THE INFLUENCE OF COVID-19 ON THE DIGITALIZATION OF THE PROPERTY DEVELOPER

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ABSTRACT

Digital transformation is impacting many industries, including the property development industry. However, the impact of the COVID-19 pandemic varies from industry to industry. In this article, the author conducts a structured literature review of the impact of the Corona pandemic on the real estate development industry and reviews the current state of research. Even though the pandemic accelerated the rate of digital transformation that was necessary, but the degree of digitalization required is individual. The author focuses in particular on the triggers of digitalization and the resulting effects. The necessity of maintaining a crisis-proof business model is highlighted.

Keywords: Property Developer, COVID-19, Digitalization

1. INTRODUCTION

In 2020, the coronavirus has infected people worldwide. By June 2020, more than 8 million people worldwide were already infected (Guo et al. 2020). The impact of the pandemic can be divided into three dimensions. On the one hand, the medical aspect. Here, rapid immunization of people is required. Another dimension is the economic aspect. Here, it is necessary to prevent bankruptcies and unemployment. In this article, the author concentrates on the third dimension: the long-term effects of the pandemic. It describes the structural changes such as new business and organizational models (Revoltella 2020).

The impact on the economy was enormous. The economic impact is comparable to the financial market crisis in 2009. However, this crisis is also forcing structural changes driven by digitalization (Grömling 2021).

(Wenzel, Matthias Stanske 2021) point out various ways in which companies can deal with crises: Retrenchment, meaning the downsizing of a company, for example, by reducing costs or product lines. Perseverance means maintaining the current operations (S. Kraus et al. 2020). Innovation focuses on the strategic. This also refers to digitization. This is the focus of the literature research in this section. Another way to respond to a crisis is to exit.

Companies have been working on digital transformation for many years. The topic is already 10 years old. (K. Kraus, Kraus and Manzhura 2021) indicate that the issue has already existed for 13–15 years. But the impact has been limited so far. Only a few companies have switched to a digital business model. Small companies in particular are slow to adopt cutting-edge technologies (Akpan, Soopramanien, and Kwak 2020). The pandemic has forced companies to create a digital infrastructure base. The traditional industrial sector is also affected by this (Ganichev and Koshovets 2021).

In this paper, the author analyzes the impact of the COVID-19 pandemic on corporate digital transformation. The following section describes the current literature, starting with the literature search procedure.

2. LITERATURE REVIEW

2.1 Research Methodology

In this paper, the author examines the impact of Covid-19 and the digital transformation. For this purpose, current research studies are evaluated by way of a structured literature review and the identification of possible perspectives for future research (D. Andreini and C. Bettinelli 2017).

2.2 COVID-19 and the Property Developer

In an earlier paper, the author has already pointed out the importance of the digital transformation of companies (Klee 2021). In the paper in question, a structured literature review was conducted to determine the current state of scientific research. In order to consider high-quality literature, only Scopus-listed papers were selected.

The keywords "covid" and "pandemic" were searched for, limited to the areas of "digitalization", "digitization" or "digital transformation". Only English-language publications from the years 2020-2021 were selected. A further restriction was placed on the area of "business management and accounting" and "economics, econometrics and finance". So as to only obtain high-quality literature, the author limited the search to conference papers, conference reviews, reviews and articles. The meta-search was recorded as follows:

Table 1: Search string from SCOPUS

Search String from SCOPUS	(TITLE-ABS-KEY ("covid" OR "pandemic") AND TITLE-ABS- KEY ("digitalization" OR "digitization" OR "digital transformation")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT- TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020)) AND (LIMIT- TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "cp") OR LIMIT- TO (DOCTYPE, "re") OR LIMIT-TO (DOCTYPE, "cr")) AND (LIMIT- TO (SUBJAREA, "BUSI") OR LIMIT- TO (SUBJAREA, "ECON")) AND (LIMIT-TO (OA, "all"))
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Figure 1: Structure of systematic Literature review

First Step: Identification of relevant studies, topic: "covid" or "pandemic", 175.132

Second Step: limit to "digitalization", "digitization" or "digital transformation", language: English, 550 records

Third Step: limit to conferences papers, conference reviews, reviews, article, years 2020-2021, "Business Management and accounting" and "Economics, Econometrics and Finance", 122 records

Fourth Step: limit to full text, abstract and conclusion screening 59 records, supplemented by literature from cross-references

Source: Developed for this research



Figure 2: Keywords from the literature review

Source: Created with VOSviewer

Figure 2 shows the keywords from the literature search and the connections between them. Leaving aside the negative health consequences of the pandemic, it is likely that the coronavirus pandemic will drive digital transformation and have a positive effect on output over a long period of time (Grömling 2021) (Revoltella 2020). Small and medium-sized enterprises in particular have adopted digital technologies under the pressure of the pandemic (Guo et al. 2020).

A chain of effects was created through the shutdown, the closed borders, quarantine measures and physical distancing. The measures have contributed to a change in customer behavior and their needs on the demand side, for example, digital communication (S. Kraus et al. 2020). On the supply side, the financial situation of many companies has also changed. Many companies have had to examine and identify areas in their value chain which can be digitized. Together, this has accelerated digital transformation and the willingness of many companies to innovate (Klein and Todesco 2021)(Ceylan, Ozkan, and Mulazimogullari 2020)(Grömling 2021)(Scheidgen et al. 2021). This was a consequence of the disruption of the global value chain due to obstructed imports and exports resulting from the imposed isolation of many countries (Guo et al. 2020).

These effects have been summarized by the author in the following figure:

Figure 2: How has the pandemic affected companies in terms of digitalization?

How has the pandemic affected companies in terms of digitalization?



Source: Developed for this research

A study by (Tartarin, Mihai, and Timber 2020) also confirms the statements in the previous graph: Business models have changed as a result of the crisis and the pandemic was the driver of business model innovation in their value chains. Research by (S. Kraus et al. 2020) (Akpan, Soopramanien, and Kwak 2020) with family businesses and formerly technology-averse employees also found that innovation and digitization are driven by the lack of face-to-face interaction as well as the perceived benefits of technological features. These were also increasingly used in communication with customers. The intensity of the use of digital methods again depended on digital maturity. This helps companies to create crisis-proof business models. Digital transformation is likely to be the key to a post-pandemic recovery, including capacity building (van Ark, de Vries, and Erumban 2021).

3. CONCLUSION

(Guo et al. 2020) conclude in their study that SMEs handle crises better depending on their digital maturity and adoption of technologies. Digitized companies are more resilient (Revoltella 2020) and protect from crises (Wirtz, Müller, and Weyerer 2020).

On the other hand, every company has to find its own sensible level of digitization. You can't conclude that the higher the level of digitization, the more robust the business model. The choice of strategy depends on a variety of factors. (Priyono, Moin, and Putri 2020) identified three paths: A company can try to achieve the transition to a digital enterprise. Digitizing sales is just

as promising as working with digital partners. The decision for one of the three strategies depends on the current maturity level.

As a conclusion to the literature review, it can be assumed that the coronavirus pandemic has accelerated the already necessary transformation of business models. The research is not specific to developers, as that particular area is still rather unexplored. However, it can be assumed from interviews with property developers that the acceleration of digitization driven by COVID-19 can also be projected onto this industry. However, it cannot be stated that maximum digitization also promises maximum success. The degree of maturity of digital transformation is individual.

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