respondents report that their participation has only contributed to a lesser degree or not at all.

5. Conclusions

> *My boss knows that I am following the course, but I mostly experience apathy from the boss. I might think I have some pearls of wisdom to share from the course, but I find that the attitude (ed. from the management) is that either they have already found these pearls of wisdom. And if they don't have, then it is probably not that valuable to them.*
> *John, warehouse clerk in his 30s, field notes*

92 members of HK have completed the course "Digital Change Agent", which was held between late summer 2019 and spring 2020. Via ethnographic studies and surveys at the beginning of the course, the end of the course and three months later, it is examined which barriers and drivers there have been in relation to making course participants into *digital change agents*.

Some special conditions apply to the study: First, Covid19, which locked down Denmark mid-March 2020, during some of the last course modules. Furthermore, the typical course participant is a woman aged 54, which should also be a point of attention in the reading of the report and the conclusion.

The participants are a diverse group with several reasons for signing up for the course; a majority has signed up for the course out of their own initiative and not based on the suggestion of a manager or colleague.

The participants share a positive view of digitalisation and see opportunities in digital technology, but experience that their age in particular is a barrier to becoming a *digital change agent*. The participants use the term "digital natives" to distinguish between people born before and after the digital revolution, which indicates an understanding that, due to one's age, one has either better or worse pre-conditions for being able to understand and acquire new digital skills.

Drivers and barriers are highly dependent on the participants and the professional field – in this study clerical work. At the same time, many different factors apply, from interest to professional development. As the literature has not looked at a subject matter similar to the Danish - primarily women 50+ who work in clerical positions and participate in a course with the aim of becoming a digital change agent, it is difficult to draw broad connections between the literature and this study.

Overall Satisfaction and Implications of Participation in the Course

The participants are largely satisfied with the course, and especially the third module "mapping, use and security of data" was rated highly by the participants, whereas the last module about the plan of action was rated the lowest. Overall, the participants have experienced that they have gained more general knowledge about digital technologies, which has contributed to a greater curiosity about digital possibilities and belief in their own digital abilities. The course has not led to importannt changes for the participants' portfolio of assignments, responsibilities or salary. Rather, that the knowledge gained from the course is shared informally with colleagues and to a very small degree with managers. At the same time, a high assessment of the course and a consistent experience of a great personal benefit from the course does not mean that knowledge gained from the course is implemented in the workplace.

5.1 Barriers and Drivers

Barrier 1: Hard to Recruit Course Participants and Their Managers

Different communication strategies have been tried, and face to face conversations have proven to have the best success rate. At the same time, it has also proved difficult to get the managers to participate together with the employees at the first module of the course and it has been difficult to recruit participants from SMEs.

Barrier 2: Age as a Defining Factor

Several of the interviewees point out that due to their age, they do not see themselves as "digital natives" – and at the same time they experience that others see the same thing – that age is an obstacle to contributing to digital change.

Barrier 3: Positioning in the Workplace

The participants are office workers and experience to a great degree that their work assignments consist of day-to-day tasks and are far from a strategic level where it is possible to implement (digital) changes.

Driver 1: Keen and Curious Learners

The participants can be described as keen and curious learners who are curious about digitalisation and its possibilities, and they have to a large degree signed up for the course on their own initiative. At the same time, they are very much used to participating in continuing education. This is also supported by the fact that there were no clear indications in the survey that the participants had low self-efficacy or barriers in relation to academic self-concept, which in turn is supported by the fact that almost half of the participants have a higher education.

Driver 2: The Participants Are Focused on Problem Solving and Professional Development

Almost all participants hoped to a high or some degree that the course would increase their ability to solve future tasks (97 %) or lead to professional development (94 %).

Driver 3: Positive View on Digitalisation

Despite age being perceived as a possible barrier for establishing digital change in the workplace (see barrier 2), the participants have a positive view of digitalisation and see opportunities in digital technology.

5.2 Learning Points

Getting co-workers to participate in continuing education has also proved difficult in previous studies (DEA 2019b). In this report, it is found that relational marketing has had a greater effect than traditional marketing, which is worth investigating further. At the same time, it is also important to know one's target audience – as this study shows, age, for example, has a decisive effect on how course participants' experience of their own ability to act as digital change agents. In light of this, it is also important to be

aware of the position the employee, who has signed up for the course, has in the company, so that there is a connection between the tools taught during the course and the actual opportunities for change the employee has at his or her workplace.

Originally, it was an ambition to have the manager attend the course, as a minimum for the first module. This has not been possible, but the idea is valid – because it supports knowledge sharing in the workplace after the completion of the course. However, this study shows that it is largely tips and tricks that course participants share with colleagues after completing the course and not major digital changes, which in part can be seen as an objective of the course that has not been met.

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Appendix 1: Members of Trade Unions in Denmark

Members of trade unions in proportion of full-time employees			
	2017	2018	2019
Share that is a member of one of the three main organizations	64%	64%	63%
Share that is a member of an organization	82%	82%	81%

Source: Statistics Denmark

Appendix 2: Email from HK-Headoffice to HK-member

Digital Forandringsagent er et kursusforløb udviklet af Google i samarbejde med HK og IVÆKST, som styrker dine digitale kompetencer. Vi skriver til dig, fordi vi har tilrettelagt forløbet, så det primært henvender sig til HK'ere, der arbejder i mindre virksomheder.

På kursusforløbet Digital Forandringsagent får du redskaber til at skabe digitale forandringer i din virksomhed. Du bliver bedre i stand til at kortlægge din virksomheds muligheder for at skabe værdi og optimere forretningsprocesser via digitalisering og du får indblik i, hvad potentialet for forbedring egentlig er.

Alt dette lyder måske som en stor mundfuld, men vi vil bare rigtig gerne klæde vores medlemmer bedre på til at kunne håndtere digitale processer. Det er altså ikke meningen, at du skal kunne det hele inden du starter – det er jo derfor, vi har lavet forløbet.

Lidt om indholdet
Helt konkret giver kursusforløbet dig redskaber til at arbejde med:
• Digital kundeservice
• Kortlægning, brug og sikring af data (heriblandt GDPR)
• Digital koordinering og kommunikation

Hvor og hvornår
Kursusforløbet består af 5 moduler af 3 timers varighed. Modulerne afholdes ca. hver 14. dag med opstart i september. Du kan enten tage kurset i dagtimerne eller om aftenen. Vi udbyder 3 hold i HK Hovedstaden i efteråret – to i København og et i Hillerød.

Hold 1 (aften):
Opstart 3/9-2019 kl. 17-20 i HK Hovedstaden, Svend Aukens Plads 11, 2300 Kbh. S

Hold 2 (dag):
Opstart 10/9 kl. 9-12 i HK Hovedstaden, Svend Aukens Plads 11, 2300 Kbh. S

Hold 3 (dag):
Opstart 16/9 kl. 9-12 på Milnersvej 35 B, 3400 Hillerød.

Hvordan tilmelder man sig?
Du kan læse mere om forløbet og tilmelde dig her: https://digitalforandringsagent.dk/
Men vent ikke for længe, for der er kun et begrænset antal pladser.

Med venlig hilsen
René Knudsen
HK Service Hovedstaden

Appendix 3: Further Tables and Figures

Appendix 3.1: Background Variables

Gender	Frequency	Percent
Woman	51	81%
Man	12	19%
Total	*63*	*100%*

Age group	Frequency	Percent
21-35	8	13%
36-45	6	10%
46-55	25	41%
56-64	22	36%
Total	*61*	*100%*

Employment status	Frequency	Percent
Full time and permanent position	35	56%
Full time and time limited position	3	5%
Part time and permanent position	4	6%
Part time and time limited position	1	2%
Employed in internship or something equivalent	0	0%
Entrepreneur	5	8%
Unemployed	7	11%
Other	7	11%
Total	*62*	*100%*

Highest educational attainment	Frequency	Percent
Secondary school	2	3%
General upper secondary	10	16%
Vocational upper secondary	20	32%
Short cycle higher education (2-3 years)	12	19%
Medium cycle higher education (3-4 years)	15	24%
Long cycle higher education (4 years and more)	2	3%
Other – please specify	1	2%
Total	*62*	*100%*

Employment sector	Frequency	Percent
Public	3	5%
Private	47	78%
Other	10	17%
Total	*60*	*100%*

Organization size	Frequency	Percent
Less than 10	5	11%
Between 10 and 49	12	27 %
Between 50 and 249	12	27 %
More than 250	16	36 %
Total	*45*	*100 %*

Appendix 3.2 Academic Self-Concept

How confident are you that you can... (n=32)

Statement	Not at all confident	A little confident	Somewhat confident	Very confident	Completely confident
Participate in discussions with the pther course participants	0,0%	3%	34,4%	34,4%	25,0%
Find a place to prepare for class	0,0%		28,1%	40,6%	31,3%
Remember information from textbooks or class	0,0%	12,5%	25,0%	43,8%	18,8%
Prepare myself for class	0,0%	9,4%	21,9%	40,6%	28,1%
Concentrate on what is being taught		9,4%		53,1%	34,4%
Do homework when there are other interesting things to do	6,3%	3,1%	31,3%	21,9%	37,5%
Hand in assignments on time	0,0%	3%	21,9%	21,9%	50,0%

Legend: ■ Not at all confident ■ A little confident ■ Somewhat confident ■ Very confident ■ Completely confident

Appendix 3.3: Objectives for the Course and Support from the Workplace

Have you defined objectives for the course with your colleagues or management? (n=53)

- Yes — 13%
- No — 64%
- Don't know — 6%
- I set objectives myself — 17%
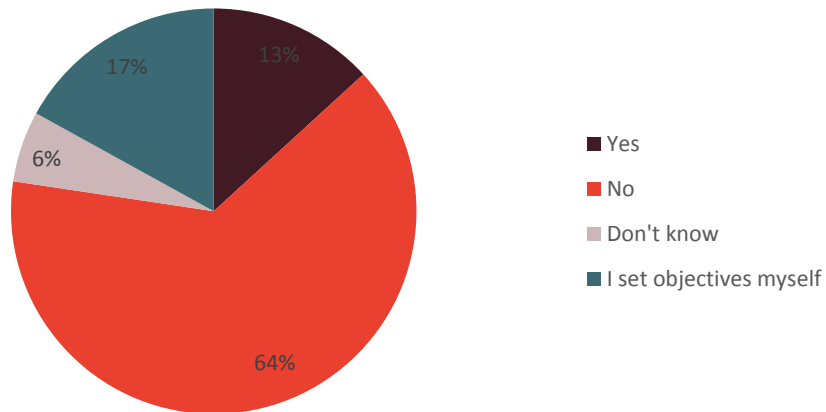
Have you discussed with your colleauges or manager how your participation in the course supports the work of your organisation? (n=53)

- Yes — 34%
- No — 60%
- Don't know — 6%

Have you had support to participate in the course from...

	To a high degree	To some degree	To less degree	Not at all	Don't know
Your management (n=43)	29%	14%	14%	14%	29%
Your colleagues (n=39)	21%	23%	10%	38%	8%

Training and sharing knowledge (n=32)

	To a high degree	To some degree	To less degree	Not at all	Don't know
To what degree do you experience that there is focus on training in your workplace?	13%	38%	31%	13%	6%
In my workplace, we're good at sharing knowledgte and learning from each other	19%	53%	9%	9%	9%

Appendix 3.4: Previous Experiences with Training

How would you characterise your previous experiences with training?(n=45)

Category	Percentage
Positive	56%
Somewhat positive	29%
Neither positive nor negative	9%
Somewhat negative	0%
Negative	0%
I haven't previously participated in training	7%

Which of the following kinds of training have you participated in over the last three years? (n=32)

Category	Percentage
Courses from external providers	75%
Courses provided at my workplace	41%
Peer training (e.g. from colleagues)	59%
None	3%
Other	19%

Has your participation in the course increased your desire to participate in further training? (n=46)

Category	Percentage
To a high degree	65%
To some degree	28%
To a lesser degree	2%
Not at all	2%
Don't know	2%

Appendix 3.5: Course Satisfaction

How satisfied are you with the course overall? (n=46)

Category	Percentage
Satisfied	43%
Mostly satisfied	39%
Neither satisfied nor dissatisfied	9%
Mostly dissatisfied	7%
Dissatisfied	
Don't know	2%

Overall satisfaction with the course cross-tabbed with educational attainment (n=43)

Educational attainment	Satisfied	Mostly satified	Neither satisfied nor dissatisfied	Mostly dissatisfied	Dissatisfied
High school (gymnasium)	25%	38%	25%	13%	0%
Short-cycle higher education	36%	64%			0%
Vocational education and training	38%	38%	15%	8%	0%
Højst gymnasium	73%	18%		9%	0%

Legend:
- Satisfied
- Mostly satified
- Neither satisfied nor dissatisfied
- Mostly dissatisfied
- Dissatisfied

What do you think of the length of the course? (n=46)

- Too long: 2%
- Just right: 63%
- Too short: 31%
- Don't know: 4%

What did you gain from taking the course? (n=45)

Category	To a high degree	To some degree	To less degree	Not at all
Improved ability to get a job elsewhere	11,1%	44,4%	31,1%	13,3%
I met new people and expanded my network	24,4%	20,0%	37,8%	17,8%
I have developed personally	20,0%	46,7%	28,9%	4,4%
I have developed professionally	17,8%	55,6%	24,4%	2,2%
Improved ability to change positions/tasks in my current job	6,7%	24,4%	40,0%	28,9%
Improved my ability to solve future tasks	11,1%	44,4%	35,6%	8,9%
I can keep my current job	28,9%	20,0%	20,0%	31,1%
Increased my salary	2,2%		17,8%	80,0%
Improved ability to solve concrete tasks	11,1%	46,7%	33,3%	8,9%
I can perform my job better	8,9%	44,4%	22,2%	24,4%

■ To a high degree ■ To some degree ■ To less degree ■ Not at all

Appendix 4: Project Design

Key aims of FutureFit
- Develop increased evidence to inform development of training approaches and skills to prepare workers for jobs of the future (based on comparative and in-country studies of training provided in 5 European countries)

Key desired outcomes of FutureFit
- Workers taking part in the project receive valuable training for the future of work
- Greater awareness among stakeholders of the importance of evaluating training provision, of workers' training needs, and of key factors in more effective training provision for workers

Key elements of the Danish evaluation of "Digital Forandringsagent"

Description of "Digital Forandringsagent"	Learners' motivations and starting point for learning	Immediate and medium-term outcomes	Potential longer-term outcomes and generalizable learnings from the evaluation
Key objectives, contents and format of the training; participant target group and recruitment procedures; key considerations in the design and delivery of training	Motivations, starting point, learning identity, enabling and hindering factors (individual and in the workplace)	Measurable and perceived outcomes of the training (for the individual and for their role in the workplace)	Reflections on possible longer-term outcomes of the training and lessons for other programmes and stakeholders
Data & methods: Interviews, document study **Lead: DEA**	**Data & methods:** Anthropological methods, interviews / survey **Lead: TAE / DEA**	**Data & methods:** Anthropological methods, interviews / survey **Lead: TAE / DEA**	**Data & methods:** Synthesis, workshop with key stakeholders **Lead: DEA**

Description of the training developed and provided by HK Privat and Ivækst, "Digital Forandringsagent". The aim of this element is to lay the foundation for the evaluation of the Danish training and provide key contextual information for use in the subsequent comparative study undertaken by NESTA in connection with the FutureFit programme.

Learners' motivations and starting point for learning. Outline of learners' motivations to participate in training and their starting point for doing so. This includes examining key issues related to e.g. perceived learner identity but also enabling and hindering factors in their workplace. Understanding learners' motivations and starting point for learning is therefore crucial to inform the evaluation of the outcomes and effectiveness of the training provided through "Digital Forandringsagent.

Immediate and medium-term outcomes. This part of the evaluation will focus on examining the measurable outcomes of the training provided through "Digital Forandringsagent" during, immediately after, and 6 months after participation in the training. As such, this element will contribute with necessary inputs to the evaluation of the training conducted and outcomes and effects.

Potential longer-term outcomes and generalizable learnings from the evaluation. The aim of this final element of the evaluation is to synthesize key findings from the evaluation of the training provided through "Digital Forandringsagent" and to relate them to the wider aims of the FutureFit programme in order to promote reflections and learnings regarding how to provide effective training for workers at risk of job displacement or role change due to automation and other technological advances.
In identifying barriers and drivers the evaluation looks at the process leading up to the course, i.e. the motivation, starting point and learner identity of participants, the performance at the course and their experiences with implementing tools and skills after the course has ended.