Mathis Köpp

Identifying challenges with employee adoption of digital innovations and determining how to address them:

An action research on MAN Truck & Bus Norway

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Author	Mathis Köpp
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ABSTRACT

Considering the recent technological advances, it is more important than ever for corporations to equip their staff with the necessary resources to adapt to the new possibilities. Research has shown the effectiveness of utilising user participation to diffuse new technology. This study applies user participation at MAN Truck & Bus Norway to highlight the obstacles hindering employees from adopting the newly implemented cloud collaboration software Microsoft 365. Based on these hurdles, the study aims to project what measures could be taken to diffuse the adoption of M365 and potential future digital innovations.

Following a comprehensive review of research on technology adoption and innovation diffusion, action research was conducted. Participants from two local departments at MAN Norway were presented with different depths of involvement in solutions built using the new collaboration tools of M365.

Analysis of the participants' adoption behaviour and perceptions collected after the project highlighted 15 distinct challenges MAN Norway has to address to diffuse the adoption of M365.

The research depicts various approaches MAN Norway can take to improve the stagnant adoption of M365 and critical elements that need to be considered in implementing future digital innovations. Further, the research proves the applicability and effectiveness of user participation in post-implementation scenarios and its value for identifying aspects interfering with adoption. As the findings of this research are tailored to MAN Norway, future research is needed to investigate further challenges with the adoption of digital innovations and the role of user participation in the diffusion process.

Keywords: innovation, adoption, diffusion, Microsoft 365, interventions

CONTENTS

APPENDICES

1 INTRODUCTION

1.1 Background and commissioner organisation

In light of the swift and relentless progress of digital innovation in the corporate landscape, it is increasingly vital to equip employees with the necessary skills and knowledge to adapt to the changes. One of the companies facing challenges related to adopting a newly implemented digital innovation is MAN Truck & Bus Norway.MAN Norway belongs to MAN Scandinavia and is a subsidiary of MAN Truck & Bus, one of Europe's largest utility vehicle manufacturers.
In addition to the headquarters located in Oslo, MAN Norway runs seven workshops (blue) and collaborates with 24 partner workshops (red) across the country (Figure 1).

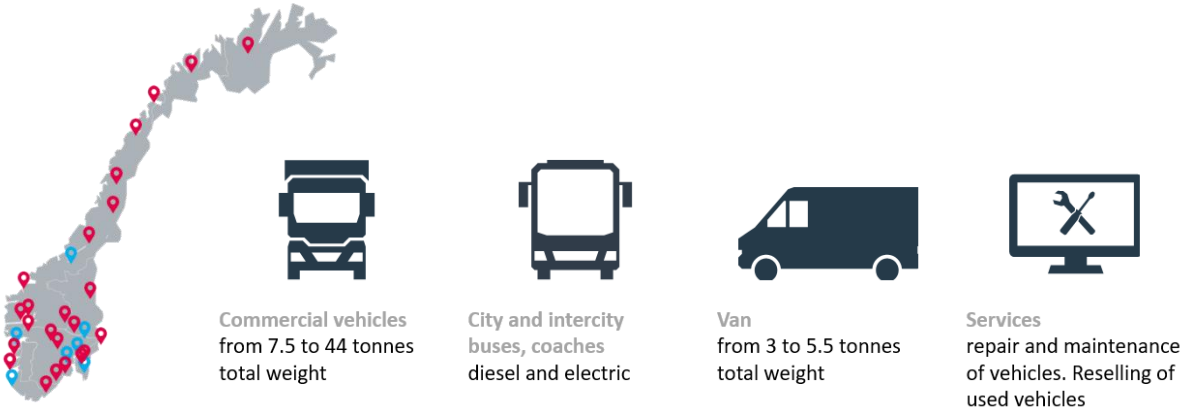

Figure 1 MAN Workshop locations | Product Portfolio

The product portfolio of MAN Norway, depicted in Figure 1, focuses on commercial vehicles, trucks, buses, vans and services.
Offering services related to a wide range of vehicles in Norway requires the workshops to be spread out to the country's most rural areas. Due to the distances between locations and close cooperation with MAN Truck & Bus Denmark, effective business processes require digital collaboration as one of the core competencies.
However, management at MAN Norway is unsatisfied with the current state of digital collaboration. Especially the outdated way of communication and treating file sharing are matters of concern.

With the obligatory implementation of Microsoft 365 (M365) in the first quarter of 2023, many new opportunities for digital collaboration became available. Unfortunately, the unique features of M365 were left widely unused by the staff, pointing to the need to investigate the factors hindering adoption.
After extensive internal discussions with local management, it was concluded that a project should depict the opportunities coming with M365 and investigate the reasons for the stagnant adoption.

1.2 Development settings

An example process utilising some of the core features of M365 was remodelled to highlight the benefits of the new software. The findings gathered throughout redesigning and establishing an example process depict the factors interfering with employees adopting M365. Moreover, the process redesign also underlines general challenges affecting the adoption of digital innovations implemented in the future.

Since the research aims to transfer the findings to multiple administrative departments throughout MAN Norway, the example process had to fit multiple needs of users across the National Sales Company (NSC). Since commercial vehicles are exposed to different loads, distances and terrain conditions, maintenance requirements can vary drastically depending on the use case. Therefore, it is crucial for service contracts covering the maintenance of the vehicles to consider the various use cases. However, this calculation is rather complicated, requiring the Repair and Maintenance Contracting (RMC) department to offer a distinct price for each vehicle. This process of requesting price offers until the final contract involved a lot of manual document handling and communication, making it ideal to be redefined using M365. Therefore, it was decided to remodel the "price offer request system" for service contracts in the ”Service Products” and ”Sales” departments. The findings collected through testing and operating the solutions indicate the barriers interfering with individual adoption of digital innovations.

Based on this setting, the main research topic of this study is *identifying challenges with employee adoption of digital innovations*.
The project's insights also illustrate managerial interventions possibly contributing to accelerating adoption. Hence, the concluding remarks of this research revolve around *determining how* MAN Norway can *address the challenges* identified in the study and apply the insights to future implementations.

Established theories show that user participation contributes to the adoption of technology (Venkatesh & Bala 2008, 295). This study observes how the project's degree of participation/involvement affects the attitude and behaviour towards using M365 in a post-implementation context.
Therefore, a subquestion this study investigates is:
What impact does user participation have on adoption after implementation?

The empirical context of utilising user participation in a post-implementation scenario to mitigate a national sales company's (NSC) struggle to adopt innovations imposed by the corporation is inadequately explored. This study closes this gap by identifying whether a project focusing on user participation accelerates adoption and helps identify common barriers to adoption.

1.3 Research methods

As this research revolves around the redesign of a process the author was actively working with throughout his internship at MAN Norway; he is utilising action research to track and record the changes made to the process using M365 and the corresponding reactions by the staff. Utilising action research in this scenario is suitable as the study tests a custom solution to a real-life significant issue. (Zuber-Skerritt & Perry 2002, 173.)
The various actions taken from the development stage to launching the remodelled process are recorded based on action research stages and compared to Likert scale survey data collected after the completion of the project observation phase. Resulting insights about user perceptions and the

effectiveness of the researcher’s approaches are then analysed using frequency tests, person correlation analysis and linear regression analysis.

1.4 Framework and the limitations of the study

Throughout the process redesign, the researcher’s actions, interactions with Microsoft 365 by the participants and feedback were recorded and served as qualitative data. The issues recognised throughout the action research point to general adoption challenges within MAN Norway. Additionally, a Likert scale questionnaire assessing the participants' opinions was conducted. This quantitative survey data, together with user metrics of M365, facilitate the reflection stage of the action research as it evaluates opinions before and after the project in addition to adoption behaviour.

Four established constructs for identifying adoption intention are evaluated and moderated by age, experience and voluntariness, as depicted in Figure 2.

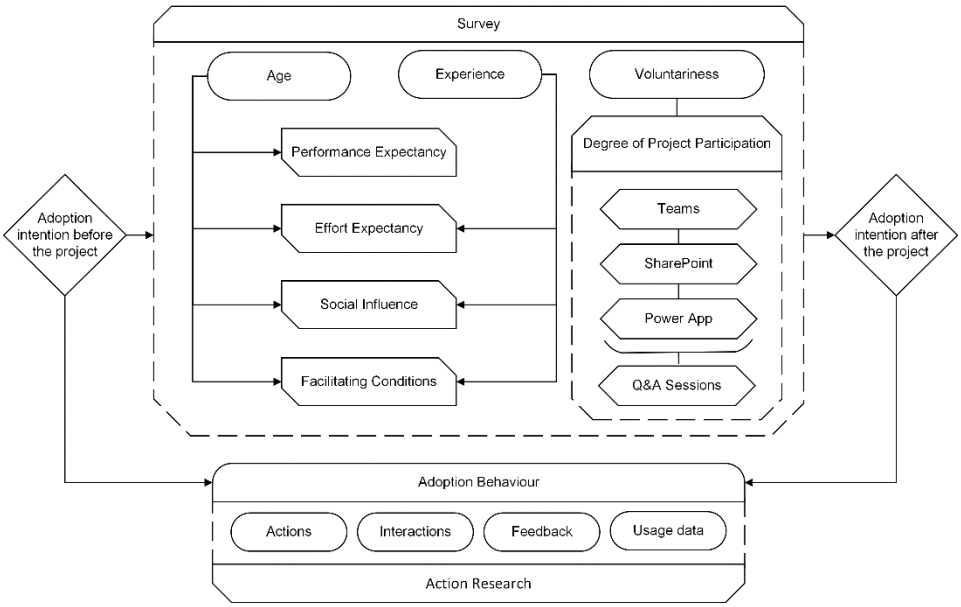

Figure 2: Conceptual Framework

This study uses non-probability sampling as the participants were taken from specific departments. Due to the non-diverse nature of the sample's sex, it was decided to refrain from including gender as a moderator. The project scope focuses on employees with some degree of knowledge about Office applications and does not include adopters without in-depth prior knowledge, for example,

Mechanics. Additionally, the study highlights adoption behaviour at MAN Norway and does not significantly consider the user behaviour of other NSCs.

2 ADOPTION OF DIGITAL INNOVATIONS

The following part will discuss the most prominent theories in innovation diffusion and technology acceptance research in light of three aspects. First, the general attributes of an innovation which facilitate adoption. Second, the individual decision-making of adoption and the variables influencing it. Third, interventions an organisation can utilise to influence adoption directly.

2.1 Attributes of Innovations

The Innovation Diffusion Theory (IDT), created by Everett M. Rogers in 1962, provides a fundamental framework for understanding what characteristics of an innovation influence adoption. Numerous subsequent studies have relied on Rogers' findings, making it imperative to comprehend the central principles of his research.

He defines an innovation as “an idea, practice or object that is perceived as new by an individual or other unit of adoption" It is important to understand that the perceived newness of an innovation is subjective and based on the adopter's perspective rather than the initial discovery or use of the innovation. In addition, the term "newness" can refer to a situation where potential users have been aware of the innovation for a while but have not yet formed a positive or negative opinion about it (Rogers 2003, 12).

Rogers states that technological innovations typically provide at least some degree of benefit for potential adopters, but these advantages may not be immediately apparent to the intended adopters. It is essential to measure adoption and the factors that affect it.

Rogers & Shoemaker (1971) devised the concept of *rate of adoption*, defined as the speed at which individuals within a social system adopt an innovation during a specific period. Five key attributes of an innovation influence the rate of

adoption: relative advantage, compatibility, complexity, trialability and observability. (Rogers 2003, 221.)

The perceived *relative advantage* of an innovation describes the degree to which individuals view an innovation as better than the preceding concept. Rogers emphasises that the perceived relative advantage is the dominant factor driving the adoption rate. (Rogers 2003, 229.) Another important factor is *compatibility*. It illustrates how individuals perceive an innovation aligning with past experiences, existing values and needs. High perceived compatibility correlates positively with the adoption rate. (Rogers 2003, 241.) Closely related is the perceived *complexity*, as it depicts how individuals view an innovation as difficult to understand or use. It should be noted that high perceived complexity has a negative impact on the rate of adoption. (Rogers 2003, 257.) A means to reduce perceived complexity is *trialability*. It represents to what extent individuals can experiment with the innovation during the implementation phase. It can be observed that a high trialability before the general rollout of a new idea has positive effects on adoption rates. Some ideas are easily communicated, whereas others might be difficult to convey. The degree to which the impact of an innovation is noticeable by different individuals is defined as *observability.* The easily observable result of an innovation positively impacts the adoption rate. (Rogers 2003, 259.)

Sometimes, individuals derive from the initially intended use of the innovation. The degree of that change or modification is known as *re-invention*. The possibility of re-inventing an innovation can positively affect its adoption rate. (Rogers 2003, 17.)

Extensive research has demonstrated the feasibility of expanding the attributes described in IDT. In 1991 Geroge C. Moore and Izak Benbasat refined several constructs from Roger's findings. Most of these adoption predictors align with the perceived attributes of innovation defined by Rogers in 1983. However, the term, *voluntariness of use* is not explicitly listed as an attribute for innovation adoption in his IDT. *Voluntariness of use* can be described as "the degree to which use of

innovation is perceived as being voluntary or of free will". (Moore & Benbasat, 1991, 195.)

Additionally, the authors conclude that the observability attribute defined by Rogers taps into two distinct constructs: result demonstrability and visibility. The concept of *result demonstrability* indicates that the easier an innovation can be demonstrated, the more likely it is to be adopted. Similar effects can be observed with high *visibility* of the innovation's advantages. (Moore & Benbasat, 1991, 203.)

2.2 Individual decision making

The individual's decision to adopt an innovation has been the subject of many subsequent studies. Rogers' IDT (2003) provides a good overview of the stages an individual passes until adopting an innovation. He also provides a categorisation of adopters and shows their respective influence on the overall adoption of an innovation.

The process by which an individual decides to adopt an innovation into an existing practice is known as the *innovation-decision-making process.* (Rogers 2003, 14.) The process comprises five key steps describing the individual's behaviour throughout the adoption of an innovation: knowledge, persuasion, decision, implementation and confirmation.

When individuals gain initial *knowledge* about an innovation, it often creates uncertainty about the consequences of adopting it. The perceived advantage of a new idea can motivate an individual to *pursue* learning about the said idea. Once an individual has gathered enough information to reduce their uncertainty, they can then make a *decision* to either accept or reject the innovation. When an innovation is *implemented*, it often leads to the generation of more information. This information can either *confirm or contradict* previously gathered insights, which causes individuals to reassess their perceptions. (Rogers 2003, 169.)

How quickly an adopter goes through the several steps of the innovation-decision-making process differs from individual to individual. Rogers describes this phenomenon as *innovativeness*. Innovativeness is "the degree to which an

individual or other unit of adoption is relatively earlier in adopting new ideas than other members of a social system". (Rogers 2003, 297.)

To facilitate determining innovativeness, Rogers categorises adopters into five groups: innovators, early adopters, early majority, late majority and laggards (Figure 3).

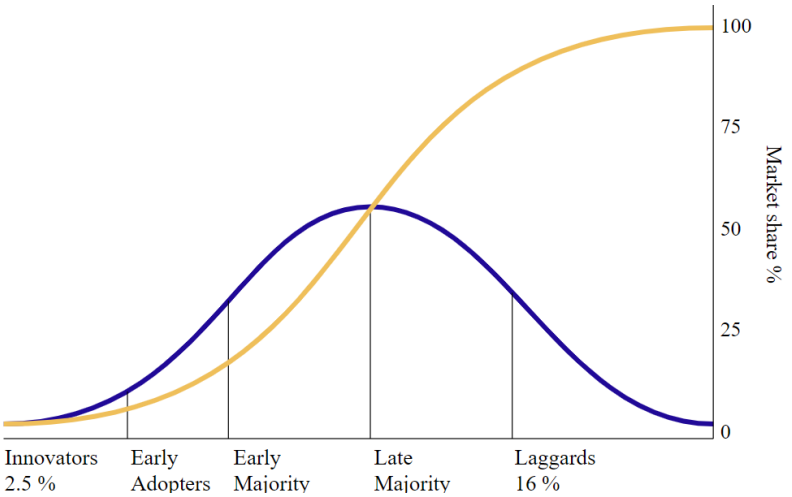

Figure 3 Adoptor Categories on the Basis of Innovativeness

Although some information is lost due to classifying individuals, Rogers claims it helps with the "understanding of human behaviour". (Rogers 2003, 280.)

The *S-shaped adoption curve*, represented by the yellow line in Figure 3, is the foundation of his classification system and holds a significant role in diffusion research. Apart from the cumulative number of adopters shown by the S-shaped adoption curve, adoption can also be represented by a *bell-shaped curve* that displays the frequency and percentage of adopter groups across time. Both the blue and yellow lines represent the adoption rate and are just two different ways of presenting the data. (Rogers 2003, 272.)

One can notice that the S-shaped adoption curve experiences rapid growth once the adoption rate reaches 10-20%. This turning point is referred to as the *critical mass* and is a central aspect of the diffusion process.

"The critical mass occurs at the point at which enough individuals in a system have adopted an innovation so that the innovation's further rate of adoption becomes self-sustaining". (Rogers 2003, 343.) That means as more individuals adopt the innovation, it "is perceived as increasingly beneficial to future adopters" (Rogers 2003, 344), ultimately encouraging them to adopt the new idea.

The concept of critical mass is often referred to as ”chasm” based on the *technology adaption life cycle* (TALC). In 1991, Gary Autry Moore Jr. developed the theory in his book "Crossing the Chasm: Marketing and Selling High-Tech Products to Mainstream Customers". The model is based on the adopter categories defined by Rogers; however, as the book's name suggests, Moore looks at technology adoption based on market dynamics. As the IDT focuses on spreading innovation in a system rather than selling it, it is better suited for the context of this study.

Each adopter group possess distinct characteristics. *Innovators* can be described as venturesome and typically play "a gatekeeping role in the flow of new ideas" (Rogers 2003, 283). Whether creating cutting-edge ideas or being the first to embrace them, they initiate the adoption process. Followed by the innovators are the *early adopters*. Their opinion has the most impact on potential adopters, as they are respected by their peers and not as distant as innovators. Hence, they play a crucial role in reaching the critical mass.
In a social system, an idea is not widely accepted until the *early majority*, comprising one-third of the members, begins to adopt it. They are an important link in the diffusion process as they are located between relatively early and late adopter categories. The early majority's innovation decision-making process takes longer than those of innovators and early adopters. They are typically willing to adopt an innovation but rarely lead the way. "Be not the first by which the new idea is tried, nor the last to lay the old aside" is a fitting way of describing their general attitude.
Innovators, early adopters and early majority are often called *earlier adopters* and are the groups dominantly determining the successful implementation of an innovation. Opposite to the earlier adopters are the *later adopters*, comprised of late majority and laggards. The *late majority* also makes up one-third of the members within a social system and adopts innovations after half of the social system already took it into use. Their motivation to adopt is mainly influenced by peer pressure as they tend to be sceptical of new ideas. The final group in the adopter categorisation are *laggards*. Rogers describes them as traditionalists since decision-making is mainly based on past experiences. For laggards,

adoption only occurs once all uncertainty surrounding the potential failure of an innovation has been eliminated. (Rogers 2003, 284.)

It is important to understand that the degree to which an individual tolerates uncertainty mainly determines their innovativeness (Rogers 2003, 284).
One of the core findings of the IDT is "how earlier adopters differ from later adopters of an innovation" (Rogers 2003, 12). Rogers suggests that earlier adopters differ in three main categories. First, they tend to have a "higher socioeconomic status", for example, higher education. Second, they can be distinguished based on personality variables like "a more favourable attitude toward change […] and a greater ability to cope with uncertainty" Lastly, they "have a different communication behaviour", as earlier adopters tend to have, for example, a "greater exposer to mass media [,] engage in more active information seeking [and] have a greater exposer to interpersonal communication channels". (Rogers 2003, 298.)

2.2.1 Technology Acceptance

The subject of technology acceptance has been extensively researched, with a multitude of models attempting to explain it. The foundation for technology acceptance research is the "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology" study by Fred D. Davis from 1989. The concept developed by Davis became known as the *technology acceptance model* (TAM) and has various implications in later studies. His research is tailored to the adoption of information systems, making it an important theory for this study.

Davis (1989, 320) defines two core drivers for the adoption of an information system (Figure 4). The first determinant is the *technology's perceived usefulness* (PU), described as "the degree to which a person believes that using a particular system would enhance his or her job performance".

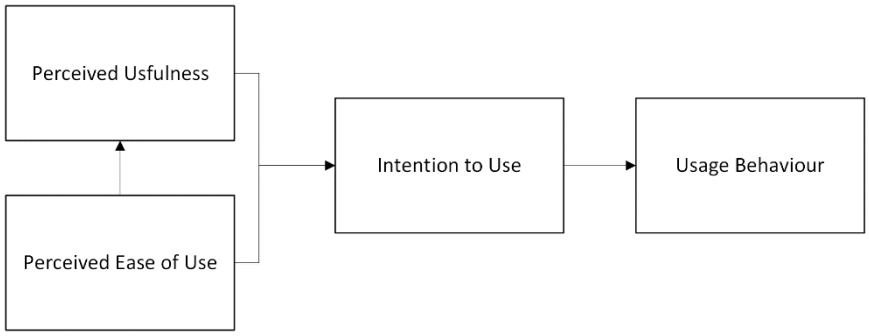

Figure 4 Technology Acceptance Model

The other factor influencing adoption is the *perceived ease of use* (PEU) which refers to "the degree to which a person believes that using a particular system would be free of effort". (Davis 1989, 320.) Davis emphasises that the adoption of a technology is, first and foremost, driven by perceived usefulness. "Users are willing to cope with some difficulty of use in a system that provides critically needed functionality." (Davis 1989, 333.) Hence, the difficulty of operating a system is secondary to the perceived usefulness of the system.

The theory of reasoned action (TRA) developed by Icek Ajzen and Martin Fischbein is the underlying concept of linking the two constructs to intention to use. TRA revolves around two factors determining the *behavioural intention* of individuals: subjective norm and attitude toward behaviour. Ajzen and Fischbein describe *attitude toward behaviour* as a collection of an individual's positive or negative sentiments about performing the target behaviour. (Ajzen & Fischbein 1975, 216.) Subjective norm, on the other hand, is "the person's perception that most people who are important to [him or her] think [he or she] should or should not perform the behaviour in question (Ajzen & Fischbein 1975, 302). This definition can be compared to Moore and Benbasat's description of *image,* as both refer to the impact of third-person opinions on adoption behaviour.

The final conceptualisation of TAM does not incorporate the attitudinal and norm aspect of TRA. Nonetheless, it bases the relationship between intent and actual use on the TRA's concept that most socially relevant behaviours are under

conscious control and that an individual's intent to engage in a behaviour is both its primary cause and its most accurate prediction. (Ajzen & Fischbein 1972, 1.) Davis concludes that future implications of his study should assess how other variables relate to the two determinants of technology acceptance. His model accurately predicts 47 % of behavioural intention to use and 51% of usage behaviour, suggesting models with higher predictive efficiency are better suited for investigating technology acceptance. (Venkatesh et al. 2003, 436.)

One significant addition to Davis's TAM and Roger's IDT involves examining the differences between pre-and post-adoption beliefs. Karahanna et al. suggest that individuals` beliefs may change throughout the technology adoption. The study bases its findings on the pre-adoption and post-adoption views of Windows users. Although the research does not introduce a separate model, it depicts the determinants for attitudinal change throughout the adoption process. Generally, people tend to have more positive behavioural beliefs after adopting an information system than before. (Karahanna et al. 1999, 193.)
The authors also highlight that initial adoption is solely influenced by normative considerations. That means social influences, for example, opinions by coworkers and supervisors, are crucial determinants for initiating the adoption of technology. This finding suggests initiating "social pressure from the organisational environment may be an effective mechanism to overcome initial inertia in adopting IT". Although the effect of social pressure vanishes with progressing adoption, it can induce the initial use of the technology. (Karahanna et al. 1999, 199.)
On the contrary, the behavioural intention for continued use is dominantly influenced by the attitudinal component and voluntariness (Karahanna et al. 1999, 201), this means after frequent use of the system, individuals mainly base the decision for continued use on personal experiences. The study's key finding is that "a unitary set of beliefs to explain different stages in the process may lead to important relationships being obfuscated" (Karahanna et al. 1999, 203). Hence, Karahanna et al. suggest that change agents should tailor" demonstrations, marketing efforts and training programs [...] to emphasise criteria that end users actually employ in their adoption and usage decision" (Karahanna

et al. 1999, 202). This recommendation is in accordance with Roger's definition of change agents' roles.

2.2.2 Technology Acceptance Model 2

In 2000 Davis extended the technology acceptance model with Viswanath Venkatesh (Figure 5).

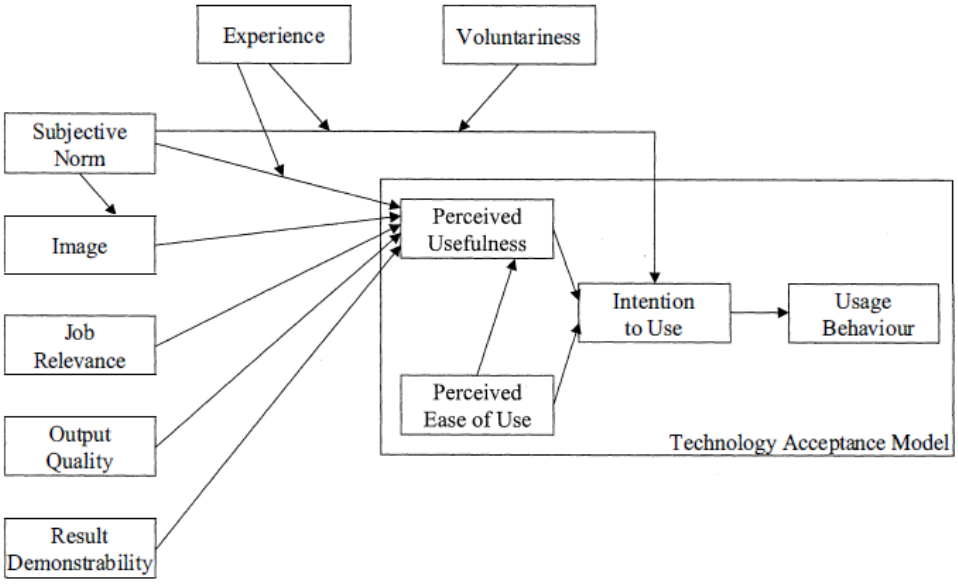

Figure 5 Extension of the technology acceptance model

The new model differentiates between two core processes driving the perceived usefulness of technology: social influence processes and cognitive instrumental processes.

The main component of *social influence processes* is the subjective norm and is consistent with the definition established in TRA. The other constructs for social influence processes are image and voluntariness, as defined by Moore and Benbasat. Davis and Venkatesh conclude that "subjective norm had a direct effect on intentions for mandatory, but not voluntary, usage contexts". (Venkatesh & Davis 2000, 198.) Furthermore, their research revealed that people who become more familiar with a system tend to rely less on social information in determining its usefulness and intent. However, they still consider the potential benefits of using the system for status purposes. (Venkatesh & Davis 2000, 199.) Their findings extend Karahanna et al.'s determinants for pre- and post-adoption beliefs.

Beyond the social influence process, the authors theorise four c*ognitive instrumental* constructs: job relevance, output quality, result demonstrability, and perceived ease of use. (Venkatesh & Davis 2000, 190). The concept of perceived ease of use, as defined in TAM, remains unchanged and is a crucial factor in the decision-making process in TAM2. Job relevance is "an individual's perception regarding the degree to which the target system is applicable to his or her job". The authors emphasise that the impact of job relevance is second to the *output quality*, which can be described as the perceived performance of the system. (Venkatesh & Davis 2000, 191.) The final construct of cognitive instrumental processes is the *result demonstrability* derived from Rogers's observability attribute by Moore and Benbasat (Venkatesh & Davis 2000, 191).
Through these redefined drivers, TAM2 measures a predictive efficiency for perceived usefulness of 60%, which was not evaluated in TAM (Venkatesh & Davis 2000, 196). Although TAM2 offers valuable insights into social influences (subjective norm) impacting adoption behaviour, it does consider other external factors impacting individual decision-making. For this reason, it is advisable to refer to a model including both intrinsic and extrinsic factors for adoption.

2.2.3 Unified Theory of Acceptance and Use of Technology

The *unified theory of acceptance and use of technology*, developed based on eight preceding technology acceptance studies, is the best-suited model for this research. It is the first theory related to technology acceptance, aiming to synthesise key findings of the research field's primary studies. Although it may not be the most extensive and recent model, it provides a comprehensive framework while still being relatively concise. Additionally, it is tailored to measure the adoption and use of technology within organisations while reaching a predictive efficiency for behavioural intention of 70% (Venkatesh et al. 2003, 467). The authors condense four constructs from 32 variables, described in the investigated models, as the key drivers for intention to use and use behaviour of technology. As depicted in Figure 6, the constructs in UTAUT are performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating

conditions (FC). Additionally, Venkatesh et al. evaluate the influence of four moderators (age, gender, experience, and voluntariness) on the constructs.

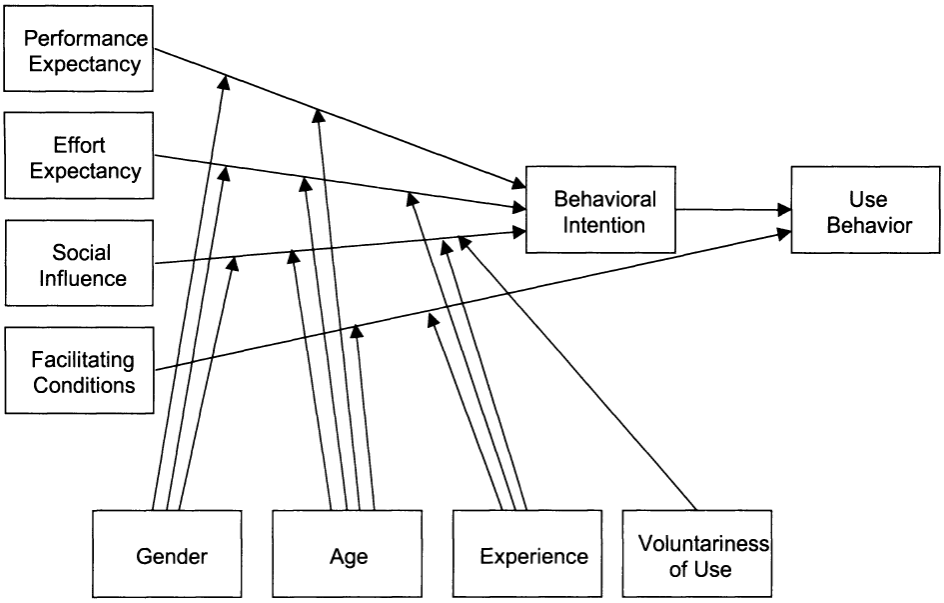

Figure 6 Unified Theory of Acceptance and Use of Technology

Out of the four constructs described in UTAUT," performance expectancy [...] is the strongest predictor of intention and remains significant at all points of measurement in both voluntary and mandatory settings" . Performance expectancy derives from perceived usefulness (TAM/TAM2), relative advantage (IDT) and three similar variables described in other models. The synthesised definition of performance expectancy is" the degree to which an individual believes that using the system will help him or her to attain gains in job performance". (Venkatesh et al. 2003, 447.) Moderators for performance expectancy are gender and age. Venkatesh et al. find support for their hypothesis (H1) that performance expectancy has a more substantial effect on behavioural intention for men and especially younger men. (Venkatesh et al. 2003, 468.)

The second construct affecting behavioural intention is *effort expectancy*, which" is [...] the degree of ease associated with the use of the system" (Venkatesh et al. 2003, 450). Effort expectancy derives from perceived ease of use (TAM/TAM2), complexity (IDT), and ease of use (IDT). It should be noted that effort expectancy is relevant for both mandatory and voluntary settings, yet it loses its relevance throughout sustained usage. Furthermore, the construct is moderated by gender, age and experience. The authors emphasise that effort expectancy has a

stronger effect on women, older workers and younger women with limited experience (H2). (Venkatesh et al. 2003, 468.)

"*Social influence* is defined as the degree to which an individual perceives that important others believe he or she should use the new system."

In previous studies, social influence has been a highly debated concept, with some researchers like Rogers questioning its significance for technology adoption. (Venkatesh et al. 2003, 469.) However, several succeeding models have proven the construct's impact on intention. Venkatesh et al. find support for social influence as a determinant for behavioural intention in the subjective norm theory applied in, for example, TRA and TAM2 (Venkatesh et al. 2003, 452). Moreover, Moore and Benbasat find evidence for image in their extension of IDT (Moore & Benbasat 1991, 195), which is also evaluated with respect to social influence in UTAUT. The authors state that "the social influence on behavioural intention [is] moderated by gender, age, voluntariness and experience" (Venkatesh et al. 2003, 453). Venkatesh et al. conclude that the social influence on behavioural intention is particularly strong in mandatory settings for older workers, women and workers with little experience (H3) (Venkatesh et al. 2003, 468). This finding also aligns with the age difference effect on the technology adoption decision described by Morris and Venkatesh. According to their research, older workers tend to place more importance on social influences, with the impact declining with experience. (Morris & Venkatesh 2000, 377.)

The final construct of UTAUT is *facilitation conditions*, which is "the degree to which an individual believes that an organisational and technical infrastructure exists to support use of the system" (Venkatesh et al. 2003, 453). It is the only determinant for technology adoption that directly influences use behaviour. Among other theories, the construct derives from the compatibility attribute described in IDT. Previous models' equivalents to facilitating conditions sometimes predict behavioural intention as well. However, the authors find evidence that as long as" both performance expectancy constructs and effort expectancy constructs are present, facilitating conditions becomes nonsignificant in predicting intention". (Venkatesh et al. 2003, 454.) Older workers, especially those with experience, are particularly influenced by facilitating conditions (H4b)

(Venkatesh et al. 2003, 455). The facilitating conditions construct closes the gap of extrinsic factors influencing adoption visible in previous technologies acceptance research.

Ultimately, next to unifying preexisting theories, the research's main contribution is highlighting the importance of moderators in technology adoption. The contextualisation of adoption through moderators provides a better" picture of the dynamic nature of individual perceptions about technology." Although previous models have successfully predicted intention and usage, they have insufficiently prescribed guidance based on moderators for change agents and developers. (Venkatesh et al. 2003, 470.)

2.2.4 Extended Unified Theory of Acceptance and Use of Technology

The most recent model in technology acceptance research is the *extended universal theory of acceptance and use of technology* (UTAUT2) developed in 2012. It is the successor of UTAUT and extends the model in various ways. UTAUT2 is tailored to the consumer use context and considers constructs like price value, which cannot be assessed by the participants in the context of this research (Venkatesh et al. 2012, 161). Additionally, the authors disclaim that "the sample [used for developing UTAUT2] is somewhat skewed, with a mean age of around 31,[which means] the findings may not apply to those who are significantly older" (Venkatesh et al. 2012, 173). Since the studied population in this research has a mean age of around 45, UTAUT2 will not be considered in the context of this research.

2.3 Interventions

So far, none of the evaluated models have assessed concrete managerial implications for driving technology adoption. Although UTAUT is a well-suited model for researching the factors surrounding individual adoption behaviour, it misses tangible managerial implications to diffuse technology. The most recent extension of TAM introduced by Venkatesh and Bala in their paper "Technology Acceptance Model 3 and a Research Agenda on Interventions" (TAM3) closes this gap. TAM3 sets the foundation for "understanding the role of interventions in

IT adoption contexts" (Venkatesh & Bala 2008, 291). Since UTAUT has a higher predictive efficiency for behavioural intention than TAM3 (Venkatesh & Bala 2008, 286), it will remain the core model for identifying trends in individual decision-making in adoption for this research. Nonetheless, the interventions listed by Venkatesh and Bala serve as valuable implications to counter the challenges identified through UTAUT.

Figure 7 depicts the authors' differentiation between pre-implementation interventions (red) and post-implementation interventions (blue).

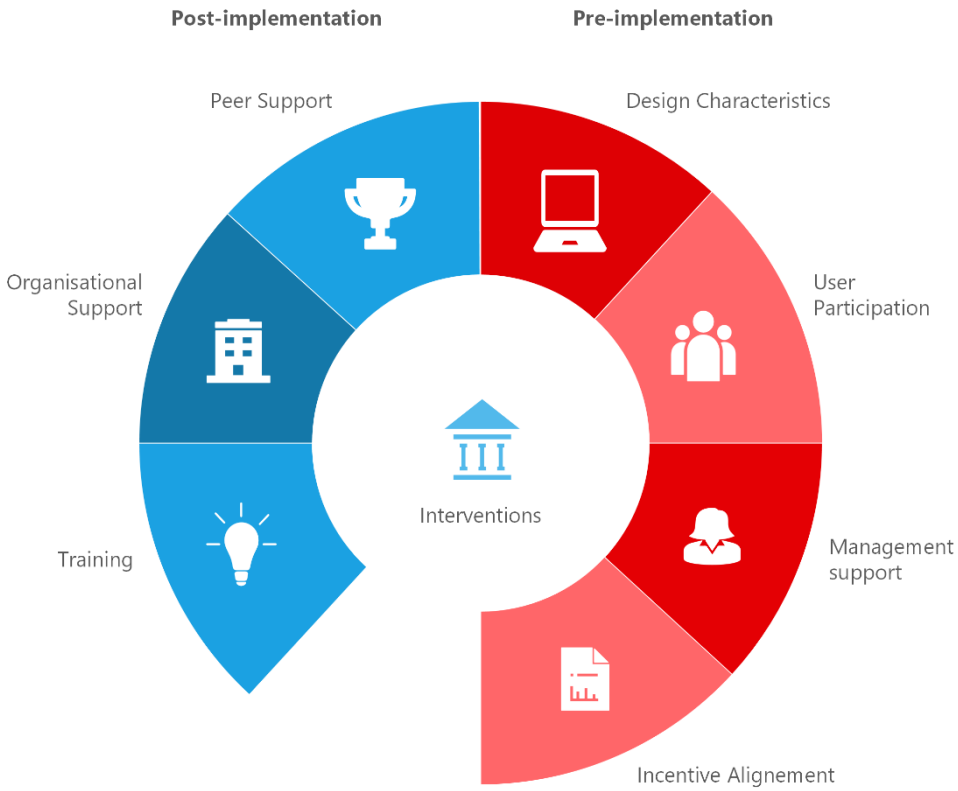

Figure 7 Interventions based on TAM3

As the name suggests, *pre-implementation interventions* represent organisational activities during system implementation and deployment. There are two interrelated objectives of pre-implementation interventions. The first is to minimise the initial inertia to use a new system. The second goal is to provide a realistic system preview to ensure the target group can develop an accurate opinion regarding how the innovation can benefit their work. (Venkatesh & Bala 2008, 293.) With the increasing complexity of technological innovations, ensuring "accurate perceptions of system characteristics" [becomes immensely important] during the pre-implementation phase" (Venkatesh & Bala 2008, 294).

The authors identify four interventions a change agency should consider throughout the pre-implementation phase of technological innovations: design characteristics, user participation, management support and incentive alignment.

Venkatesh and Bala split *design characteristics* into information- and system-related characteristics. This categorisation is due to the different influences the two aspects have on perception. Generally, information-related design characteristics are associated with performance and productivity, making it influential for the perceived usefulness of a system. On the other hand, system-related design characteristics are associated with user-friendliness, flexibility and reliability, making it a determinant for a system's perceived ease of use. (Venkatesh & Bala 2008, 294.) It is important to consider design characteristics with adopter contexts, as moderators sometimes indicate a more substantial effect on a particular perception depending on the user group (Rogers 2003, 19).

Encouraging active *user participation* is a proven intervention that can contribute to heightened user involvement, improved system acceptance, and overall system success. Generally, user participation refers to "assignments, activities, and behaviours that users or their representatives perform during the systems implementation process". (Venkatesh & Bala 2008, 295.) The authors differentiate between three dimensions of user participation: overall responsibility, user-IS relationship and hands-on activities. (Venkatesh & Bala 2008, 295). Nurturing these dimensions throughout pre-implementation can help adopters develop a detailed perception of system characteristics and benefits. Generally, user participation taps into the previously defined trialability, result demonstrability, and visibility constructs of the IDT. Moreover, enabling active user participation can also be seen as a facilitating condition described in UTAUT since it supports removing barriers to adoption. All of these constructs directly or indirectly positively impact use behaviour. The continued use of an innovation translates to the adoption behaviour of said innovation. For this reason, I expect a significant relationship between user participation and adoption behaviour:

H0: User participation does not significantly affect adoption behaviour.

Ha: User participation positively affects adoption behaviour.

Only after managers understand and accept the benefits provided by a system can they actively support the employees during the adoption decision-making process. Overall, *management support* refers to the degree of commitment individuals perceive from their management toward implementing and using the new system. Managers can either directly or indirectly intervene in the implementation process. Direct interventions include, for example, using system features in their processes, implementing incentive structures or modifying the system to the user group's needs. Indirect interventions can be, for example, championing/sponsoring, providing resources and directing or mandating the use. Implementing a new system involves substantial changes to organisational structure, coordination mechanisms, jobs, and processes. Hence, "management's support in the form of commitment and communication […] is absolutely critical for the […] employee morale following the implementation". (Venkatesh & Bala 2008, 297.)

Often, management lacks time or particular expertise to offer sufficient direct support, making it feasible to redirect this task. Rogers assigns the role of managing the support during the pre-implementation stage to a *change agency*. According to the IDT (Rogers 2003, 368), "change agents provide a communication link between a resource system with some kind of expertise and a client system". Individuals who act as change agents are typically well-versed in the innovation they work with. This expertise makes them responsible for ensuring an adequate communication flow about the innovation, considering the client's needs. The superior knowledge of change agents often gets in the way of effective innovation communication, as it is difficult for them to put themselves in the target audience's position. This occurrence can be described by heterophyllous communication, which means the individuals conversing about the innovation differ in specific attributes such as beliefs, education or social status. *Homophilous* communication, on the other hand, is when individuals with similar attributes communicate with each other. (Rogers 2003, 36.) "Most human communication takes place between individuals who are homophilous, a situation that leads to more effective communication." (Rogers 2003, 37). Therefore,

avoiding or at least being aware of heterophily as a change agent is desirable, as it can lead to misunderstandings. (Rogers 2003, 37)

Rogers lists a sequence of roles a change agent should take throughout the introduction phase of an innovation.

First, change agents have to *develop a need for change*. They point out alternatives to existing problems, emphasise their importance, and assure potential adopters of their capability to confront them. It is also important that change agents *establish an information exchange relationship*. Change agents can improve this relationship by being perceived as credible and by emphasising the importance of the adopters' needs. Adopters must usually accept the change agent before engaging in the innovation decision-making process. (Rogers 2003, 369.) As soon as the change agent is accepted, he or she can *diagnose problems*. After exploring the different operations users undergo to fulfil their goals, change agents begin to *create an intent to change in the client* by depicting the potential advantages of the innovation. Now that adopters have developed and intend to use the innovation, change agents must *translate it into action*. It is challenging to directly impact persuasion and decision as a change agent, making using early adopters in this step essential. (Rogers 2003, 370.)

The final interference option during the pre-implementation of a system is *incentive alignment.* Unless a system's features align with employees' interests and incentives, organisations may fail to utilise the said system effectively. Even when adopters develop positive opinions toward a system, the new system may not come with organisational benefits if there are no incentives related to their work. (Venkatesh & Bala 2008, 297.) For instance, if an adopter recognises their use of the system solely benefiting members of other departments/units, it can result in a lack of incentive alignment, ultimately decelerating the adoption rate.

After the deployment of a system, post-implementation interventions come into play. They are crucial for helping employees cope with "initial shock and changes associated with the new system." According to Venkatesh and Bala, three interventions can help employees further adopt a system after its implementation: training, organisational support and peer support. (Venkatesh & Bala 2008, 298.)

The most weight during post-implementation is attributed to *training* interventions. Training can be conducted both before and after the implementation of a system but is mainly carried out as soon as the system has been successfully deployed. One of the reasons training is an effective means to push adoption is its flexible nature. There are many approaches an organisation can take to tailor their training to the target group to increase perceived compatibility. Additionally, it should be noted that the complexity of a system correlates with the importance of training, as complex systems tend to invoke adverse attitudes due to their disruptiveness. Training interventions can mitigate these negative attitudes and induce a favourable perception toward the new system. (Venkatesh & Bala 2008, 299.)

Closely related to training is *organisational support,* as it determines the nature and extent to which training is offered. In addition to training, organisations can offer support by, for example, "providing necessary infrastructure, creating dedicated helpdesks [or] hiring system and business process experts" (Venkatesh & Bala 2008, 299). Furthermore, users need support after implementing the new system to apply it to complex business cases. Hence, the organisation must provide internal and external expertise to help users "modify or enhance the IT applications or work processes".

Whether or not an organisation offers sufficient support after implementing a system influences perceived usefulness, i.e. performance expectancy and ease of use, i.e. effort expectancy. (Venkatesh & Bala 2008, 300.) The change agent plays a decisive role in organisational support in the context of successful acceptance of technology. The critical responsibility of the change agent at this stage is *stabilising adoption and preventing discontinuance*. There are multiple ways to keep adopters engaged. A common approach is messaging adopters and encouraging their new behaviour. The ultimate goal is *to achieve a terminal relationship,* which means shifting "the clients from a position of reliance on the change agent to one of self-reliance". (Rogers 2003, 370.)

The final post-implementation intervention listed in TAM3 is *peer support.* It refers to activities and functions done by users contributing to the system's adoption by

coworkers. Generally, peers have three different ways of influencing technology acceptance. First, they can offer formal or informal training to their coworkers. Second, they can conduct modification or enhancement of the system or work processes to fit the users' needs. And finally, they can modify or enhance processes directly in collaboration with other users. (Venkatesh & Bala 2008, 300.) Actively involving peers in support of the system increases observability and can lead to a positive perception of the system. Developing a favourable perception of a particular employee group can accelerate adoption through social influences. (Venkatesh & Bala 2008, 301.)

The impact of social influences described in TAM3 taps into the concept of opinion leadership in the context of managerial interventions. Rogers describes opinion leadership as "the degree to which an individual is able to influence […] other individuals' attitudes or overt behaviour in a desired way". Generally, early adopters have the highest degree of opinion leadership, explaining their crucial role in reaching the critical mass. Utilising the influence of opinion leaders as a change agency is crucial for the success of diffusion efforts. (Rogers 2003, 37-38.)

3 DIGITAL INNOVATION AT MAN NORWAY

MAN Norway has been struggling with several issues related to productivity and collaboration. Gunner Kommisrud (Head of Service Products at MAN Norway) names three core problems related to digital collaboration impeding fluent daily business operations. First, the absence of a centralised intranet causes significant communication challenges. The staff struggles to access important company resources and updates independently. Information is being distributed through emails to make up for the missing intranet, contributing to the next issue: Information overflow. As most communication is done through emails, important information is often lost due to the sheer amount of messages flooding the inbox daily. Additionally, important documents are shared via email, making identifying correct versions difficult. Even if versioning is left aside, MAN Norway struggles immensely with its folder structure. ” *The usage of folders has more evolved and developed over time. […] It's becoming completely impossible to have the full*

overview; additionally, different departments do it differently. So, we're not really structured around any process guidance at all" (Kommisrud, Appendix 1/6).
The issues around digital collaboration became increasingly apparent because of the COVID-19 pandemic. With most employees working remotely, the need for fluent communication and file-sharing became undeniable. (cf. Kommisrud, Appendix 1/6). Therefore, the central management decided to implement Microsoft Teams to innovate digital collaboration internally. With the decision to transfer from Skype to Teams as the main collaboration tool, Microsoft 365 and Intune must be implemented initially. In the first quarter of 2023, M365 became widely available at all NSCs, including Norway (cf. Frengsted, Appendix 1/1).

3.1 Microsoft 365

Since the need for implementing M365 is established, it is crucial to investigate the innovation's characteristics contributing to or impeding employee adoption. The attributes that Rogers, Moore and Benbasat defined in the IDT are well-suited to compare M365 to its predecessor, Office 2019. Regarding relative advantages, M365 overshadows Office 2019 because its well-integrated, cloud-based collaboration tools offer real-time document sharing, facilitating remote work capabilities. Moreover, the new features of the Power Platform enable users to automate processes without requiring a software development background. Since Office 2019 is a stand-alone desktop suite with only five applications, it can not provide the same range of possibilities as M365. Additionally, M365 is highly compatible with former office users as the core applications only include a few new features and remain unchanged regarding the workflow.

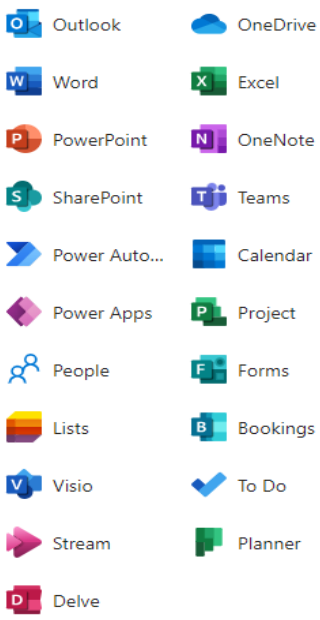

Figure 8 M365 Applications available at MAN Norway

Nonetheless, the sheer number of new applications included in the E3 license of M365, depicted in Figure 8, can be intimidating for traditional Office users. Furthermore, working partly in the cloud environment poses a changeover for employees used to working in desktop applications. For these reasons, M365 can be quite complex for adopters at MAN Norway, especially because Office 2021 was never launched, leaving a four-year gap in knowledge about all the new features. Microsoft offers extensive M365 trial versions for corporations to address the complexity issue. Additionally, it has several workshop options involving adopters to diffuse the initial use.

Compared to the relatively static desktop applications of Office 2019, the possibility of testing M365 in a browser contributes to high trialability, visibility and result demonstrability. Another positive aspect of transitioning to M365 is its high reinvention possibilities. Users have many customisation options when designing Teams layouts, SharePoint Sites, automating processes, etc.

So far, the use of M365 has been entirely voluntary at MAN Norway. Although all employees are integrated into Intune and have access to M365, it is up to the individual to move out of the familiar standard Office apps and explore the new features.

3.2 Diffusion Efforts

Before investigating the individual adoption behaviour, it is valuable to understand what measures MAN Norway and the headquarters in Munich have taken to diffuse M365.

3.2.1 Pre- Implementation Interventions

Before implementing M365 at NSCs, MAN launched the “Microsoft 365 Champions Program, [which] provides an online community, monthly community calls, and content driving adoption across various services in Microsoft 365“

(Gatimu & Hwang, 2022). An external company from Germany led this project based on material provided by Microsoft. The program was conducted in the third quarter of 2022 and focused on Teams and OneDrive. Initially, seven employees took part in the project, but unfortunately, two of the most active participants left the company before implementing M365. After the project was concluded and the staff had the chance to test Teams in the browser, the people responsible for the Champions Program were assigned to different projects.

3.2.2 Post- Implementation Interventions

After several schedule changes, M365 was implemented throughout the first quarter of 2023. As soon as devices were integrated into Intune and employees had access to M365, the local IT at MAN Norway spent about two hours with each user setting up their new laptop and explaining some technical aspects. This setup concludes the face-to-face training offered for M365 by MAN. (cf. Appendix 1/3). However, MAN Norway started an online learning project with the education platform Eduhouse in April 2023. According to Charlotte Haugen (Customer Success Agent at Eduhouse), MAN Norway has 80 licences for employees working in administrative positions. The standard license enables users to access online learning material for OneDrive, Word, PowerPoint, Excel and Teams. MAN Norway granted ten users elevated licenses, allowing them additional access to Power BI and Adobe content. By the beginning of July 2023, 54 employees had signed up to Eduhouse, yet only 18 users are actively utilising the learning materials. Eduhouse also offers on-site workshops with employees and has a built-in feature of customising study plans. Neither option has been pursued yet.

Other post-implementation diffusion measures are the helpdesks for core applications, like Teams, SharePoint and the Power Platform. If users have issues related to one of these topics, they can visit their respective SharePoint wiki, from which they will be provided with contact persons to help solve their problems. Additionally, there are two teams related to community support, where users can help users. One is associated with M365 in general, and the other is specific to the Power Platform. In the Power Platform Teams channel, external

experts from the M365 consultant Netunite support difficult questions that the community cannot solve. Furthermore, Netunite offers three weekly 20-minute meeting slots where users can directly address issues with an expert. It should be noted that communication on these channels is in German.

After implementing M365 at MAN Norway, the newly available features have hardly been utilised. Users lack the incentive to use the software as their processes are still designed for Microsoft Office. The management acknowledges that it is crucial to showcase the advantages of M365 in a manner that can be comprehended effortlessly by the employees. For this reason, I was tasked to remodel an example process using M365 and investigate how the new approach is perceived and impacts adoption. As this is an unprecedented process redesign at MAN Norway, the insight gained through the project should create awareness of the organisation's challenges and opportunities related to M365. Furthermore, this research depicts why user participation should be utilised to make adoption challenges apparent and how it improves the acceptance of digital innovations.

4 METHODOLOGY

The project derived from this task relates to the Service Products and Sales department at MAN Norway. As an intern in the Repair and Maintenance Contracting (RMC) department, the researcher spent a lot of time working with requests from sales for price calculations for service contracts. These requests were done using Excel templates sent via email and involved a lot of manual work. Due to his experience with this particular process, it was decided that it is the ideal case for remodelling a process using M365 applications. Additionally, the process is very similar to other administrative tasks, as it involves a lot of repetitive communication and document handling. These characteristics made it a suitable example for future reference.

4.1 Action Research

Since the author is directly testing a solution to a real-life significant issue, he conducted action-based research on the participants' adoption of the process redesign.

Action-based research is a well-established method when implementing and testing practical solutions, as it is not merely theorising the issue. Another noteworthy aspect of action research is its contextual relevance since it is grounded in a specific setting. As this research focuses on a particular branch with unique circumstances, a method that acknowledges the local needs and constraints can result in insights tailored to the working environment at MAN Norway (Zuber-Skerritt & Perry 2002).

The action research is based on the concept of the application lifecycle described by Microsoft for developing M365 processes (Figure 9) and the action research model (Figure 10).

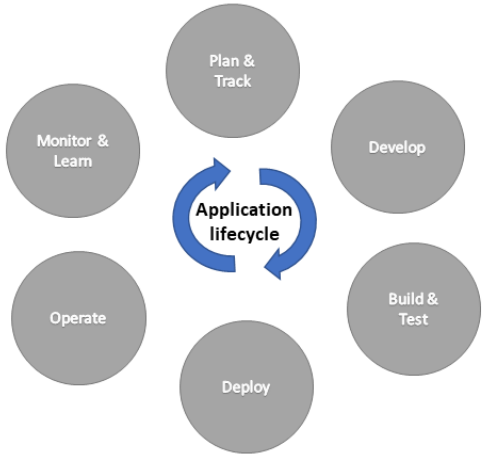

Figure 9 Application Lifecycle

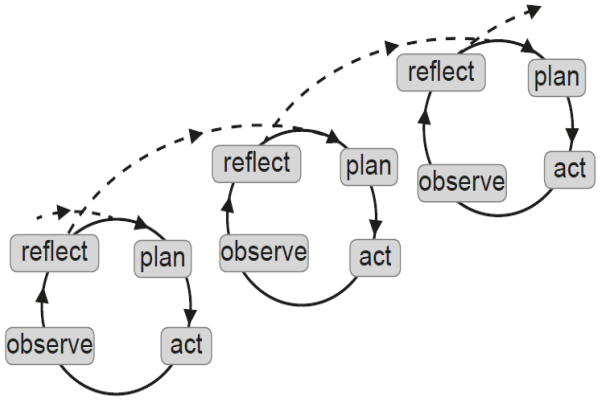

Figure 10 Kemmis and McTaggart's (1988) Action Research Model

As these are iterative processes, multiple steps are repeated throughout the action research, meaning it can be necessary to revisit the previous steps occasionally. The key stages derived from the two models above are Planning, Development and Testing, Launch and Operation, and Observation and Reflection.

4.1.1 Planning

The project began by planning the different M365 applications needed to redesign the process. Within the first three weeks, it was defined how Teams, SharePoint, and Power Apps must be set up to accommodate the new process (Appendix 2/4, A1-8). A flow chart was also developed to visualise how the new process differs from the old one. (Appendix 2/1-2)

4.1.2 Development and Testing

After the initial planning stage was complete, the development of a SharePoint site connected to Teams began. After the setup of the SharePoint site, the development of a Power App based on the flow chart (Appendix 2/2) began. The SharePoint site is the backend for the data collected in the Power App. Parallelly, different SharePoint pages were filled with content related to the various sales departments, and accesses were restricted using audience targeting based on Azure AD groups. The Truck Department's page showcases the new process flow chart explaining how the "price offer request tool" (Power App) works and includes a 9-minute application tutorial.
A mobile version of the Power App was also created to enable salespeople to access it without their laptops. Throughout the development phase, the Service Products team tested different solutions and suggested several changes. After almost three months of development and testing (Appendix 2/4, A9-32), the SharePoint Site, Teams Channel and Power App were ready for launch.

4.1.3 Launch and Operation

At the end of May 2023, all employees working in Sales and administrative positions in workshops received access to the MTB NO Service Products SharePoint site. Additionally, all salespeople got access to the corresponding Teams channel. Employees working in the sale of trucks, vans (TGEs) or used vehicles (TopUsed) received access to the Power App. The new solutions were operated for an entire month and constantly updated based on users' recommendations (Appendix 2/4, A33-57). Four Q&A sessions with the project participants were conducted throughout the operation phase to diffuse the new process (Appendix 2/5).

4.1.4 Observation and Reflection

During the action research, factors interfering with using the new solutions in MTB NO Service Products were observed and recorded. Based on these

observations, reflections on the process and content were used to update and further develop the SharePoint site, Teams channel and Power App. Particularly, the observation stage resulted in significant process updates. After the operation stage two interviews with the Head of Service Products and Head of IT at MAN Norway were conducted to see their view on the project. Their evaluations are mainly used to depict the general pre- and post-implementation conditions surrounding M365 at MAN Norway (Appendix 1). Finally, a survey with the participants was conducted from the end of June until mid-July to conclude the reflection stage.

4.2 Sample and Population

The population of this research are employees working in administrative positions at MAN Norway who have an M365 E3 licence (Figure 11).

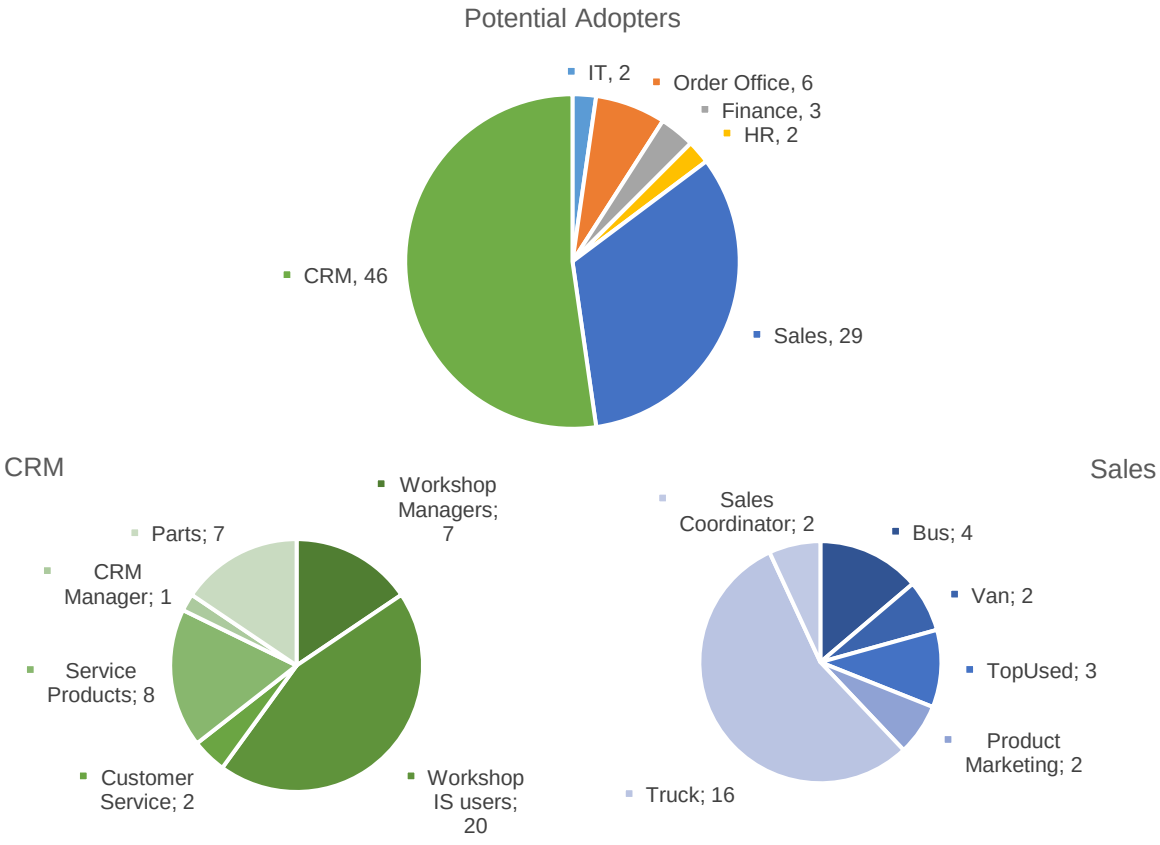

Figure 11 Potential M365 Adopters at MAN Truck & Bus Norway August 2023

The size of the population (88) is also comparable to the number of licences issued for Eduhouse (80). Since finding a process addressing all relevant

departments is nearly impossible, working with a smaller sample is advisable. Therefore, this study looks at the adoption behaviour of the Service Products and Sales departments, amounting to 37 participants (cf. Appendix 2/3), 32 of whom partook in the survey (Appendix 3/2). This research categorises age and experience into groups for anonymity. Otherwise, individuals could be easily identified by combining the information provided in the study.
Nonetheless, it is possible to give details on averages. The mean age of the sample is 48, and the average number of years worked at MAN Norway is eight. Therefore, the selection can be described as relatively old with a high experience level. Compared to the population, the sample`s demographic is very similar, as the population`s mean age is around 45 while the experience amounts to six years on average.

4.3 Data Collection

The qualitative data collected during the action research is divided into actions, interactions, feedback and the Q&A session log. Research activities are recorded in a table describing, categorising, and evaluating the various actions (Appendix 2/5). After each Q&A session, a short summary of questions, answers and issues were recorded to improve the succeeding session (Appendix 2/6). Feedback collected throughout the project was recorded similarly and linked to related actions or Q&A sessions (Appendix 2/7). Likewise, noteworthy interactions with the SharePoint site, Teams channel and Power App are linked to resulting feedback and actions. (Appendix 2/8)
The quantitative data of this study consists of usage data of the Power App and the survey data collected through Microsoft Forms. Microsoft has several analytical tools for evaluating user behaviour in the Power Platform. In Power Apps, analytics pointing towards user behaviour are app launches per day and active users per day. These user metrics were extracted from the end of May to the end of July 2023.
There are various benefits of collecting the survey through Microsoft Forms. First, it is user-friendly and has a straightforward interface compatible with multiple devices. Additionally, the tool is integrated into M365, making distributing the

survey through SharePoint, Teams and Outlook easy. Finally, Microsoft Forms offers robust data security, ensuring results remain anonymous and protected from access outside the corporation.

The survey took about eight minutes to answer and used a six-point Likert scale instead of open-ended questions. Using this type of questionnaire forces users to have a more definite stand on the statements, reducing ambiguity in the analysis. The participants were asked about their level of agreement with statements concerning their views on M365 before and after the project. Additionally, statements about Training and Social Influences should give a more complete image of the external influences on perceptions. Finally, opinions on the Teams, SharePoint and the Power App solutions are collected to assess better how the different aspects of the project were viewed.

The twelve statement topics are highlighted in Table 1.

Table 1 Likert Scale Statements

ID	Categories	Topic
I	Personal information	Age, Experience and Department
PREIV	Pre-implementation view	Before the implementation of M365 at MAN Norway, please rate your agreement with the following statements.
SP	Specific feature perception - SharePoint	Considering the "Service Products SharePoint Site", please rate the following statements.
TE	Specific feature perception - Teams	Considering the "Service Products Teams channel", please rate the following statements.
A	Specific feature perception - Power App	Considering the "new tool for requesting service contracts" for trucks, please rate the following statements.
TRG	Training General	Considering the training situation during the Microsoft 365 implementation phase, please rate your agreement with the following statements.
TRBC	Training Business Champions	Considering the "Business Champions" project aiming to empower core users to teach other users about M365, please rate the following statements.
TRQA	Training Q&A	Considering the weekly Q&A teams meetings offered in June 2023, please rate the following statements.

TREH	Training Eduhouse	Considering the new digital training platform "Eduhouse" available for Employees at MAN Norway, please rate the following statements.
SI	Social Influence	Considering the social environment at work and its effects on your attitude towards Microsoft 365, please rate the following statements.
POSTIV	Post-implementation View	Considering your current view on M365, please rate your agreement with the following statements.
POSTIVIM	Post-implementation View Impact	Considering the effects the "Service Products project" had on your view on Microsoft 365, please rate your agreement with the following statements.

4.4 Data Analysis

The data analysis is based on the UTAUT model and compares the four identifiers for behavioural intention and use behaviour, considering three moderators. The survey findings are compared to the qualitative data collected throughout the action research project. Additionally, usage metrics like app launches per day are evaluated with preceding actions to identify behavioural responses and tendencies. The survey includes a personal view before and after the project, which can be used in the analysis to evaluate the project's impact.

The survey data generated through the Likert scale question is considered ordinally distributed. The quantitative analysis was done through SPSS by coding the answers into numerical values. (Appendix 3/2). Therefore, agreeance with statements, e.g., “Strongly agree”, is coded into the value “6”, while disagreement with statements, e.g., “Strongly disagree”, is coded into the value “1”. This summative scale facilitates the analysis as low values depict disagreement while agreeance is shown through high values. Hence, the data analysis can reveal interdependency between variables through statistical tests.

Some variables are combined and tested for reliability using Cronbach's alpha reliability test. The combined values used for defining constructs are inspired by the original question items used in the UTAUT model (cf. Venkatesh et al. 2003, 460). An alpha value of over 0.75 is considered reliable.

The variables are then analysed using Pearson correlation to assess significant relationships. An alpha value of below 0.05 is considered significant for the correlation analysis. The correlation coefficients of significant relationships are interpreted based on the descriptions in Table 2.

Table 2 Pearson Correlation Interpretation

Pearson Correlation Coefficient	**Interpretation**
r = 1	Perfect positive Correlation
0.7 ≤ r < 1	Strong Positive Correlation
0.3 ≤ r < 0.7	Moderate Positive Correlation
0 < r < 0.3	Weak Positive Correlation
r = 0	No Correlation
-0.3 < r < 0	Weak Negative Correlation
-0.7 < r ≤ -0.3	Moderate Negative Correlation
-1 < r ≤ -0.7	Strong Negative Correlation
r = -1	Perfect Negative Correlation

As correlations do not establish cause or effect relationships, they are unsuitable for rejecting the null hypothesis. Therefore, hierarchical linear regression is used to quantify cause or effect relationships with the two dependent variables: adoption behaviour and project impact on adoption behaviour. In the first stage of the regression analysis, the independent combined variables for pre-implementation performance expectancy, effort expectancy and behavioural intention are included. The second stage comprises the three moderating variables: age, experience, and involvement. Finally, the moderators' interaction terms are tested for significance to estimate their moderating effect on dependent variables. Treating these variables as moderators and the adoption intention as a dependent variable is inspired by the methodology used in the UTAUT model (cf. Venkatesh et al. 2003, 445). Additionally, a chi-squared test is carried out to assess the independence of moderators. For accuracy reasons, the adjusted R square determines the predictive efficiency of the models since this regression analysis involves many predictors, and this value considers additional insignificant predictors negatively.

5 RESULTS AND ANALYSIS

Through investigating the observations made in the action research and the insights derived from the Likert scale questionnaire, the research identifies 15 significant obstacles to the adoption of M365 (Table 3).

Table 3 List of challenges identified in the research

ID	Challenge
C1	*Stakeholders have different expectations and needs regarding the digital innovation's benefits*
C2	*Adopters with much experience can take longer to see the benefits of innovations*
C3	*Aspects of an innovation are not perceived as relevant by all adopter groups*
C4	*Too many different digital solutions for end users*
C5	*Absence of guidelines for solution design*
C6	*Adapting design characteristics to the needs of the majority of users*
C7	*Time constraints of individuals to experiment with innovations*
C8	*Lacking utilisation of management support for inducing use behaviour*
C9	*Lacking utilisation of peer support*
C10	*Lacking training offer*
C11	*Monotonous training offers*
C12	*Inertia of utilising educational video material*
C13	*Lacking support for process owners and developers*
C14	*Processes are not suitable for the digital innovation*
C15	*Lack of governance over the adoption process of digital innovations*

The following chapter will elaborate on the challenges based on the UTAUT model and provide reasoning for their significance in the context of adopting digital innovations at MAN Norway.

5.1 Moderators

As this analysis builds on the UTAUT model, looking at the moderators for individual decision-making is important before going into the constructs. This study examines the influences of age, experience and voluntariness on the different constructs. However, instead of simply taking the voluntariness of using M365 as a moderator, this research considers the impact of user participation in the project on the constructs. In this scenario, user participation and voluntariness can be compared as part of the sample (Service Products, Sales (trucks) were indirectly forced to participate in the project since the old process

was discarded and employees needed to adapt to the new one. The remaining sample (Sales Vans, Coordinator, Product Marketing) could voluntarily involve themselves. The project's user participation assessment is based on seven Likert scale statements about the level of involvement with SharePoint, Teams, the Power App and attendance in the Q&A sessions. Combining the answers of all items results in the “Level of involvement” moderator (Table 4).

Table 4 Level of Involvement Statements

ID	Involvement	Moderator	Category
INV1SP	I frequently visit the site	Vol	SP
INV2SP	I have created content for the site	Vol	SP
INV3TE	I frequently visit the Teams channel	Vol	TE
INV4TE	I have published content in teams	Vol	TE
INV5A	I am using the app frequently	Vol	A
INV6A	I frequently made suggestions on how to improve the tool	Vol	A
INV7QA	I attended the meetings frequently	Vol	TRQA

Combining the answers of all items has a Cronbach’s alpha value of 0.844, suggesting the aggregated variable “Level of involvement” is a reliable moderator.

The average level of involvement for each participant group reflects the degree of their respective voluntariness in participating in the project. The highest average level of involvement is the Service Products department, with a mean value of 4.05. This high value can be explained through their administrative role in the project as department members were responsible for creating content in SharePoint and managing the Power App. Closely followed by the Service Products department is the Sales (truck) department, with a mean level of involvement of 2.88. Their involvement can be explained as the process redesign forced them to use the new request tool to receive price offers for service contracts. On the other hand, the other sales departments could continue to use the old process, making their involvement in the SharePoint site, Teams channel and Q&A sessions completely voluntary. For this reason, the remaining sales departments have the lowest average level of involvement, with a mean value of 1.7.

When analysing the level of involvement`s impact on constructs and behaviour, it is essential to establish the independence of the variable compared to pre-implementation views and other moderators. If pre-implementation opinions were significantly correlated to the level of involvement, the variable would be meaningless since it would simply depict that participating in the project was based on the initial favorability of using M365. The Pearson correlation analysis shows no significant correlation between pre-adoption beliefs and involvement in the project, as no level reaches a significance value below 0.05 (Table 5).

Table 5 Level of Involvement Correlations with Pre-Implementation Views

Question Item	Type	Level of involvement	Variable
I was looking forward to adopting different features of M365 in my work tasks	Pearson Correlation	.247	Pre-Implementation BI
	Sig. (2-tailed)	**.173**	
I was planning to create own content to share with others in M365	Pearson Correlation	.112	Behavioural Intention/Contnent & Automation (Pre-Implementation)
	Sig. (2-tailed)	**.543**	
I was considering creating my own automated processes using M365	Pearson Correlation	.088	Behavioural Intention/Contnent & Automation (Pre-Implementation)
	Sig. (2-tailed)	**.631**	
I believed that M365 would be easy to use	Pearson Correlation	.118	Pre-Implementation EE
	Sig. (2-tailed)	**.519**	
I believed using M365 would align with my way of working	Pearson Correlation	.178	Pre-Implementation EE
	Sig. (2-tailed)	**.329**	
I was aware of the potential benefits of using M365 in my work environment.	Pearson Correlation	.162	Pre-Implementation PE
	Sig. (2-tailed)	**.374**	
I perceived M365 as a valuable tool for collaboration	Pearson Correlation	.187	Pre-Implementation PE
	Sig. (2-tailed)	**.305**	

While the correlation analysis depicts a lack of relationship between the variables, it does not eliminate the chance of dependency in a non-linear way. Hence, the chi-square tests between the level of involvement and participants' pre-implementation beliefs contribute the necessary evidence for the independence of the variables, as all significance values exceed 0.05. (Table 6)

Table 6 Chi-Square test between Level of Involvement and variables

Variables	Asymptotic Significance (2-sided)
Pre-Implementation PE	0.926
Pre-Implementation EE	0.879
Pre-Implementation BI	0.748
Behavioural Intention/Contnent & Automation (Pre-Implementation)	1

Additionally, there is no significant correlation between the level of involvement and the other two moderators (Table 7).

Table 7 Level of Involvement Correlations with other moderators

Variables	Asymptotic Significance (2-sided)
Experience	0.137
Age	0.517

However, a significant (p=0.013) moderate positive (r=0.433) correlation exists between age and experience. The chi-square test also quantifies this relationship (p= 0.045). The association between age and experience is expected since older participants are more likely to have worked for the same company for a more extended period.

Although the UTAUT model finds significant evidence for the moderating effects of age, experience and voluntariness, this research cannot fully support this finding.

Table 8 Model summary of hierarchical regression analysis for adoption behaviour

Model	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	0.237	0.335	3.408	0.022
2	**0.485**	0.266	5.333	**0.006**
3	0.456	0.188	0.892	0.577

Table 8 depicts the three stages of hierarchical regression used in this research. First, the independent variables were included; second, the moderators; and third, the interaction terms between independent variables and moderators. The second model is the only significant (Sig. F Change= 0.006) and has the highest predictive efficiency with an adjusted R square of 0.485. Similar results can be

observed in hierarchical regression analyses for the project's impact on adoption (Table 9).

Table 9 Model summary of hierarchical regression analysis for project impact on adoption behaviour

Model	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	0.063	0.184	1.525	0.223
2	**0.389**	0.343	5.792	**0.004**
3	0.454	0.262	1.24	0.358

These figures highlight the variables' (age, experience and involvement) role in explaining the variance for the dependent variable, yet the data does not support their moderating effect.

Regardless of the lack of evidence for the moderating effect of age, experience, and involvement, they will still be referred to as moderators in this study, as research has found significant evidence for their role in the adoption of technology.

5.2 Performance Expectancy

Technology acceptance research suggests that performance expectancy is the most important determinant of behavioural intention. Therefore, challenges related to performance expectancy have the most weight in the individual decision to refrain from adopting an innovation. This research examines pre- and post-implementation PE and the project's impact on PE.

Generally, the research differentiates between the general performance expectancy of M365 and the performance expectancy of specific features (Teams. SharePoint and Power Apps). This differentiation is because the performance expectancy of specific features is related to the elements used in the research project, which may differ from the overall perception of the innovation.

Table 10 Performance Expectancy Pre-Implementation

ID	Performance Expectancy (Pre-Implementation)	Construct	Category
PEpre1	I was aware of the potential benefits of using M365 in my work environment.	PE	PREIV
PEpre2	I perceived M365 as a valuable tool for collaboration	PE	PREIV

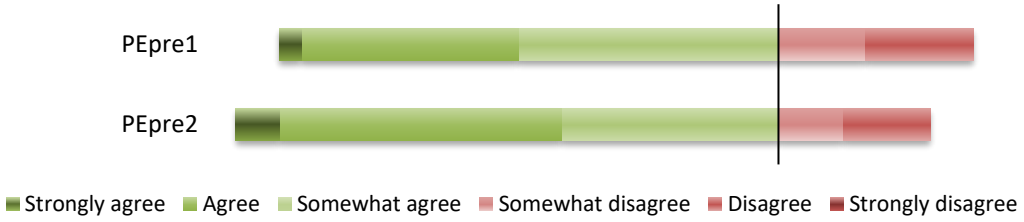

Figure 12 Performance Expectancy (Pre-Implementation) Frequency Chart

Participants could express their performance expectations on M365 before the implementation as they got acquainted with the tool through the test system. It can be observed that the majority of the participants had positive opinions about M365 before the implementation. Out of the 32 participants, only nine did not see the potential benefits of the innovation, while only eight people did not perceive M365 as a valuable tool (Figure 12).

Throughout the action research, it became clear that people painstakingly compare processes using new technology to the predecessor process. For example, after the launch of the Power App, some salespeople complained that specific features were missing in the process (Appendix 2/7, F7-8). Despite the evident advantages in other areas, these benefits were not necessarily apparent to a particular user group. Two weeks into the operation phase, one of the participants concluded that the Power App primarily benefits the Service Products team, causing frustration on the sales department end (Appendix 2/7, F23). This feedback underlines the importance of aligning the performance expectancies of different stakeholders when developing new solutions using digital innovations.

C1: Stakeholders have different expectations and needs regarding the digital innovation's benefits

Not considering all opinions of stakeholders resulted in the Power App not being used to the full extent (Appendix 2/5, A50). Fortunately, in this scenario, the solution for the problem was fairly quick to implement (Appendix 2/5, A54). After consulting the sales department, it became clear that requiring signatures on offers did not reflect the day-to-day business scenario. Therefore, the signature part on offer prices was decided to be optional (cf. Appendix 2/3). Several salespeople came forward the week following the process change with positive feedback about the redesign (Appendix 2/7, F29). The Power App has undergone significant changes throughout the development and operation stage to fit the users' needs, positively influencing individuals' perceptions. It can be observed that participants primarily perceived the app as beneficial and expandable to other scenarios when looking at Table 11 and Figure 13.

Table 11 Performance Expectancy Power App

ID	Power App	Construct	Groups	Category
A2PE	I can imagine other, smaller processes to be adapted by similar tools	PE	Sales (Truck), Service Products	A
A3PE	I see opportunities to improve the app further	PE	Sales (Truck), Service Products	A
A4PE	I see the benefits of using the tool compared to the old process	PE	Sales (Truck), Service Products	A

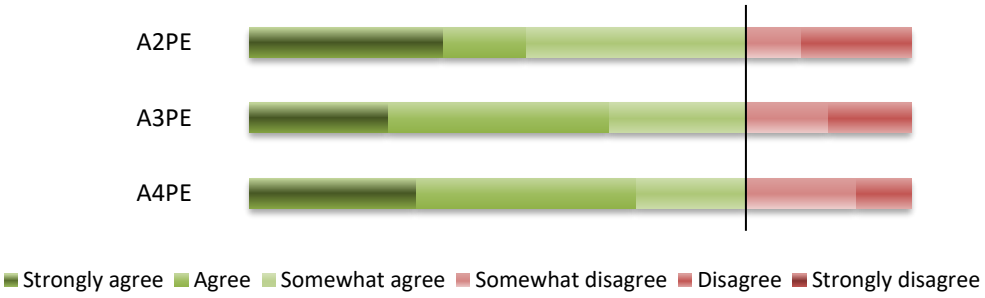

Figure 13 Performance Expectancy (Power App) Frequency Chart

When testing the three variables in Table 4 for correlations with moderators, it can be examined that experience moderately negatively (p=0.002, r=-0.597) correlates with A2PE and A4PE, suggesting that experienced people tend not to see the benefits of using the tool.

Similar results can be observed when looking at the performance expectancy of Microsoft Teams.

Table 12 Performance Expectancy Teams

ID	Teams	Construct	Category
TE2PE	I believe the channel is a good way to collaborate internally	PE	TE
TE3PE	I believe using teams is better than using emails for internal collaboration	PE	TE

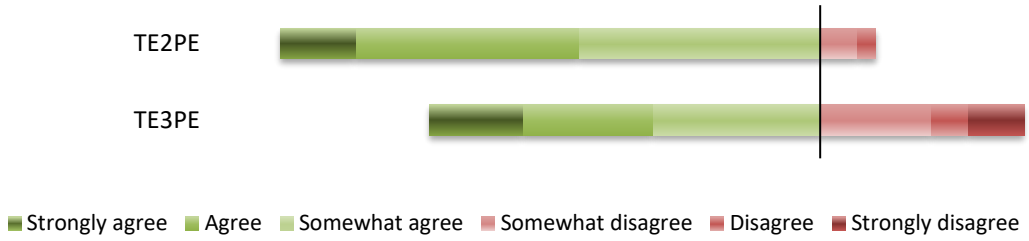

Figure 14 Performance Expectancy (Teams) Frequency Chart

The variables TE2PE and TE3PE both show a significant negative correlation with experience. Especially, using teams instead of emails for internal communication seems more repellent to participants with long experience (Appendix 5/2). Nonetheless, participants largely considered aspects of Teams covered in the project as valuable, if not better than emails (Figure 14).

While not as explicitly positive as the results on the Power App and Teams, the performance expectancies for SharePoint show a general favorability by the participants (Figure 15).

Table 13 Performance Expectancy SharePoint

ID	SharePoint	Construct	Groups	Category
SP1PE	The site provides content related to my work	PE	all	SP
SP2PE	I would like to see more similar information sites at MAN Norway	PE	all	SP

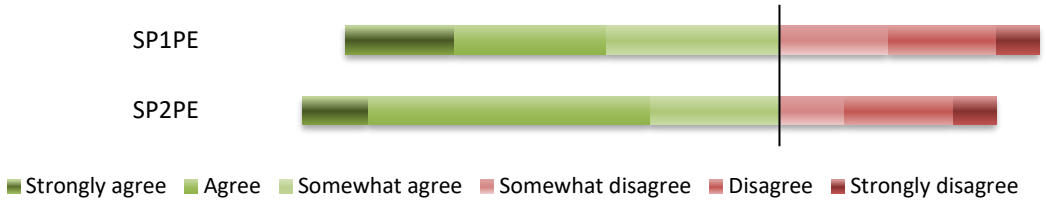

Figure 15 Performance Expectancy (SharePoint) Frequency Chart

Comparable results to the relationship between the performance expectancy of Microsoft Teams and experience can be observed in the correlation analysis of SharePoint. Although the perceived relevance of content in SharePoint (SP1PE) is independent of moderators, there is a correlation between SP2PE and experience. (Appendix 5/2)

This tendency of participants with long experience at MAN Norway to have more negative perceptions of performance aspects of the specific features used in the project corresponds with insights gained throughout the action research. After implementing and announcing the redesigned process, salespeople occasionally sent requests using the old Excel files via email instead of the Power App. One aspect these salespeople have in common is their long time at MAN Norway, suggesting that with experience comes some inertia to accept the benefits of new technologies.

C2: Adopters with much experience can take longer to see the benefits of innovations

Another apparent aspect of the action research is finding the correct approach for addressing different user groups. At MAN Norway, no differentiation is made between users with an E3 licence for M365. Accordingly, when conducting the Q&A sessions to elaborate on the new process and various features of M365, initially, no effort was made to tailor the content presented to the needs of the different participant groups. Understandably, users quickly got confused about the features explained throughout the meeting as the content was partly addressing developers rather than standard users. After the second Q&A

session, some participants came forward, expressing their confusion about the relevance of the content (Appendix 2/6).

C3: Aspects of an innovation are not perceived as relevant by all adopter groups

Although there were some reservations before implementing M365, participants were largely positive about the performance expectancy of M365 (Figure 12). Post-implementation views show that this positive trend has continued, with only three people not seeing the benefits of M365 and two participants not considering M365 as a valuable tool for collaboration (Figure 16).

Table 14 Performance Expectancy Post-Implementation

ID	Performance expectancy (Post-Implementation)	Construct	Category
PEpost1	I am aware of the benefits of using M365 in my work environment.	PE	POSTIV
PEpost2	I believe M365 is a valuable tool for collaboration	PE	POSTIV

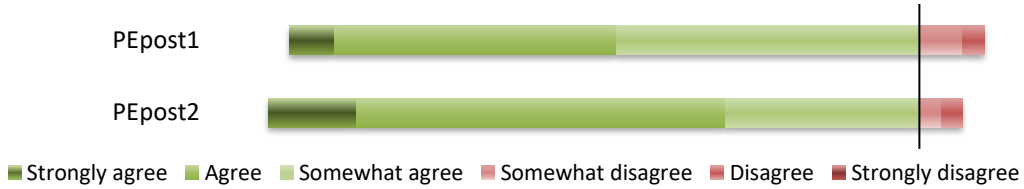

Figure 16 Performance Expectancy (Post-Implementation) Frequency Chart

The analysis of the project's impact on performance expectancy shows that a vast majority of 25 people attribute their increased awareness of the benefits and value of M365 to the project (Figure 17).

Table 15 Performance Expectancy Impact

ID	Performance Expectancy (Impact)	Construct	Category
PEimp1	The project increased my awareness of the benefits of using M365 in my work environment.	PE	POSTIVIM
PEimpt2	The project showed me that M365 is a valuable tool for collaboration	PE	POSTIVIM

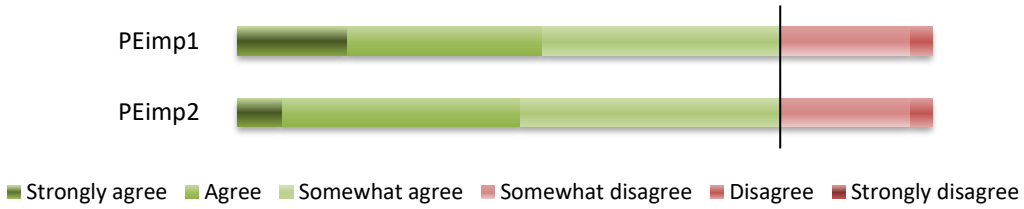

Figure 17 Performance Expectancy (Impact) Frequency Chart

When analysing overall relationships between PUs and moderators, combining variables facilitates making conclusions. Pre-implementation PU (PEpre1, PEpre2), Post-implementation PU (PEpost1, PEpost2) and the project's impact on PU (PEimp1, PEimp2) are reliable as all variables have a Cronbach alpha value above 0.75. (Table 16)

Table 16 Performance Expectancy Reliability

Combined variable	Cronbach alpha
PEpre1, PEpre2	0.815
PEpost1, PEpost2	0.806
PEimp1, PEimp2	0.879

The data illustrates a significant moderate positive relationship (p= 0.438, r= 0.012) between the level of involvement and Post-implementation PE. A similar correlation (p= 0.464, r= 0.008) can be observed between the level of involvement and the project's impact on PE (Appendix 5/3). Additionally, experience shows a moderate negative correlation (p= -0.421, r= 0.016) with the project's impact on PE, underlining the findings in C2 (Appendix 5/5). Although post-implementation and the project's impact on PE show significant correlations with moderators, linear regression suggests that neither experience nor the level of involvement can be used to explain or predict PE (Appendix 5/1). All in all, the PEs before the project indicate that most participants saw the benefits of M365. The perceptions of specific features used in the project are similar to general post-implementation perceptions. Even if opinions about PE are more positive after the implementation, it suggests that other barriers hold more weight in preventing adoption at MAN Norway than PE.

5.3 Effort Expectancy

After performance expectancy, effort expectancy holds the second most weight in the individual adoption decision. At MAN Norway, the previously mentioned complexity aspect of M365 is visible as twelve participants did not think the software would be easy to use before implementation (Figure 18).

Table 17 Effort Expectancy Pre-Implementation

ID	Effort expectancy (Pre-Implementation)	Construct	Category
EEpre1	I believed that M365 would be easy to use	EE	PREIV
EEpre2	I believed using M365 would align with my way of working	EE	PREIV

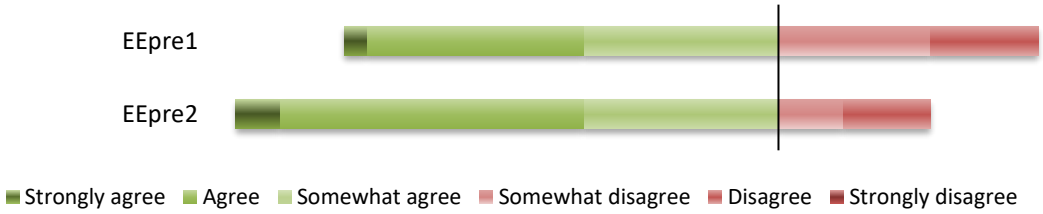

Figure 18 Effort Expectancy (Pre-Implementation) Frequency Chart

However, only seven participants doubted that M365 would not align with their way of working, suggesting a relatively high perception of compatibility (Figure 18).

Many attempts were made to elevate the user experience during the action research. The most significant aspect for EE was designing all project solutions to be accessible through teams. One of the participants complained that employees at MAN Norway face too many different applications and need to jump from one tool to another within one process.
C4: Too many different digital solutions for end users

M365 allows for linked experiences, making it recommendable to provide a hub for end users from where they can carry out the whole process.
Another factor established throughout the development stage was the importance of uniformity of solutions. “The most important part is that you can feel some familiarity [in SharePoint] when jumping from one department to another since

many [employees at MAN Norway] have to do that." (Appendix 1/5). If Teams channels and SharePoint site interfaces differ significantly between the departments, it could lead to confusion on the user end. Although this effect was not explicitly observed in the action research, according to the Head of IT at MAN Norway, this issue arose in Germany (Appendix 1/5). Unfortunately, uniformly designing a SharePoint site or Teams channel is challenging since developers have no central guidelines.

C5: Absence of guidelines for solution design

Overall, the effort to design the Power App with the user experience in mind resulted in most participants perceiving it as easy to use (Figure 19).

Table 18 Effort Expectancy Power App

ID	Power App	Construct	Groups	Category
A5EE	I find the tool easy to use	EE	Sales (Truck), Service Products	A

Figure 19 Effort Expectancy (Power App) Frequency Chart

Nonetheless, the research shows that it is important to prioritise some user experience features. Part of the development stage involved tailoring the app to be used on a mobile phone (Appendix 2/5, A19). While this was perceived as facilitating the use by one of the participants (Appendix 2/7, F7), he was the only person to utilise this feature. Hence, it is advisable not to spend too much time on aspects that may facilitate the use for some but do not address the needs of most users. Determining these aspects can be challenging and requires dialogue with several end users.

C6: Adapting design characteristics to the needs of the majority of users

Another factor that should be considered when addressing the effort expectancy at MAN Norway is the leeway for individuals to experiment with the innovation. One participant expressed his favorability of using the new technology but

pointed out he does not have the time to deal with it. (Appendix 2/7, F30). Especially salespeople who do not have a fixed salary but get paid on commission lack incentives to put more effort into adopting technology. Why should they spend more time on this matter if it comes at the expense of their sales?

C7: Time constraints of individuals to experiment with innovations

Regardless of the challenges associated with EE, participants have a slightly better view of efforts connected to M365 after implementation than before (Figure 20).

Table 19 Effort Expectancy Post-Implementation

ID	Effort Expectancy (Post-Implementation)	Construct	Category
EEpost1	I believe that M365 is easy to use	EE	PREIV
EEpost2	I believe that using M365 aligns with my way of working	EE	PREIV

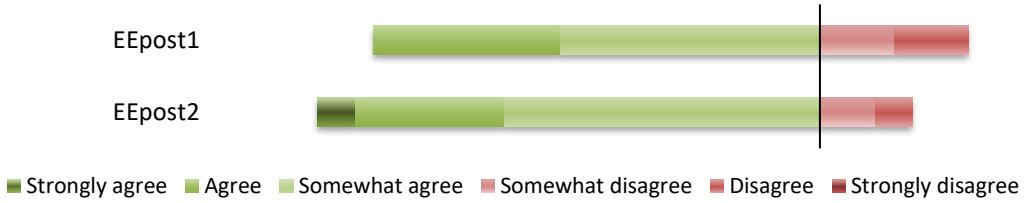

Figure 20 Effort Expectancy (Post-Implementation) Frequency Chart

The project's impact on effort expectancy seems more divided. Although most participants state the project has positively affected their satisfaction working with M365, almost half disagree. Regarding EEimp2, participants show more approval of the positive impact of the project (Figure 21).

Table 20 Effort Expectancy Impact

ID	Effort Expectancy (Impact)	Construct	Category
EEimp1	The project has increased my satisfaction working with M365	EE	POSTIVIM
EEimp2	The project showed me that using M365 aligns with my way of working	EE	POSTIVIM

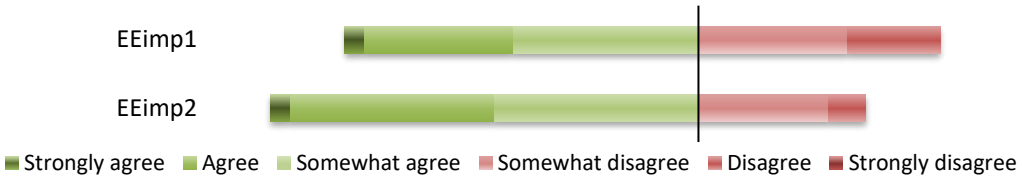

Figure 21 Effort Expectancy (Impact) Frequency Chart

Combined variables are used to test the different variables for relationships with constructs. Similarly to the variables of PE, pre-implementation EE (EEpre1, EEpre2), post-implementation EE (EEpost1, EEpost2) and the project's impact on EE (EEimp1, EEimp2) show a reliable Cronbach alpha value (Table 21).

Table 21 Effort Expectancy Reliability

Combined variable	**Cronbach alpha**
EEpre1, EEpre2	0.791
EEpost1, EEpost2	0.763
EEimp1, EEimp2	0.753

Interestingly, correlations of the combined variables show the level of involvement has a moderate positive correlation with both post-implementation EE and the project's impact on EE (Appendix 5/3). In other words, individuals with high participation in the project consider the project's effects on their effort expectancy more significantly than individuals with lower involvement.

All in all, participants associate the use of M365 with some effort. Yet technology acceptance and diffusion research has shown that individuals are willing to cope with some effort if the benefits of the innovation are apparent. Hence, EE is not the key construct preventing M365 from being adopted by participants.

5.4 Social Influence

Divergent of the innovation's properties is the social influence construct, which focuses on peers' opinions and how they affect the individual perception of the innovation. Similar to the other construct, the social influence construct in this research is based on the question items used in the UTAUT model (cf. Venkatesh et al. 2003, 460).

However, It should be noted that the social influence construct cannot be treated as a combined variable in the analysis of this research as the four variables depicted in Table 22 have a Cronbach alpha value of 0.558, indicating poor internal consistency. For this reason, the variables are analysed separately for relationships with the moderators.

Table 22 Social Influence

ID	Social Influence	Construct	Category
SI1	I feel influenced by my colleagues to use M365 for collaborative work	SI	SI
SI2	The opinions of my coworkers regarding M365 usage matter to me	SI	SI
SI3	The encouragement from my supervisor positively impacts my usage of M365	SI	SI
SI4	I am likely to seek assistance from my coworkers when facing challenges while using M365	SI	SI

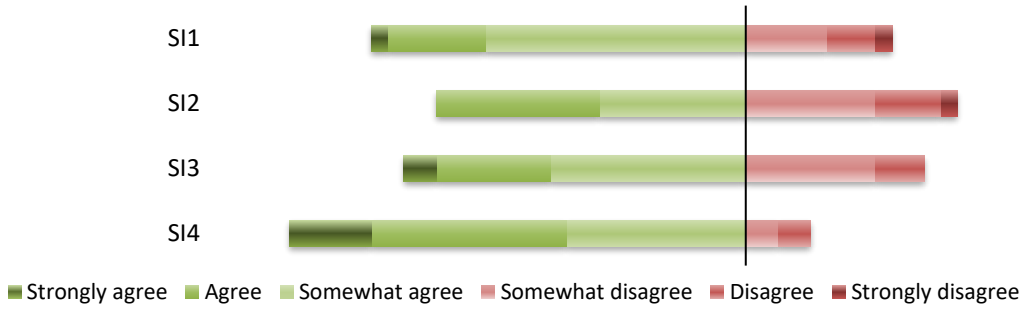

Figure 22 Social Influence Frequency Chart

The study illustrates that a vast majority of participants feel influenced by their colleagues to use M365 for collaborative work. Coworkers' opinions on M365 usage seem less important to individuals, although most participants still value them (Figure 22). A clear trend can be observed regarding whether the supervisor's encouragement impacts the individual's usage of M365. All members of the Service Products department agreed with this statement, while eleven Sales department members disagreed. Hence, the Service Products department supervisor played an impactful role in the behaviour of his subordinates, while the Sales department's supervision has room for impacting use behaviour.

C8: Lacking utilisation of management support for inducing use behaviour

Overall, the assistance of coworkers seems to be highly regarded by the participants, as 28 out of the 32 participants ask for support from their peers when facing challenges with using M365. Unfortunately, employees can only help one another individually, and stories about successfully overcoming challenges are not shared within MAN Norway. Although there is a Users-help-Users community chat in Germany, it is helpful for Norwegians since the chat is in German. Therefore, MAN Norway needs to elevate the possibility of employees helping and learning from one another.

C9: Lacking utilisation of peer support

It can be observed that experience has a moderate negative correlation with SI2 and SI3 (Appendix 5/6). These results mean although experienced participants are less likely to be influenced by coworkers' opinions on M365 and put less meaning to supervisors' encouragements, other variables may play into these moderate negative correlations.

Overall, social influences are regarded as impactful on participants' use behaviour, making it crucial for MAN Norway to reflect on the associated challenges.

5.5 Facilitating Conditions

The final construct investigated in this research is facilitating conditions at MAN Norway. As this construct is the only one directly impacting use behaviour according to the model, it is essential to examine the interventions MAN Norway has utilised and how participants relate to them.

Three specific interventions can be considered facilitating conditions: the Champions Project carried out before the implementation of M365, the access to the digital education platform Eduhouse and the Q&A sessions conducted throughout the operation phase of the action research. All of these interventions fall under the training category. The study examines the participants' overall training perceptions and their perceptions of specific training interventions.

Additionally, this section looks at challenges related to facilitating conditions identified throughout the action research.

When looking at the general perception of training, it is evident that participants do not think they have received appropriate training on using M365 (Figure 23, FC1TR). Furthermore, 22 participants do not believe the training approach during the pre-implementation phase was good (Figure 23, FC2TR). Therefore, 29 of the 32 partakers would like more training on how to use M365 (Figure 23, FC3TR).
C10: Lacking training offer

Table 23 General Training Perceptions

ID	General Training	Construct	Category
FC1TR	I received training on how to use M365	FC	TRG
FC2TR	I think the training approach used by MAN Norway was good	FC	TRG
FC3TR	I would like to get more training on how to use M365	FC	TRG

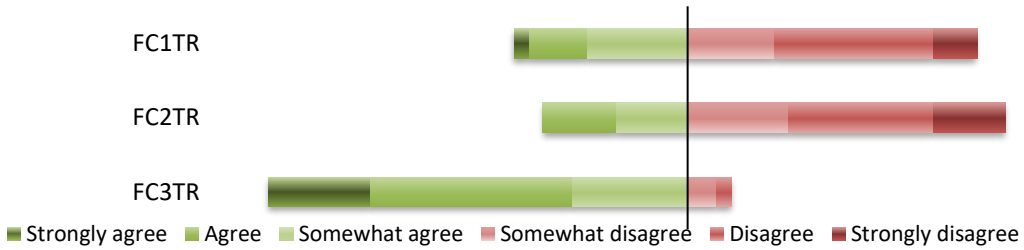

Figure 23 General Training Perceptions Frequency Chart

Part of the pre-implementation training involved some of the employees at MAN Norway participating in the Champions Project. However, only six people in the sample were aware of the project's existence (Figure 24, FC4BC) and only four were actively involved (Figure 24, FC5BC). Therefore, a dominant disbelief of the project's impact on the adoption of M365 can be observed (Figure 24, FC6BC). The Head of Service Products attributes the negative perception of the project to the time differences between the rollout process and the project due to delays. Because of these schedule changes, “the news value of that project was gone” (Appendix 1/7).

The project's original idea is to enable employees to refer to trained peers in the adoption process for help. However, if most of the staff does not know about the project's existence, its facilitating role in adoption is questionable.

Table 24 Business Champions Project Perceptions

ID	Business Champions Project	Construct	Category
FC4BC	I was aware of the project	FC	TRBC
FC5BC	I was involved in the project	FC	TRBC
FC6BC	Overall, I believe the project helped with the adoption of M365	FC	TRBC

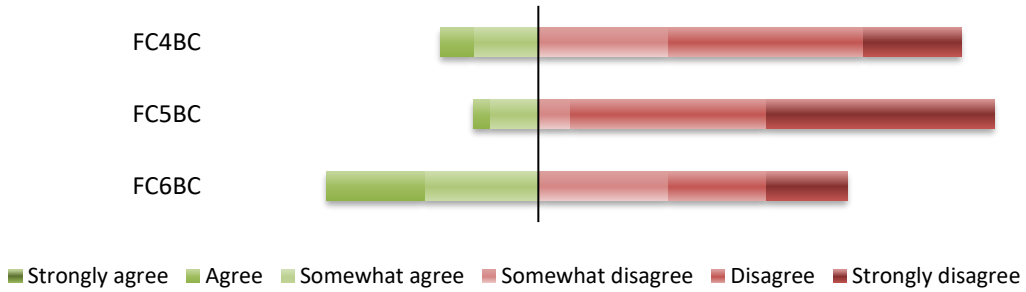

Figure 24 Business Champions Project Perceptions Frequency Chart

After implementing M365, management provided employees with an E3 Microsoft licence access to the digital education platform Eduhouse. This offer was widely communicated as most of the staff seemed aware of the platform's opportunities. Yet, after three months of access to the site, only three participants started using the site frequently. Participants were asked about their preferred learning method to test whether this hesitance to use the platform is related to a general dislike of Eduhouse's learning approach. The results show that although participants generally like learning online, people strongly prefer on-site learning (Figure 25). Unfortunately, little effort has been made to offer training other than online.

C11: Monotonous training offers

Table 25 Eduhouse Perceptions

ID	Eduhouse	Construct	Category
FC7EH	I am aware of the training opportunities provided on the platform	FC	TREH
FC8EH	I am using Eduhouse frequently	FC	TREH
FC9EH	I like learning online	FC	TREH
FC10EH	I prefer learning in person	FC	TREH

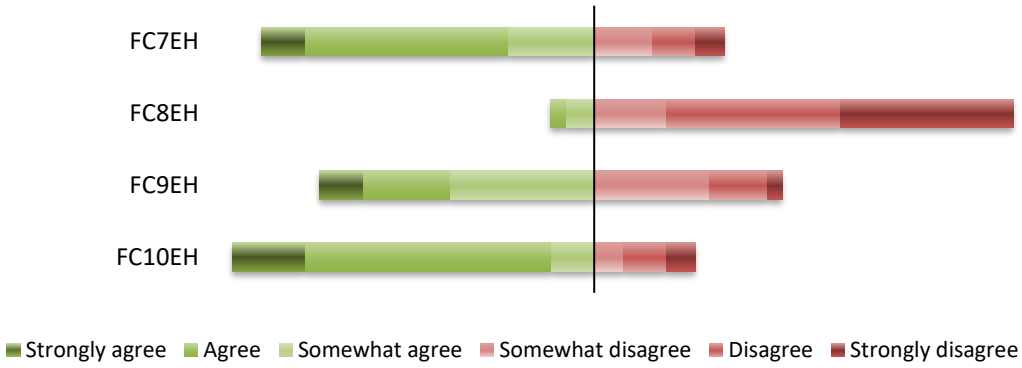

Figure 25 Eduhouse Perceptions Frequency Chart

Particularly, teaching through videos does not seem to be the best approach. Throughout the operating phase, participants had the chance to refer to an online video tutorial where the new process was explained in detail (Appendix 2/5, A26-29). However, in total, only five participants went ahead and watched the tutorial. Even after pointing to the existence of the tutorial multiple times (Appendix 2/5, A50)., users preferred being walked through the process face-to-face. This behaviour gives reason to believe participants are not keen to watch educational videos as a training solution.

C12: Inertia of utilising educational video material

Since the online tutorial approach did not bring the expected results and difficulties in understanding the new process among the participants became apparent, it was decided to take matters more actively. Hence, the researcher started to conduct weekly Microsoft Teams meetings where participants could freely join and ask questions about the new process and M365. Although issues like the previously mentioned content confusion came up, overall feedback on the sessions' impact on general understanding of M365 was positive. About 20

participants stated that the meeting insights found application in their daily work and perceived the sessions helpful for understanding aspects of M365.

Table 26 Q&A Session Perceptions

ID	Q&A Sessions	Construct	Category
FC11QA	I have applied insights gained in the meetings to my daily work	FC/UB	TREH
FC12QA	The meetings helped me better understand parts of M365	FC/UB	TREH

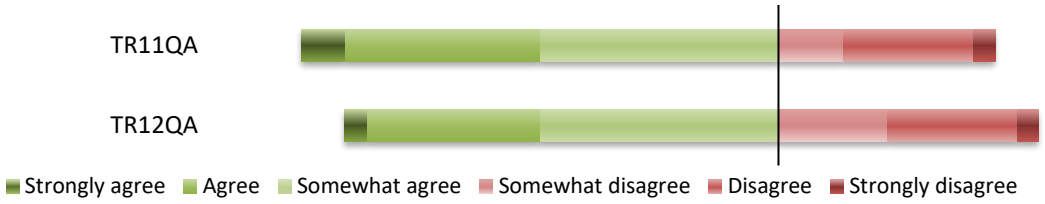

Figure 26 Q&A Session Perceptions - Frequency Chart

In addition to participant perceptions, user metrics of the Power App indicate the impact of the Q&A sessions on use behaviour. Figure 27 depicts the Power app launches per day over the course of the operation stage. Highlighted in grey are the dates of the four Q&A sessions. It can be seen that spikes in the number of app launches occur around the dates of the Q&A sessions.

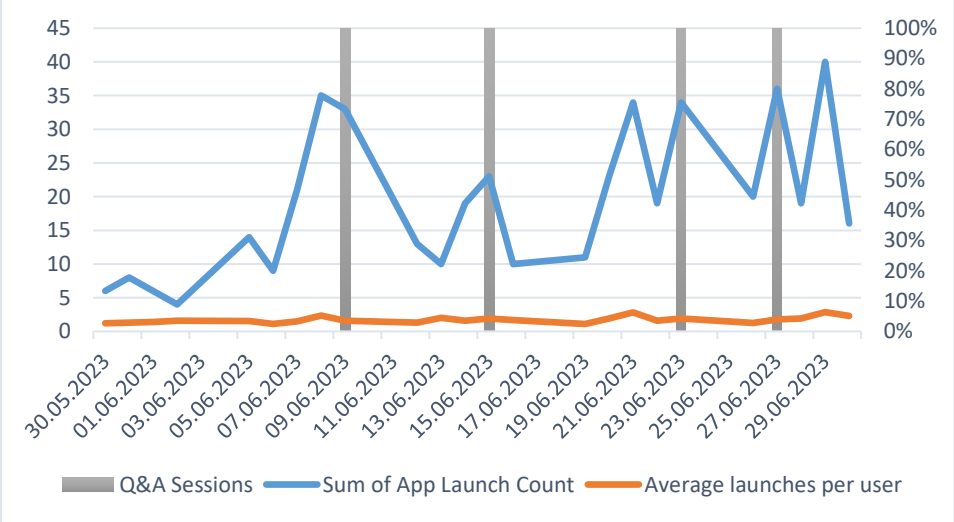

Figure 27 Power App launches in relation to Q&A sessions

Similar spikes can be seen in Figure 28, which highlights the sum of active users working with the Power App per day.

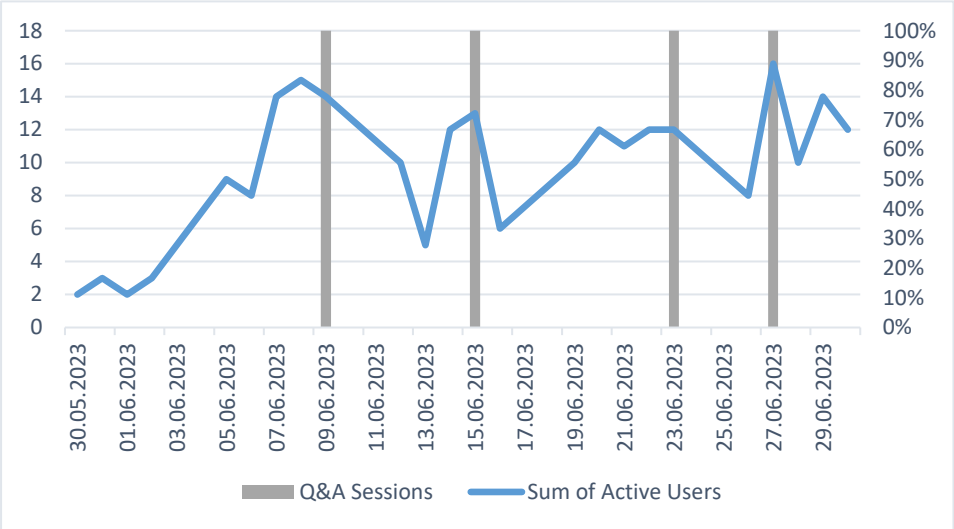

Figure 28 Active Users in relation to Q&A sessions

As both graphs show the relationship between the use of the new process and the Q&A sessions, together with perceptions in Figure 26, it can be concluded that such an active approach to training can induce use behaviour.

Nevertheless, there is room for improvement regarding the diffusion efforts for the Power App, as almost half of the participants stated they had received insufficient instructions on how the tool works (Figure 29).

Table 27 Perception of Power App Instructions

ID	Power App	Construct	Groups	Category
A1FC	I received sufficient instructions on how the tool works	FC	Sales (Sales (Truck))	A

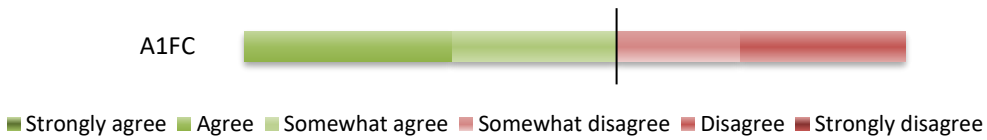

Figure 29 Perception of Power App Instructions - Frequency Chart

Another aspect outside of the end-user training is facilitating conditions for the key users designing processes around digital innovations. The twenty-minute

expert sessions MAN offers do not suffice to build robust solutions with M365 as a person without a software developer background. In the development phase, I made several mistakes that could have been avoided if I had had a person to whom I could have quickly turned. The fact that I needed to wait for advice for at least a week, given I managed to obtain one of the meeting slots, led me to continue developing and incorporating flaws. Although I had access to the user communities designed for peer support in M365, they were not helpful for the complex questions related to the Power Platform.

After reflecting on the action research, Gunner Kommisrud concluded that lack of support applies not only to the people developing the solutions but also to the managers governing the processes.

[…] We're left alone again to mess up, but mess up in a different way. […] We are not developing processes for a living. We are using the processes to obtain other goals. […] Our need is to solve business problems, and it should be. That's why I'm hired here to fix other things than making digital processes. So I think there is a need for help. None of the departments are really there to make IT solutions." (Appendix 1/8)

C13: Lacking support for process owners and developers

The research has shown the need to advance the facilitating conditions at MAN Norway. Out of the four constructs described in the UTAU model, facilitating conditions is where MAN Norway has the most room for improvement.

5.6 Behavioural Intention

The measurement for the behavioural intention to use M365 is split into the general intention to adopt aspects of M365 and the intention of creating content and automation.

It can be observed that participants predominantly intended to adopt features of M365 in their work before the implementation (Figure 30).

Table 28 Behavioural Intention/General Pre-Implementation

ID	Behavioural Intention/General (Pre-Implementation)	Construct	Category
BIpre1	I was looking forward to adopting different features of M365 in my work tasks	BI	PREIV

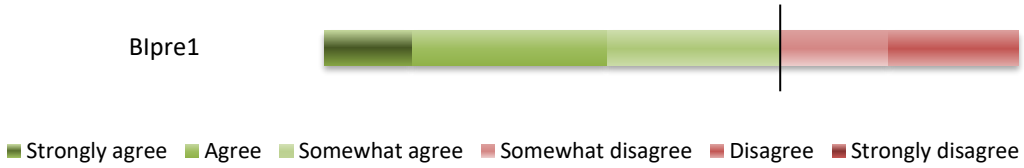

Figure 30 Behavioural Intention/General (Pre-Implementation) Frequency Chart

However, a strong aversion can be seen when considering the intention for content creation and automation before the implementation (Figure 31).

Table 29 Behavioural Intention/Content & Automation Pre-Implementation

ID	Behavioural Intention/Content & Automation (Pre-Implementation)	Construct	Category
BIpre2	I was planning to create own content to share with others in M365	BI	PREIV
BIpre3	I was considering creating my own automated processes using M365	BI	PREIV

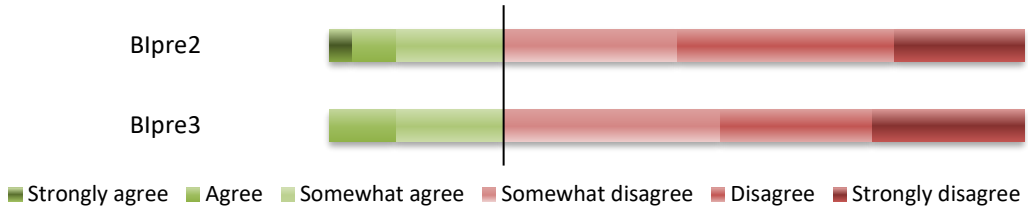

Figure 31 Behavioural Intention/Content & Automation (Pre-Implementation) Frequency Chart

After the implementation, this aversion shifted, and employees dominantly considered creating content and automation a possibility for them (Figure 32).

Table 30 Behavioural Intention/Content & Automation Post-Implementation

ID	Behavioural Intention/Content & Automation (Post-Implementation)	Construct	Category
BIpost2	I can imagine creating own content to share with others in M365	BI	POSTIV
BIpost3	I can imagine creating own automated processes using M365	BI	POSTIV

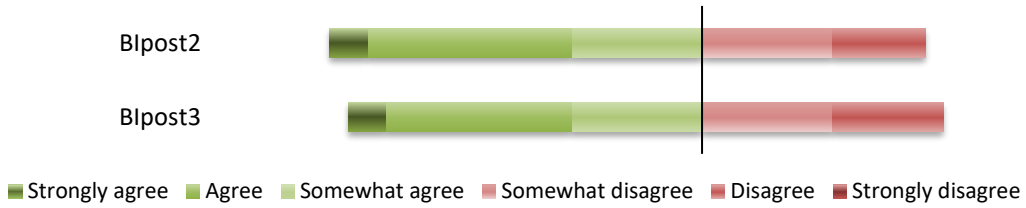

Figure 32 Behavioural Intention/Content & Automation (Post-Implementation) Frequency Chart

When analysing the project's impact on their intention to create content and automation, participants are very split in attributing positive influence to the project. (Figure 33)

Table 31 Behavioural Intention/Content & Automation Impact

ID	Behavioural Intention/Content & Automation (Impact)	Construct	Category
BIimp2	The project inspired me to create my own content to share with others in M365	BI	POSTIVIM
BIimp3	The project inspired me to create my own automated processes using M365	BI	POSTIVIM

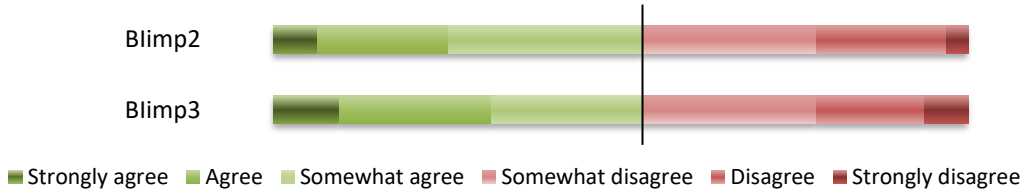

Figure 33 Behavioural Intention/Content & Automation (Impact) Frequency Chart

Correlation analysis highlights that moderators significantly affect the intention to create content and automation. Calculating Cronbach's alpha values for the variable related to creating content and automating processes shows significant reliability for pre-implementation intention (BIpre2 BIpre3), post-implementation

intention (BIpost2, BIpost3) and the project's impact on intention (BIimp2, BIimp3) (Table 32).

Table 32 Behavioural Intention Content & Automation

Combined variable	**Cronbach alpha**
BIpre2 BIpre3	0.926
BIpre2 BIpre3	0.835
BIimp2, BIimp3	0.953

A moderate negative correlation between age and experience with creating content and automation can be observed at all stages of implementation (Table 33).

Table 33 Level of Involvement Correlations with BI

Stage	**p**	**r**
Behavioural Intention/Content & Automation (Pre-Implementation)	0.006	-0.477
Behavioural Intention/Content & Automation (Post-Implementation)	0.008	-0.458
Behavioural Intention/Content & Automation (Impact)	0.009	-0.454

On the other hand, the level of involvement shows a moderate positive correlation with both post-implementation intention to create content and automation (p=0.026, r=0.394) and the project's impact on intention to create content automation (p=0.026, r=0.392).

It can be drawn that the level of involvement in the project positively influenced the intention to take more advanced aspects of M365 into use.

This relationship can also be observed by the number of requests for Teams channels expressed throughout and after the operating stage. A total of seven channels were created as a result of these requests to accommodate new or modified processes in M365 (Table 34).

Table 34 Requested Teams Channels

Teams	Planned Processes	Date
MTB NO Sales	Price approvals and internal collaboration	04/06/2023
MTB NO Technical Support	Support for technical topics concerning workshops	06/06/2023
MTB NO Product Marketing	Information distribution about the product news	15/06/2023
MTB NO Drive Rollout & Training	Information distribution about D.R.I.V.E project	10/08/2023
MTB NO HRM Internal	Internal collaboration between HR Norway and HR Denmark	18/08/2023
MTB NO IT	IT ticket system for issues and news about software updates	01/09/2023
MTB NO Market Communication	Collaboration platform for ICS testing between Norway and Denmark	06/09/2023

Additionally, seven out of eight participants not directly involved with the Power App stated they both heard about the tool, and it raised their awareness of automation with M365 (Figure 34).

Table 35 Power App Awareness

ID	Power App	Groups	Category
A6	I have heard about the tool	Sales (other)	A
A7	It raised my awareness about the possibility of automating processes using M365	Sales (other)	A

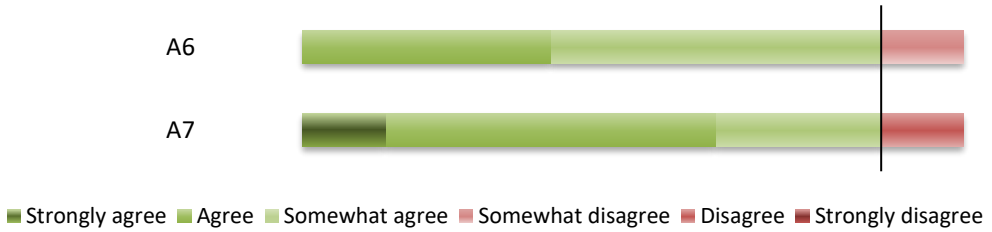

Figure 34 Power App Awareness Frequency Chart

5.7 Use Behaviour

Despite the many obstacles encountered during the action research, general perceptions about the project are predominantly positive. Furthermore, throughout the operating stage, daily Power App users reached a relatively consistent count of daily users above ten (Figure 28).

After the implementation, a vast majority of 28 of 32 participants claimed to have adopted different features of M365 in their work (Figure 35).

Table 36 Use Behaviour /General Post-Implementation

ID	Use Behaviour /General (Post-Implementation)	Construct	Category
UBpost1	I adopted different features of M365 in my work tasks	UB	POSTIV

Figure 35 Use Behaviour /General (Post-Implementation) Frequency Chart

Although not all attribute their adoption decision to the project, most participants do. (Figure 36)

Table 37 Use Behaviour/General Impact

ID	Use Behaviour/General (Impact)	Construct	Category
UBimp1	The project made me adopt different features of M365 in my work tasks	UB	POSTIVIM

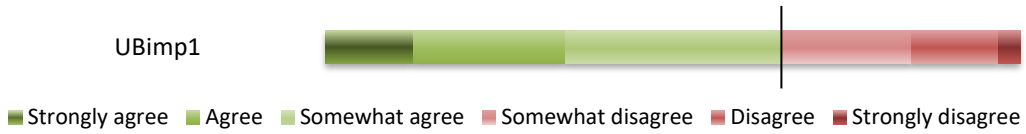

Figure 36 Use Behaviour/General (Impact) Frequency Chart

The correlation analysis between the level of involvement and use behaviour shows a significant moderate positive relationship. Additionally, the result remains significant in linear regression analysis (p= >0.01), suggesting that the level of involvement can be seen as a direct predictor for adopting different features of M365 (Appendix 6/1).

This suggestion is supported by the significant correlation between the level of involvement and the project's impact on use behaviour. Again, the finding is quantified by the significant relationship in linear regression analysis (Appendix 6/2). Since both variables for use behaviour show a meaningful relationship with the level of involvement, it can be concluded that the degree of participation in the project positively affected their adoption behaviour. For this reason, the null hypothesis is rejected, and instead, the alternate hypothesis is accepted.

Ha: User participation positively affects adoption behaviour.

Another aspect that should be highlighted concerning the level of involvement is the varying degree of voluntariness depending on the user group. The project has shown that user groups indirectly mandated to involve themselves in the project reaped more adoption benefits than those with more or completely voluntary participation. This insight aligns with Karahanna et al.'s finding that initiating social pressure can reduce initial inertia to adoption (Karahanna et al. 1999, 199).

One aspect that becomes apparent when looking at the current state of the adoption of M365 at MAN Norway is the little incentives provided by the company to change behaviour. After implanting M365, none of the processes were adapted to utilise the full potential of the innovation. Instead, all processes tailored to the possibilities of Office 2019 remained the way they were before implementation.
C14: Processes are not suitable for the digital innovation

The final challenge that can be drawn from this study is related to the absence of measuring and guiding the adoption process at MAN Norway. No one is appointed responsible for leading and guiding interventions locally.
C15: Lack of governance over the adoption process of digital innovations

6 CONCLUSION

The research shows that MAN Norway faces 15 significant challenges in adopting digital innovations. In the context of M365, the company can work on overcoming these challenges to learn about diffusing future implementations of digital innovations. The following chapter finalises the research by categorising the various obstacles to the interventions described in TAM3. Further, it reflects on the most crucial aspects MAN Norway must consider to diffuse future digital innovations successfully.

6.1 Design Characteristics

When looking at the obstacles related to design characteristics, MAN Norway needs to consider available applications. Salespeople, for instance, have to work

with SalesForce, SuperOffice, SAP, and two other custom internal systems. The research does not question the need for all of these tools, but with the implementation of M365, many new features that can be perceived as overwhelming are put into the equation (C4). Therefore, it is advisable to structure digital innovations as concisely as possible and reduce the number of new solutions end users have to deal with. M365 has the option to have all applications linked to Teams, making it possible to build solutions incorporating all possibilities but users need to actively confront only one tool at the beginning of the adoption process. Tightly linked to this solution is the issue of having no guidelines for how solutions should be structured and designed (C5). MAN Norway must avoid the situation in MAN Germany, where solutions evolved into what they are today instead of being developed as a recognisable tool (cf. Appendix 1/4). Therefore, setting ground rules about folder structures and interface design is vital.

6.2 User Participation

The research provides significant evidence for the effectiveness of utilising user participation as a diffusion measure. Contrary to the original description in TAM3, the study proves the applicability of user participation in a post-implementation context. A crucial aspect of user participation is its potential to convey the advantages of a digital innovation very straightforwardly. One of the challenges described in the research is the inertia of experienced people to accept the benefits of M365 (C2). This position is understandable as these people have been dealing with the same approach for years, which may have worked fine for them. Therefore, the “key point for success is that the ones that own the process […] are putting up something better than before. And the motivation triggered by seeing things working […] and the feeling of "this is working better than the old one" will be the most important driver to success.” (Appendix 1/8)

6.3 Management Support

One of the interventions with the most potential impact at MAN Norway is management support. The research names three significant challenges management must address to reach the critical mass of adopters. First, it is evident that management inadequately induces employees' use behaviour (C8). Second, it can be observed that no effort has been made to adapt the existing processes to the potential of the digital innovation (C14). Finally, there is almost no governance around the adoption process of digital innovation (C15). MAN Norway is planning a process mapping in the 4th quarter of 2023 to assess existing processes and eliminate waste. This action can be an excellent opportunity to look at each procedure in light of the options provided in M365 and redesign them accordingly. However, this approach requires the managers to be willing to change their processes with M365 and provide support for their subordinates. To address the lack of governance, MAN Norway needs to appoint a responsible person or task force as a change agency that measures, observes and diffuses the adoption process of digital innovation.

6.4 Incentive Alignment

Another relevant aspect when diffusing the adoption of digital innovations is incentive alignment. The study highlights the different stakeholders' performance expectancies with digital innovations (C4). A crucial part of building solutions with digital innovation is that benefits need to be equally apparent to users on all sides of the process. If this situation is not given and one user group feels that another group reaps more significant benefits than them, it can intervene with adoption. Additionally, it can be observed that not all aspects of an innovation are of equal relevance to different adopter groups. (C3). This difference in perceived relevance is even more significant when looking at MAN Norway's potential adopters, which include more than ten different departments (Figure 11). To better understand the varying needs of employees, it is advisable to categorise them into groups. The best practice of Microsoft suggests differentiating between standard users, champions, developers and IT experts in the context of M365

(Gatimu & Hwang, 2022). Since the headquarters' IT governs the technical aspects of digital innovations, the IT expert group can be ignored in the context of MAN Norway. Utilising the other three user groups for targeted diffusion measures by the change agency can result in more perceived relevance by the individual. The final challenge related to incentive alignment at MAN Norway is the difficulty adapting design characteristics to the needs of most users. As a developer, it is easy to get lost in details that may be perceived as relevant to some but do not hold significant value for most users. Hence, engaging in conversations with the stakeholders early in the development process is recommended to avoid wasted time and unsuited solutions.

6.5 Peer Support

The study depicts that most participants value coworkers' opinions and refer to them if they have issues related to M365. However, MAN Norway provides insufficient support to nurture and utilise this relationship to diffuse the adoption of M365 (C9). To increase the impact of peer support, MAN Norway can provide a joint Teams chat related to community support. This channel can be seen as the counterpart to the German users-help-users chat. Furthermore, change agents could use the influence of opinion leaders to address pressing adoption matters or to highlight individual stories of successfully overcoming challenges related to digital innovation.

6.6 Organisational Support

It is indisputable that the organisation must also play its part in diffusing the adoption of digital innovations. One aspect where the organisation has to step in is the time constraints of individuals preventing them from experimenting with innovations (C7). It is up to the organisation to provide enough leeway for individuals to utilise user participation. Concerning salespeople, little incentive is offered to partake in active interventions as they take time away from their sales, potentially jeopardising their commission. Therefore, it is advisable to look at extrinsic motivation to diffuse adoption.

Another significant issue is the lack of support for process owners and developers (C13). Neither process owners nor developers are experts in redesigning procedures using M365. Process owners or managers are hired to solve business problems, while developers in M365 generally do not come from a software developer background but have a nag for technical features. A possible solution to the lack of support could be hiring an expert who can help the process owners with in-depth product knowledge about the innovation's possibilities while assisting developers with technical issue resolution. Furthermore, this expert could provide valuable input in the suggested community teams channel and help standard users with day-to-day issues.

6.7 Training

The most negatively perceived aspects associated with implementing M365 are the training interventions used by MAN Norway. Participants perceive the offered training as insufficient (C10), and the training approaches are too monotonous (C11). Hence, MAN Norway needs to rethink how it has conducted training. One aspect would involve increasing and diversifying the training, by utilising the workshop offers provided by Microsoft and Eduhouse. Participants stated their preference for one-site training, making workshops a suitable solution.
A further challenge identified in the research is the hesitancy to utilise educational video material (C12). A common attribute of online education is the sheer amount of content available, which can cause information overload for individuals. To tackle this issue, Eduhouse offers customisable study plans. MAN Norway could utilise this feature to tailor online training to the needs of specific adopter groups, increasing the perceived relevance. The final recommendation relates to the reinvention of the Champions project. Having specific users with high innovativeness helping others is valuable for offering training and utilising peer support. However, MAN Norway should govern this project instead of outsourcing this task since this was one reason for the initial project's failure (cf. Appendix 1/2). MAN Norway must start working on internal training competencies for digital innovations instead of solely relying on externals.

6.8 Future Digital Innovations

The research shows many significant aspects for MAN Norway to consider regarding the diffusion of M365. However, not all of these insights are generally applicable to digital innovations. The critical element drawn from this research is the significance of sophisticated interventions.

MAN Norway must emphasise governing the adoption process and appoint change agencies.
Additionally, it is crucial to rethink the existing processes as part of implementing a digital innovation. Further, management needs to be on board and induce the use of the new features. Relatedly, different adopter groups must be considered and persuaded to support one another during adoption. If internal know-how is lacking, the organisation should bring in external expertise to support process redesign and diffusion. At the same time, this requires the organisation to start developing internal expertise about the digital innovation. Finally, training approaches need to be diverse and tailored to the needs of adopter groups.

The most essential aspect established through the insights of this research for taking new digital innovations to use is user participation. Mainly, the mandatory scenario of user participation in the early stages of implementing future digital innovations should be utilised at MAN Norway.

Gunner Kommisrud summarises his insights derived from the project as follows: *“We need to force users and force them to realise that things are good. […] They need to be somehow pushed over the line, and then they will respond back with feedback. Either it's good or bad. But only when you have pushed them over the line, will you have something back. Before that, they will just sit and wait*.” (Appendix 1/9)

6.9 Reliability and Future Implications

Limitations of the study are related to the sampling for the analysis and the transferability of the findings to other scenarios.

Since this research revolves around a somewhat skewed sample in that participants were not selected randomly, have a relatively high mean age and are predominantly male, findings may differ from studies using a randomised and more diverse sampling. Further, the nature of action research includes opinionated tendencies by the researcher as observation throughout the various stages may be weighted subjectively. Additionally, the survey was available in Norwegian, and most participants used this version. Yet the researcher is not fluent in Norwegian, and although a native speaker revised the translated survey, contents may have been lost in translation.

This research is not well suited regarding transferability to other scenarios and companies. The findings presented in the study are tailored to the observations made at MAN Norway and the opinions of its employees. Hence, too many variables are not considered when applying the insights of this study to companies with different demographics and sizes. Additionally, the research focuses on employees with some experience with preceding versions of the innovation, making it unsuitable for transferring findings to adopter groups with less experience, for example, in the context of MAN Norway, this would involve Mechanics.

Finally, future implications of this study should further investigate the value and possibilities of user participation in diffusing adoption in other scenarios. Especially in light of the drastically evolving AI technologies, future studies should research their adoption and whether user participation is a valuable intervention for diffusion in this context. Additionally, the lack of support for moderating effects of age and experience should be reviewed in a similar context with a more diverse sample.

Moreover, the role of gender was not considered in this research, making it vital to assess its impact on adoption behaviour in future research. The last aspect that should be studied is the difference in challenges related to adopting digital innovations that are entirely new to the adopter group.

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7.1 LIST OF FIGURES

7.2 LIST OF TABLES

Appendix 1/1

INTERVIEWS

Excerpt of Interview with Bjoern Einar Frengsted (IT Manager at MAN Norway)

Interviewer = A:
Interviewee = B:

A: Can you provide an overview of the implementation process for Microsoft 365 in Norway and the key steps and milestones?

B: This was a common process for all countries. The only thing we had were common emails we had from headquarters. And you can say that all the workflows we did were within the IT meetings we were sitting in. So there were two separations. The business champions had their own meetings. And we also had team managers. We had overall meetings and tasks and technical tasks to extract all data and get all the proper information into the Headquarters system from our systems.

A: Then the initial step was basically to migrate from the local drives here to the cloud environment in Munich!?

B: Yes. The main reason for running over was that the management wanted to have a common system, and Teams was the driver for everything. The priority for the implementation of M365 was 99% to have Teams running and a common outlook. The advantage of Outlook was that mailing lists became available, so that was also a big thing.

A: So then the other features of M365 were secondary. Did they even include them in the training sessions later in Business Champions, or was that just OneDrive?

B: No, for the Business Champions, almost everything was about Teams. I think that they didn't touch Outlook at all. Because they were familiar with Office from earlier, so they were not involved in other processes on teams.

A: Can you give me a brief time frame when what happened? Because the Champions project was way earlier than the implementation of M365 at MAN Norway, right?

B: Yes. Also because of holidays, lack of equipment and because of other things happening. Ukraine, et cetera, the project was pushed back. The time schedule was changed during the process. Yeah, but the Business Champions project, was a part of Q three last year.

A: And people migrated to the new system in the first quarter of this year.

B: Yes!

A: That means the Business Champions project was already finalised when the technical part of the implementation was not finished.

B: Yes!

A: From what I heard, all the people who were involved in that Business Champion project were solely working in a cloud test system, not on the desktop solution, because they didn't have access to their own accounts at that time.

B: Yes. People were scheduled after needs and workshops, and the rollout process was done over three months.

A: Okay, but that's something we can pick up on because one of the questions was whether there was some differentiation between the different user groups. For example, Sales and the workshop leaders had different use cases for Teams.

B: Yes, because for instance, Salesmen, they are communicating to each other, so we concentrated them into one batch. That approach was taken across all departments, so to put them up, it was like Filial managers and Salesmen, they were sitting in groups.

A: But then, if that categorisation was intended from the beginning, is there a reason why after the implementation, that categorisation was not taken over? For example, having a Teams channel for the different groups? So workshops and Sales would have an internal Teams channel. Because after the implementation, there was no central team for any of the tasks related to the groups.

B: There was one for the Business Champions. They can place and ask. And they also had support. They could call and email directly to Munich, and they also did that a lot in the initial phase.

A: What I just referred to is that there has been no real idea of the setup afterwards. I mean, they did the training, but then, from what I could see, there was no emphasis on structuring how they would work later. Was there some sort of governance over how people should work later? Was that part of the discussion?

B: Yes, that was why they placed an external company to help solve these issues for the Business Champions. But unfortunately for us, the person who was in charge of this external IT, left the company in December. So he was definitely the far, far more skilled person in this project. And he was also sending a lot of emails and also had a lot of updates towards Munich in this Business Champions Teams channel.

A: So then the ideas that were collected during the Champions Project were then not transferred to the real-life situation?

B: No, because we had such a lack of employees. The biggest skills got lost when the two highest-rated people fell out of the group. And additionally, some business champions didn't want to participate anymore because of the time the project was consuming. And we also had to transform our IT architecture and solution in this phase. So we couldn't follow the central demands of doing this and that. And we also had to roll out PCs and our own Intune solution, which is a solution Munich is rolling out during the next two years coming up in 2024 and 2025. This we must implement now; in the same phase here. So that was taking far more hours than the Microsoft 365 project because, for the Intune solution, we used maybe 60-70% of our time and 30% on M365. So building up the Intune solution is by far the most important thing in the project. And additionally setting up and rolling out about 200 PCs. As soon as that is done, we can start to roll out 365 and migrate their PST files and setup their environment.

A: So you could say that they took the second step before the first one with that project for MS 365 because Intune needed to run before M365 could be used. So then you had no capacity to try to get the employees to work correctly with the tools.

B: Yes, we had to. I think Torbjørn spent at least two hours on each user in terms of setting up the environment together with them.

A: But that was just technical. That was not how to use the tool, right?

B: A mixture.

A: So then they had some sort of training beforehand, but that was just when they received the device.

B: Yes!

A: Maybe now we can go a bit more into the current training opportunities that MAN Norway offers. I'm not sure how involved you are in the Eduhouse solution we have right now.

B: I'm not involved Because there are no courses for IT. It's not usable for us, and we have a similar portal for IT.

A: But then, do you know who governs this adoption project? Is there anyone assigned to improving the tool's usage, or is that just delegated to IT, but IT doesn't have time to deal with it?

B: No, in all countries, it should not be IT. That's why we have the Business Champions; they should transfer this knowledge.

A: Okay. Then maybe you can rate the Business Champions project. You picked the people that were involved in that project, right?

B: It was done together with branch managers around the management group. And they made the proposals for the people., based on available time and motivation.

A: How would you rate the knowledge transfer by the Business Champions? Because, in theory, the adoption was then made responsible to them. They were the people that should train their colleagues. But what's your estimation? Did the people actually follow up on that? Did they know how things were working?

B: No, as I said, because most people with real skills left the group. And then, the solution and the support were also stopped from Munich's side. So then it doesn't make sense to try to onboard someone else.

A: Could you then say that the business champion solution for Norway failed?

B: Yes, the branch managers tried intensely to get more resources and headcounts, but the management did not allow it. We didn't get more people. We had to fire a lot of people, and people also got another work or another employer. In that case, it was also coming because of our bad economic situation during the time frame.

A: Now, comparing it with the current training, do you know anything about if people are using Eduhouse or if it provides, in your opinion good solutions for getting the staff trained on M365?

B: No, I have no idea about that because it's HR's topic. They have ownership of the program.

A: Let's go away from the training aspect for now. Currently, the whole creation of Teams, Sharepoint Sites and everything is done by the users. Is there any plan or governance over how these Teams and SharePoint Sites should look? How should they develop over time, and how are they linked? Is there any plan, or do you know of a story in Munich where they have created guidelines on that?

B: Yes, but unfortunately, that was done during the setup, and after we went live, we were missing the background because the external experts on all areas disappeared from the project. And then, the internal people had to take over, and they were not experienced. They couldn't see directly how they should make the architecture and split for the different departments. But after a while in Germany, they tried several solutions internally, and they had to go back to the basics because their build-up failed. So they see that because of the amount of data and the portal's functionality, instead of having everything under one umbrella here and there, they have to place it on different levels for each department because then you are flexible, and it is not stopped because of Gigabytes. The naming standard is also important and. each department was heavily involved in meetings, after-sales, finance and It, et cetera. And so you can see how they manage it centrally, but you can't easily establish your own SharePoint sites and teams groups because there are many standards and difficulties in jumping between departments. So it's up to each NFCs more or less to find their common setup, so all the users can be familiar with the setup. Not only does it mean that you must have a plan for it so each group cannot decide for themselves what the name should be, et cetera, but we also have the same on the global address list. The standard came out when all the NFCs had already started the process. And that's why you can see there are many different standards because they made a white paper. But I think Norway is, I would say, in a good position now to structure how we work with all these different SharePoint sites and how we structure teams and the file structure, especially in Azure.

A: So do you think it makes sense to spend some time on defining a plan with multiple departments and see how everyone works together and see what kind of folder structure, for example, or layout of a SharePoint is universal so that you can take that over in the different sites?

B: Yes, that is important, and that is why we see that we have good control over it because we know who is in the start phase and what they are looking for. And what you have done for after-sales, for instance, we also know that you can link that to back-office and HR wants the same. And then, you can take advantage of the first setup and make a copy of the naming and also the setup in those departments. You can take advantage of just some of the few futures and have a very basic, simple setup. But the most important part is that you can feel some familiarity when jumping from one department to another since many here have to do that. It's what they do in the yellow folders. Also, many are part of several departments and need different kinds of information, then it's important. But like I've seen in the SharePoint structure in Munich, which was built up over years, there are many difficulties because different persons have been involved and are thinking differently. After Easter this year, they have tried to do a more common setup that works well.

A: But then it's very valuable now that we are initiating all these changes that we do it right from the beginning so that we do not face these problems later!?

B: Yes! And in fact, I think we have good control over, especially the Team-script, because not too many creative people are starting and doing things locally. They're waiting, and that is also a good thing. If we have had very eager champions earlier, then we may have had an issue with the standardisation. If they could have taken the opportunity and had the advantage to make an environment, it would be relatively easy to establish things differently. So that is the advantage of being a little bit late. Now we have more control over the information and how to unify the different departments there. So it's better to spend some extra days on it and do it in a good way.

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Appendix 1/6

Interview with Gunner Kommisrud (Head of Service Products at MAN Norway)

Interviewer = A:
Interviewee = B:

A: How do you envision Microsoft 365 improving your overall productivity and efficiency as well as that of your team and colleagues?

B: I think the most important part of it for a start is the team's functionality because we had very bad tools for collaborating team remotely, and we have had that for years, and in fact, we have survived the COVID period without having a good collaboration tool. And it was first when we had teams that we could, for my department, at least have a conversation with picture and sound with all of my employees that are working remotely. So obviously that will be the biggest leap forward for our department and our business. Now that we have seen it a little bit more, there are many collaboration tools and ways of working together on the same content that really would help us in the future. We can come back to these possibilities because we are not really mature to take them into use. Also, we have been lacking a platform for sharing information, like an internal website or intranet or whatever. We haven't had that, so in that terms, it fills in a gap, but we may not be too well set for taking it into use.

A: Do you already have some concrete issues in mind that M365 could solve?

B: Yeah, first of all, it's related to the document storage issues because we have been storing documents and folders and folders and folders and subfolders and folders. So indexing all documents using tags instead of file names and folders would be a lift for us on many occasions. But it's hard to get there because there's a long way to break out of the bad habits. So that's one of the issues. And then transfer a lot of those mail-driven conversations over to teams to be faster and respond quicker to minor details in communication. That would be fine.

A: So far, has there been any structure in creating these folders of the file structure? Was there any guideline on how to use it?

B: No, definitely not. And the usage of folders has more evolved and developed over time. It's quite a good structure for some parts, not because of good guidelines, but because someone did the right things at one point and it's a mess for others. And for most of the documents and the information we store, there is too much old documentation left. We are not good enough to delete all the stuff we don't need anymore. So it's becoming completely impossible to have the full overview; additionally, different departments do it differently. So we're not really structured around any process guidance at all.

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A: You already mentioned habits as a pain point. Do you know or can you imagine a solution for overcoming these habits? One of the solutions provided by our HRM is Eduhouse, which tries to teach people how to use M365. Do you think that's a good solution?

B: It's necessary as a part of the solution. But it's not a solution in itself, in my opinion, because you can train people, but I think you need to motivate people and maybe also force them. And as I see it, it's not difficult to use the tools. It's not difficult in a way that you need to train to use the tools, but you might need training to understand the possibilities of the tools. So maybe the focus of the training should be changed a little bit so process owners will get training in the possibilities more than using the tools itself.

If you like, we have done now in some experiments, force people to use the process. We can see that at first, they don't really like it. No one likes to be forced. But then, very quickly, they see the positive effects of the tools; If it is well designed. I think a key point for success is that the ones that own the process or the department that owns the process are putting up something better than before. And the motivation triggered by seeing things working will be the driver to have it implemented in a good way. And then I think training is secondary to guidance on what to do, and the feeling of "this is working better than the old one" will be the most important driver to success.

A: Maybe we can pick up on that with regard to the service contract request tool. So can you maybe quickly summarise what you think was wrong about the old process and how it compares to the new solution using features of M365?

B: What is wrong is quite easy to explain because it's a lot of documents being sent back and forth via mail. We are storing a lot of documents which are not connected to the process. And that means that every now and then, we pick up confusion in the process. Have I sent this? Is this all right? Is there a newer version? Sometimes, we fail because the right document isn't in the right place at the right time or because we're using the wrong one. And we are communicating on different topics on each side of the table. So we are lost in transition in sending documents back and forth, with mail as the driving communication tool. And we have become a lot better at it since I started. Not because of me, maybe, but we have been better at setting demands for the process. But still, the process isn't good enough. So when we started using the tool, that is, let's call it an experiment in itself, it links all these processes together, is not really doing something new, but it's structuring the process. Obviously, the layout of the process looks different, but it's the same thing that's been done; apart from some mistakes we made when we designed the app and the new process that we put in some more demands that didn't work out. Now that we have changed, I would say the concept is exactly as it was before, but contained in one defined process containing all the information and the communication steps. And it's convenient. It's convenient for the user, and it's convenient for the management of the process. And it also stores the information for later reference. So, not introducing anything new than controlling the process. It enhances the process.

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A: Okay. We've been scratching on the resources a bit earlier in this interview. We already noticed that not many resources will be available from headquarters. So, can Norway set aside some resources to improve the situation? Resources also include buy-in for your employees. So how would you make or provide leeway for training, for example?

B: It's a very good question. It can be answered from a couple of angles, I think. But if you look at it from an organisational view of the business in Norway as a whole. I think we should have one super user or someone that really can work with the usage of the tool instead of having only the technical IT department as it is today. I think it should be room in an organisation of our size to have someone that can help out in using the IT tools, maybe also combined with some business tools from headquarter responsibility on top. But I do not think that is a plan for the organisation, but I really believe it should be room for that kind of resource in the organisation, and I think it's necessary. And if you look at it without that as a perspective, it isn't a problem to free resources for training. That is not the problem because training will typically be some hours every now and then. It's not weeks off, so that will be possible, but it's a difference in training people to use Excel, as we touched on and teaching them to automate their processes. Because a lot of people working in my department at least, do not really own processes. They own the input to the processes more than the process itself. So that's more for me as a manager to go into and say, hey, this process needs to be structured. So I need to train myself in those perspectives, and I need to drive it through myself. So at mid manager level and maybe also higher up in the managerial hierarchy, they should be trained, and they should be informed, and they should drive the processes.

A: Right, that is also true from what I have seen, working with different expertise on the managing level. So if you take the Order office, for example, how the digitisation of the processes is pushed forward right now. That's a very different level than other departments. One issue we have is that the IT will never be able to take governance of teaching people in any way. And that's also not their job. From Munich's perspective, that's not intended. And the resource they set aside is this weekly 20 minutes meeting, which I've also used a couple of times, which is nowhere near the amount of time you need to cover one little topic. So having a responsible person for the branch or the NSC could be a very valuable thing.

B: Yeah, that was exactly what I was thinking about and saying, okay, now we have a new tool. We have new possibilities. We have a lot of things that we should have cleaned up a long time ago. But now we're left alone again to mess up, but mess up in a different way. So we should really have help because we are doing other business. We are not developing processes for a living. We are using the processes to obtain other goals. So it will never be our first priority to design new processes that are perfect for the future. Our need is to solve business problems, and it should be. That's why I'm hired here to fix other things than making digital processes. So I think there is a need for help. None of the departments are really there to make IT solutions.

A: Maybe to wrap it up, we can look into your long-term vision. What do you see M365 becoming in the long run here at MAN Norway?

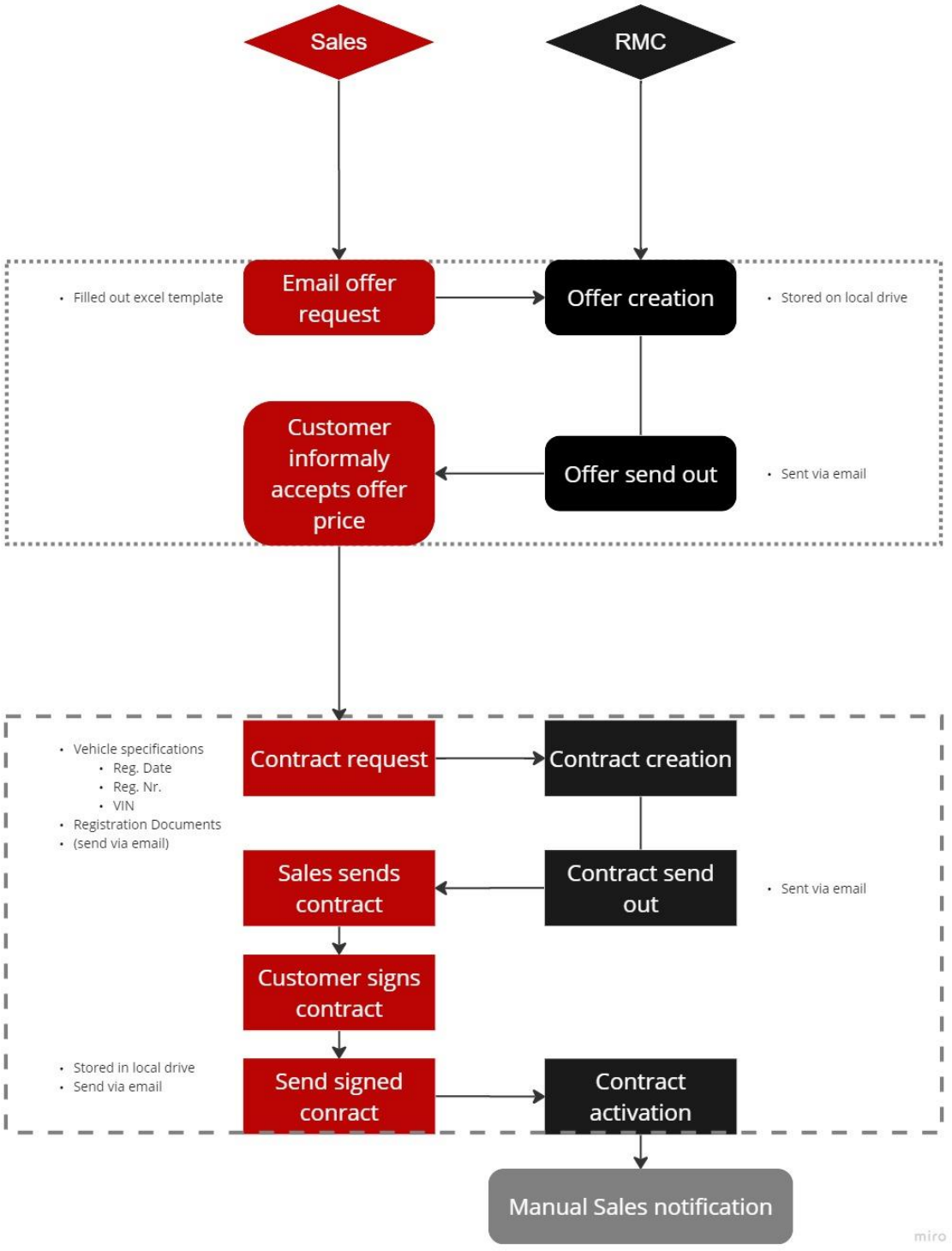
B: That's a difficult question, but I do believe document sharing will really break its way through instead of storing in folders. Of course, we will still have folders, but we will keep track of one document and work on it together instead of sending it around. And that will be a game changer for a lot of things happening in the departments. It will take some time, but it will break its way through, I think. And that will help us to be more efficient in a lot of business processes because we are smashing around with documents and stuff and lose control and make failures that could be easily avoided. Working more effectively with the IT systems. Now for the really long term vision. I don't really believe that Microsoft 365 is having that much impact. If you compare it with other strategic actions that need to be taken, but without having an effective way of communicating, getting a lot of things will be worse.

A: To pick up on that, what kind of learning can MAN Norway take from this M 365 implementation and possibly transfer to other technology implementations?

B: I think we need to force users and force them to realise that things are good. Instead of fearing M365 without trying. So that's more or less I will not say a lesson learned from this only, but it has shown that people are reluctant to take new technology into use. They need to be somehow pushed over the line, and then they will respond back with feedback. Either it's good or bad. But only when you have pushed them over the line, will you have something back. Before that, they will just sit and wait. So that's maybe one of the most significant learnings.

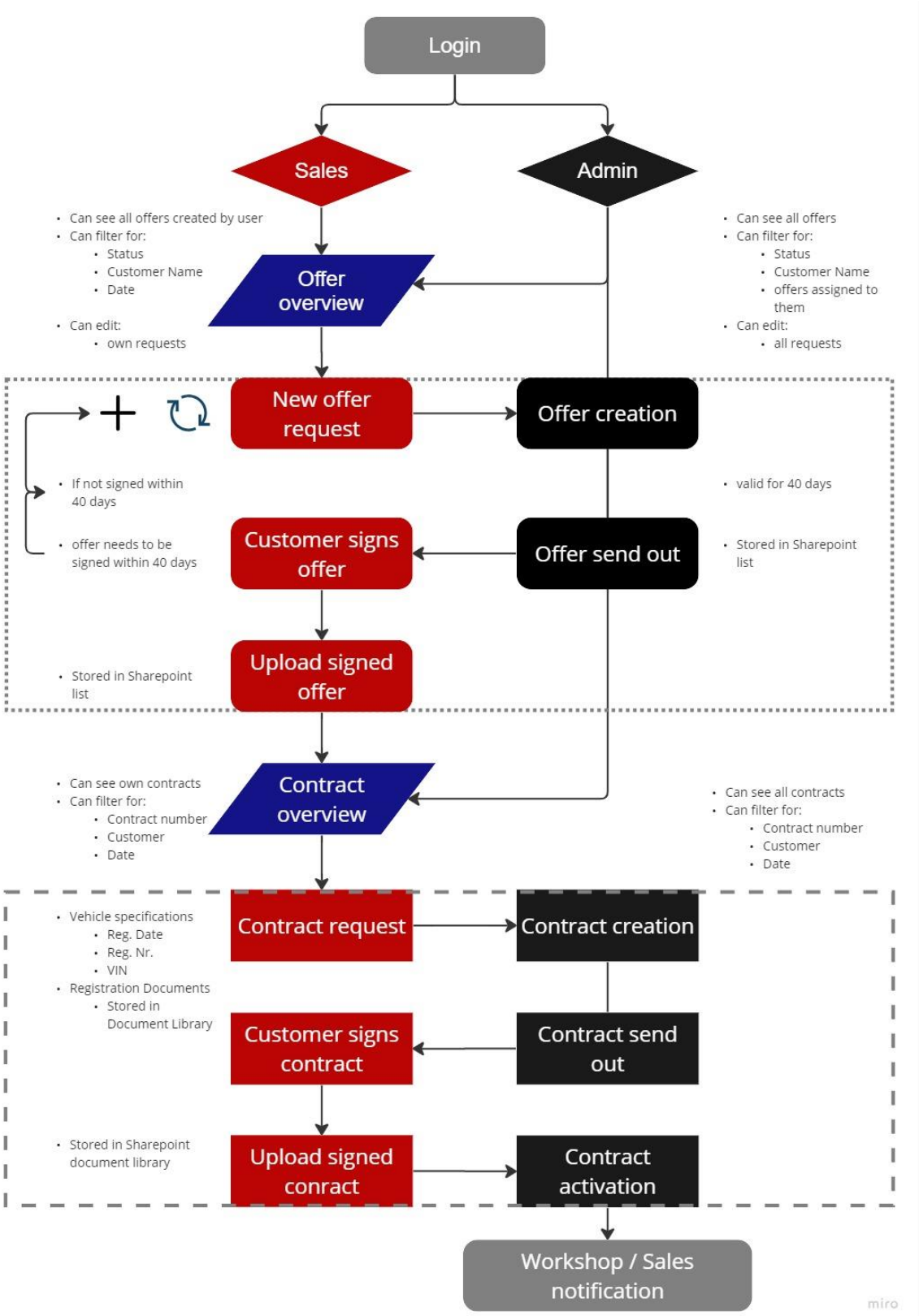
Appendix 2/1

ACTION RESEARCH
Old Process – Flow chart (17 February 2023)



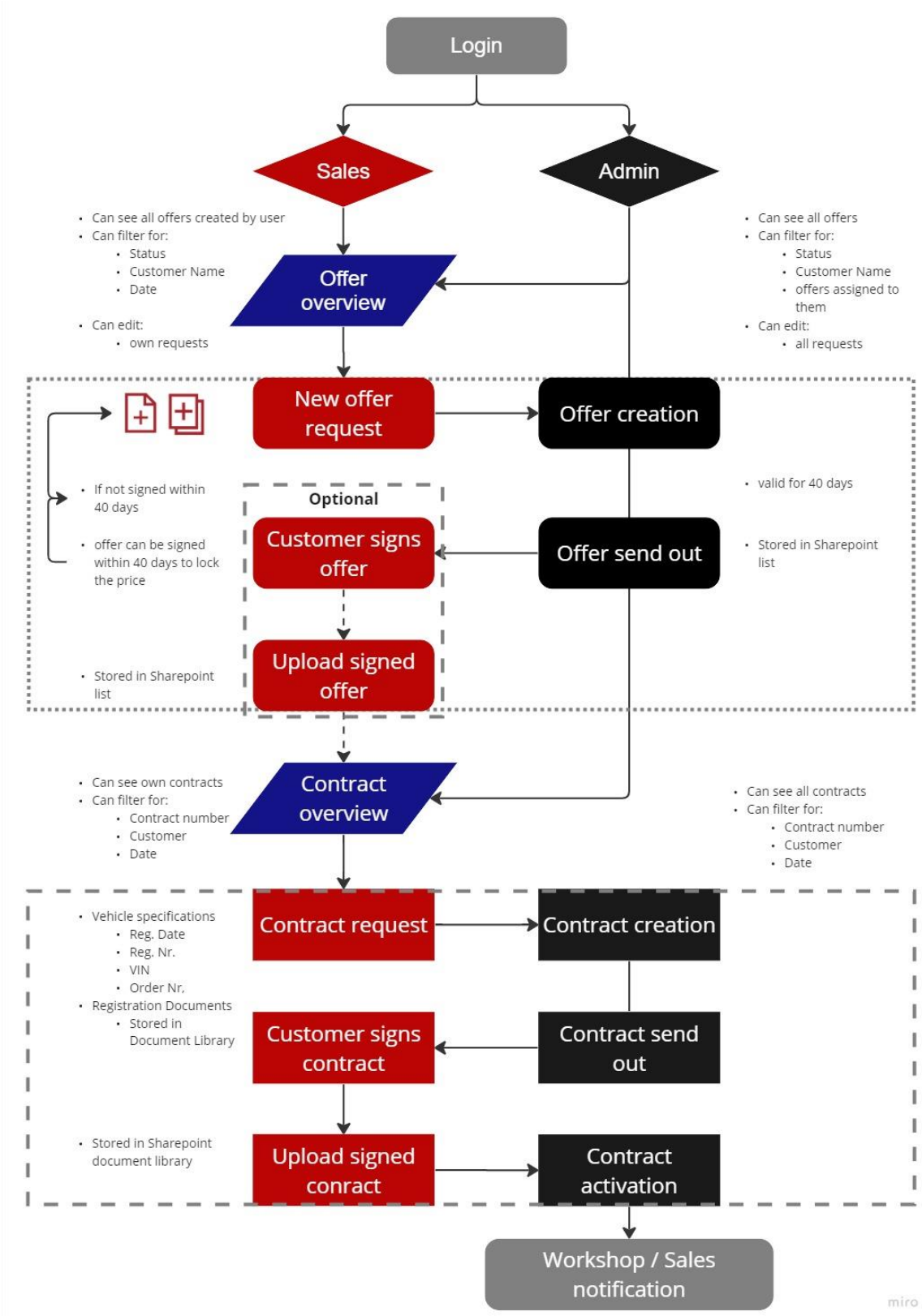
Appendix 2/2

New Process – Flowchart (2 March 2023)



Appendix 2/3

Current Process – Flowchart (18 June 2023)



Appendix 2/4

Research activities

Participants

Sales Team

ID	Gender	Sub-Department	Organisation	Age Group
PS1	Male	Truck	SE-NO-S	3
PS2	Male	Truck	SE-NO-SN	3
PS3	Male	Truck	SE-NO-SE	3
PS4	Male	Bus	SE-NO-SB	2
PS5	Male	TopUsed	SE-NO-SU	2
PS6	Male	Truck	SE-NO-SU	3
PS7	Male	TopUsed	SE-NO-SE	4
PS8	Male	Truck	SE-NO-SW	3
PS9	Male	Truck	SE-NO-SE	5
PS10	Male	Truck	SE-NO-SW	5
PS11	Male	Truck	SE-NO-SW	4
PS12	Male	Bus	SE-NO-SB	4
PS13	Male	Truck	SE-NO-SE	5
PS14	Male	Truck	SE-NO-SE	4
PS15	Female	Coordinator	SE-NO-SN	4
PS16	Male	Bus	SE-NO-SB	3
PS17	Male	Truck	SE-NO-SE	3
PS18	Male	Van (TGE)	SE-NO-SV	4
PS19	Male	Truck	SE-NO-SW	4
PS20	Male	Product Marketing	SE-NO-SE	4
PS21	Male	Van (TGE)	SE-NO-SV	3
PS22	Male	Truck	SE-NO-SE	3
PS23	Male	TopUsed	SE-NO-SU	3
PS24	Male	Bus	SE-NO-SB	2
PS25	Male	Truck	SE-NO-S	5
PS26	Female	Coordinator	SE-NO-MW	3
PS27	Male	Truck	SE-NO-SN	5
PS28	Male	Truck	SE-NO-SW	5
PS29	Male	Product Marketing	SE-NO-SN	5

Age Distribution

ID	Range	Count
1	> 28	0
2	28 -37	3
3	38 -47	11
4	48 -57	8
5	< 57	7

Service Products Team

ID	Gender	Sub-Department	Organisation	Age Group
PR1	Female	RMC	FVE-SC-NO-F	1
PR2	Male	RMC	SE-NO-MA	5
PR3	Male	Technical	SE-NO-MA	2
PR4	Male	RMC	SE-NO-MA	5
PR5	Male	RMC	FVE-SC-NO-F	1
PR6	Male	RMC	SE-NO-MA	4
PR7	Male	Technical	SE-NO-MA	4
PR8	Male	Technical	SE-NO-MA	2

Age Distribution

ID	Range	Count
1	>28	2
2	28 -37	2
3	38 -47	0
4	48 -57	2
5	< 57	2

Appendix 2/5

Action Research Activities

ID	Date	Action	Action type	Description	Objectives	Challenges	Impact	Importance	Stage
A1	14/02/2023	**Idea collection**	Organisational	Meeting with the Head of Finance Scandinavia, Head of Orderoffice Norway & Head of Service Products Norway.	Collecting Ideas from different departments on a pilot project for SharePoint, teams and Power Platform	All departments stated that they need to rethink their way of addressing digital collaboration. Therefore, picking the most generic process that can potentially benefit all turned out to be complicated.	I narrowed the selection down to the RMC department as I had the most experience with the processes.	Medium	Planning
A2	18/02/2023	**Needs assessment Service Products**	Organisational	Meeting with the head of Service Products about the need to rethink the way they work with digital tools	Clearly outline what processes and general practices need the most attention and where the integration of new digital tools has the most impact.	/	Made clear where the focus of the project should be	High	Planning
A3	24/02/2023	**Start of project definition**	Organisational	Semi-structured interview with two core members of the RMC team defining the goals and ideas for the project	Clearly defining the goals of the project.	The issue can be addressed from various angles. Finding a generic approach valuable for many departments was difficult.	Goals: Showcase opportunities, see the development process, observe issues with adoption and find their origins	High	Planning
A4	27/02/2023	**Process redesign**	Organisational	Semi-structured interview with the head of the RMC department about the old offer and contract request process for repair and maintenance service contracts	Cleary outlining the status quo of the process and determining the weaknesses	/	A flowchart of the old process was developed	High	Planning
A5	27/02/2023 - 02/03/2023	**Flow chart development**	Organisational	Creation of a flow chart of the old process and the "Service contract and offer request app" (Power App)	Crealy structuring the layout and functions for app development. & Showcasing the process flow to the users	The flowchart had to be updated several times.	Visualising the process helped pinpoint issues with the process (Appendix 2/1-2)	High	Planning
A6	01/03/2023	**Creation of Teams connected to Sharepoint Service Products**	Technical (Teams / Sharepoint)	SharePoint and Team (MTB NO Serviceprodukter) was created	Creating a hub for information distribution and digital collaboration	There is no common standard for how Teams and SharePoint sites should be set up.	The backend for data and simple frontend for users was developed	High	Developing
A7	03/03/2023	**Flow chart review**	Organisational	During the review, the possibility of adding registration documents to the offer before requesting the contract was discussed.	Incorporating more parts of the old process into the new one that was missing in the first Flow chart	/	Appendix (2/2)	Medium	Reflecting
A8	04/03/2023	**Flow Chart adaption**	Organisational	possibility of adding registration documents to the offer before requesting the contract was discussed and added to the process	Finalising the first process flow chart	Miro was not the best choice for developing flow charts. Visio would have been easier.	Flow chart includes Registration documents as part of the file storage	Medium	Planning

ID	Date	Action	Action type	Description	Objectives	Challenges	Impact	Importance	Stage
A9	04/03/2023	**Creation of Planner features in teams**	Technical (Teams)	Enabling the MTB NO Serviceprodukter task feature to test its practicality	By enabling "Planner" for MTB NO Service Products, Outlook task should be replaced	Web applications are a lot better supported than desktop applications	None. The planner feature was not used	Low	Developing
A10	04/03/2023	**Creation of a Sales Page in Sharepoint**	Technical (SharePoint)	SharePoint page for sales, including information about the new process and information related to Service Products	Share information related to sales and provide information related to the application	The option of using hub sites would have made collaboration and the establishment of a uniform user interface easier. Unfortunately, that feature is not available.	Standard Communication page related to Service contract information targeted at Sales	Medium	Developing
A11	04/03/2023	**Creation of a Channel for Sales**	Technical (Teams)	Developing a Sales Teams channel	Common communication for matters only related to sales. Storage for sales documents related to Service Products	/	Salespeople began using the channel for internal meetings	Medium	Developing
A12	04/03/2023	**Creation of Workshop Page in Sharepoint**	Technical (SharePoint)	SharePoint page for the workshop, including information about the updates related to contracts and links to essential parts in the Aftersales-Portal (an internal website related to aftersales)	Share information related to workshops and test a new way of "pushing" information to workshop and technical leaders	It was challenging to narrow down who should gain access to the page, so the content was not explicit.	Common Communication page related to Service contract information targeted at workshops	Medium	Developing
A13	05/03/2023	**Start of Power App Development**	Technical (Power App)	Development of the first version of the Power App designed to take over the email-based service contract / offer request process	Outlining the features of the application. Connection to SharePoint libraries and lists	Best practices for the naming convention for the Power Apps' backend were not considered, which led to the recreation of many list columns.	Initiated the understanding of the possibilities of power apps	High	Developing
A14	06/03/2023	**User definition and permission settings**	Technical (Power App)	Setup of permission rights for sales and Service Products based on Azure AD groups	Depending on the department, restrict access for users to the app and SharePoint.	Azure AD Setup is flawed. (People are in Ad Groups they don't work for). Made it difficult to assign permissions correctly	Variable Access restrictions for users. There is no need for maintaining accesses in the future as long as employees are assigned to correct Azure AD Groups.	High	Developing
A15	07/03/2023	**Decision to have all parts of the process in Norwegian and translation**	UEX	After a talk with the Head of Service Products, we decided to translate every part of Sharepoint, teams, and	It makes Sharepoint and the App more engaging as, except for one person, all people involved are native Norwegian	Previous steps done in English had to be translated or completely redone	Norwegian natives felt more familiar with the terms for vehicle specifications as the Excel sheet used to be in English as well	Medium	Developing
A16	08/03/2023	**Changing the status feature in the app to read-only**	Bug fixing	One of the users managed to change the status of a record manually	To prevent people from skipping steps in the process by changing the status	editing status afterwards needs to be done on the SharePoint site	Strict order of process steps	Low	Testing

ID	Date	Action	Action type	Description	Objectives	Challenges	Impact	Importance	Stage
A17	13/03/2023	**Introduction of the first version of Power App to the Service Products core team**	Organisational	Teams-meeting with core members of the Service Products team to showcase the SharePoint Site, Teams channel and power app	Showcase the app and collect feedback for necessary changes	Some team members took a long time to understand how the app works	See F2	High	Testing
A18	14/03/2023	**Adding more filter functions**	Technical (Power App)	Based on recommendations by the Service Products team, more filters for record search were included.	Facilitate search functions for users and increase perceived compatibility as it is more similar to the Windows Explorer search options.	/	Faster and more versatile filtering of records	Medium	Reflecting
A19	15/03/2023	**Testing of the mobile version of the Power App**	Technical (Power App)	Restructuring and testing the app to be responsive depending on screen size. This responsiveness allows for the use of any device.	Increase usability across devices.	Power App's responsive design is very time-consuming. Since many employees have different company phones, the app window size needs to be extra responsive.	Salespeople can access all Power App features through the mobile version.	Low	Testing
A20	17/03/2023	**Creation of a private RMC channel**	Technical (Teams / Sharepoint)	Creation of a private RMC channel in Teams (also launches private SharePoint site) to facilitate internal communication and file security.	Facilitate team communication and file sharing in a restricted environment	Privat channels lack core features like "Planner" and "Meeting scheduling", making it not the best solution for team collaboration. Team members struggle to utilise the channel for document sharing	Internal RMC-related content was discussed and shared in the channel from that day onwards	Medium	Launch
A21	24/03/2023	**Adding content to the RMC Sharepoint Page**	Communication	Adding all necessary information about the Power app from the admin perspective to the Privat RMC Sharepoint Site	Distribute information for the RMC team through M365 instead of emails	Enable the RMC team to look for information independently	Intranet for RMC related conntent	Medium	Developing
A22	26/03/2023	**Adding content to the Sales Sharepoint Page**	Communication	Adding information related to the application, contract price lists and prices for vehicle add-ons on the Sales Sharepoint Page	Distribute information for the Sales team through M365 instead of emails	Enable the Sales department to look for information independently	Intranet for Sales for service contract-related content	Medium	Developing
A23	27/03/2023	**Adding content to the Workshop Sharepoint Page**	Communication	Adding information related to claiming of service contract for workshops and links to the "After-Sales Portal" for common issues	Distribute information for the Workshop leaders through M365 instead of emails.	Enable the workshop leaders to look for information independently	Intranet for workshop leaders for contract claiming related content	Medium	Developing
A24	28/03/2023	**SharePoint List for workshop contacts**	Technical (Sharepoint)	Development of a SharePoint list for workshop contacts, which workshop leaders can independently update	Enable workshops to update their contact information independently	The partner workshops are not part of the MAN Azure environment, making it impossible to share data with them	The list is used for notifying workshops when a contract is activated	Medium	Developing

ID	Date	Action	Action type	Description	Objectives	Challenges	Impact	Importance	Stage
A25	03/04/2023	**Teams Tabs linked to SharePoint**	UEX	Connecting Sharepoint Content to Teams Channels	All content is available on teams; employees do not need to navigate to SharePoint to access information.	The app link runs better if directly in Teams as an add-on. The channel app is relatively slow.	Only one tool is needed to access all the solutions	Medium	Developing
A26	10/04/2023	**The decision to develop an app tutorial and Screen capture of the Power App workflow**	Organisational	After a talk with the Head of Service Products, we decided to create a short tutorial of the application for the salespeople available on the SharePoint Page for sales.	Decrease the initial inertia of using the application	Microsoft Stream's recording function sometimes shows browser borders. I needed to retake many of the recording steps because of the difference in video sizes caused by the borders	Screen recordings of the core app features	Medium	Planning
A27	17/04/2023 - 24/03/2023	**App tutorial development**	Technical (Power App)	Editing screen captures in Premier Pro with captions explaining the different steps of the process.	Decrease the initial inertia of using the application	MAN did not provide any software for editing the tutorial. I needed to use my private software to create the tutorial	Finished tutorial with Norwegian captions	Medium	Developing
A28	28/04/2023	**App tutorial translation**	Technical (Power App)	Translating tutorial captions together with head of Service Products into Norwegian	Increase acceptance by Sales through the native language in the tutorial.		Raw tutorial with English captions	Low	Developing
A29	01/05/2023	**App tutorial upload**	Technical (SharePoint)	Upload the final tutorial to the Sales SharePoint Page	Decrease the initial inertia of using the application	Tutorials are very static and cannot be easily adjusted in case of changes in the application.	Sales can look at the tutorial to learn about the full new process	Medium	Testing
A30	15/05/2023	**Process Introduction to Service Products Team**	Organisational	During a Teams session, the core features and concepts of the Sharepoint and Power App were presented to the Service Products department. The project goals were summarised, and verbal feedback was collected.	Showcase all solutions and the reasons for implementing them	People were hesitant to ask questions when they did not understand something	Team members got the first full overview of solutions and possibilities	High	Testing
A31	26/05/2023	**Core user onboarding**	Training	The leading service contract creator got an onboarding session via Teams. During the meeting, all features of the app were presented.	Enable the main operator to work as an admin within the application	It took some time to convince the operator about the benefits the new process has over the old one	The admin side of the application can be operated	High	Testing
A32	28/05/2023	**Discussion about the launch of the solutions with the head of Service Products**	Organisational	The decision to not widely announce the launch of the Teams channel, SharePoint Site and app	By not announcing the launch of the solutions separately, all users will only receive automated messages that they have access to the new solutions. Ideally, this can indicate which employees start testing the solutions without being explicitly asked to do so	/	Two users started trying the application without being explicitly asked	High	Planning

ID	Date	Action	Action type	Description	Objectives	Challenges	Impact	Importance	Stage
A33	30/05/2023	**Official Launch of the SharePoint site, teams channel and power app**	Technical (Power App)	Sharepoint, Teams channel and Power App were opened for Sales and Workshop departments.	Providing access for all users to the different solutions	Azure AD Setup is flawed. (People are in Ad Groups they don't work for). Made it difficult to assign permissions correctly	All users that would need access got it	High	Launch
A34	31/05/2023	**Set up a User Group for Claiming**	Technical	A Teams chat that is designated for claiming questions.	Users should help users when it comes to Claiming questions. Since it is a particular topic, there is no need to involve many people. Controllers from the Service Products department are helping as well. The insights of the chat can be used for FAQs.	It was unclear who needed to be part of this group so users could add others.	No more specific questions on the Sharepoint home page	Medium	Reflecting
A35	02/06/2023	**Team tag creation for every sales department**	UEX	Team tag creation for every sales department to better target a specific audience	In case a particular topic is only relevant to a specific department. The tag feature can be used to address them without involving unrelated people.	Azure AD Setup is flawed. (People are in Ad Groups they don't work for). Made it difficult to assign tags correctly	Clear information flow. Less general message notifications	Medium	Developing
A36	02/06/2023	**Reminder by the Head of Service Products to use the app**	Communication	Official announcement to use the Power App instead of the old process in MTB NO Service Products teams channel	As the launch was not officially announced before, this action should serve as the clarification of what the automated messages (A28) were about	It is difficult to assess how many people have read the message in teams	Solutions are officially announced	High	Operating
A34	04/06/2023	**Creation of Teams connected to Sharepoint Sales**	Technical (Teams / Sharepoint)	SharePoint and Team (MTB NO Sales) was created	By creating another targeted Sharepoint, the number of processes covered by each site can be limited. Additionally, issues are being discussed within the team. People who are not affected do not need to get messages.	Completely new setup of SharePoint and teams	The sales department has its own team channel to collaborate in	Medium	Developing
A35	04/06/2023	**Changing title assignment in the Power app**	Bug fixing	The naming system for the records in the Power App is automated. It could be overwritten if the two users request an offer for the same customer on the same day.	The timestamp was included to prevent data loss.	Time and date settings can differ based on the device's language settings.	Unique names for request records	Low	Reflecting

ID	Date	Action	Action type	Description	Objectives	Challenges	Impact	Importance	Stage
A36	02/06/2023 - 05/06/2023	**Process development for file approval in MTB NO Sales**	Technical (Teams / Sharepoint)	The calculation scheme for sales price and Calculation scheme for TopUsed sales price got an approval process in SharePoint and Power automate	The approval process can be applied in many other scenarios and drive the employees' interest in new possibilities.	It takes some know-how to set it up with email notifications	The Head of Service Products got interested in the process and wants to adapt the concept to his processes	High	Developing
A37	05/06/2023	**Approval Email notification flow**	Technical (Power Automate)	Testing of using Power Automate for approving documents in the newly created MTB NO Sales channel	Testing the Possibilities of Power Automate in the context of document approval	Difficult to understand all the features. Limited connectors by central IT	Showes that approvals can be done using M365	Low	Testing
A38	05/06/2023	**Onboarding Head of Orderoffice Sales calculation approval process**	Training	Onboarding Head of Orderoffice Sales about the calculation approval process and its potential	Show other departments what opportunities come with M365.	/	The head of the Order Office encourages further development of the solution.	Low	Testing
A39	06/06/2023	**Launch of a separate channel for MTB NO Technical support**	Technical (Teams / Sharepoint)	The technical leaders of all workshops and the technical advisors got their own channel on the Technical support team.	Facilitate the communication between technical workshop leaders and technical advisors.	Some of the members of this channel have never used Teams before	Technical issues of mechanics can be addressed separately from other Service Product Matters	Medium	Launch
A40	07/06/2023	**Email / Teams message to encourage people to try the app or to proceed in the process**	Communication	Due to the little traffic on Teams, SharePoint and the app, it was decided to send another message to the salespeople encouraging them to use the solutions and watch the tutorial.	Increase traffic on SharePoint, Teams and the Power App.	Not many people reacted to this encouragement	Reaslisiation that people need a different method to stay engaged	High	Operating
A41	07/06/2023	**The decision to conduct Q&A Meetings about M365**	Organisational	Since few people actively use the tools, it was decided to conduct weekly Q&A meetings about M365 with Service Products and Sales.	Increase traffic on SharePoint, Teams and the Power App. Help people understand the benefits of M365.	It is difficult to pinpoint what content should be addressed if a few questions arise.	New potential training opportunity for sales and Service Products	High	Planning
A42	08/06/2023	**Invitation to Weekly Q&A session about Sharepoint Teams and Power Platform**	Training	Invitation to weekly Q&A meetings to show Service Products and Sales how the new Power App Teams channels and SharePoint work	Increase traffic on SharePoint, Teams and the Power App. Help people understand the benefits of M365.	It is difficult to assess how many people will attend, as not all participants accepted or declined the invitation.	All employees from the sales and Service Products department can ask questions directly.	High	Launch
A43	09/06/2023	**Showed core user how to add the app in the left navigation panel in teams**	Training	During a teams session, the contract creator of the RMC department received instructions on how to add the app in the left navigation panel in Teams.	Facilitate excess for core users of the app.	/	Core User has easier access to the app and can respond to requests quicker	Low	Operating
A44	09/06/2023	**Notification email when changes to request are made**	Technical (Power App)	When someone makes changes to an offer request, a notification email gets sent to the operator	Clear communication and quick response time to requests	Admins were not automatically notified when a new record was created	Admins get a notification when a record is edited in the "new" status	Low	Reflecting

ID	Date	Action	Action type	Description	Objectives	Challenges	Impact	Importance	Stage
A45	09/06/2023	**First Q&A Session**	Training	see Q&A 1	see Q&A 1	see Q&A 1	see Q&A 1		Operating
A46	12/06/2023	**Adding the "created by" column to the admin view**	Technical (Power App)	Adding Created by column to the request form in view and edit mode based on request in F13	It makes it easier for the admin to see the creator without navigating back.	/	Better workflow for admin when calculating prices		Reflecting
A47	12/06/2023	**New sort system for gallery records**	Technical (Power App), UEX	Change of sort system of offer records: newest to oldest (F19)	Improving User Experience	/	Admins and Users can easily see which records are new	Low	Reflecting
A48	15/06/2023	**Establishing a new SharePoint Site for MTB NO Product Marketing**	Technical (Sharepoint/ Teams)	After hearing about the MTB NO Service Products team. The Product Marketing department also asked for its own Teams channel	Enabling the Product Marketing department to distribute information through Teams and SharePoint instead of emails	Product Marketing had no concrete ideas of how the SharePoint and Teams channel should look. Additionally, they did not have time to work on designing the new solution	Product Marketing has the option of distributing information in their own Teams channel	Medium	Developing
A49	15/06/2023	**Second Q&A session**	Training	see Q&A 2	see Q&A 2	see Q&A 2	see Q&A 2	Medium	Operating
A50	15/06/2023	**Wrap up Meeting with Head of Service Products**	Organisational	Short Teams Meeting to discuss how to increase awareness for continuation of offer request process (signature on offers within 40 days)	Defining a strategy for assuring price confirmation by the customer before the offer expiry	Sales People make requests and receive the prices. However, they do not continue in the new process afterwards. Often, they use emails to send signed contracts and other documents instead of the Power App.	The decision to consult salespeople about their issues	Medium	Reflecting
A51	17/06/2023	**Scheduled meeting with salesperson**	Communication	As a reaction to the negative feedback (F25-26), it was decided to have a direct meeting with one of the salespersons to talk about the issues. Parrally, the head of Service Products, also met with a different salesperson about the same problem.	Identify barriers for salespeople continuing the process	Sales People seem to dislike the signature part in Flowchart 1 (Appendix 2/2)	New insights about Sales' perspectives	High	Planning
A52	19/06/2023	**Processes reassessment for offer request**	Organisational	The lack of signatures on offers was discussed during the meeting with salespeople. After assessing the reasons, it was concluded that a mandatory signature on offers is not a solution for locking offer prices for future use. It was decided to make signatures optional.	Increasing user acceptance. Structuring the process to fit the objective ideally leads to increased application use.	Without the signature, a new way of locking the prices needs to be found	The decision to make signature optional	High	Reflecting
A53	19/06/2023	**Flowchart remodelling**	Organisational	Remodelling the flow chart to make the signature part in the offer request tool optional	Increase compatibility with salespeople's way of working.		Appendix (2/3)	High	Reflecting

ID	Date	Action	Action type	Description	Objectives	Challenges	Impact	Importance	Stage
A54	20/06/2023 - 23/06/2023	**Process redesign in the Power App**	Technical (Power App)	Eliminating the mandatory signature part in the process	Increase compatibility with salespeople's way of working	It is difficult to still have the option of adding signatures without making it a requirement	Salespeople can directly request contracts after they receive a price without needing to sign it first	High	Reflecting
A55	25/06/2023	**Third Q&A session**	Training	see Q&A 3	see Q&A 3	see Q&A 3	see Q&A 3		Operating
A56	26/06/2023	**Personal training with a salesperson**	Training	After wrongly sending a request, the team offered a private onboarding session for the app	To show older Sales Representatives how to navigate within the app.	Many of the older salespeople have issues with the app but are not asking for assistance	The person has expressed that he is now able to use the app	Medium	Operating
A57	27/06/2023	**Final Q&A Session**	Training	see Q&A 4	see Q&A 4	see Q&A 4	see Q&A 4		Operating
A58	30/06/2023 - 18/07/2023	**Survey collection**	Organisational	Survey about M365 adoption of the participants through Microsoft Forms	Complete the reflection stage	Many people used Microsoft Forms for the first time	32 participants answered questions about their adoption behaviour	High	Reflecting

Appendix 2/6

Q&A Sessions Log

	Date	Topics	Description	Questions	Answers	Objectives	Challenges	Findings	Number of Attendees	Duration
Q&A -1	09/06/2023	**Q&A, general walkthrough of M365, MTB NO Service Products /Sales SharePoint sites and the Power App**	The session started by introducing the MTB NO Serviceprodukter SharePoint Site and Teams channel. Additionally, all apps in M365 were briefly introduced and explained. Finally, the new MTB NO Sales Team was briefly introduced.	Planner and To Do: how to link assigned tasks to Outlook	Personal Meeting after Q&A session to show how Planner & To Do can be used with Outlook. Establishing limitations of Outlook in the desktop version	Creating a general overview of the project. Creating awareness of the features. Another idea was to trigger inspiration for MTB NO Sales by showing the possibilities of M365	Not many people were actively participating in the meeting. In total, only two people raised questions, which made it difficult to assess in what areas people had issues	Starting at the basics for the next session and having hands-on examples of use cases. The next session should include prepared content if no questions come up.	15	57m 12s
Q&A -2	15/06/2023	**Q&A and agenda for creating and modifying a SharePoint / Teams site**	The MTB NO Product Marketing SharePoint - Teams site was taken as an example to show design features. Five different topics were covered (Q&A - 2 Answers)	None	1. How to set up navigation and the outline of a SharePoint Site 2.How SharePoint pages are linked to teams 3. How to create channels and folders 4. How to set permissions in SharePoint and Teams 5. How to make News and send notifications through tags	Showing the setup of a SharePoint site aims to inspire people for potential applications. Users should understand what is possible, and creators can learn how to structure their solutions better.	People mentioned after the meeting that they do not understand why they are learning about setup features	Topics were too focused on content creators. Not differentiating between target groups leads to frustration and confusion for standard users	18	54m 10s
Q&A -3	23/06/2023	**Q&A and walkthrough of Teams and OneDrive**	As a reaction to the confusion from the preceding meeting. This meeting simplified the content and looked at the	Price request tool for service contracts: How to add the app to the Teams navigation bar	Live showcase on how to add the Power App to the navigation. Slow walkthrough of the key features of OneDrive and Teams	By starting at the basics, participants should feel less stressed about the new features	People were very backleaning and, except for a few participants, did not actively involve themselves in the meeting	A lot more training needs to be provided on an individual level. The knowledge about the features is deficient	13	44m 16
Q&A -4	27/06/2023	**Second walkthrough of the redesigned process**	After some process modifications of the tool, the final version of the project was introduced and explained. An example was used to walk through the whole process.	Price request tool for service contracts: Will the automatic fill function for customer data become available?	As the connector to Salesforce is still blocked, filling out customer information will remain manual.	Making the signature part on the offer optional and showing that to the users,	People were very back leaning and, except for a few participants, did not actively involve themselves in the meeting.	Users are overall happy with the changes, but many still struggle to use the Power App fully.	14	35m 37s

Appendix 2/7

Participant Feedback

ID	Date	Person ID	Description	Channel	Type	Topic	Triggered by	Resulting action
F1	03/03/2023	PR5	PR5 expresses need to include registration documents in the Power App	Verbal	Constructive	Features	A7	/
F2	13/03/2023	PR4	PR4 wants more filter functions for contract search in the Power App	Teams meeting	Constructive	Features	/	A18
F3	23/05/2023	PR5	PR5 expresses a need for a private channel for claiming related topics	Verbal	Constructive	Features	NI2	A34
F4	25/05/2023	PR6	PR6 underlines the importance of keeping the users' digital literacy in mind!	Teams meeting	Constructive	Training	/	/
F5	30/05/2023	PS2	PS2 needs training on M365 and on how to use the Power App	Verbal	Negative	Training	A33	PS2 managed to work with the app by looking at the tutorial in SharePoint
F6	31/05/2023	PS2	PS2 says that the Power App mobile version is "fantastic" as it makes him more agile while making price requests	Verbal	Positive	Features	A19	/
F7	02/06/2023	PS2	PS2 requests the implementation of an automatic fill function for customer data in the Power App	Email	Constructive	Features	A33	None (no connector to sales force available)
F8	05/06/2023	PS2	PS2 likes the new way of sending requests but would like to see an automatic fill function	Teams chat	Positive	Features	A33	/
F9	06/06/2023	PR7	PR7 states that internal communication needs to improve between the Workshop and service advisors. He looks forward to using SharePoint and Teams for document sharing.	Verbal	Positive	Features	A39	/
F10	07/06/2023	PS2	PS2 did not find the used feature	Email	Question	Features	/	PS2 found the feature after a quick Teams call
F11	08/06/2023	PS3	PS3 asked if the changes he made to his offer were noticed	Email	Question	Features	/	A44
F12	08/06/2023	PS8	PS8 requests implementing an automatic fill function for customer data. He also noted that it is more time-consuming for salespeople now.	Form	Question	Features	/	None (no connector to sales force available)
F13	09/06/2023	PR1	PR1 makes a request for adding the Created by column to the request form in view and edit mode	Verbal	Constructive	Features	/	A46
F14	09/06/2023	PR4	PR4 sends a short Teams message with feedback: "Well done - easy to make price offers."	Teams chat	Positive	Features	/	/
F15	09/06/2023	PR4	Question about sending confirmation for requests	Teams chat	Question	Training	/	/
F16	09/06/2023	Head of HR DK & Head of HR NO	HRM requests presenting findings of this research to management	Verbal	Question	Communi cation	Q&A-1	Management presentation 07/09/2023
F17	09/06/2023	Head of HR DK & Head of HR NO	HRM requests receiving central training session contacts	Verbal	Constructive	Training	Q&A-1	Contacts were provided
F18	09/06/2023	PR4	PR4 asks for changing the order of offer requests from newest to oldest	Teams Meeting	Constructive	Features	/	A47
F19	12/06/2023	PS2	PS2 asked for Additional product prices	Email	Question	Features	/	The person was informed about the price table in SharePoint.
F20	15/06/2023	PS29	PS29 asks about the possibility of adding Product Marketing as a Teams channel	Verbal	Question	Features	Q&A-1	A48
F21	15/06/2023	PR4	PR4 asks about an additional products tab in the "offer request template."	Teams meeting	Question	Features	/	Short Teams meeting clarified the question.

ID	Date	Person ID	Description	Channel	Type	Topic	Triggered by	Resulting action
F22	15/06/2023	PS23	States how changes are communicated to Sales needs reassessment: Closely look at the stakeholders' needs. The aspects that are interesting for some are irrelevant for others.	Verbal	Constructive	Training	F20	A51
F23	15/06/2023	PS23	Mentioned that Sales People are not likely to watch an 8:47 minute long introductory video (Process too complicated)	Verbal	Constructive	Training	F20	A51
F24	15/06/2023	PS23	PS23 notes that RMC benefits more from the process change than sales, which causes frustration	Verbal	Constructive	Features	F20	A51
F25	16/06/2023	PS3	PS3 says the Power App itself is great, but the signatures on offers do not fit the needs	Verbal	Constructive	Features	Q&A-2	A52
F26	16/06/2023	Anonymous	Several salespeople are confused and unsatisfied with the technological changes. They mention that they do not see a reason for them to deal with the technology.	Verbal	Negative	Communi cation	Q&A-2	Content changes in Q&A 3
F27	19/06/2023	Anonymous	Salespeople do not understand the reason for the Q&A sessions and the content. Mention that there is no need for them to learn SharePoint setups. They need basic training on Teams.	Call	Negative	Training	Q&A-2	Content changes in Q&A 3
F28	20/06/2023	PS25	PS25 is happy to understand the process now. Mentioned that having so many different platforms to work with and it is pesky to switch all the time	Verbal	Constructive	Features	A56	/
F29	21/06/2023	PS27, PS29,PS2,PS3	Salespeople mention that the process changes made it a lot easier to create contracts.	Verbal	Positive	Features	A54	/
F30	28/06/2023	PS8	Old process easier. The app is beneficial, but PS8 does not have time to review it thoroughly because he is busy with sales.	Email	Negative	Communi cation	/	/

Appendix 2/8

Noteworthy User Interactions

ID	Date	Person ID	Description	Platform	Type	Resulting Feedback	Resulting action
NI1	07/03/2023	PR5	During offer creation, PR5 exploited the feature of changing the offer status manually. It was intentional and supposed to show a flaw in the app's setup.	Power App	Bug	/	A16
NI2	30/05/2023	PW1	A workshop leader used the comment function on the SharePoint home page to ask specific questions regarding warranty claiming.	SharePoint	Comment	A33	A34
NI3	30/05/2023	PS2	PS2 used the app without further instructions (early adopter)	Power App	Standard Use	F8	/
NI4	05/06/2023	PS8	PS8 requested an offer via the old process. After being told to try the process, the salesperson said he would try it the next day. After one hour, the offer was requested through the app.	Email	Standard Use	/	/
NI5	08/06/2023	P26,PS2, PS29	PS29 initiated a meeting in the Salg channel in MTB NO Serviceprodukter	Teams	Standard Use	F10	/
NI6	09/06/2023	PS3	PS3 tried to make changes to his offer and was not sure if the operator was notified	Power App	Standard Use	F8	A44
NI7	12/06/2023	PS13	PS13 accidentally requested an offer for TopUsed through the new template	Power App	Standard Use	/	The record was manually transferred to "new Truck."
NI8	14/06/2023	PS17	PS7 requested a price offer through the old Excel table. Argued that it was urgent and that the vehicle was already registered	Email	Standard Use	None	A52
NI9	19/06/2023	PS22	PS22 Requested an offer via the old process. After being told to try out the process, the salesperson requested a proposal with the Power App through the tutorial.	Email	Standard Use	F14	/
NI10	22/06/2023	PS25	PS25 requested a price offer through the old Excel table. He argued that he still has issues with using the app.	Email	Standard Use	/	A short face-to-face explanation solved the issues.
NI11	24/06/2023	PS27, PS29,PS2,PS3	Continued in the process	Power App	Standard Use	F29	/

Appendix 3/1

SURVEY

Categorisation of Statement Topics

ID	Categories	Topic
I	Personal information	Personal information
PREIV	Pre-implementation view	Before the implementation of M365 at MAN Norway, please rate your agreement with the following statements.
SP	Specific feature perception - SharePoint	Considering the "Service Products SharePoint Site", please rate the following statements.
TE	Specific feature perception - Teams	Considering the "Service Products Teams channel", please rate the following statements.
A	Specific feature perception - Power App	Considering the "new tool for requesting service contracts" for trucks, please rate the following statements.
TRG	Training General	Considering the training situation during the Microsoft 365 implementation phase, please rate your agreement with the following statements.
TRBC	Training Business Champions	Considering the "Business Champions" project aiming to empower core users to teach other users about M365, please rate the following statements.
TRQA	Training Q&A	Considering the weekly Q&A teams meetings offered in June 2023, please rate the following statements.
TREH	Training Eduhouse	Considering the new digital training platform "Eduhouse" available for Employees at MAN Norway, please rate the following statements.
SI	Social Influence	Considering the social environment at work and its effects on your attitude towards Microsoft 365, please rate the following statements.
POSTIV	Post-implementation View Impact	Considering your current view on M365 on M365, please rate your agreement with the following statements.
POSTIVIM	Post-implementation view	Considering the effects the "Service Products project" had on your view on Microsoft 365, please rate your agreement with the following statements.

Appendix 3/2

ID	Likert Items
1	Strongly disagree
2	Disagree
3	Somewhat disagree
4	Agree
5	Somewhat agree
6	Strongly agree

Personal Information

ID	Age	Category
1	Younger than 28	I
2	28-37	I
3	38-47	I
4	48-57	I
5	Older than 57	I

ID	Experience	Category
1	Less than 2 years	I
2	2 - 5 years	I
3	More than 5 years	I

ID	Department	Category
1	Sales (Trucks)	I
2	Sales other (TGE, Bus and Coordinators)	I
3	Service Products (RMC, Technical)	I

Appendix 4/1

CROSSTABS

Independence between Level of Involvement and Pre-Implementation PE

Crosstab

Count

		Performance expectancy (Pre-Implementation)							
		2.00	3.00	3.50	4.00	4.50	5.00	5.50	Total
Level of involvement	1.00	1	0	0	0	0	0	0	1
	1.14	0	0	0	1	0	0	0	1
	1.57	0	0	0	1	0	1	1	3
	1.71	0	1	1	0	0	0	0	2
	1.86	0	0	0	0	1	0	0	1
	2.14	0	0	1	0	1	0	0	2
	2.29	0	1	1	0	0	0	1	3
	2.71	0	0	0	1	0	0	0	1
	2.86	0	0	0	0	0	1	0	1
	3.00	0	0	0	2	2	1	0	5
	3.14	1	0	0	1	0	1	0	3
	3.29	1	0	0	0	0	0	0	1
	3.43	1	0	0	0	1	0	0	2
	3.71	0	0	0	0	0	0	1	1
	3.86	0	0	0	1	0	0	0	1
	5.00	0	0	0	0	1	1	0	2
	5.57	0	0	0	0	2	0	0	2
Total		4	2	3	7	8	5	3	32

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	92.766[a]	96	.574
Likelihood Ratio	76.738	96	.926
Linear-by-Linear Association	1.124	1	.289
N of Valid Cases	32		

a. 119 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

Appendix 4/2

Independence between Level of Involvement and Pre-Implementation EE

Crosstab

Count

		Effort expectancy (Pre-Implementation)							
		2.00	2.50	3.50	4.00	4.50	5.00	5.50	Total
Level of involvement	1.00	0	1	0	0	0	0	0	1
	1.14	0	0	0	0	0	1	0	1
	1.57	0	0	0	1	2	0	0	3
	1.71	0	1	0	0	1	0	0	2
	1.86	0	0	1	0	0	0	0	1
	2.14	0	0	0	2	0	0	0	2
	2.29	0	2	0	0	0	0	1	3
	2.71	0	0	0	0	1	0	0	1
	2.86	0	0	0	0	0	0	1	1
	3.00	0	0	0	1	3	1	0	5
	3.14	1	0	0	1	0	1	0	3
	3.29	1	0	0	0	0	0	0	1
	3.43	0	1	0	0	1	0	0	2
	3.71	0	0	0	0	0	0	1	1
	3.86	0	0	1	0	0	0	0	1
	5.00	0	0	0	0	1	1	0	2
	5.57	0	0	0	1	1	0	0	2
Total		2	5	2	6	10	4	3	32

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	121.404[a]	96	.041
Likelihood Ratio	80.110	96	.879
Linear-by-Linear Association	.823	1	.364
N of Valid Cases	32		

a. 119 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

Appendix 4/3

Independence between Level of Involvement and Pre-Implementation BI

Level of involvement * Behavioural Intention/General (Pre-Implementation)

Count

		I was looking forward to adopting different features of M365 in my work tasks					
		Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree	Total
Level of involvement	1.00	1	0	0	0	0	1
	1.14	0	0	1	0	0	1
	1.57	0	1	0	2	0	3
	1.71	0	1	0	1	0	2
	1.86	0	0	0	1	0	1
	2.14	1	0	1	0	0	2
	2.29	1	1	0	0	1	3
	2.71	0	0	1	0	0	1
	2.86	0	0	0	1	0	1
	3.00	0	1	2	1	1	5
	3.14	1	1	0	1	0	3
	3.29	1	0	0	0	0	1
	3.43	1	0	1	0	0	2
	3.71	0	0	0	0	1	1
	3.86	0	0	1	0	0	1
	5.00	0	0	0	1	1	2
	5.57	0	0	1	1	0	2
Total		6	5	8	9	4	32

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	54.984[a]	64	.782
Likelihood Ratio	56.113	64	.748
Linear-by-Linear Association	1.887	1	.170
N of Valid Cases	32		

a. 85 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

Appendix 4/4

Independence between Level of Involvement and Behavioural Intention/Contnent & Automation (Pre-Implementation)

Crosstab

Count

		Behavioural Intention/Contnent & Automation (Pre-Implementation)										
		1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	Total
Level of involvement	1.00	0	0	1	0	0	0	0	0	0	0	1
	1.14	0	0	0	0	1	0	0	0	0	0	1
	1.57	0	0	1	1	0	0	0	0	0	1	3
	1.71	1	0	0	0	0	1	0	0	0	0	2
	1.86	0	0	0	0	0	0	0	0	1	0	1
	2.14	1	0	1	0	0	0	0	0	0	0	2
	2.29	0	1	1	0	0	0	1	0	0	0	3
	2.71	0	0	0	0	0	0	1	0	0	0	1
	2.86	0	0	0	0	0	0	1	0	0	0	1
	3.00	1	0	1	0	3	0	0	0	0	0	5
	3.14	2	0	0	0	1	0	0	0	0	0	3
	3.29	0	0	1	0	0	0	0	0	0	0	1
	3.43	1	0	1	0	0	0	0	0	0	0	2
	3.71	0	0	0	0	0	0	0	1	0	0	1
	3.86	0	0	0	0	1	0	0	0	0	0	1
	5.00	0	0	0	0	1	1	0	0	0	0	2
	5.57	0	0	0	0	1	0	1	0	0	0	2
Total		6	1	7	1	8	2	4	1	1	1	32

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	157.054[a]	144	.216
Likelihood Ratio	85.561	144	1.000
Linear-by-Linear Association	.333	1	.564
N of Valid Cases	32		

a. 170 cells (100.0%) have expected count less than 5. The minimum expected count is .03.

Appendix 4/5

Independence between Level of Involvement and Experience

Level of involvement * Experience Crosstabulation

Count

		For how long have you been working at MAN Norway?			
		Less than 2 years	2 - 5 years	More than 5 years	Total
Level of involvement	1.00	1	0	0	1
	1.14	0	1	0	1
	1.57	2	0	1	3
	1.71	0	0	2	2
	1.86	1	0	0	1
	2.14	0	0	2	2
	2.29	0	1	2	3
	2.71	0	0	1	1
	2.86	0	0	1	1
	3.00	0	1	4	5
	3.14	0	0	3	3
	3.29	0	0	1	1
	3.43	0	1	1	2
	3.71	0	1	0	1
	3.86	0	0	1	1
	5.00	0	1	1	2
	5.57	2	0	0	2
Total		6	6	20	32

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	42.276[a]	32	.106
Likelihood Ratio	40.788	32	.137
Linear-by-Linear Association	.038	1	.846
N of Valid Cases	32		

a. 51 cells (100.0%) have expected count less than 5. The minimum expected count is .19.

Appendix 4/6

Independence between Level of Involvement and Age

Level of involvement * Age Crosstabulation

Count

		How old are you?					
		Younger than 28	28-37	38-47	48-57	Older than 57	Total
Level of involvement	1.00	0	0	1	0	0	1
	1.14	0	1	0	0	0	1
	1.57	0	1	2	0	0	3
	1.71	0	1	1	0	0	2
	1.86	0	1	0	0	0	1
	2.14	0	0	1	0	1	2
	2.29	0	0	1	1	1	3
	2.71	0	0	1	0	0	1
	2.86	0	1	0	0	0	1
	3.00	0	0	2	3	0	5
	3.14	0	0	2	0	1	3
	3.29	0	0	1	0	0	1
	3.43	0	1	0	1	0	2
	3.71	0	0	0	0	1	1
	3.86	0	0	0	0	1	1
	5.00	0	0	0	1	1	2
	5.57	2	0	0	0	0	2
Total		2	6	12	6	6	32

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	80.178[a]	64	.083
Likelihood Ratio	62.843	64	.517
Linear-by-Linear Association	.075	1	.784
N of Valid Cases	32		

a. 85 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

Appendix 4/7

Dependence between Age and Experience

Age * Expeience Crosstabulation

Count

		For how long have you been working at MAN Norway?			
		Less than 2 years	2 - 5 years	More than 5 years	Total
How old are you?	Younger than 28	2	0	0	2
	28-37	2	1	3	6
	38-47	2	1	9	12
	48-57	0	3	3	6
	Older than 57	0	1	5	6
Total		6	6	20	32

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.489[a]	8	.036
Likelihood Ratio	15.799	8	.045
Linear-by-Linear Association	5.803	1	.016
N of Valid Cases	32		

a. 14 cells (93.3%) have expected count less than 5. The minimum expected count is .38.

Symmetric Measures

		Value	Asymptotic Standard Error[a]	Approximate T[b]	Approximate Significance
Interval by Interval	Pearson's R	.433	.138	2.628	.013[c]
Ordinal by Ordinal	Spearman Correlation	.349	.166	2.040	.050[c]
N of Valid Cases		32			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Appendix 5/1

CORRELATION

Level of Involvement Correlations with Pre-implementation Views

Correlations

		Level of involvement
I was looking forward to adopting different features of M365 in my work tasks	Pearson Correlation	.247
	Sig. (2-tailed)	.173
	N	32
I was planning to create own content to share with others in M365	Pearson Correlation	.112
	Sig. (2-tailed)	.543
	N	32
I was considering creating my own automated processes using M365	Pearson Correlation	.088
	Sig. (2-tailed)	.631
	N	32
I believed that M365 would be easy to use	Pearson Correlation	.118
	Sig. (2-tailed)	.519
	N	32
I believed using M365 would align with my way of working	Pearson Correlation	.178
	Sig. (2-tailed)	.329
	N	32
I was aware of the potential benefits of using M365 in my work environment.	Pearson Correlation	.162
	Sig. (2-tailed)	.374
	N	32
I perceived M365 as a valuable tool for collaboration	Pearson Correlation	.187
	Sig. (2-tailed)	.305
	N	32

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 5/2

PE Correlations with Specific Features of M365

Correlations

		How old are you?	For how long have you been working at MAN Norway?
I can imagine other, smaller processes to be adapted by similar tools	Pearson Correlation	-.266	-.597**
	Sig. (2-tailed)	.209	.002
	N	24	24
I see opportunities to improve the app further	Pearson Correlation	-.338*	-.335
	Sig. (2-tailed)	.106	.110
	N	24	24
I see the benefits of using the tool compared to the old process	Pearson Correlation	-.244	-.424*
	Sig. (2-tailed)	.251	.039
	N	24	24
I believe the channel is a good way to collaborate internally	Pearson Correlation	-.061	-.440*
	Sig. (2-tailed)	.742	.012
	N	32	32
I believe using teams is better than using emails for internal collaboration	Pearson Correlation	-.197	-.493**
	Sig. (2-tailed)	.281	.004
	N	32	32
The site provides content related to my work	Pearson Correlation	-.338	-.034*
	Sig. (2-tailed)	.251	.855
	N	32	32
I would like to see similar information sites at MAN Norway	Pearson Correlation	.019	-.387*
	Sig. (2-tailed)	.918	.029
	N	32	32

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 5/3

Level of Involvement Correlations with PE and EE

Correlations

Pearson		Level of involvement
Performance expectancy (Pre-Implementation)	Pearson Correlation	.190
	Sig. (2-tailed)	.297
	N	32
Performance expectancy (Post-Implementation)	Pearson Correlation	.438*
	Sig. (2-tailed)	.012
	N	32
Performance expectancy (Impact)	Pearson Correlation	.464*
	Sig. (2-tailed)	.008
	N	32
Effort expectancy (Pre-Implementation)	Pearson Correlation	.163
	Sig. (2-tailed)	.373
	N	32
Effort expectancy (Post-Implementation)	Pearson Correlation	.432*
	Sig. (2-tailed)	.014
	N	32
Effort expectancy (Impact)	Pearson Correlation	.577**
	Sig. (2-tailed)	<.001
	N	32

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 5/4

Age Correlations with PE and EE

Correlations

		How old are you?
Performance expectancy (Pre-Implementation)	Pearson Correlation	-.231
	Sig. (2-tailed)	.204
	N	32
Performance expectancy (Post-Implementation)	Pearson Correlation	-.192
	Sig. (2-tailed)	.293
	N	32
Performance expectancy (Impact)	Pearson Correlation	-.284
	Sig. (2-tailed)	.115
	N	32
Effort expectancy (Pre-Implementation)	Pearson Correlation	-.235
	Sig. (2-tailed)	.195
	N	32
Effort expectancy (Post-Implementation)	Pearson Correlation	-.223
	Sig. (2-tailed)	.220
	N	32
Effort expectancy (Impact)	Pearson Correlation	-.303
	Sig. (2-tailed)	.092
	N	32

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 5/5

Experience Correlations with PE and EE

Correlations

		For how long have you been working at MAN Norway?
Performance expectancy (Pre-Implementation)	Pearson Correlation	-.192
	Sig. (2-tailed)	.292
	N	32
Performance expectancy (Post-Implementation)	Pearson Correlation	-.190
	Sig. (2-tailed)	.298
	N	32
Performance expectancy (Impact)	Pearson Correlation	-.421*
	Sig. (2-tailed)	.016
	N	32
Effort expectancy (Pre-Implementation)	Pearson Correlation	-.076
	Sig. (2-tailed)	.681
	N	32
Effort expectancy (Post-Implementation)	Pearson Correlation	-.102
	Sig. (2-tailed)	.580
	N	32
Effort expectancy (Impact)	Pearson Correlation	-.266
	Sig. (2-tailed)	.141
	N	32

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 5/6

Social Influence Correlations with Age, Experience

		How old are you?	For how long have you been working at MAN Norway?
I feel influenced by my colleagues to use M365 for collaborative work	Pearson Correlation	-.091	-.242*
	Sig. (2-tailed)	.619	.182
	N	32	32
The opinions of my coworkers regarding M365 usage matter to me	Pearson Correlation	-.309*	-.355*
	Sig. (2-tailed)	.085	.046
	N	32	32
The encouragement from my supervisor positively impacts my usage of M365	Pearson Correlation	-.268	-.445*
	Sig. (2-tailed)	.137	.011
	N	32	32
I am likely to seek assistance from my coworkers when facing challenges while using M365	Pearson Correlation	-.106	-.077
	Sig. (2-tailed)	.564	.676
	N	32	32

Appendix 5/7

Level of Involvement correlations with BI and UB

Correlations

		Level of involvement
I was looking forward to adopt different features of M365 in my work tasks	Pearson Correlation	.247
	Sig. (2-tailed)	.173
	N	32
Behavioural Intention/Content & Automation (Pre-Implementation)	Pearson Correlation	.104
	Sig. (2-tailed)	.572
	N	32
Behavioural Intention/Content & Automation (Post-Implementation)	Pearson Correlation	.394*
	Sig. (2-tailed)	.026
	N	32
Behavioural Intention/Content & Automation (Impact)	Pearson Correlation	.392*
	Sig. (2-tailed)	.026
	N	32
The project made me adopt different features of M365 in my work tasks	Pearson Correlation	.601**
	Sig. (2-tailed)	<.001
	N	32
I adopted different features of M365 in my work tasks	Pearson Correlation	.535**
	Sig. (2-tailed)	.002
	N	32

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 5/8

Age correlations with BI and UB

Correlations

		How old are you?
I was looking forward to adopting different features of M365 in my work tasks	Pearson Correlation	-.147
	Sig. (2-tailed)	.422
	N	32
Behavioural Intention/Content & Automation (Pre-Implementation)	Pearson Correlation	-.392*
	Sig. (2-tailed)	.026
	N	32
Behavioural Intention/Content & Automation (Post-Implementation)	Pearson Correlation	-.440*
	Sig. (2-tailed)	.012
	N	32
Behavioural Intention/Content & Automation (Impact)	Pearson Correlation	-.477*
	Sig. (2-tailed)	.006
	N	32
The project made me adopt different features of M365 in my work tasks	Pearson Correlation	-.263*
	Sig. (2-tailed)	.146
	N	32
I adopted different features of M365 in my work tasks	Pearson Correlation	-.278*
	Sig. (2-tailed)	.124
	N	32

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 5/9

Experience correlations with BI and UB

Correlations

		For how long have you been working at MAN Norway?
I was looking forward to adopt different features of M365 in my work tasks	Pearson Correlation	-.305
	Sig. (2-tailed)	.089
	N	32
Behavioural Intention/Content & Automation (Pre-Implementation)	Pearson Correlation	-.477**
	Sig. (2-tailed)	.006
	N	32
Behavioural Intention/Content & Automation (Post-Implementation)	Pearson Correlation	-.458**
	Sig. (2-tailed)	.008
	N	32
Behavioural Intention/Content & Automation (Impact)	Pearson Correlation	-.454**
	Sig. (2-tailed)	.009
	N	32
The project made me adopt different features of M365 in my work tasks	Pearson Correlation	-.218
	Sig. (2-tailed)	.231
	N	32
I adopted different features of M365 in my work tasks	Pearson Correlation	-.388*
	Sig. (2-tailed)	.028
	N	32

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix 6/1

LINEAR REGRESSION
Adoption

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.579[a]	.335	.237	.859	.335	3.408	4	27	.022
2	.775[b]	**.601**	.485	.706	.266	5.333	3	24	**.006**
3	.888[c]	.789	.456	.726	.188	.892	12	12	.577

a. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation)

b. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation), Level of involvement, For how long have you been working at MAN Norway?, How old are you?

c. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation), Level of involvement, For how long have you been working at MAN Norway?, How old are you?, INT_Exp_BIpreCA, INT_Age_BIpreCA, INT_Inv_BIpreCA, INT_Exp_PEpre, INT_Age_EEpre, INT_Inv_BIpre, INT_Inv_EEpre, INT_Exp_BIpre, INT_Age_BIpre, INT_Inv_PEpre, INT_Exp_EEpre, INT_Age_PEpre

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.054	4	2.514	3.408	.022[b]
	Residual	19.915	27	.738		
	Total	29.969	31			
2	Regression	18.019	7	2.574	5.170	.001[c]
	Residual	11.949	24	.498		
	Total	29.969	31			
3	Regression	23.652	19	1.245	2.365	.065[d]
	Residual	6.316	12	.526		
	Total	29.969	31			

a. Dependent Variable: I adopted different features of M365 in my work tasks

b. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation)

c. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation), Level of involvement, For how long have you been working at MAN Norway?, How old are you?

d. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation), Level of involvement, For how long have you been working at MAN Norway?, How old are you?, INT_Exp_BIpreCA, INT_Age_BIpreCA, INT_Inv_BIpreCA, INT_Exp_PEpre, INT_Age_EEpre, INT_Inv_BIpre, INT_Inv_EEpre, INT_Exp_BIpre, INT_Age_BIpre, INT_Inv_PEpre, INT_Exp_EEpre, INT_Age_PEpre

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.576	.655		3.929	<.001
	Performance expectancy (Pre-Implementation)	.226	.313	.235	.724	.475
	Effort expectancy (Pre-Implementation)	.095	.301	.099	.314	.756
	Behavioural Intention (General Pre- implementation)	-.060	.203	-.080	-.295	.770
	Behavioural Intention/Contnent & Automation (Pre-Implementation)	.308	.170	.387	1.814	.081
2	(Constant)	2.328	.863		2.696	.013
	Performance expectancy (Pre-Implementation)	.112	.258	.116	.432	.670
	Effort expectancy (Pre-Implementation)	.153	.265	.161	.579	.568
	Behavioural Intention (General Pre- implementation)	-.066	.184	-.088	-.356	.725
	Behavioural Intention/Contnent & Automation (Pre-Implementation)	.239	.163	.300	1.466	.156
	Level of involvement	.414	.109	.500	3.779	<.001
	How old are you?	.011	.139	.013	.078	.938
	For how long have you been working at MAN Norway?	-.222	.200	-.181	-1.108	.279

3	(Constant)	3.897	3.558		1.095	.295
	Performance expectancy (Pre-Implementation)	-1.097	2.478	-1.140	-.443	.666
	Effort expectancy (Pre-Implementation)	-.617	1.431	-.647	-.431	.674
	Behavioural Intention (General Pre- implementation)	2.101	1.922	2.817	1.093	.296
	Behavioural Intention/Contnent & Automation (Pre-Implementation)	-.693	.835	-.872	-.830	.423
	Level of involvement	1.448	1.036	1.751	1.398	.187
	How old are you?	-.114	.755	-.135	-.151	.882
	For how long have you been working at MAN Norway?	-1.576	1.358	-1.283	-1.161	.268
	INT_Age_PEpre	.516	.656	2.881	.786	.447
	INT_Exp_PEpre	-.494	.583	-1.887	-.848	.413
	INT_Inv_PEpre	.221	.543	1.409	.407	.691
	INT_Age_EEpre	-.484	.640	-2.675	-.756	.464
	INT_Exp_EEpre	1.204	.733	4.860	1.642	.126
	INT_Inv_EEpre	-.221	.384	-1.388	-.576	.575
	INT_Age_BIpre	-.164	.345	-1.104	-.474	.644
	INT_Exp_BIpre	-.362	.624	-1.456	-.579	.573
	INT_Inv_BIpre	-.228	.274	-1.542	-.833	.421
	INT_Age_BIpreCA	.278	.261	1.236	1.065	.308
	INT_Exp_BIpreCA	-.116	.375	-.340	-.310	.762
	INT_Inv_BIpreCA	.033	.291	.177	.114	.911

a. Dependent Variable: I adopted different features of M365 in my work tasks

Appendix 6/2

Project impact on Adoption

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.429[a]	.184	.063	1.312	.184	1.525	4	27	.223
2	.726[b]	.527	**.389**	1.060	.343	5.792	3	24	**.004**
3	.888[c]	.789	.454	1.001	.262	1.240	12	12	.358

a. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation)

b. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation), Level of involvement, For how long have you been working at MAN Norway?, How old are you?

c. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation), Level of involvement, For how long have you been working at MAN Norway?, How old are you?, INT_Exp_BIpreCA, INT_Age_BIpreCA, INT_Inv_BIpreCA, INT_Exp_PEpre, INT_Age_EEpre, INT_Inv_BIpre, INT_Inv_EEpre, INT_Exp_BIpre, INT_Age_BIpre, INT_Inv_PEpre, INT_Exp_EEpre, INT_Age_PEpre

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.498	4	2.625	1.525	.223[b]
	Residual	46.470	27	1.721		
	Total	56.969	31			
2	Regression	30.014	7	4.288	3.818	.006[c]
	Residual	26.955	24	1.123		
	Total	56.969	31			
3	Regression	44.935	19	2.365	2.358	.066[d]
	Residual	12.033	12	1.003		
	Total	56.969	31			

a. Dependent Variable: The project made me adopt different features of M365 in my work tasks

b. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation)

c. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation), Level of involvement, For how long have you been working at MAN Norway?, How old are you?

d. Predictors: (Constant), Behavioural Intention/Contnent & Automation (Pre-Implementation) , Effort expectancy (Pre-Implementation), Behavioural Intention (General Pre- implementation), Performance expectancy (Pre-Implementation), Level of involvement, For how long have you been working at MAN Norway?, How old are you?, INT_Exp_BIpreCA, INT_Age_BIpreCA, INT_Inv_BIpreCA, INT_Exp_PEpre, INT_Age_EEpre, INT_Inv_BIpre, INT_Inv_EEpre, INT_Exp_BIpre, INT_Age_BIpre, INT_Inv_PEpre, INT_Exp_EEpre, INT_Age_PEpre

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.686	1.001		1.683	.104
	Performance expectancy (Pre-Implementation)	.190	.477	.143	.398	.694
	Effort expectancy (Pre-Implementation)	.350	.460	.267	.761	.453
	Behavioural Intention (General Pre- implementation)	-.077	.310	-.075	-.248	.806
	Behavioural Intention/Contnent & Automation (Pre-Implementation)	.149	.259	.136	.576	.569
2	(Constant)	1.491	1.297		1.150	.262
	Performance expectancy (Pre-Implementation)	.017	.388	.013	.044	.965
	Effort expectancy (Pre-Implementation)	.301	.398	.229	.755	.457
	Behavioural Intention (General Pre- implementation)	.024	.277	.024	.088	.930
	Behavioural Intention/Contnent & Automation (Pre-Implementation)	.021	.245	.019	.084	.934
	Level of involvement	.669	.164	.587	4.071	<.001
	How old are you?	-.175	.209	-.151	-.838	.411
	For how long have you been working at MAN Norway?	-.128	.301	-.076	-.426	.674

3	(Constant)	10.177	4.911		2.072	.060
	Performance expectancy (Pre-Implementation)	-2.910	3.420	-2.194	-.851	.412
	Effort expectancy (Pre-Implementation)	.188	1.976	.143	.095	.926
	Behavioural Intention (General Pre- implementation)	1.738	2.652	1.690	.655	.525
	Behavioural Intention/Contnent & Automation (Pre-Implementation)	-.753	1.153	-.687	-.654	.526
	Level of involvement	2.069	1.429	1.814	1.448	.173
	How old are you?	-3.134	1.042	-2.691	-3.006	.011
	For how long have you been working at MAN Norway?	-.739	1.874	-.437	-.394	.700
	INT_Age_PEpre	1.301	.905	5.274	1.437	.176
	INT_Exp_PEpre	-.051	.804	-.141	-.063	.951
	INT_Inv_PEpre	-.384	.749	-1.776	-.513	.618
	INT_Age_EEpre	-.041	.883	-.166	-.047	.963
	INT_Exp_EEpre	-.074	1.012	-.218	-.074	.943
	INT_Inv_EEpre	.116	.530	.528	.219	.830
	INT_Age_BIpre	-.466	.477	-2.277	-.977	.348
	INT_Exp_BIpre	-.088	.862	-.258	-.103	.920
	INT_Inv_BIpre	-.055	.378	-.268	-.145	.887
	INT_Age_BIpreCA	-.143	.360	-.461	-.397	.699
	INT_Exp_BIpreCA	.379	.517	.804	.732	.478
	INT_Inv_BIpreCA	.055	.401	.213	.137	.893

a. Dependent Variable: The project made me adopt different features of M365 in my work tasks