RESEARCH AT A GLANCE

Data Driven Business

Creating added value from data

MSM Research AG, October 2019

Rational or emotional?
Smart data or gut feeling - on the path to the data-driven business

A new buzzword has appeared on the horizon of IT terminology: the data-driven business (DDB). What's it all about? Well, it isn't a new product or a new solution or some kind of cloud-based service. The focus here is on a realignment of the business model. And on what is in fact a new form of decision-making. Consequently, it's also a cultural issue that's closely connected to the context in which analytically prepared data is integrated into decision-making processes. Or better still, the question that needs to be answered here is how much gut instinct and how much space one should grant to smart data and analyses. Ultimately, it's about demolishing old traditions, old ways of thinking and old strategy formulation processes.

Contents

Powered by swisscom

MSM RESEARCH

MSM Research AG - Postfach 191 - CH-8201 Schaffhausen - Telefon 052 624 21 21 - info@msmag.ch - www.msmag.ch

What is data-driven business?

The focus is on how to gain value-creation-enhancing information from mountains and lakes of data. This results in new realisations for optimising the processes, the portfolio and the whole company strategy, which can then be implemented in concrete decisions, actions and measures. Why? Because the growing volumes of data without any real information value must force companies to rethink their approach. In an increasingly digitised world, everything revolves around response times and recognising and fulfilling individual customer requirements. Therefore, the data produced should no longer be used only for monitoring purposes.

The transformation of data to smart data can, for example:

- Optimise and individualise the customer journey, from enquiry to post-processing
- Enable prognoses and simulations of market changes and customer behaviour
- Optimise stock levels and the supply chain
- Support the pricing process in real time, depending on current market trends and demand
- Shorten customer service response times and improve the range of products/services

The roadmap to the data-driven business leads through 4 stages

Ensure the diligent handling of data	Create added values from data	Achieve competitive advantages	Enable new business models
The lawful processing, transfer and storage of the data (Secure Compliant Access)	Creating company assets based on data (Asset Value Creation)	Achieving competitive advantages by combining external and internal data (Competitive Advantage)	Adapting products / services to current market and customer requirements in real time, based on data (Adaptive Services)
Stage 1	**Stage 2**	**Stage 3**	**Stage 4**

Source: Swisscom

«Data become information and provide the basis for optimised processes and input for new business models in real time»

Smart data create competitive advantages

The transformation into smart data and greater transparency by means of valuable information creates an essential foundation for innovations and differentiating competitive advantages. Using appropriate tools and algorithms from the field of data analysis and artificial intelligence, a data-driven business can simulate different models and options, make predictions and rely on automated interaction with customers.

«It's about a new game, about transforming data into information, about creating added value»

Which makes it possible to respond to changes on the customer and market front quickly and, above all, quicker than the competition, to orient the range of services accordingly, and to generate valuable insights for adapting the company strategy and maximising the value-creation chain.

What digital evolution, real-time business analyses and artificial intelligence are going to trigger on a broad basis over the next few years resembles an actual paradigm shift, because what counts now is no longer big, lots and cheap but fast and individual.

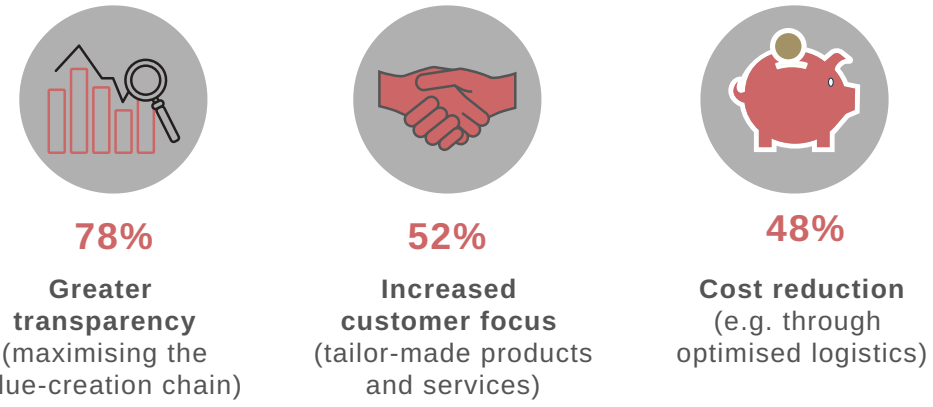


Fig. 1 - The top 3 goals and expectations of a data-driven business
What core aspects are you primarily pursuing today, with business analyses as a basis, on the path to the data-driven business? Multiple answers are possible.

«Real-time information not only makes it possible to address customers quickly, but also with greater precision and an individual approach»

What solution underlies data-driven business?

There is no such thing as THE solution. There is no software package labelled “Data-Driven Business”. It’s about more than just the deployment of technology - it’s about new ways of reaching decisions, about creating added value and being oriented towards current developments. This isn’t a topic exclusively for the IT department and the tech freaks in the company, or only for the strategists. It necessitates a cultural transformation, it necessitates processes and staff with new roles, who possess the skills and expertise to master the new game.

«The prerequisite is that the specialist departments and staff should recognise the potential of the data, demonstrate a willingness to think and act in a new way and accept new, changed roles»

In order to narrow down the term data-driven Business (DDB) with regard to products, solutions and services, it’s possible to at least define the most essential components:

- the data sources and the transfer of the data from applications like ERP, CRM, ECM, IoT, social media and communication
- the storage of the data, the storage environment and strategy, as well as the appropriate data management
- the applications from the areas of artificial intelligence, business intelligence and big data, which are closely connected to the analyses and decision-making processes
- data protection and safeguarding the information from unauthorised access

«There is no data-driven business solution. The analyses and the interplay of different IT applications and systems constitute the basis for the data-driven business model»

Where do we stand in Switzerland today?

For many Swiss companies, the term “data-driven business” still is a hype topic - at least, for the majority of those we surveyed in our study. Based on very closely related topics like artificial intelligence (AI) or the Internet of Things (IoT), it’s possible to deduce where we stand in Switzerland today regarding the data-driven business model and how we will develop further.

«The new technologies, such as artificial intelligence or the Internet of Things, are the basis for data-driven business»

When companies are surveyed about the topics surrounding digital evolution, artificial intelligence, analytics and the IoT begin to detach themselves from the realm of hype and to become substantial.

Viewed across all sectors and size categories, just under 10% of Swiss companies are currently specifically addressing these up-and-coming key technologies and bases of a data-driven business. However, these topics are set to become priority topics over the coming three years and will further consolidate the basis of the data-driven business.

The topics closely related to DDB:
Artificial intelligence and the Internet of Things

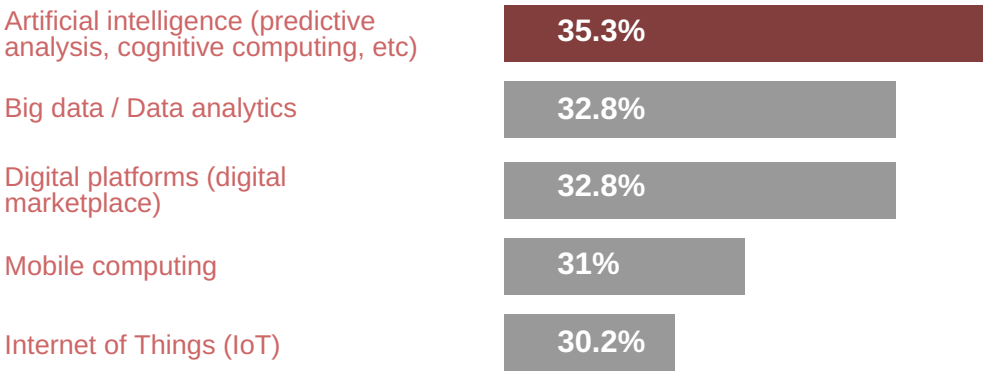


Fig. 2 - Top up-and-coming technologies as the basis of data-driven business
Which of the following technologies will you be concentrating on in your company as a new project over the next 3 years? Multiple answers are possible

«Topics like artificial intelligence, analytics or the Internet of Things are among the key technologies of the data-driven business»

On the path to the data-driven business, companies battle with rapidly growing data mountains

In view of the rapidly growing data mountains, the companies see the safeguarding of the quality, up-to-dateness and consistency of the data as being the biggest challenges. In fact, particularly the unstructured data offer huge potential and must be suitably prepared to ensure worthwhile further processing and valuable use.

«Security and data protection aspects or the integrated storage strategy rank extremely high on the list of challenges»

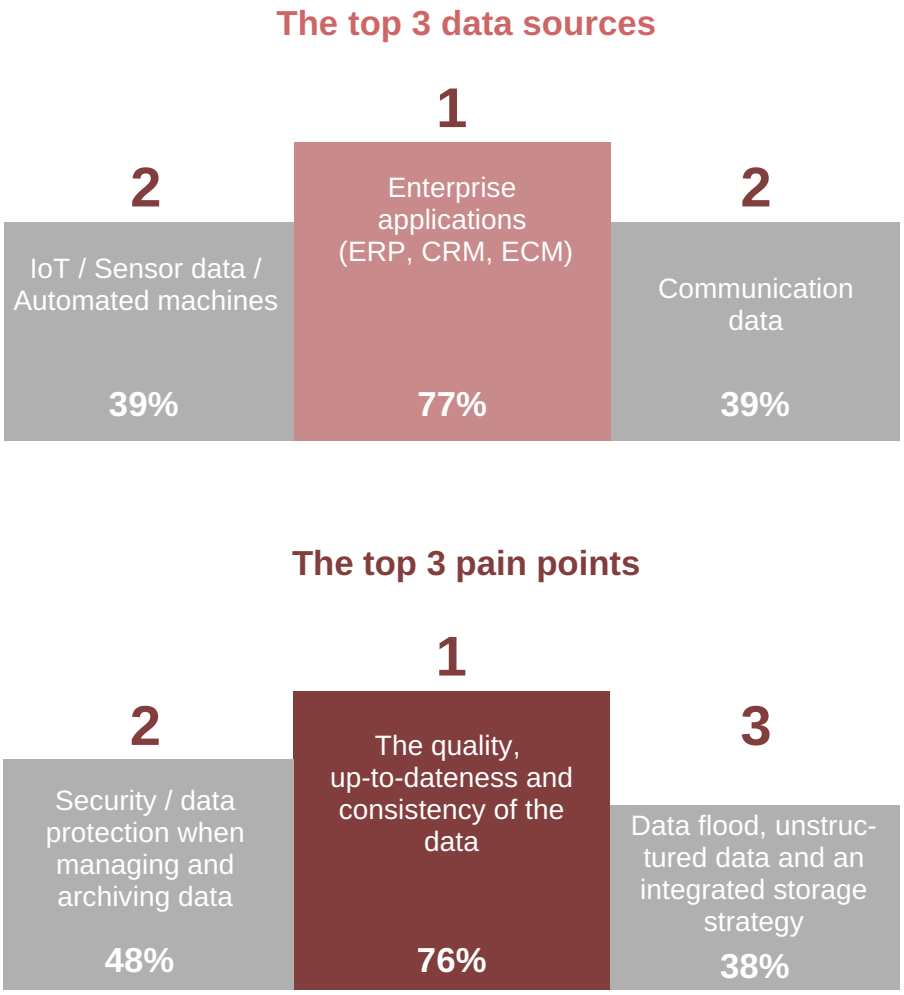


Fig. 3 - The top data sources and pain points of data storage
Which data sources will contribute most to increasing the volume of data in your company in the future? And what are your biggest pain points regarding data storage? Multiple answers are possible

The data mountains must be amalgamated

Nowadays, data accrue from a wide variety of sources. It has long been the case that the amalgamation, storage, management, analysis and safeguarding of the masses of data is now no longer limited to sources from core internal processes such as order processing, warehousing, the financial department, production or marketing and distribution. Particularly in light of the customer journey and the whole digitised world, the flood of data will continue to grow exponentially in scope and volume.

«Added value must be created from the masses of data»

It is primarily data from the customer and market front that are generated from a huge number of terminal devices, social media sources, mobile devices and applications, from video, image and audio sources, sensors or IoT chips; and that is fed into the digital processes, as it offers enormous potential in terms of value-creation-enhancing information.

When analysed correctly and - above all - rapidly, they increase a company's ability to save on costs and to differentiate themselves on the one hand, and to have a rapid response in bringing new products and services to new markets and customer segments on the other.

Are data-centred companies more successful?

43%	This doesn't depend only on data collection, but also on the analysis and conversion of the data to value-creation-enhancing information
32%	Yes, with the right analytical tools they can create a competitive advantage for themselves
29%	Yes, with the right experts and appropriate know-how, you can thus generate advantages

Fig. 4 - The perceived status of the topic of data-driven business (DDB)
In your view, will "data-centric companies", which make their business decisions on the basis of data, be more successful in future than comparable companies who do not have systematic data collection and analysis? Multiple answers are possible

«The correct, rapid analysis of data increases a company's ability to quickly address markets and customers»

The dissemination of the enabling technologies for data-driven business

Even though investments in the DDB enabling technologies are markedly increasing, the path to the data-driven business remains a long one.

When one considers the companies' assessments regarding artificial intelligence or one of the most important future data sources, the IoT, it becomes evident that we can't expect data-driven businesses to become widespread in Switzerland in the immediate future.

«Companies estimate that important enabling technologies for DDB, such as AI or IoT, will become prevalent over the next 5 years»

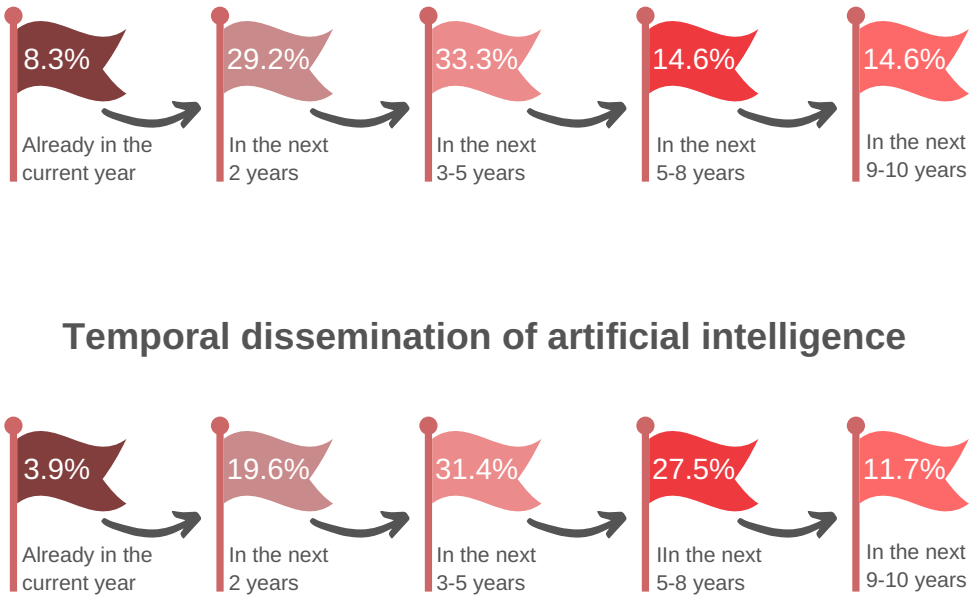


Fig. 5 - Temporal dissemination of the enabling and key technologies of a data-driven business
In your opinion, when will the following concepts become reality and come into effect on a larger scale? Only 1 answer is possible

What's holding the companies back - where are the obstacles?

Today, most of the companies surveyed in the course of the study are not yet suitably equipped and set up with regard to the available in-company expertise and staff resources. Also, they only have vague ideas about how to successfully take the path to the data-driven business. In addition, some express concerns that the right time for getting into the field hasn't yet come, as it's assumed that the technologies and services currently available on the market are not yet mature or that current economic prospects do not offer any incentive to implement changes.

«In many companies, the topic of data-driven business is not currently being given priority and the benefit is not (yet) discernible»

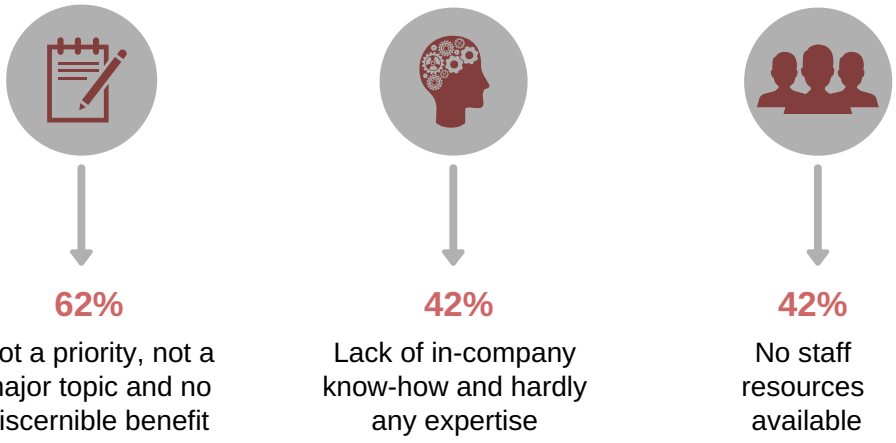


Fig. 6 - The top three obstacles on the path to the DDB
What obstacles are primarily preventing you from investing in a data-driven business model? Multiple answers are possible

The digital evolutionary stage through which we are now going differs from the three industrial revolution stages seen up to now (steam and railways, electricity and automation, computers) in one major way: it is happening at a tremendous speed. However, many companies currently take the following view: the business trend is currently positive, so there's no reason to change anything.

The benefit of a DDB is not yet apparent in its full range of possibilities and ramifications. However, standing still and waiting can rapidly backfire - the window of opportunity can quickly close again: the competition doesn't wait.

Data analysis and transformation into value-generating information creates the basis for the data-driven business

The data-driven business is closely connected to digital transformation in extensive areas, and these are in turn closely connected to the use of suitable analytical tools. Hardly any major digitisation and IoT project can get by without an analytical or even a big data solution.

«The abundance of tools and solutions, particularly in the field of analytics, entails the risk of concentrating too heavily and exclusively on the technologies»

The interfaces of the different worlds and solutions, and the interlocking of business analytics and digitisation can be compared to a complicated mechanism. However, it is the degree of smoothness of integration into the business processes, the convergence of the individual tools and services, and the orientation towards the aims of the information acquisition that will determine success and the extent to which new, profit-generating potential is exploited.

A data-driven business is not a technology-driven company per se, but rather a company that questions traditional business models, turns decision-making processes on their head and controls the business strategy based on more than personal deliberations and gut feelings.

«A data-driven business supports operationally and strategically relevant decisions and measures through the use of smart data»

The impact on the culture and the organisation

Transformation into a data-driven business is like a new game: it's all about pace, innovation and response times. All of which has a major impact on the organisation and the culture of a company. Without the appropriate use of technology, no added value can be created from data.

It requires the necessary systems, applications and processes for the analysis and transformation of the data into information. However, it also presupposes an organisation and staff with the skills and expertise to master the new game.

Another prerequisite is that the specialist departments and staff should recognise the potential of the data, demonstrate a willingness to think and act in a new way and support the appropriate change of culture. And without new skilled personnel, first and foremost in the area of data analysis, nothing will work: the "data scientist" will play a key role here.

Ultimately, it will be possible to deduce the success of a data-driven business from its degree of maturity and willingness to change.

«A data-driven business demands new expertise and a new understanding of roles»

Conclusion

Ultimately, the all-important question here is how practical, competitive and commercially meaningful business cases can be realised from the creative ideas and initial solution approaches. What are needed are small first steps with clearly defined objectives that are limited to individual products or services. The experience gained from these pilot projects can then be transferred and applied to further areas and processes.

Particularly in smaller and medium-sized enterprises, resources for realising appropriate projects are often only available to a limited extent. On the other hand, large companies often have to contend with a heterogenous collection of analytic tools - or rather, with the challenge of consolidating and standardising them.

«A data-driven business or company can't be realised overnight; nevertheless, the first steps should be taken quickly»

Recommended first steps towards a data-driven business

1 Create a roadmap for the path to the DDB and define clear and simple objectives for initial pilot projects and trial runs with analytic and AI tools. Such objectives may, for example, be the analysis of customer behaviour in order to improve and individualise the range of services on offer, individualised customer support within the customer journey, the analysis of lead times for answering enquiries in order to shorten response times, or the demand-driven management of stock levels.

2 Put together a team from specialist departments and the IT department. Only on an interdisciplinary basis and with the inclusion of all those involved in the processes can measures be discussed and the appropriate steps be determined.

3 Build on a simple, standardised architecture in the area of analytics, and define the relevant data sources. Use the offers of appropriate suppliers and service providers in the field of business intelligence, analytics and AI. Nowadays, ever more services can be provided from the Cloud.

4 Learn from the first projects based on an iterative approach. It doesn't always have to be 100% perfect: it's better to start an 80% project, to learn from it and to improve it further, than to waste crucial, precious time with endless attempts to perfect things.

As with all big, rapid changes and new opportunities and risks that present themselves, the same thing applies here: beginning with small steps and iterative loops is often better than standing still or a (too) late and overhasty entry into unfamiliar territory.

Create transparency and gain the tools you need to start

Would you like to build up new data-based business models or to optimise your processes with the aid of data? Do you need clean, consistent master data and transaction data, as well as the right technical components for doing it? Are you unsure which data are located where, how they are processed and how you can harmonise them?

We support you with a structured approach, with an actual state analysis and a target vision, so that you can plan concrete initiatives and projects.

Act now!

Work out the bases for your business, together with IT experts, in the Data Readiness Assessment:

Book a workshop

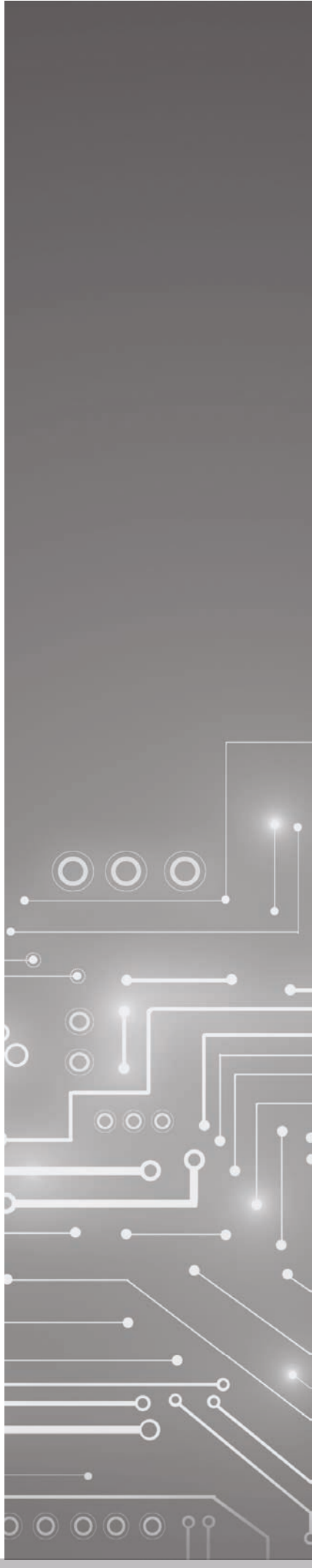
Would you like to take part in a noncommittal exchange of information on the topic of data-driven business? Meet with our experts for a personal talk:

Arrange a consultation

More on the topic of data-driven business

Copyright and terms and conditions of use

This white paper was prepared by MSM Research AG, powered by Swisscom for distribution to its customers. The information and data presented here were collated diligently and with the greatest possible care and accuracy. Although assumptions and estimates are unavoidable, all of them are based on the latest knowledge. Prognoses are only up-to-date on the date of their publication and can change at any time. However, no warranties can be given as regards their completeness and accuracy. Copyright and all rights to data remain the property of MSM Research AG.



Basis of Study / Sources
Studies/Research from 2019 on the Swiss market:
"Data Driven Business" (n=40), "Artificial Intelligence" (n=51) and "Internet of Things (IoT)" (n=64).
MSM Research AG

Photos: Bigstock, Getty Images

Author
Philipp A. Ziegler, CEO, MSM Research AG

Design / Layout
Corinne Jost, Head of Marketing, MSM Research AG