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Management Perception of Digital Innovation: How Innovation Managers Perceive Digital Innovation in their Organisational Setting in Austria

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Abstract

The rapid advancement of digital technologies has fundamentally shaped business in all sectors. Therefore, organisations must find strategies for responding to this advancement through digital innovation. In this context, the perspective of innovation managers and their perception of digital innovations in practise are underrepresented in previous research. Therefore, using semi-structured interviews, this study examines the perceptions of 13 innovation managers towards digital innovation and organisational factors in Austria. Results showed that digital innovation is perceived positively and has the potential to solve current societal, economic and environmental challenges. However, a proactive strategy is required for organisations. Finally, in terms of conductive factors, agility, mindset adjustment, innovation culture, open innovation approach and ecosystem usage appear to be important in practise in Austria. This suggests that managers who are aware of the impact of digital innovation and consider conductive factors in their leading strategy may be successful in handling digital innovation.

Keywords: Digital Transformation; Economy; Society; Environment; Organisation; Expert Opinion; Innovation Management.

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1 Introduction

The rapid development of new technologies (e.g. artificial intelligence, blockchain or the Internet of Things) is becoming more important for organisations to maximise their benefits (Singh et al., 2020). In response to the emerging technologies, continuous innovation efforts are essential for organisations, regardless of whether a company, a non-profit organisation or even a government agency applies them (Hanaysha et al., 2022; Verhoef et al., 2021). A continuous drive for innovation can ensure an organisation's survival in a turbulent, hyper-competitive environment (Granig and Hilgarter, 2017). However, trends, such as digitalisation and globalisation have aided in creating new value-added opportunities for developing new products, services and business models (Caputo et al., 2021; Lee, 2015). Many organisations show that this goes far beyond the improvement of products, services, business models and production processes. Moreover, such trends have transformed many sectors in the economy and can change many economic characteristics fundamentally (Caputo et al., 2021; Prem, 2015). Furthermore, digital technologies

have significantly altered the methods and means of innovation (Nambisan, 2018). Emerging technologies enable digital innovations which appear to impact organisations' strategic and operational level (Ahmad and van Looy, 2020). Digital innovation is a crucial component of digital transformation in organisations, and it has initiated a growing body of research over the last few decades (Hadjielias et al., 2021; Kohli and Melville, 2019; Nambisan, 2018; Ramdani et al., 2022; Vial, 2019). Researchers investigating digital innovation focussed on the factors that influence adoption, such as individual, technological, organisational and environmental factors, as well as the impact of digital innovation on company performance, including cost reduction, profitability or competitiveness (Kurilova and Antipov, 2020). Other studies have examined manager antecedents of digital innovation, including knowledge and awareness, or organisational antecedents associated with management support, organisational readiness and organisational culture of digital innovation (AlBar and Hoque, 2017; Hartl and Hess, 2017; Li et al., 2018; Nambisan et al., 2017; Nasiri et al., 2020). Although much literature on digital innovation exists, there is still a lack of understanding about how innovation managers perceive digital innovation in their organisational setting in Austria. This is critical because innovation managers manage digital innovations daily, and looking at it from this angle allows them to draw conclusions particularly relevant to practise. Therefore, this research examines the perception and conductive factors for digital innovation from the perspective of an innovation manager in Austria to obtain insights into this increasingly important topic. In particular, this study aims to address two specific questions: (1) How do innovation managers perceive the impact of digital innovation? (2) What are the organisational factors conducive to digital innovation from the perspective of innovation managers in Austria?

2 Theoretical framework

2.1 Clarifying the Basics: Digitisation, digitalisation, digital transformation, innovation and digital innovation

Similar terms are frequently used synonymously, which can lead to confusion because they have different meanings. Today, digitisation refers to the transformation of analogue information to digital information and processes in the technical context (Gobble, 2018; Negroponte, 1995). Digitalisation entails much more and is concerned with using digital technologies to generate value and profit in novel ways (Gobble, 2018). In digitalisation, digitised data serve as the foundation for knowledge that can be used to change the business or drive new business models (Gobble, 2018). In literature, no consensus exists as to what digital transformation exactly constitutes. Although some scholars directly link digital transformation with digital technologies (Fitzgerald et al., 2013; Hess et al., 2016; Li et al., 2018; Schuchmann and Seufert, 2015; Westerman et al., 2014), others associate it with digital resources (Bharadwaj et al., 2013), new business models (Henriette et al., 2015) or digital operations and processes (Bowersox et al., 2005). Furthermore, researchers defined digital transformation as the systemic restructuring of the economy, institutions and society driven by digital diffusion (Unruh and Kiron, 2017). Meanwhile, other researchers described digital transformation to be accompanied by changes in business models, which result in changed products, organisational structures or process automation (Hess et al., 2016).

Improving productivity, lowering costs and, most importantly, generating innovations may be the most significant advantages of using digital technologies, and they should be used on the path to digital transformation (Hess et al., 2016). However, as Gothelf (2017) pointed out, digital transformation is not synonymous with innovation. Innovation may trigger transformation, or vice versa, but both aspects are not mutually exclusive. Innovation focuses more on the moment and the realisation of an invention, whereas digital transformation employs a longer change process

with multiple goals (Gothelf, 2017). Studies dealing with this phenomenon shows that in this context, the term 'digital innovation' is used in the literature as '[...] the creation of (and consequent change in) market offerings, business processes, or models that result from the use of digital technology', and it plays a central role in most organisational functions (Nambisan et al., 2017). Current forms of organisational innovation must be transformed and requires new skills, as noted by Nylén and Holmström (2015). Therefore, new approaches and strategies for digital innovation are required (Hinings et al., 2018; Nambisan et al., 2017).

2.2 Conceptualisation

The framework used is based on a conceptualisation in the literature with constructs described in Table 1. The theoretical framework of digital innovation developed by Kohli and Melville (2019) describes seven main dimensions of digital innovation: initiation, development, implementation, exploitation, the role of the external competitive environment, the role of the internal organisational environment and outcome (product, service, process) (Kohli and Melville, 2019). This framework was chosen because it is based on a comprehensive review and simple to understand. The role of the internal organisational environment and the critical role of managers appears to be particularly important in this context. Previous research has found that managers are primarily responsible for creating a digital-innovation-friendly environment by fostering a learning culture that includes support for knowledge sharing and the ability to absorb new ideas (Kohli and Melville, 2019; Wang and Ramiller, 2009; Wrede et al., 2020). Managers play a particularly important role in all dimensions. However, their perception appears to be indispensable, especially in the internal organisational environment dimension. As shown in Figure 1, this study connects to the dimension of internal organisational environment by investigating managers' perceptions of digital innovation.

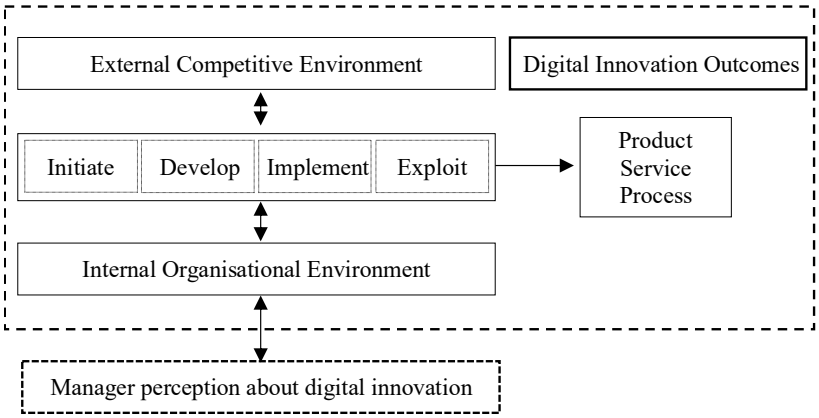


Figure 1. Theoretical framework of digital innovation

Table 1. Theoretical constructs of digital innovation by Kohli and Melville (2019)

Construct	Description
Initiate	The initiation dimension consists of the organisational ability to identify, adapt and apply knowledge regarding the possibilities of digital innovation from both the internal and external environment.
Develop	The development dimension refers to design science including the creation of technology and how technologies can be adopted.

Construct	Description
Implement	The implementation dimension refers to the complex set of organisational changes that occur during digital innovation initiatives.
Exploit	The exploitation dimension includes the generation of innovations using existing technologies and data sources.
External competitive environment	The role of the external competitive environment refers to the using behaviour of managers regarding digital innovations and how managers determine actions to respond to the competitive environment.
Internal organisational environment	The role of the internal organisational environment includes the crucial role of managers.
Digital innovation outcomes	The dimension of digital innovation outcomes leads to the successful generation of new digital innovations.

3 Method

This study employs a qualitative approach to best answer the research questions and understand the subject-oriented perspectives of Austrian innovation managers on digital innovation.

3.1 Participants and sampling

Face-to-face interviews were conducted with 17 German-speaking key informants from various branches, of whom 13 completed the interviews. Keynote speakers from the Innovation Congress, one of the most influential events in south Austria regarding innovation, were invited to participate in this study. This event was used for recruiting due to the opportunity to have innovation experts from different sectors and areas of Austria on site. This pool of 25 potential key informants served as the foundation for selection. Seventeen potential key informants meet the inclusion criteria of experience with innovation and digitalisation in a leadership position in a national setting. However, eight key informants were excluded due to the missing link to national setting. When selecting the key informants, a wide range of perspectives and viewpoints were intended, so no restrictions on, for example, sectors or organisation size were imposed. Four weeks before the event, a uniform email with an invitation to participate in this study was sent to the 17 key informants. As a result, 16 key informants responded and agreed to participate. Three key informants cancelled their interviews shortly before they were scheduled and refused to participate due to time constraints. This study included 13 key informants in total. Data were collected through semi-structured face-to-face interviews with 12 male and one female respondents over the course of one hour. The key informants came from various business sectors, including food (3), consulting (3), investment (3), technology (2) and academia (2). The mean age was 46,6±8,7 years with 16,1±8,6 years of experience with innovations and digitalisation in a leading position, as seen in Table 2.

Table 2. Characteristics of participants

ID	Age (in years)	Sex	Experience (in years)	Business domain
P1	53	male	28	consulting
P2	48	male	10	investment

ID	Age (in years)	Sex	Experience (in years)	Business domain
P3	36	male	7	food
P4	56	female	25	consulting
P5	49	male	19	consulting
P6	35	male	9	food
P7	46	male	15	food
P8	53	male	15	academe
P9	51	male	20	investment
P10	34	male	6	technology
P11	64	male	35	investment
P12	42	male	9	technology
P13	39	male	11	academe

3.2 Data collection

The semi-structured interviews (n = 13) were conducted by a single interviewer and included open-ended questions. The topics of the interview guide and the questions were based on a previous literature search in EBSCO Publishing and a previous focus group. The aim was to better understand the management perception to digital innovation in Austria. Therefore, three independent innovation experts were invited to participate: one from the university and two from practise. Subsequently, a topic list and questions for the semi-structured interviews were developed based on the outcomes of this discussion. The topics addressed three major themes in the perceptions of innovation managers in Austria: (a) the impact of digital innovations, (b) conducive organisational factors for digital innovations and (c) important digital innovation areas. However, part c was irrelevant and will not be considered in this study. The interview started with an introduction of the interviewer and information about data anonymisation. After obtaining their informed consent, an interviewer who had no relation to the participants conducted all interviews. Firstly, experts in the field of innovation were asked to describe their background and personal approach to innovations in general and how long they had worked in the field. Secondly, we were interested in identifying the impact of digital innovations (e.g. 'What impact does 'digital innovations' have for you?'; 'What opportunities and challenges may arise from digital innovations for your organisation?'; and 'How you personally perceive digital innovation in your organisation?'). Thirdly, we wanted to determine what factors are conducive for digital innovations. Therefore, we asked what organisations needed to perform in context to create digital innovations (e.g. 'What aspects of digital innovation are important for your organisation?'; 'Which factors do you think can stimulate digital innovation in your organisation?'). The data were gathered through verbal questions that were immediately transcribed verbatim. The interviews were transcribed and entered into MAXQDA ten for further organisation and analysis. The programme was chosen to help with the effective organisation, management and qualitative data coding.

3.3 Data analysis

After anonymised verbatim interview transcription, the researcher performed a summarised qualitative content analysis according to Mayring (2015). The analysis claims to be based on explicit rules. A systematic approach was used to make the study comprehensible and verifiable to avoid

free interpretation. Additionally, the analysis was conducted using specific guided steps devised by Mayring (2015). The initial coding process was an open coding process. Every single transcript was viewed and read. Elements were identified, texts were unified and concepts were highlighted and removed during this phase. The subsequent coding was performed in such a way that the current transcript was constantly compared with the previous ones, allowing for the creation of categories and their properties. Additional topics and areas emerged as the coding progressed. No categories of existing theories were used because the goal was to leave categories per se out of these studies and consider subjective perception of innovation managers. One author carried out the analysis in an iterative process to identify key themes and sub-themes. The initial coding and the original quotes from the interview data were included in summary tables. These summary tables served as a starting point for discussions with the other author to ensure that the themes and sub-themes were distinctive and coherent. During the analysis, relevant text passages were identified and chosen to match the research question (step 1), then transferred into paraphrases (step 2), and generalised (step 3). The level of abstraction was chosen to be as general as possible in a form that could be generalised beyond the individual case. For each paraphrase, the authors assigned a serial number (No.), pointed out the site of the reference in the transcript (including page and row), and mentioned the participant number from whom the paraphrase originated (ID). Meaning paraphrases could be derived from this (step 4). The summary paraphrases formed by bundling, construction and integration (step 5) are represented in the right column (reduction). The respective paraphrase numbers of the first stage are given in brackets contained in the summary paraphrases (step 6) to ensure completeness. This methodology was used for most of the research (impact of digital innovation and conducive organisational factors for digital innovations). For the results section, sample text passages were cited to support the statements.

4 Results

4.1 Perception of digitalisation and digital innovation from innovation managers view

Digitalisation has a wide-ranging impact on almost every aspect of life and significantly impacts the daily operations of all organisations. According to the interviews with experts, the advantages clearly outweigh the disadvantages. One of the advantages is that digital technologies make daily life easier for both the general public and organisations. Moreover, communication can be greatly simplified. As a result, contact between organisations and customers can be made much more efficient across borders because translation tools reduce the language barrier and time is limited by digital messages. Furthermore, the benefits of digital technologies allow organisations to create new business models or restructure existing ones.

> *I think there are a lot of advantages that digitalisation can bring to us (. . .) it has brought a lot of relief. For companies but also for customers. You can do a lot of things digitally now. Who would have thought earlier that via smartphone and a click, contact with companies can be recorded beyond the borders? In addition, completely new business models are created. (Participant 10, male)*

Integrating digital technology away from more efficient organisation–customer contact and communication has tremendous innovation potential. The use of digital methods can improve, facilitate and increase the efficiency of innovation processes. According to Participant 8 (male), 'Digitalisation makes innovation processes better and easier'. A common view among interviewees was that all are witnessing the transformative effects of social media, mobile, cloud and other

technologies in all societal aspects today and that the enormous influence on economy and environment was undisputed. Innovation in general is part of life and has always existed and will always exist. However, digital innovation is probably more important today than ever before.

> *Digital innovation is to the greatest extent so far, simply because the digital revolution has just made the issue much more present and the pressure on businesses and society has grown. (Participant 13, male)*

In contrast to the discovered advantages, a more frequently mentioned critical aspect is that all processes have become faster due to digitalisation, and the 'winner takes it all' mentality has found its way.

> *(. . .) the world will never be as slow as it is today'. (Participant 11, male)*

> *Because the frequency of digital innovation has simply become so fast that we all just have to wonder every day what is new. If you cannot keep up, you will be overtaken by other companies very quickly and only the one of them who will be the fastest will be the winner in this game. (Participant 7, male)*

The customers, market and competitors are not waiting for a company to be qualified for digital challenges. Therefore, digital innovations are critical for organisations to remain competitive. There is almost an obligation to embrace digital innovation to remain future-ready, not just reactive but proactive

> *The digitalisation is unstoppable and has already arrived everywhere. We are just at the beginning. I think that will go faster and faster with time. Organisations must be control a situation rather than just responding to it to stay in the market. (Participant 11, male)*

4.2 The impact of digital innovation from innovation managers views

The analysis revealed strong evidence that digital innovation is regarded as critical, primarily for problem solving. This concept takes into account various levels such as societal, economic and ecological, as seen in Figure 2. Participant 9 (male) stated that 'Digital innovations have the potential to solve problems at the economic, ecological and social level'.

On a societal level, digital innovation may seek to improve the population's quality of life by addressing the challenges of rapid societal change. The society is rapidly changing as a result of health advancements and demographic shifts. People are getting older, but their life expectancy is not increasing. The use of digital innovation can improve living conditions and societal welfare or subjective well-being.

> *A development without innovation is hardly possible and only digital innovation brings both the economic and social developments that make us better and more suitable for the future. (Participant 2, male)*

> *In society, it means that we can constantly improve the quality of life through digital innovation. (Participant 8, male)*

From an economic point of view, digital innovations have the potential to maintain an organisation's competitiveness while also developing competitive advantages by allowing it to create new value for the customer. Organisations with the necessary organisational and human resources represent and promote a suitable culture of innovation, allowing them to quickly and successfully implement digital innovations, thereby creating competitive advantages.

Progress and productivity can only come through innovation and technology. Without digital innovation, there is a downtime and a company can no longer enjoy competitive advantages. (Participant 12, male).

The whole of society and business is changing through digitalisation. Digital innovations trigger change, thereby resulting in new needs arising, which are in turn satisfied by digital innovations. According to Participant 4 (female), 'A reciprocal relationship exists between digital innovation and need'.

On an environmental level, digital innovation has the potential to solve the problem of limited resources to achieve ecological sustainability for a future worth living. Participant 5 (male) states that 'Digital innovations that are focussed on ecologic sustainability can bring us many advantages and they can bring us a leap forward'.

4.3 Conducive organisational factors for digital innovations

As shown in Figure 2, many aspects were identified based on the analysis process on the topic of factors that are conducive to digital innovation from the perspective of innovation managers. However, experts agree that it is critical to recognise that digital innovation necessitates organisational adaptation.

Agility is one of the most important aspects of digital innovation and its associated rapidly changing time. Organisations that can act agilely and flexibly can respond to new customer needs more quickly and adapt processes, structures, or outputs appropriately. As a result, market presence enables and can achieve long-term competitive advantage.

Digital innovations cannot always be planned exactly. However, quick adjustments are needed. This is a main component for successful organisations regarding digital innovation. (Participant 12, male)

Meanwhile, the aspect of *mindset adjustment* focuses on digital innovation as an overall organisational task and management support. The entire organisation must support and be accountable for digital innovations, particularly at the executive level. Operationally, digital innovation can be delegated, but not mentally. Crucially, the power of digital innovation is determined by whether or not management supports it. Without top management support, an innovation manager cannot successfully develop digital innovations.

It is a special culture that needs to be developed for digital innovation, which is not easy and depends on leadership culture and requires mindset changes. (Participant 1, male)

Innovative corporate culture is represented by establishing a positive working environment in which all parties feel at ease; it is critical to the success of digital innovation. Digital innovation must be viewed positively.

Technical knowledge is important, but the enthusiasm for digital innovation is crucial. It is not hard work when people feel comfortable in the organisation. (Participant 8, male)

Moreover, trial and error must be allowed and promoted in such innovative corporate culture. Participant 10 (male) stated, 'I think there has to be space in the organisation to try out digital innovations and it also has to be clear that digital innovation sometimes fails'. According to experts, organisational creativity plays an important role in digital innovation. The concept of

creativity involves generating new ideas and refers to the ability to think broadly. According to Participant 4 (female), 'The basis for digital innovations is clearly creativity'.

For *open innovation process and usage of an ecosystem*, the experts agree that openness to knowledge exchange is also a critical factor in digital innovations. Nobody knows where the best innovation is coming from because knowledge is ubiquitous and everywhere. This is why open innovation processes are used to acquire impulses from outside the organisation. To improve digital innovation, stakeholders must exchange ideas with others. A good strategy is when an organisation is open about its innovation process.

> *How digital innovation develop should not be a secret. While an idea is valuable, the implementation and process is even more important. It would be important to exchange ideas with others. (Participant 12, male)*

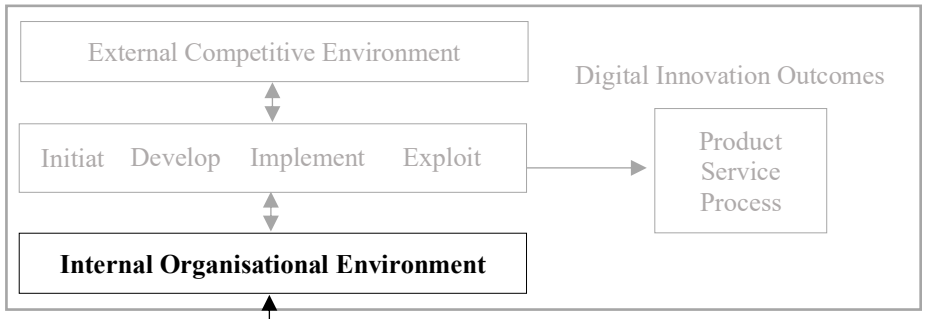
Further, the relationships between existing and prospective customers, employees, and stakeholders are all important considerations. Collaboration with other companies and research organisations, so everyone can benefit from such connections, leads to success in digital innovation. In other words, experts believe that the merger of several companies is a success factor for digital innovation. According to Participant 10 (male), 'Sharing and partnering with other companies to develop digital innovation is very important to the success of digital innovation'.

5 Discussion

This study examines how innovation managers perceive digital innovation in their organisational setting in Austria. Firstly, it investigates how innovation managers perceive the impact of digital innovation, and secondly, it identifies organisational factors that promote digital innovation.

The result of this study indicates that digital innovation may be a critical factor for any organisation, whether it is in the food, consulting, investment, or technology sector. This is consistent with previous findings that show that digital technologies are crucial for any type of organisation, because all kinds of organisations must begin reinventing themselves to stay competitive (Hanaysha et al., 2022; Singh et al., 2020; Verhoef et al., 2021).

In terms of experts' general perceptions of digital innovation, this study found that digital innovation is mostly perceived as something positive with various advantages. Digital innovation enables organisations to simplify processes and design them more efficiently. This finding is consistent with the findings of Parviainen et al. (2017), who found that digitalisation and the associated changes can provide new opportunities more efficiently and appear to be related to cost reduction, profitability and competitiveness (Kurilova and Antipov, 2020). Furthermore, digital innovations are perceived as having the potential to create new business models or restructure existing ones for organisations and make cross-border customer–organisation communication easier. This finding backs up a previous study reporting that digital age tools like translators and autocorrect simplify cross-cultural communication and influence people to be more confident during communication (Lifintsev and Wellbrock, 2019). Several advantages of digital technologies, such as cost reduction, profitability, or competitiveness, have been identified in previous research (Kurilova and Antipov, 2020). Moreover, digital technologies and innovations appear to lead to more diverse innovation actors, increased cooperation and the emergence of new industrial structures (Hund et al., 2019). Despite all the advantages, digital innovations may have drawbacks for organisations, such as increasing peace for innovation through digitalisation or the 'winner takes it all' mentality, as demonstrated in this study. Overall, digital transformation cannot be slowed, halted, or reversed. Fundamental shifts are already underway. However, as mentioned by



Manager perception about digital innovation

	Level	Challenge	Potential
Impact	Society	Rapid societal changes	Quality of life improvement
	Environment	Limited resources	Ecological sustainability
	Economy	Changed customer preferences	Competitive advantages

Solve challenges

	Critical Success Factor	Subfactor
Conductive organisational factors	Agility	
	Mindset adjustment	♦ Digital innovation as the overall task ♦ Support from top management
	Innovative corporate culture	♦ Chance to trial and error ♦ Positive working atmosphere ♦ Creativity
	Open innovation approach	
	Usage of an ecosystem	

Figure 2. Digital innovation

the experts in this study, these processes occur much faster today than in the past. This expert perception is congruent with the existing literature, which shows that a crucial aspect of digital innovation processes is the fast pace (Mariani and Nambisan, 2021; Nylén and Holmström, 2015). Furthermore, prior research indicates that digital innovation may also have negative effects, such as role conflict, stress and costs (Berger et al., 2021), which must be considered when developing

digital innovation.

As demonstrated by this study, organisations require digital innovation to remain competitive in the future. Moreover, there is an obligation to embrace digital innovation to remain fit for the future and not just reactively but also proactively. This finding is supported by previous research, which shows that a proactive approach to the impact of trends such as digitalisation appears to be more favourable for improving organisational resilience (Granig and Hilgarter, 2020; Parviainen et al., 2017).

According to Austrian innovation managers, the impact of digital innovation may address the societal, economic and ecological levels, which corresponds to the three-pillar concept of sustainability. This is consistent with previous research indicating a link between digital innovation and sustainability (e.g. Cosimato and Vona, 2021; Gossen et al., 2021; Lichtenthaler, 2021). Further, the results of this study show that the impact of digital innovation is complex and dependent on the perspective. In a social context, it might be associated with improving the quality of life of the population and triggered by rapid societal changes such as demographic change. On the economic level, digital innovation may be attributed to the importance of generating competitive advantages, which appears to be triggered by changes in customer preferences. In the environment context, digital innovation may be prompted by limited resources and appears to achieve ecological sustainability. However, the overall impact of the three levels is to solve challenges. Nevertheless, more research on this topic is required before the relationship between digital innovation and sustainability can be fully understood. Some possible research questions are 'Does digital innovation contribute to greater sustainability?' 'Do digital innovations help to improve people's lives, achieve economic growth, or increase competitive advantages, or do they help to protect the environment?

With today's discovered rapid pace, digital innovations necessitate a reorganisation of organisational work and the associated change in an organisation's capabilities. These findings are consistent with existing evidence suggesting that digital technologies may change the characteristics of innovation actors (Hund et al., 2019; Nambisan, 2018). However, previous research has shown that some elements are critical for digital innovation, such as the creation of a conducive environment to establish an innovative corporate and learning culture (Kohli & Melville, 2019). Furthermore, experts believe that mindset adjustment and the associated support of top management are critical components of digital innovation. This idea supports previous findings in the literature, where Hess et al. (2016) and Fitzgerald et al. (2013) argued that it is a high-priority management challenge, and the initiative to tackle it has to come from the top. Further, a digital mindset can assist organisations in developing and maintaining digital targeting. Thus, both commitment and acceptance of new technologies grow (Khin and Ho, 2019). Organisations rely on learning from within and outside their organisation to initiate digital innovation. According to the current findings, a previous study found that digital technologies change the involved users in innovation practise and increase cooperation (Hund et al., 2019). The knowledge exchange between internal and external partners, such as in open innovation processes or ecosystems, appears to improve the identification and estimation of exploitable opportunities (Kohli and Melville, 2019). Further, an ecosystem is concerned with the cooperative or collaborative behaviour of various stakeholders in the pursuit of a core value proposition. This concept can be used to interpret the value of digital innovation by considering digital resources and actors from an ecosystem standpoint (Nambisan, 2018). According to experts, agility is equally important in digital innovation. This could be explained by three key mechanisms, which Chan et al. (2019) discussed. Firstly, the openness mechanism reduces organisational rigidity. Secondly, developing innovative capabilities will help organisations become more adaptable. Thirdly, the ability of organisations to be both efficient

and flexible simultaneously is the key to agility (Chan et al., 2019).

Finally, several important limitations must be considered. First, there are various and small sample sizes. Because of the small sample size, caution must be applied as the findings may not be transferable to all settings or even generalisable to other countries. Therefore, further research with a larger sample size is advised to further investigate this relevant topic. The sample profile comes next. The experts were chosen to gain an insight into digital innovations from the perspective of Austrian innovation managers, regardless of sector. This sample profile includes a variety of innovation experts, but the generalisation of results is limited. Further research should be conducted to investigate the perception of digital innovation across different sectors or countries to develop action plans for organisations. Nevertheless, the insights can be assumed to be an overarching phenomenon because the experts' statements were similar despite the companies' differences in industry, size, market environment, or legal form. In this context, further research would benefit from a closer look at the employee level, which at the very least supports digital innovations.

6 Conclusion

This study provided expert insights into organisational digital innovations. The perceived impact and conducive factors of digital innovation were discovered. These insights contribute to a better understanding of digital innovation in organisations in Austria.

Moreover, the study's findings have important implications for developing digital innovation strategies that are proactive rather than reactive.

One issue that emerges from these findings is that digital innovation may be viewed as an opportunity to support societal, economic and environmental efforts. Informed managers who understand their responsibilities can help create a more sustainable future. Therefore, managers are encouraged to discuss the effects of digital innovation on a societal, economic and ecological level. This finding implies that knowledge about the impact of digital innovation in a socioeconomic and ecological context allows for a more in-depth understanding of digital innovation.

Furthermore, the conducive organisational factors indicate what organisations should look for to stimulate digital innovation. Understanding these factors enables organisations to reconsider and, if necessary, modify their own orientation. Managers must consider not only technology but also people and organisational needs. They must also tap into the collective intelligence of people both inside and outside the organisation. Moreover, opening some processes may aid in integrating internal and external resources and the successful implementation of digital innovation. Furthermore, time is of the essence; thus, an organisation must be adequately flexible to respond quickly to changing situations. Finally, managers aware of and incorporating conductive factors into their leading strategy may successfully foster digital innovation.

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