

Book Review "Digitalization Cases Vol. 2 – Mastering Digital Transformation for Global Business"¹

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Nils Urbach, Maximilian Röglinger, Karlheinz Kautz, Rose Alinda Alias, Carol Saunders, Martin Wiener (Eds.), *Digitalization Cases Vol. 2 – Mastering Digital Transformation for Global Business*

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The edited volume "Digitalization Cases Vol. 2 – Mastering Digital Transformation for Global Business" in the "Management for Professionals" series of Springer Nature Switzerland is a continuation of the work of the first two editors published in 2019. The volume presents 20 case studies in the context of digitalization from four continents. Several cases are new, but some are also continuations or updates of the case studies from the first volume. Target groups are practitioners in companies whose initial situations are comparable to those of the case companies, as well as researchers, teachers and students who want to learn from these cases what digitalization can mean in practice. The cases are divided into three topical areas – Digital Disruption, Digital Business and Digital Transformation (DT) – which also represent the three parts of the work. Preceding these three parts, the editors present a jointly written lead-in that gives an instructive introduction to the topic of digital transformation for global companies and global economic action. In addition to a thematic introduction to the three topical areas based on an enterprise architecture model and an overview of the cases, the chapter also provides good directions for the use and reading of the cases which are presented in the following. Now to the cases, which are all similarly structured, and in the volume's three parts are each assigned to one of the three mentioned topical areas.

Part 1 – Digital Disruption – deals with cases in which the focus is on modern technologies that have to be observed, analysed, selected if necessary, and skilfully used in order to seize technological opportunities and avoid risks. The first case deals with the anonymization of sensitive data and the detection of manipulations in image material in claims settlement. In the case study, a method based on deep learning is presented, which can be used for anonymization and manipulation detection of image material. AI in conjunction with Robotic Process Automation (RPA) is the technological focus of the second case, which deals with the automation of invoicing in a medium-sized but globally operating company. In the third case, the introduction of digital twins at a Turkish electrical household appliance manufacturer is described, which has led to significant and diverse improvements in the production process

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and product quality. Blockchain technology is the focus of a case study from the work area of the German Federal Office for Migration and Refugees, which in a federal system is faced with the challenge of designing processes uniformly and also allowing information to flow between these processes without there being a central executing authority. Using the example of the asylum process, the added value of the technology of a data protection-friendly decentralized data storage, which at the same time also creates transparency in almost real time, can be shown. In addition to the technological challenges, this case also illustrates the organizational hurdles in public administrations in the use of blockchain technology. Organizational hurdles and individual barriers are also at the heart of a case from the healthcare sector in Canada. This example describes the piloting and implementation of a monitoring system for chronically ill patients in their home environment, in which paramedics perform the task of training patients. This is achieved in the various regional communities with varying degrees of success. The last case study impressively illustrates the use of RPA at Deutsche Telekom Services Europe (German Telcom Services Europe). More than 170 implemented software robots contribute to considerable efficiency gains there.

In Part 2 – Digital Business – completely new or further developed business models enabled by digitalization are the focus of the respective case studies. In the very first case, the transformation of a formerly insignificant telecommunications company into a global player, which has risen to become one of the top three telecommunications companies in the world, is shown: the success story of Huawei. The case impressively shows that such a development is not about individual digital innovations, but about the interaction of a large number of interlocking components that are successfully implemented along a strategy and supported by appropriate leadership. The second case concerns a traditional company in the German insurance industry, DEVK, which, in addition to its core business, has founded a start-up for digital insurance products that can be implemented entirely on digital channels. In implementation times of 4 and 8 months, two products could be launched on the market, which would not have been possible in the parent company at this speed. The case shows that in addition to the change of the business model, the organizational embedding of changed business model in the existing business environment is of high importance for success. The third case concerns the German ingredient, seasoning, and spice specialist RAPS and one of its customer groups, the traditional butcher industry. Through a platform-independent new service offering, RAPS offers its customers an application by means of which they receive valuable support in critical problem areas, e.g. in the area of the declaration of ingredients of their meat products. Although the service is provided to customers free of charge, it has contributed significantly to the success of RAPS and the positive public perception of the company. Mobility X Lab is a Swedish incubator founded by six companies from the automotive and telecommunications industries, which has developed into a collaboration hub. The aim is to promote digital innovation in the automotive industry by successfully advancing matchmaking for collaborative digital projects between the founding companies and the participating start-ups. In the case of SCHOTT AG, a German multinational glass manufacturing company, it is about promoting innovation too, in this case digital service innovations based on a B2B e-commerce platform. The case shows that service innovations need not be developed solely from a problem-centred customer perspective, but that this can be combined with a resource-driven view of business opportunities. In addition, the SCHOTT example shows that high quality expectations resulting from a company's traditional business model are transferred to the expectations of digital services. A company like SCHOTT

therefore has to take care of meeting such expectations with digital services if it wants to avoid the risk of jeopardizing its usual quality promise. The last case of this section concerns the city of Lohmar, a German city of approximately 31000 inhabitants, which was able to develop a digital transformation strategy in a joint project with the participation and with the support of the Federal German Ministry of the Interior and Community. The strategy aims in particular at solving urban traffic problems through a Smart Mobility Hub that combines multimodal mobility systems.

The last part of the book, i.e. Part 3 – Digital Transformation – deals with cases that show technology-induced changes in companies in organizational, procedural, and technological terms. The first case of this part illustrates, presenting the example of a small or medium-sized enterprise (SME), that also smaller companies with limited resources are able to develop and successfully implement digital strategies. In the following case, the example of a public utility company in Ghana also illustrates a digital transformation process with special challenges in change management. In the subsequent case study of a German automobile manufacturer, the requirements of digital transformation for the workforce and the transformation of the workforce are considered. On the basis of an employee-centred transformation concept, which was designed to be participatory, it was possible to sensitize the workforce to the digitalization-related changes and to increase the acceptance of these changes and it showed that the willingness of those involved to change significantly exceeded expectations. In the case of the Dutch platform company Springest, the introduction of a holocracy in the transition from a start-up to an SME is considered. Central to the success of this form of organization was the use of transparency-enhancing IT tools. In the case study, the well-supported new organizational form, well-supported by IT, led to considerable growth and increased employee satisfaction. In the case of the Vietnamese IT company FPT Software, the use of Digital Kaizen to support a digital transformation program is shown. The chosen path of the company is to apply digital transformation approaches in the company itself and, if successful, to commercialize them, i.e. to create customer offers from them. Digital transformation is understood as a continuous improvement program in the sense of the Kaizen philosophy. The special methodology is illustrated in the case by two concrete projects.

The next case, the example of Arcadis, a globally operating planning and consulting company, especially for construction assets, describes the transformation into a learning company. This case also clearly shows that digital transformation is not about a one-time change program, but about the cultivation of a digital mindset. As in the previous case, this is again a large company, but this time one that is extremely fragmented by inorganic growth. In the Arcadis case study, the goal of digital transformation therefore is to include the entire company and to bring about a consolidation in terms of common vision and identity. In addition to overcoming complexity, the challenge with this approach is to not destroy the decentralization that aims at local customers. Here, I will not resolve the path taken by the company, because from my point of view the Arcadis case study is the "most exciting" case of the book and the one that has impressed me personally the most. For me, it is also one of the cases that is clearly aimed at an entire top management team of a company as a target group. It is not a CDO or CIO case, but one that should also interest CEOs and top HR managers. What I also like about the case is that, together with some of the following cases, it very clearly lives up to the subtitle of the volume "Mastering Digital Transformation for Global Business".

The next case is located in the context of a German manufacturer of medical aids, *medi*, which has developed into a globally active company over the last 20 years. The case study is about the company's entry into the development of a data-driven company. The focus is in particular on creating the conditions for this development. The case convincingly illustrates that companies in digital transformation processes first have to take a step back and classically have to analyse where they actually stand. The interesting thing about this case is that a detailed enterprise architecture model consisting of processes, applications, and data models offers this entry and, that and how it actually can have an impact, namely through transparency, which has further, flow-on self-reinforcing effects. The last case of the book takes up a traditional topic, namely the introduction of an ERP system in a decentralized company, which is considered a transformation program and not a software introduction. The Swiss *Arbonia Group* operates globally and consists of four divisions, each with several branches. The case study deals with the *Door Division* with four subsidiaries spread across Germany, Switzerland, and Poland. At the same time, a cross-site SAP S/4HANA implementation is intended to bring about harmonization, which still leaves enough local leeway and flexibility. In the example, this is achieved with governance measures that promote both local differentiation and global consistency. How this can be concretely designed and implemented makes this case a striking example in the multitude of ERP implementation case examples that have already been dealt with in the literature before.

This last case also forms the end of the book. Perhaps the editors could have given the book a more cohesive character if they had rounded it off with a final chapter. However, this hardly diminishes the high quality of the work, whose strengths lie in the convincing and well-presented cases. All follow a similar structure, which makes it easy to find the way around them. It is also nice that the described companies are called with by their actual names. While reading, I repeatedly caught myself looking at company websites on the Internet at the same time – out of the curiosity that the reading of the cases caused. This can certainly be used well in teaching and practitioners will also appreciate the fact that they learn which company is involved and that company members are often named as co-authors of the case descriptions. It should be noted that the cases deal with very different facets of the topic of digitalization, which is brought about by the three parts of the book. Personally, I liked the contributions of the third part best, and unfortunately it took me a while to get there with the reading. The thematic breadth is such that I can hardly imagine readers for whom everything is equally interesting. That's why I can only recommend every reader to select the cases of interest carefully. For such a selection, the abstracts help very well, because they are each divided into the four parts, "Situation faced", "Action taken", "Results achieved", and "Lessons learned". This structuring can then also be found in the main parts of the contributions themselves.

When reading the book, I paid particular attention to its suitability for executives such as CIOs, CDOs or CEOs. Even if the explicit role of IT-related C-level executives is only specifically elaborated in a few cases and they are only mentioned in a few cases, the volume still offers a relatively large number of insights for this target group. Almost all cases make it clear that a traditional, technology-oriented understanding of IT is outdated, that even talking about business and IT is no longer up to date, but rather that one should speak of "IT is business" and "Business is IT". In this sense, the book is therefore not only relevant for the IT-savvy C-level roles, but for the entire top management team. Detached from these people as a reader target group, the cases in the volume also tell something about these roles, although they are rarely explicitly mentioned. Almost everything described in the case studies is the

responsibility of CIOs, CDOs and CEOs. The design of these and similar positions and their interaction is therefore of decisive relevance for whether what is described in the cases of this book can also succeed in other companies. Many of the case studies make it clear that successful digital transformation programs are not top-down projects, but also that they do not work if the mindset at the top of the company is not ready for such programs. The work illustrates many of the tasks and challenges that leaders must take on and solve in these contexts. Those of these executives, who have very little time to immerse themselves in these many realistic illustrative cases, have above already received a hint for a particularly interesting case.

Finally, I can only praise the editors, all highly recognized scholars and researchers of information systems, and the equally renowned team of reviewers for the good selection of cases and for their willingness to support on the experienceability of the wide range of topics that we research and teach in business information systems. The book makes a significant contribution to this!

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