

White Paper Digitisation

Corporate Digital Transformation in the Real Estate Industry

The digitalisation of our society is in full swing and has a major impact on the economy. How are companies dealing with the changing landscape? What new opportunities are out there? What challenges are to be overcome in order to survive in the market in the future? How does the digital transformation succeed? And what is the situation in the real estate industry?

We provide you with a guide to realise digital transformation in 10 steps.

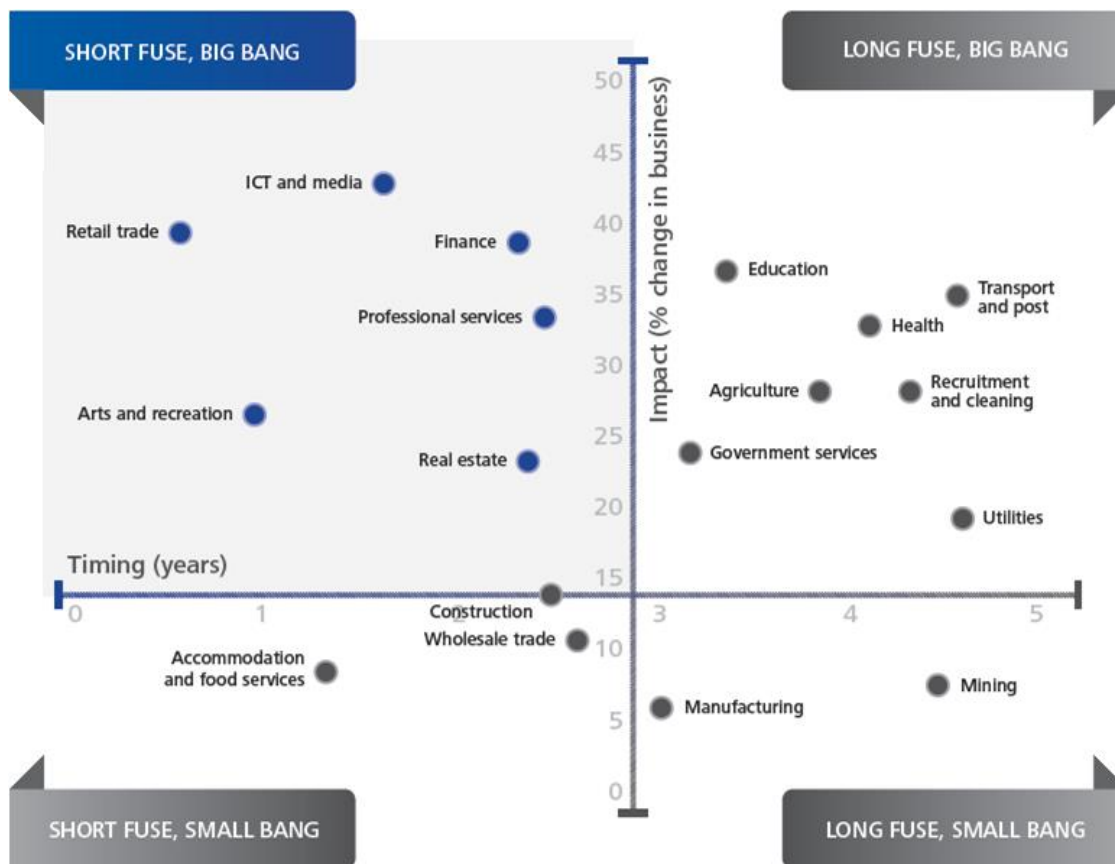
Digitisation

Digitisation is one of the so-called "disruptive innovations", which completely change entire markets and require new business models.

The world is in upheaval, the digital transformation of our society is in full swing: technological innovations bring changes in almost all areas of life, facilitate processes, make information and immediately accessible. This change brings with it many conveniences and advantages, but it also arouses fears and overwhelms in its complexity.

Transformation does not stop at companies; dealing with it has become an important competitive and often survival factor. Digitisation belongs to the so-called "disruptive innovations", which completely change entire markets and demand completely new business models. New technological developments have set off a movement that is revolutionizing entire industries, making traditional companies disappear and new competitors emerge.

New developments and innovations constantly bring new opportunities and challenges to society - and to companies. In some cases, they trigger disruptive changes, for example in trade (Zalando, Amazon), in communication (Facebook) or in the media industry (Netflix, Spotify). In other industries, change is slower, but here, too, digitisation is gradually taking hold. The degree of disruption is also different: while industries such as the music industry have been completely turned upside down by digitisation, the manufacturing industry, for example, has been far less affected by the changes.



Quelle: Deloitte

That digital transformation is revolutionising almost all sectors of the economy is beyond question. It is obvious that it must also take place in individual companies. But it is often unclear how and to what extent this should take place. How do companies approach the change?

For many companies, the beginning of the digital transformation is a step out of their comfort zone: processes and business models that promised success until a few years ago are losing their impact or are being overtaken by new technologies. New competitors are entering the market. In the digital age, everything revolves around speed, change and innovation. Often the change is accompanied by fears and uncertainties. But transformation also offers opportunities to optimise processes, to increase the value of the company through innovation and new business models and thus to remain competitive.

However, the process of rethinking is not an easy one: not only is the technology behind familiar processes changing, but digital transformation is accompanied by a completely new understanding of customer relationships and the entire value chain.

The central prerequisite for a successful transformation is a plan that shows how modern IT infrastructures, business processes and models can be brought together in a profitable way.

Digitisation is never an end in itself, but a powerful means of solving problems and exploiting potential.

Digital transformation is the continuous process by which companies react to disruptive changes related to customers and markets (the external ecosystem) or drive these changes themselves by using digital technologies and skills to develop new business models, products and services. The digital and physical business and customer experiences are seamlessly combined, while improving internal efficiency and business performance.¹

1.1 A view on Switzerland

Regarding digitisation the surveyed companies want to achieve mainly internally oriented goals such as the automation of business processes, increased efficiency and cost reductions.

In 2018, the analysis company IDC together with the magazine Computerworld conducted the "Swiss IT" study², in which around 600 Swiss IT and management representatives were interviewed about current IT trends and challenges in connection with digitisation. The results clearly show that the digital transformation in Switzerland is already in full swing, but that the topic is often approached from an operational rather than a strategic perspective. The companies surveyed would like to use digitisation to achieve primarily internally oriented goals such as the automation of business processes (68 percent), increased efficiency (68 percent) and cost reductions (44 percent).

50 percent of the companies surveyed stated that they will embrace change in the next five years - mainly in response to changing conditions, namely digitisation. Conversely, however, this also means that the other 50 percent at the time of the survey stated no intention of embracing change in the near future. Around 40 percent of those surveyed expect the digital transformation to have a serious impact on their companies.

This increases the need to seize the opportunities offered by digitisation and become innovative by developing new products and services, driving new innovations and recreating the customer experience.

In Switzerland, almost all sectors and industries are in a phase of change and digital transformation is an unavoidable topic. New technologies and competitors are coming onto the market at ever shorter intervals. For 40 percent of all companies surveyed, the great complexity is the main challenge when implementing digitisation initiatives.

In order to master this complexity, a strategic approach to the topic of digital transformation is needed. Central questions are: How can digital business models be developed successfully and sustainably? What opportunities do new products and

¹ IDC, Computerworld: Swiss IT 2018 - Wo stehen Schweizer Unternehmen bei der Digitalisierung und Automatisierung ihrer IT und ihrer Geschäftsprozesse? 2018

² Ebd.

technologies such as 3D printing, Big Data, Internet of Things, automation, cloud solutions or artificial intelligence open up for your company?



Quelle: Archilyse

1.2 How does digital transformation happen in companies?

Digital transformation is not a task for the IT department, but one that needs the entire company.

For many companies, digitalization is both a curse and a blessing. Digitisation needs a strategy that is deeply rooted in the company. Digital transformation is not a matter for the IT department, but a task that challenges the entire company. Because digital transformation is not primarily about technical innovations or new software, but about new business models and different approaches.

The transition to the digital world cannot be achieved by developing apps or a new website. In order to successfully make the step into the digital world, a rethinking in the whole organization is necessary. Only by consistently adapting the entire corporate DNA to the changing environmental requirements can turn the risks of the digital world into opportunities to successfully compete in the future. Due to the importance that digital transformation has for the entire company, it requires the appropriate resources and a superordinate strategy.

This may be a challenge and involve a considerable amount of effort, but an overarching approach also offers companies the opportunity to optimize existing processes and increase their own corporate value through new business models and innovations.

The central questions remain: How do I take digitalization into account in my company? How do I approach the digital transformation? How do I develop the digital potential in my company to remain competitive in the future?

According to Deloitte, successfully dealing with the opportunities and challenges of digitisation requires a transformation in four dimensions: Organization, culture, employees and the digital environment.³

2. Digitisation in the real estate sector

PropTechs now offer numerous digital solutions for the industry and the trend towards disruptive change and digital transformation is unmissable.

The real estate industry is also undergoing change: modern technologies and new business models are revolutionising the market. Progressive digitalisation not only influences the design of the properties themselves, but also their construction, marketing and management. The needs of tenants are also changing as a result of digitisation. It is fair to say that the digital transformation is leading and will continue to lead to profound changes along the entire value chain in the real estate sector.

For a long time, the real estate sector was considered a dinosaur in terms of digitisation. But in recent years, a lot has happened here as well. PropTechs now offer numerous digital solutions for the industry and the trend towards disruptive changes and a digital transformation in the real estate sector can no longer be ignored.

From the many possibilities of 3D printing, which could shake up the entire construction industry, to smart building management, apartment viewing via virtual reality or sophisticated smart home systems, the range of solutions and new business models that digitalization is bringing to the real estate sector is enormous.

BIM (Building Information Modeling) has already revolutionised the construction process in many countries by giving everyone access to the same data at all times. Innovations such as automated locking systems, smart building management or the digital asset evaluation and smart property price determination can not only increase efficiency and save costs, but also establish completely new business models.

An important function in the course of the digitalization of the real estate sector is played by so-called PropTech start-ups, whose innovations not only make the entire transformation of the industry possible, but also provide a real impetus. This is because the potential of digitisation is still far too little exploited, especially in the rather sluggish real estate sector.

According to the venture capital database CB Insights⁴, the financing volume for PropTech is increasing worldwide by over 30 percent

³ Deloitte: Digitale Zukunftsfähigkeit: Wie wappnen sich Unternehmen für die Chancen und Herausforderungen der Digitalisierung?

⁴ <https://www.cbinsights.com/research/real-estate-tech-market-map-expert-intelligence/>

annually. The figures impressively show the dynamic growth of the industry. The start-ups cover a wide range of services: They simplify the tasks of property management companies, help with the project management of construction projects, improve the ecological efficiency of buildings or network the interior and exterior of a property.

So here too, the question is not whether digitisation will become established, but rather to what extent it will take place and what it means in concrete terms for the individual players.

2.1 Digitisation of the real estate sector in Switzerland

A survey shows that in the next five years, the digital transformation will have a medium to strong impact on companies.

According to a survey conducted by Ernst & Young in the Swiss real estate industry, almost all respondents assume that the digital transformation will have a medium to strong impact on their companies over the next five years.⁵ 87 percent of those surveyed see the use of digital technologies as an opportunity to increase efficiency in their core processes. However, only around six percent of the companies are relying on a Chief Digital Officer (CDO), thus raising digitisation to C-level.

A clear majority of those surveyed (80 percent) are planning to digitise all important documents in the next five years. As the biggest challenge in the implementation of the digitisation strategy, the participating companies estimate a lack of human resources and a shortage of skilled workers. This leads to the conclusion that it is appropriate to implement an overarching strategy for the transformation process in good time and to draw on the knowledge of competent partners from the PropTech environment.

3. Archilyse: The Swiss Army Knife of real estate analysis

Archilyse offers a worldwide unique technological solution that automates manual tasks, optimises processes and thus massively reduces costs.

Archilyse has set itself the task of enriching all stages of the value chain of the real estate industry with meaningful information: A comprehensive analysis makes architecture measurable, thus comparable and much more accessible. The ETH spin-off, founded in 2017, not only provides the basis for new business models with its analyses, but also leads to significant increases in efficiency with the knowledge gained. Using the worldwide unique technological solutions, manual work steps can be automated, processes can be optimised and thus costs can be massively reduced.

The Archilyse API already provides useful insights for those involved with easily accessible data: based on address information, Archilyse generates simulations for example for the prospects, the amount of daylight or distances and travel times to points of interest in the vicinity of the property, for example to the nearest kindergarten or shopping centre. Based on address information, floor plans and 3D models, the Archilyse platform provides various simulations and

⁵ Ernst & Young: Digitalisierungsstudie Immobilienbranche Schweiz

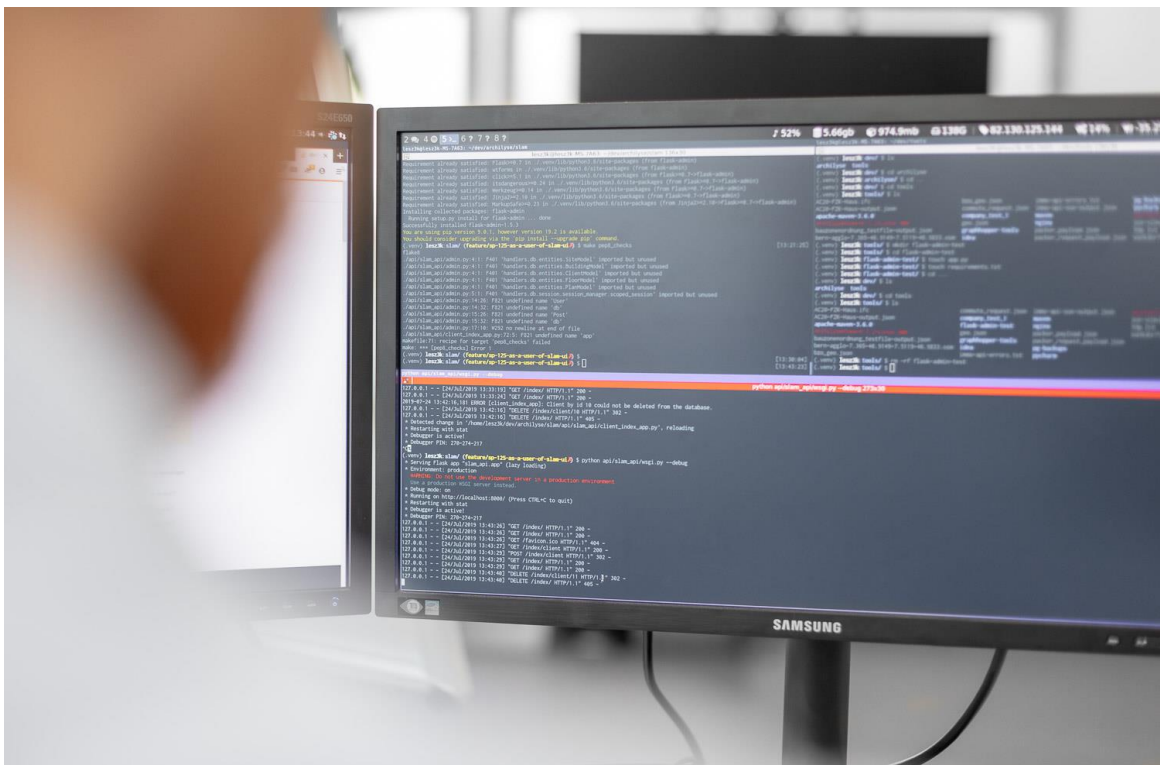
analyses of a property and makes this information available to project developers, architects and real estate companies via a user interface.

The idea behind this is to make architectural quality objectively measurable. All those involved along the entire value chain can benefit from this. Today, real estate is generally valued according to how centrally located it is or how large an apartment is. Many other criteria are ignored. For example, the efficiency of the floor plans, the respective neighborhood, the view, the connection to public transport or even the distance to the nearest hospital.

With the analysis of Archilyse, property owners or future tenants can immediately see how the apartment can be furnished. Or how much sunlight streams into the rooms and how easily the residents can move around the apartment. Archilyse also looks at the surroundings - whether the apartment offers a view of the countryside, for example, and whether it is close to the tram stop.

Is the 4-room apartment suitable for families or for a couple? How can office space be optimally divided so that the users feel comfortable? With the help of Archilyse such questions can be answered objectively.

Thus, Archilyse ultimately helps in the interpretation of architecture and supports decision-makers along the entire value chain with additional, objective facts.



Quelle: Archilyse

4. 10 steps for corporate digitisation

Those who tackle the change can get much more out of it than saving costs or working more efficiently. They can establish new business models and create innovative customer experiences, thus getting their company competitive for the future.

For many companies, digital transformation is both a curse and a blessing: the complexity is great, opportunities and risks have to be weighed up, often there is a lack of the necessary expertise and often also a lack of an overall strategy for the challenging process. But digital transformation also brings opportunities: Those who manage the change skilfully can do much more than minimise costs or work more efficiently. They must establish new business models and create innovative customer experiences to make their company fit for the future.

This complex process requires a strategy that is deeply rooted in the company. Digital transformation is not a matter for the IT department, but a task that challenges the entire company. Digital transformation is not primarily about new software or the digitalization of documents, but about new business models and approaches.

The following guide should serve as an orientation when planning a digital transformation.

10 Steps Towards Corporate Digital Transformation

1. **Orientation phase:** The first step is to determine the status quo: Where is there a need for optimisation? What are the most important fields of action, what goals & KPIs should be achieved? The following questions should be answered: Where does the company stand in regard to digitisation? Where is there a need for action? What does the market look like? What are the competitors up to?
Describe a new business model adapted to the digital world. Identify growth potentials that can be tapped with digital technologies and derive new business models from them.
2. **Developing a digitalization strategy:** In the next step, the data and findings from the orientation phase are analysed and a strategy is developed based on this. Which processes, departments, business areas should be integrated, which business models should be digitised?
3. **Clarifying responsibilities:** Who is responsible for digitisation? The digital transformation affects all business areas and resources must be planned accordingly. Digitization is not a job for the IT department but should take place across companies and at the executive level. Once the responsibilities have been clarified, a project setup will follow and the appointment of a digitisation manager with appropriate powers and influence.
4. **Defining a digital ecosystem:** In a further step, it will be clarified for which areas external consultants and partners should be consulted. In addition, you can find out where partners, suppliers and service providers have already taken similar steps. Are there any synergies? The resulting exchange of experience and transfer of innovation can provide important insights. New partnerships from the digitisation environment should also be examined. Finally, the selection of adequate digital technologies and instruments is on the agenda, as is the search for the right partner(s) for implementation.
5. **Digitising the value chain:** This is where the concrete steps are to be defined: Infrastructure must be provided, a budget must be set, a useful process landscape must be designed, and an appropriate business plan must be drawn up. Ideally, these steps are managed centrally. This is

also where the individual steps for the respective departments are planned, a digital roadmap is created, milestones and responsibilities are defined. If not already done, the CDO should now also be appointed.

6. **Involving employees:** Above all, digital transformation requires cultural and organizational adjustments. Employees must be informed, involved, motivated and trained accordingly. But also, the creation of change management programs, agile project management and interdisciplinary structures should be tackled at this point.
7. **Prioritising:** Which steps are the most urgent? What can wait? What can be implemented quickly? Where can I quickly achieve small successes? Focus on the feasible and the measurable. Otherwise, there is a danger that projects will develop into "wild fields of experimentation" if new ideas and changes are continually being introduced.
8. **Step-by-step implementation:** Individual steps are easier to implement and bring a quicker sense of achievement. It is advisable to implement ideas in a modular fashion, so that they can then be modified or updated on a rolling basis. It is very important to establish an error culture, and failing forward is the keyword here: small steps are taken quickly, and initial measures are implemented, the mistakes made are constantly learned from, the necessary adjustments are made and the process continues.
9. **Digitising the customer relationship:** This includes all external communication, the development of an appropriate marketing strategy, the creation of new distribution channels and the development of new customer experiences. Data already obtained can be used for further analysis and new customer experiences.
10. **Evaluation:** Finally, the set goals & KPIs are reviewed. New technologies and competitors should always be kept in mind, because digital transformation is an ongoing, circular process that must be constantly adapted to current developments.

5. Recommended literature & further links

Heike Gündling: Next Generation Real Estate: Innovation und digitale Trends, Frankfurt School Verlag, ISBN 978-3956470967

Andreas Moring, Lukas Maiwald, Timo Kewitz: Bits and Bricks: Digitalisierung von Geschäftsmodellen in der Immobilienbranche, Springer Gabler, ISBN 978-3658193867

Daniel Schallmo, Andreas Rusnjak, Johanna Anzengruber et al: Digitale Transformation von Geschäftsmodellen: Grundlagen, Instrumente und Best Practices (Schwerpunkt Business Model Innovation), Springer Gabler, ISBN 978-3658123871

Oliver Gassmann, Philipp Sutter: Digitale Transformation im Unternehmen gestalten. Zühlke Verlag, ISBN 978-344644678-6

Ernst & Young: Digitalisierungsstudie zur Immobilienbranche in der Schweiz
[https://www.ey.com/Publication/vwLUAssets/ey-digitalisierungsstudie-immobilienbranche-schweiz-april-2019/\\$FILE/ey-digitalisierungsstudie-immobilienbranche-schweiz-april-2019.pdf](https://www.ey.com/Publication/vwLUAssets/ey-digitalisierungsstudie-immobilienbranche-schweiz-april-2019/$FILE/ey-digitalisierungsstudie-immobilienbranche-schweiz-april-2019.pdf)

Deloitte: Digitale Zukunftsfähigkeit. Wie wappnen sich Unternehmen für die Chancen und Herausforderungen der Digitalisierung? <https://www2.deloitte.com/content/dam/Deloitte/ch/Documents/consumer-business/ch-de-cip-swiss-transformation.pdf>

Matthias Zacher Manager Research & Consulting, IDC Central Europe GmbH: SWISS IT 2018: Wo stehen Schweizer Unternehmen bei der Digitalisierung und Automatisierung ihrer IT und ihrer Geschäftsprozesse?
<https://www.swisscom.ch/de/business/enterprise/downloads/digitalisierung/db003-swiss-it-digitalisierung-automatisierung.html>

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