Digitalization
– More Potential Than Performance

h&z-Study: An inquiry into digitalization in corporate practice

h&z study

Transforming Knowledge into Practice

Editorial

Products, channels, business models: digitalization has radically changed the corporate world in many areas within a very short time. While in the past, industry was the classic driver of innovation, internet companies with digital products now also set new standards in traditional industries as well. But digitalization does not only increase pressure on car manufacturers, mechanical engineering companies or service providers; the technological change also gives companies the opportunity to develop digital products and new business models – and to distinguish themselves from the competition. But do companies recognize this potential and are they utilizing it consistently?

To answer this question, h&z conducted an online survey amongst decision-makers from functional departments and top management in mechanical engineering and the automotive industry and amongst service providers, IT/telecommunication and energy industries in the DACH region and asked them how important digitalization is for their company and what progress their organization has made in that area. In some areas, participants were able to give more than one answer.

The result: while many companies have realized how important digitalization is for the future, they are having difficulties when it comes to implementation. The reason: the digital importance is approached with the wrong steps, or no steps are taken at all. When it comes to the core topic of knowhow, top decision-makers choose to get help from outside instead of building up digital assets internally, thus laying the foundation for new business models.

Big potential,
little expertise

Under the keyword of Industry 4.0, the economy has been discussing the automation of production and processes. As well as traditional companies becoming digital players for years, Germany still focuses more on process effectiveness than on new business models. Consequently, all study participants across all industries rate the importance of the topic of digitalization for their company as high to very high (approximately 94 percent). 81 percent of those polled are also aware that digital assets such as customer data and expert knowledge are important building blocks for successful business models of the future.

Nevertheless, many companies realised the potential of digitalization and determined the lack of expertise : 87 percent of study participants stated that their company is making only medium or little use of the potential of digitalization (both approximately 44 percent). The reason for the discrepancy between awareness and action is rooted in lack of knowhow: more than half of those polled stated that their company is lacking in-house knowledge on how to access and use data (50 percent). Apparently there is also a lack of expert knowhow (60 percent), data scientists, and analytics knowledge to process big data or to answer legal questions of data use (70 percent).

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Another focus area of the study reveals how much the lack of expertise is holding back digitalization: when asked about the importance of digital products for their own offering portfolio, 75 percent of participants stated that both interactive products and services (e.g. car-to-car communication). Although small products and services (e.g smart home automation) are considered to be important for their companies, only 53 percent considered their company prepared to use interactive products and services. Furthermore, approximately 41 percent considered themselves prepared to use smart products and services. „Companies are having a tough time harmonizing hardware development cycles of many years with fast-moving innovations on the software side that are often implemented in weeks, sometimes in near real time today", says h&z IoT expert Torsten Deller.
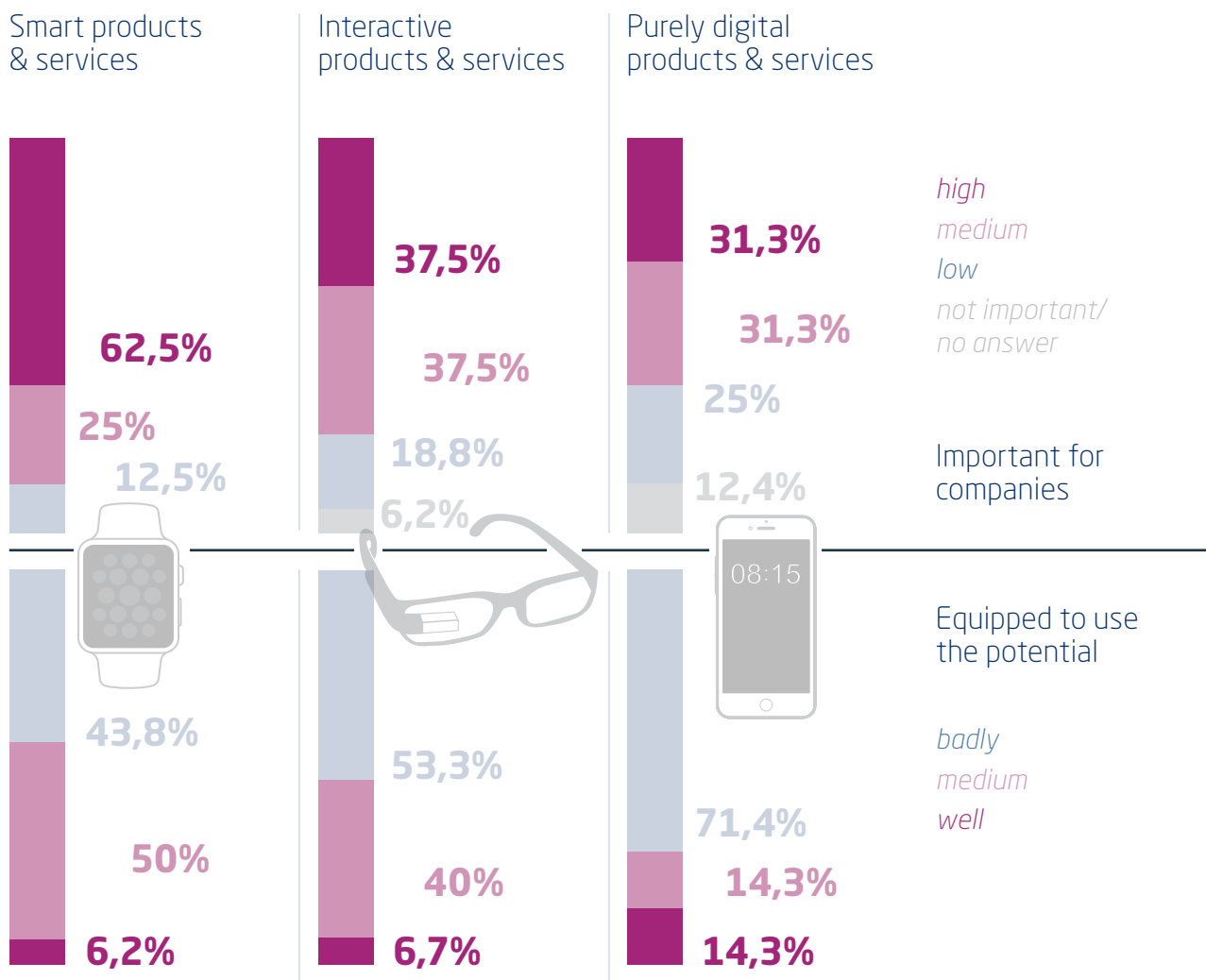
Decision-makers are still underestimating the potential of entering new markets with disruptive digital business models.

The smart product is positioned as a pure digital product, just under one third of those polled mention the importance of pure digital products. This shows that decision-makers are still underestimating the potential of entering new markets with disruptive digital business models.

Importance and implementation of digital projects

Smart products & services	Interactive products & services	Purely digital products & services	
			high
		31,3%	*medium*
	37,5%		*low*
		31,3%	*not important/ no answer*
62,5%	**37,5%**	**25%**	
25%	**18,8%**		**Important for companies**
12,5%	**6,2%**	**12,4%**	
			Equipped to use the potential
43,8%			
	53,3%	**71,4%**	*badly*
			medium
50%	**40%**	**14,3%**	*well*
6,2%	**6,7%**	**14,3%**	

The result: where there is a lack of knowhow or digitally skilled personnel, companies focus on existing products and leave disruptive innovations to the digital players. Instead of developing new standards for the market with their own purely digital solutions, many companies prefer to digitalize existing products to the extent necessary. „Today, it is about generating value add for the customer outside of the reliable core product; in a digital world, this is not the classical industry product anymore most of the time", says Christian Haas, Partner at h&z.

Defensive stance instead of consistent realignment

In light of the growing pressure that those polled felt from digital players such as Google, Amazon or Apple, one would think that companies would have progressed much further in developing digital business models and products by now: approximately 94 percent of study participants rate the danger of new competitors for themselves as medium to high. However, only 13 percent feel well prepared to face this challenge. Where is the discrepancy coming from? More than half of the participants also state that there is a lack of knowhow that prevents them from appropriately meeting the challenge imposed by digital business models for their own business model. Additionally, they are of the opinion that long decision-making pathways hinder a successful reaction to external digital business models. Nevertheless, almost two thirds of the companies polled react to the competition by trying out new business models themselves. At the same time, however, a majority of them prefers to work on higher market entry barriers for new players (about one third of those polled) or decides to take legal actions against them. So instead of focusing on their own digital competitiveness, some companies take a defensive stance.

> *The market for IT and analytics experts is empty, which is why a digital strategy relying on knowledge from outside is bound to fail.*

Instead, all energy should be focused on building internal digital competences at all levels of personnel; the cornerstone of every successful digital business model.
Most of those polled realize the importance of digital competences, but approximately 43 percent of them admit that their company is doing little to create them. Additionally 50 percent say the efforts are medium, and only 7 percent state to be really active in this area. Many times, however, companies are pursuing counterproductive approaches: in order to build digital competences, all study participants bank on external experts. In addition, approximately 63 percent also count on networking and equally 63 percent count on individual internal training courses. The problem is: the market for IT and analytics experts is mostly empty, which is why a digital strategy relying on knowledge from outside is bound to fail.

International corporations, including those with German roots, are also starting to set up digital competence far away from Germany. This evidently has negative effects on Germany as an industrial location, plus this would be no alternative for mid-size companies. Often, this approach links to a realization that communication with technical and IT departments at home is often lacking.
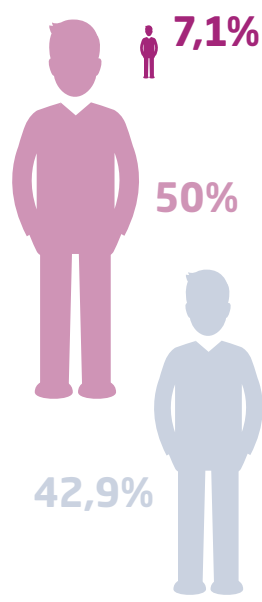
Setup of internal digital competences

Development of internal digital skills *
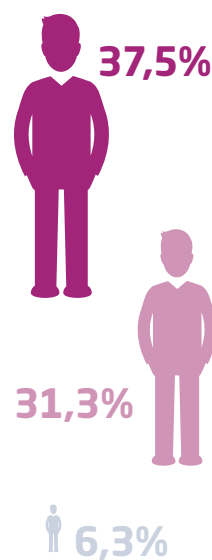
How important is the topic for your company?

56,3%

18,8%

12,5%
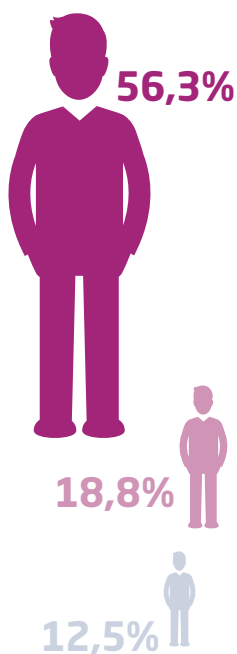
How proficient is your company in this topic?
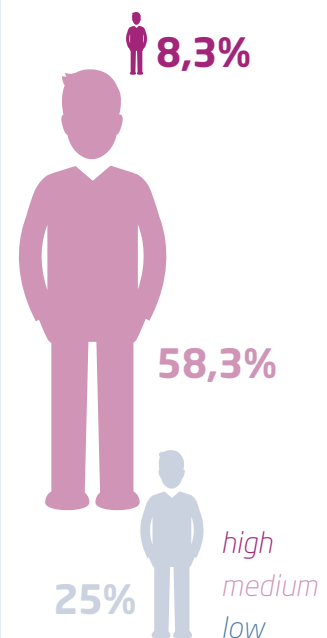
7,1%

50%

42,9%

Digital networks and knowledge "on demand" *

How important is the topic for your company?

37,5%

31,3%

6,3%

To what degree does your company use these external offerings?

8,3%

58,3%

25%

high
medium
low

* Percentages not shown mean "not important" and "no answer".

Furthermore, digital alignment is only successful if companies have exclusive use of their customer data and IT knowledge which are not delegated to cooperation partners or external experts. "Unfortunately, German companies have preferred to outsource software development competence to service providers in the past few decades", says Ulrich Bombka, Principal and Analytics Expert at h&z.
The result: „While they are good at creating requirement specifications, they had to realize that they gave away a core competence for digital products".

> *Too often, we encounter decision-makers across companies who have not understood why their company should store data when they don't have a concrete business case yet.*

Due to the lack of digital expertise, many companies do not take any steps in the key area of big data: while all study participants said that the collection and use of large data quantities is important for acquiring new customers or approving business forecasts and internal processes/production, 80 percent stated that their organization is barely active in this area. One mistake: „Too often, we encounter decision-makers across companies who have not understood why their company should store data when they don't have a concrete business case yet", observed Ulrich Bombka. However, it is essential for companies to collect data first without immediately knowing all options for the use of that data, which often do not become apparent until later. Without this data collection, digital products and services cannot be created. Industrial companies must recognize that their data gives them a decisive lead compared to digital players trying to enter their product areas.

At the same time, it is essential to build up internal knowhow carriers who can identify the benefit of big data and draw consequences. Only with their help, the right decisions for digitalization, new products and digital business models can be made in a timely manner. The participants' answers have shown that companies urgently need to set up internal digital skills and experts at all levels.

Bottom line

The study has shown that while companies are clearly aware of the opportunities for success offered by digitalization, many of them are only addressing the necessary change halfheartedly. Instead of setting themselves up consistently as digital players, they outfit existing products with the minimum of digital requirements, but are not offering their customers any real new solutions. In order to be able to compete with internet corporations and other new digital providers, companies should think beyond the current range of products and consider new digital business models for the future. The necessary digital assets must be built up within the company and transferred to knowhow carriers on-site for two reasons: on the one hand, because that is where exclusive product expertise and customer data is located that keeps them one step ahead of the competition; on the other hand, because there will not be enough external experts available at the market in the long run.

Authors

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