

# *Digitisation*

## A Quantitative and Qualitative Market Research Elicitation

*Examining German  
digitisation needs,  
fears and expectations*

**ISM**

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SCHOOL OF MANAGEMENT  
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# 1. Introduction

Digitisation – a topic that has been prominent in the public discourse for quite a while. On the one hand, digitisation facilitates worldwide trade, connects people through communication tools and enables faster data transmission. On the other hand, it is accompanied by numerous newly arising challenges such as data security concerns and cybercrime. Within this market research project, the International School of Management (ISM) Strategic Marketing Management master’s class of 2019 was tasked with examining the needs, fears and expectations of the German population regarding the megatrend of digitisation. The project was initialised in cooperation with PwC’s Digital Services Department.

**44%** *“I don’t mind digitisation affecting every part of my life.”*

The aim of this study is to take a focused approach addressing this broad topic, considering digitisation within people’s business as well as private lives. Rather than only looking at single trends in certain sectors, this approach aims at capturing the “big picture” and subsequently narrowing it down to the most important areas of digitisation. In this study, the term “digitisation” shall be defined as the integration of digital technology into people’s everyday lives.

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# 2. Methodology

To gather detailed insights on the topic of digitisation, a combination of quantitative and qualitative empirical methods was chosen. Given the time limitation of eight weeks, the two approaches were conducted in parallel but interrelatedly.

Initially, an online survey was set up, assessed in a pretesting phase and afterwards distributed via various social and professional networks in order to get a general overview of the subject. The questionnaire consisted of ten content questions and eight sociodemographic questions as well as three open questions to enable the participants to further elaborate on the main topics. Within 12 days of data collection, a total of 418 people participated and gave insights into their fears, needs and expectations regarding digitisation and its accompanying trends. After cleaning the sample, 408 cases were included in the statistical evaluation, taking only German (63%) and American (37%) participants into account. On average, the participants were highly educated (42% bachelor’s degree), lived in an urban area (82%), were female (66%) and between 18 and 26 years old (59%). They varied widely in their profession as well as their job rank. Overall, the collected data can only be considered as a trend but not as representative for the German or the American population.

Building on the first quantitative insights, a guideline for several focus group discussions was set up as a means of going deeper into the topic and gaining further insights into people’s feelings and attitudes towards digitisation. Over the course of two days, three focus groups of 90 minutes on average were conducted at the ISM facilities in Munich for the purpose of the qualitative research. This method was chosen as it enables a deeper understanding of personal thoughts, lifestyles and motives by actively engaging the participants in the research process. The focus group participants were female and male and currently residing in Munich; however, they varied in terms of their sociodemographics, such as age, profession and religion. The first focus group consisted of six people between the ages of 18 and 26. In the second group six people between 27 and 38 participated, and the age of the six participants in the third focus group ranged from 39 to 65. Seven women and 11 men led to a total of 18 interviewed persons. The questioning methods varied from brainstorming to open questions or projective techniques, often supported by visual stimuli such as pictures of different scenarios.

### 3. Quantitative results

The quantitative dataset was analysed and evaluated with the help of IBM's statistics software SPSS. Given the scope of the paper, only the most essential quantitative findings will be portrayed in the following. It is crucial to mention that even though 153 Americans were included in the survey, the results displayed within this paper focus only on the German participants, taking the limitations of this paper into account.

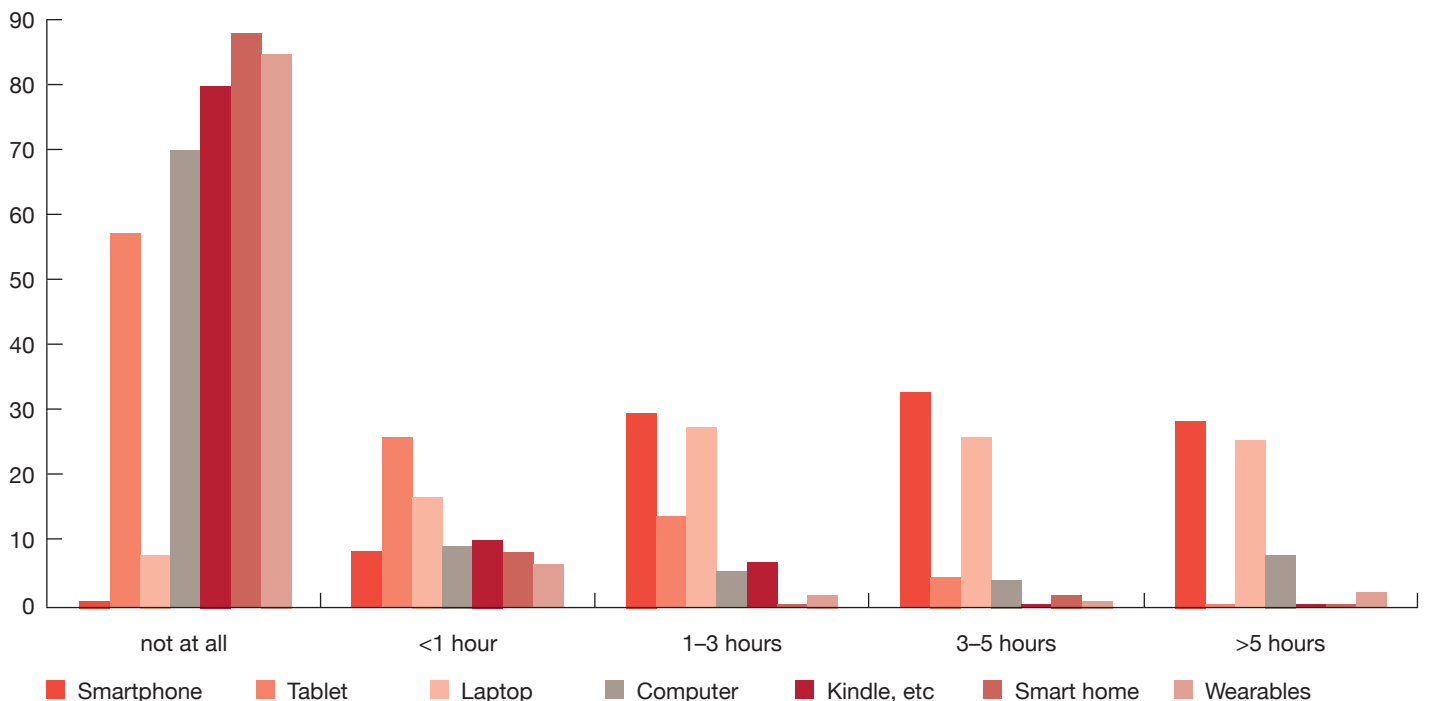
*“Communication becomes faster and more direct.”*

Overall, the average participant viewed digitisation “somewhat positively.” It cannot be ruled out that the participants’ overall affinity for digitisation was either influenced by the characteristics of the sample composition or the naming of the topic “digitisation” at the stage of the survey’s distribution. The view of digitisation (ranked on a 5-point Likert scale) was

influenced by numerous factors such as gender, education level, job rank, profession or device usage of the participants. Men ( $M = 4.14$ ;  $SD = 0.9$ ) for example, had a more positive view of digitisation than women ( $M = 3.77$ ;  $SD = 0.8$ ), and people with a higher level of education ( $M = 3.73$ ;  $SD = 0.9$ ), also viewed digitisation more positively than people with a lower level of education ( $M = 3.47$ ;  $SD = 1.1$ ). However, apart from the difference in means between genders, these findings were not significant and can only be considered trends.

In light of with this positive attitude, the high percentage (44 %) of participants who stated that they would not mind digitisation affecting every part of their life and the relatively high device usage of the participants was not surprising and can be seen in the following graph:

**Fig. 1 Usage of different devices in hours per day – in percent**



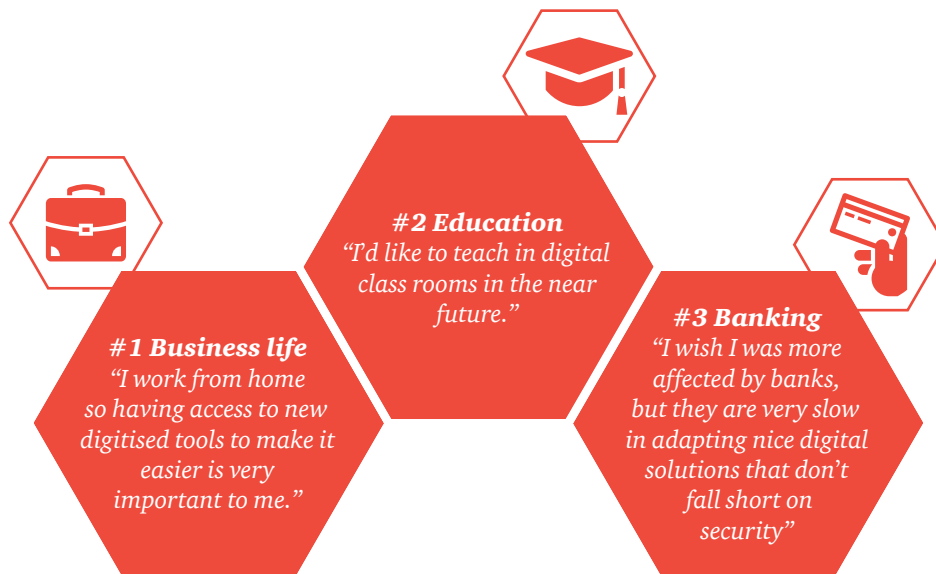
Starting with an analysis of the status quo, the participants were asked to rank the aspects of their life which are most affected by digitisation. The outcome was that the majority said that communication was most affected, followed by business life and entertainment. Additionally, the respondents were asked to name the aspects of their life in which they

would like to see more digitisation. The outcome was that the participants perceived business life as the most important area, followed by education. Participants named banking as the third area where they would require more digitisation.

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**Fig. 2 Status quo areas that are most affected by digitisation**

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The two most frequently named areas that people do not want to be digitised were Romance/Dating and Healthcare. Furthermore, the open answers revealed that some participants felt the need to express their concerns explicitly regarding those two topics. Additionally, the participants were asked to select and rank their five most pressing concerns. The most critically viewed aspects were data privacy, bank/data fraud and surveillance.

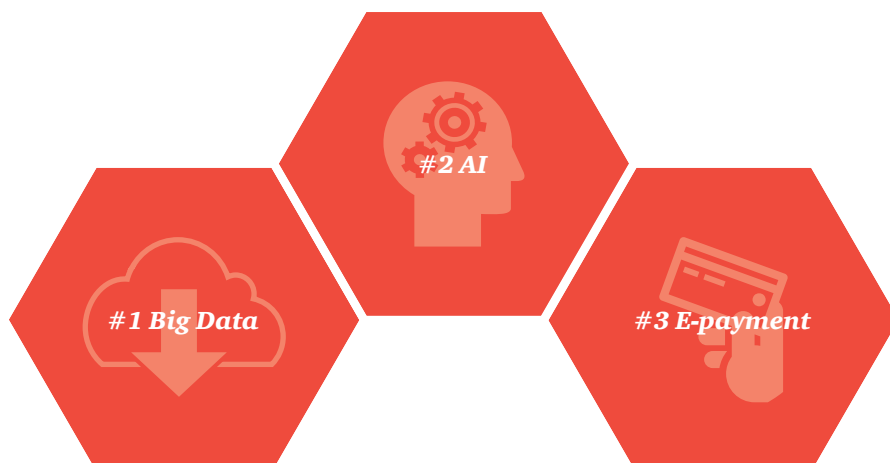
The last section of the questionnaire focused on people's expectations of trends affecting their own lives and, additionally, society as a whole. Big data and AI were clearly the aspects in which the participants expect the biggest trends in the future regarding their own lives, followed by e-payment.

Looking at the identified trends for the whole society, it can be seen that big data and AI were also named the most often, along with autonomous driving.

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**Fig. 3 Trend expectations, own life**

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## 4. Qualitative results

To analyse the participants' attitudes towards the megatrend of digitisation in depth, three focus group discussions (FGDs) were examined. The discussions resulted in detailed information on the general understanding of the term "digitisation", the extent to which the participants' daily routines such as their work lives are being influenced by digitisation and their needs and demands as well as their fears regarding the trend. The discussions ended with a five-year

*"Every device could become a (digital) service."*

forecast of expected future trends from the participants' subjective perspective. Due to the limited scope of this paper and similarities in the responses, the results of the examined aspects will be combined for all three age groups. Important differences will be highlighted in each section.

### **General understanding of digitisation: internet, smartphone and data security**

The most frequently named aspects regarding the understanding of the term "digitisation" were the internet and smartphones as well as the chances and possibilities they offer. However, some fears were already expressed in this early stage of interviewing. Digitisation is perceived as making processes easier and faster but can also trigger stress due to its omnipresence and 24/7 availability. The greatest concerns

*"Work comes home with us; it has no limits."*

regarding digitisation were the security of personal data, a lack of transparency and the total lack of control over what is being used by consumers. In general, all age groups perceive the digitisation trend as a great opportunity to facilitate and accelerate processes, but that there is a necessity for more transparency and control over stored personal data.

### **Digitisation in private life speeds up processes while overloading with information**

The private lives of the participants are strongly influenced by digitisation. Due to the tendency to replace traditional media with digital services and devices, processes become faster and easier. At the same time, the overload of information and fast communication causes a high level of stress for people and was perceived as leading to a reduction in the importance of the communicated content. The participants of all age groups report the intense usage of digital devices and services within their private lives. The elder target group stated that new technologies are often initially rejected but become common and integrated into their daily lives over the course of time. Again, chances and possibilities for facilitating life are realised but are also perceived as coming along with a high degree of dependence. This leads to the attempt of the youngest

participants to keep digitisation out of their private lives once in a while.

### **Digitisation in work life creates new jobs and possibilities but also demands**

Similar to the effects of digitisation in private life, new technologies are perceived to ease and speed up processes in business life. Still, new ways of communication entail new tasks and lead to information overload. As a result of digital communication, participants report feelings of constant availability ("24/7 standby mode"). This creates a feeling of being under constant pressure and blurs distinctions between private and professional lives. Summarising the findings, it can be stated that digitisation has advanced work life but also increased the dependency on technology and at the same time entailed new efforts and challenges.

*"I like the idea of electronic health records, but I am really afraid of robot doctors."*

### **Desire for the improvement of existing technologies and concerns about privacy**

In general, the participants named a demand for improvements in the public sector rather than the private sphere. Digitisation of the entertainment sector, for instance, was barely mentioned whereas improvements in banking and e-payment are wished for by every age group. In addition, an overall concern with data privacy issues could be detected across all age groups. Desired improvements in other categories such as shopping, mobility or work, however, varied between the different age groups.

### **Needs for safe and efficient data storage**

The FGDs gave insight into people's needs and which services or devices the participants want to be digitised. A common demand for easier and standardised digital payment and check-out solutions was highlighted throughout all age groups. In addition, a digital identity as a centrally managed authentication solution was named, such as a digital health record in healthcare. For all desired innovations, the participants wanted to have access to information about which data is being stored and for what purpose.

### **Concerns about privacy in social media, the future of digitisation and a knowledge gap**

The category of fears regarding digitisation delivered scattered results across all age groups. Participants aged 18–26 mainly mentioned the importance of social media and data privacy issues connected to these ways of communication. People aged 27–38 named fears about health issues regarding radiation of digital devices as well as the fear of being under constant surveillance. Furthermore, the fear of losing their jobs and

being replaced by machines as well as concern about the influence of digital devices on children and their future development were expressed by this group. Digitisation taking over lives and habits is generally seen as negative. This thought was especially stressed by the age group of 39–65 years. Here, participants were further afraid of not being able to stay up to date with the required knowledge about digital innovations. The loss of personal interaction and human contact due to digitisation was named by participants in all age groups. In addition, the fear regarding uncertainty about how digitisation will be used and controlled in the future was a common tenor.

*“I would like interpersonal interactions to remain personal and unmediated. Especially when it comes to dating.”*

#### **Expectations for easier future processes and hope for suitable regulations**

Being asked about their expectations for digitisation in the future, the participants mentioned the improvements in AI and an associated facilitation of processes and changing behaviour even more frequently. Services in mobility are expected to increase in terms of car sharing or alternative mobility. Moreover, the healthcare sector was perceived to evolve due to digitisation, ie, being affordable for more people in the future. For all of these changes, specific laws and strict regulations regarding privacy and surveillance issues are expected to be set up by the governments.

#### **A trend radar showing how diverse the next five years are seen in different age groups**

Autonomous driving, alternative payment methods and robots were mentioned by all age groups as becoming more common in the near future. Whereas the youngest group shared many concerns about the upcoming developments, the age groups of 27–38 and 39–65 were more optimistic about future developments in digitisation. The middle age group named many trends that will arise within the next five years, whereas participants aged 39–65 saw most trends beginning five years from now.

In conclusion, the FGDs revealed detailed insights about people expecting various changes in their lives through digitisation and its resulting opportunities. Throughout all parts of the discussions, fears and concerns were mentioned, showing that people want laws and regulations to be set up in order to protect their data and independence as well as enhance trust.

These findings mirror the relevance of closing the gap between people’s desire for convenience, time efficiency, and curiosity about new gadgets on the one hand and their fear of turning into a see-through customer whose most private details are made accessible to third parties on the other. Or as Bill Gates phrased it:

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## **5. Conclusion**

On the one hand, digitisation with new services and technologies has the potential to fundamentally transform and facilitate people’s lives and to have a great impact in the future. Processes will become faster and easier, people can connect every aspect of their daily life and, in general, new innovations create great opportunities in business and private life, like the creation of new jobs or improvements in the health sector. But on the other hand, digitisation is closely related with concerns and fears. People need (data-)security, transparency and control over what data is being stored and how it is being used. They expect companies, governments and legal systems in the

future to set up regulations regarding privacy and data security. Only then can we fully profit from the chances accompanying digitisation. Future research should examine the needs, fears and expectations related to the megatrend of digitisation in depth in order to guide society through the jungle of services and possibilities. Research on the differences between different cultures (such as the small-scale comparison here between Germans and Americans) can be beneficial to provide people in different countries with new technologies they really require to improve their daily life and that they can trust in.

*“Historically, privacy was almost implicit, because it was hard to find and gather information. But in the digital world (...) we need to have more explicit rules – not just for governments but for private companies.”* Bill Gates

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