June 2023

Digital Maturity Index Survey 2023

Enabling business growth through digitalization

Deloitte. Digital



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Key Results

Participants on C-level and BU head level

Industry sectors with focus on industrial products and automotive

Invested in digitalization on average

Have developed a digital mindset among the workforce

33%

Work in ecosystems fostering cross-company value creation

>70%

Of companies develop new customer solutions and business models in the course of digitalization

This year's study builds on the very first survey in 2019 and analyzes how companies are shaping their digital future against the backdrop of multiple crises. It covers over 800 of the latest insights from leaders across different sectors in manufacturing:



Companies have **increased their digital maturity** by an average of 16 p.p. in the last 5 years



Due to multiple disruptions, the **EBIT uplifts** from digitalization have barely increased (+1%) - however, digitally mature companies still achieve 6% more EBIT uplift than lagging companies (2019: 10%)



Digitalization remains the **major investment factor** in companies despite uncertainties – at the same time, about **30% are willing to accelerate** their digitalization due to the crises



Our participants represent the breadth of the manufacturing industry holding middle management or top management positions

This year's survey focuses on representative countries of the four most important global economic regions.

CxO level

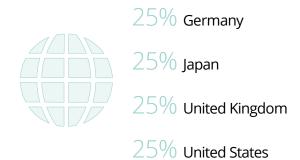
participants

#6

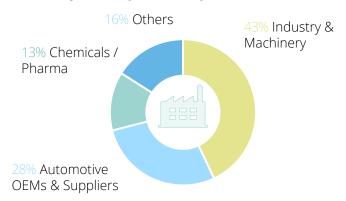
annual survey

4 year lapse of time to focus on

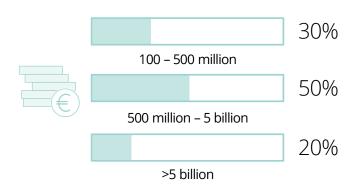
Participants By Country



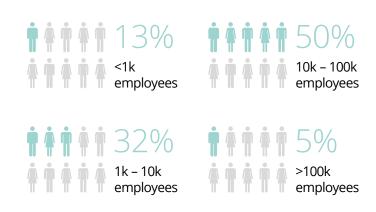
Participants by industry



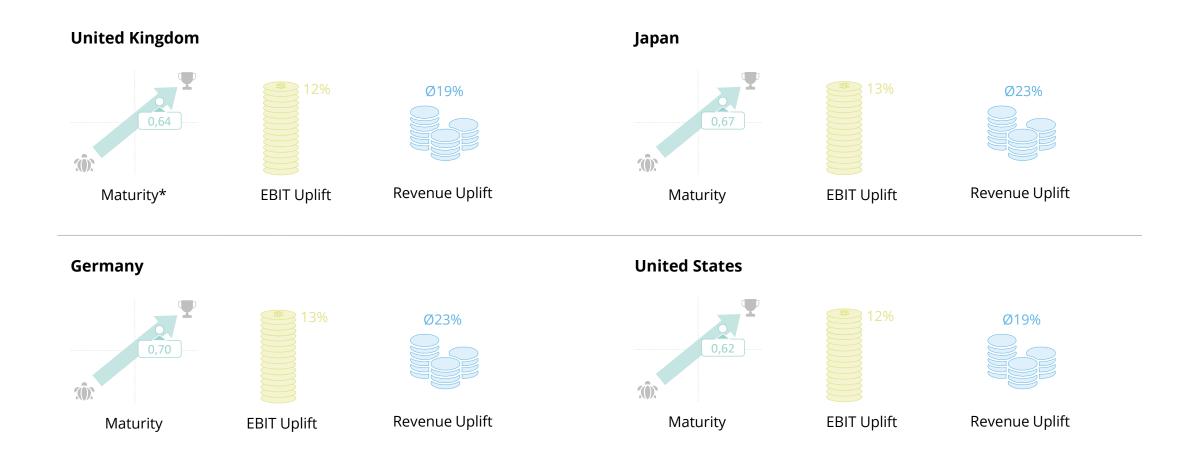
Participants By Revenue



Participants by # employees



Key figures for the different regions



5 | Deloitte Digital 2023 *0=not digital ... 1=fully digitized

Sector progress in digitalization from 2019 to 2023

Automotive Industry

Starting from the weakest position in 2019, the automotive industry has made the biggest leap forward in the last five years, embracing digital progress and its monetization in equal measure.

Industrial Products

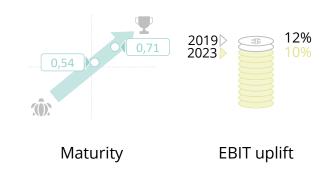
Starting from a strong position, the current crises in the industrial sector show that EBIT increases have been weak despite consistent digitalization initiatives.

Chemicals & Pharma

Severely affected by rising raw material costs, EBIT uplifts even declined slightly, even though considerable digital progress was made in this area during the period under review.







Background and methodology of the survey

Deloitte performs an annual analysis of the degree of digitalization in the German and global manufacturing industry as part of an expert survey. Our **Digital Maturity Index (DMI)** – jointly developed by Deloitte and the University of Duisburg-Essen – marks the starting point of your digital transformation.

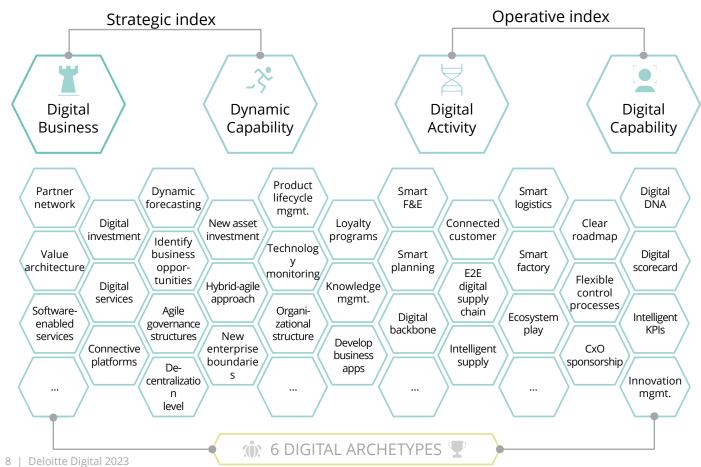


The Deloitte DMI is the result of a standardized approach so as to derive a digital maturity level as well as possible fields of action on your path to a digital business model.

The basis of this study is made up of more than 90 different operational and strategic parameters resulting in six digital archetypes – from Digital Laggards to Digital Champions – characterized by different digitalization approaches.

This year's study builds on the very first survey in 2019 and analyzes the overall progress of leading companies against the backdrop of the multiple global crises differently affecting the markets under review, and how the multiple initiatives are having an overarching impact on the health status of the businesses.

Digital key capabilities and parameters determine maturity

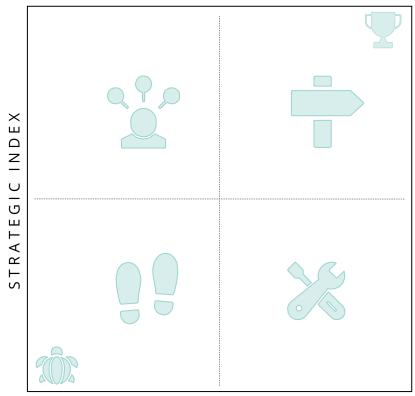


Our Digital Maturity Index considers four holistic indices: "Digital Business", "Dynamic Capability", "Digital Activity", and "Digital Capability" to analyze the status quo of a digital journey covering more than 90 different operational and strategic parameters.

Based on theses parameters we have defined six different digital archetypes and allocated companies to them based on their overall digital journey and performance.

Six evolving digital archetypes

Strategic and operative maturity



OPERATIVE INDEX

Digital archetypes



CHAMPIONS combine consistent digital strategy with operational excellence to achieve a flexibility advantage



POTENTIALS focus on developing their digital strategy hand in hand with operational excellence to achieve cost advantages



INNOVATORS show distinct advances in digital business through an innovative portfolio but average operational success



OPERATORS focus on digitalizing their core value chain, founding their success upon flexibility through innovative solutions



FOLLOWERS seek to consistently advance digital skills in both index dimensions. Connecting initiatives is essential to improve

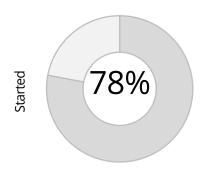


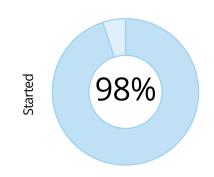
LAGGARDS lack digital skills in both index dimensions using digitalization to improve overall efficiency



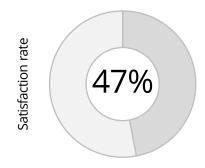
Development of digital transformation

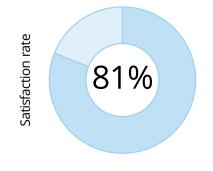
Start of digital transformation





Satisfaction with transformation progress





2019 2023

Digital transformation has progressed significantly compared with 2019. Only 2% of the companies surveyed have not yet started the digital transformation. It is also clear that a large number started after the pandemic.

Satisfaction with the progress of digital transformation has increased compared with 2019 Due to the high investment of the past years: As gleaned from previous digital maturity surveys, at least 10% investment is required to initiate an EBIT-effective transformation.

Where the different sectors can learn from each other

Even though companies in different manufacturing industries see similar challenges, specific areas emerge where they are ahead of other industries, and their levers and methods are transferable.

While the automotive industry is already leading the way in building digital talent, connected services have been heavily involved in industrial products in recent years. In the process industry environment of the chemical and pharmaceutical industries, the focus is on functional strengths such as production and logistics.





Automotive

- 1. Share of digital talents +13%
- 2. Performance of planning process +12%
- 3. Technology scouting +6%



Industrial Products

- 1. Intelligent, connected services +8%
- 2. Target market analysis +8%
- 3. Active decision processes +7%



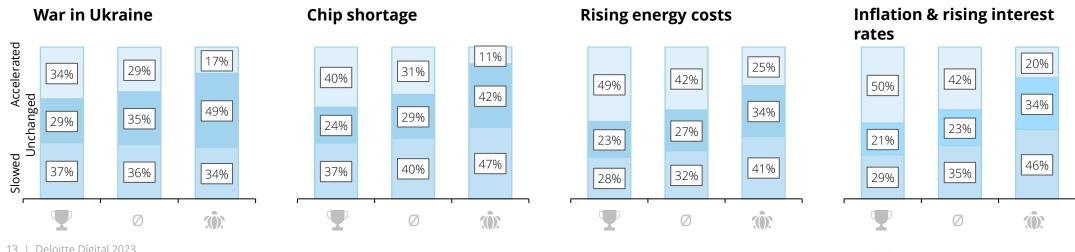
Chemicals / Pharma

- 1. Performance of production process +6%
- 2. Performance of logistic process +5%
- 3. Maturity of procurement process +2%

Crises accelerate digitalization for Champions and Potentials

The current global crises have both a positive and a negative impact on the digitalization of companies. The crises do not negatively affect the digitalization process of Champions and Potentials. Instead, the challenges associated with the crises are accelerating the process by about 10% more than the average.

Laggards and Followers suffer most from the chip shortage, and rising inflation and interest rates (7% more than the average). This not only slows down the digitalization progress in the short-term but will also affect the digitalization progress in the long term, as cost reductions are still in the spotlight due to the ongoing economic crises.







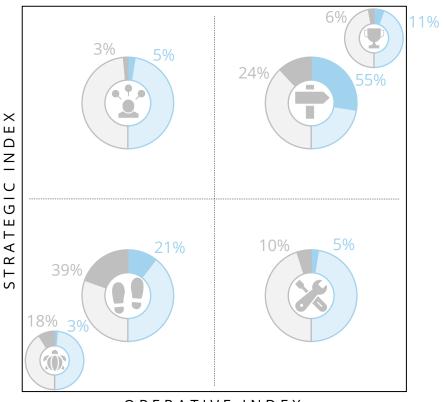
More companies assigned to the mature archetypes

Companies are succeeding in improving their level of digitalization. In particular, there are fewer and fewer archetypes in the area of Operators, Followers and Laggards. The Covid pandemic has led to increasing digitalization, so more business opportunities are being tapped, with successful strategic and operational activities.

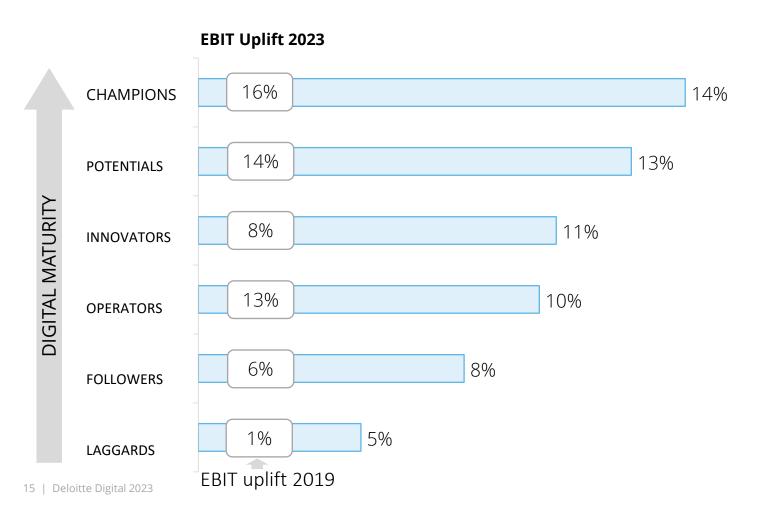
% of companies



Archetypes distribution

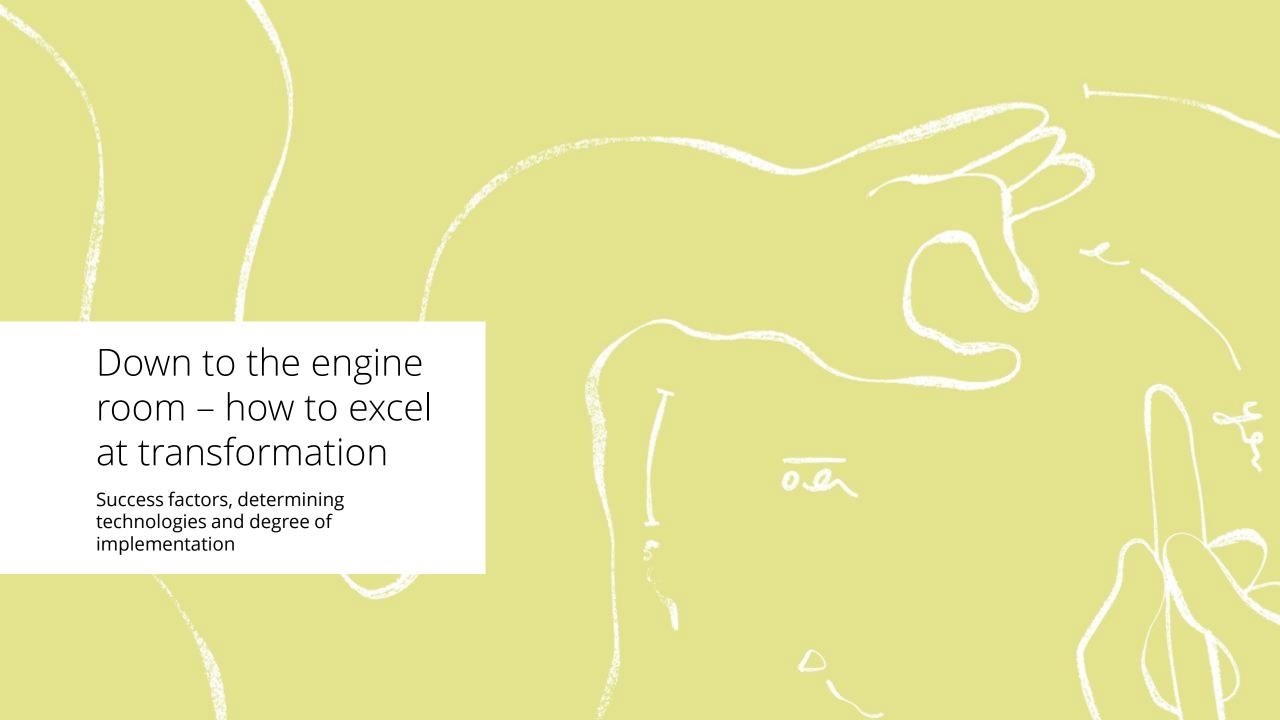


Digital archetypes vary in terms of business impact



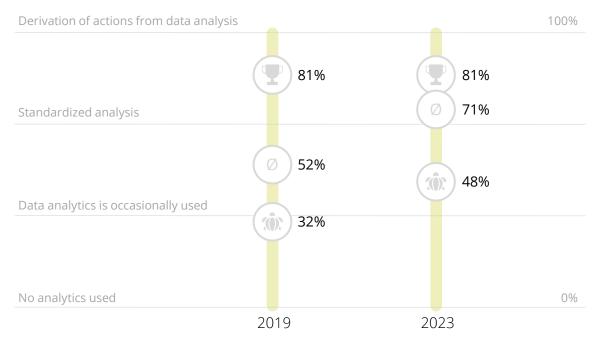
The impact of digitalization on EBIT and revenue has been significantly minimized per archetype compared to 2019. Companies are suffering from the enormous capital requirements driven by costly back-end software implementations as well as creation of hardware infrastructure.

Nevertheless, it is once again clear that the pursuit of archetypes and increased digitalization brings added value, as digital archetypes vary in terms of business impact.



Data Analytics is becoming a commodity for companies today

Usage of data analytics



... of Champions and Potentials use data analytics as a part of standardized processes in 2023







Data analytics is used to evaluate the existing database in a targeted manner.

In 2019, 86% of all companies had contact with data analytics; in 2023, this figure has already risen to 98%. This is mainly due to the increasing availability of analyzable and standardized data that can be processed in visualization software for business intelligence, leading to a significant catchup recently by using standardized data analysis.

Companies are participating in ecosystems



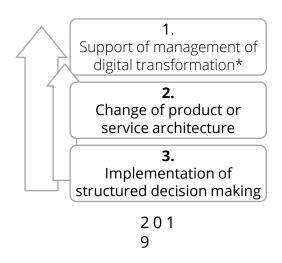
Most companies are making great efforts to build ecosystems because they expect to gain value from them.

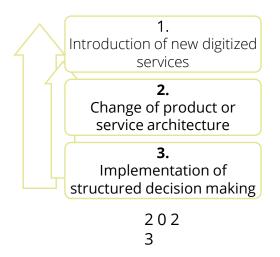
This is reflected in the fact that collaboration in corporate networks has increased by an immense +34% and the associated cross-company value creation increased by +33% compared to 2019. Over +30% of the respondent companies set a framework through a joint overarching customer solution.



Highest rated DMI parameters remain almost the same

Highest rated DMI parameters





Highest leap forward FROM 2019 TO 2023

1.Reduction of the trade-off between traditional and innovative business areas

Impact of digitalization on R&D productivity

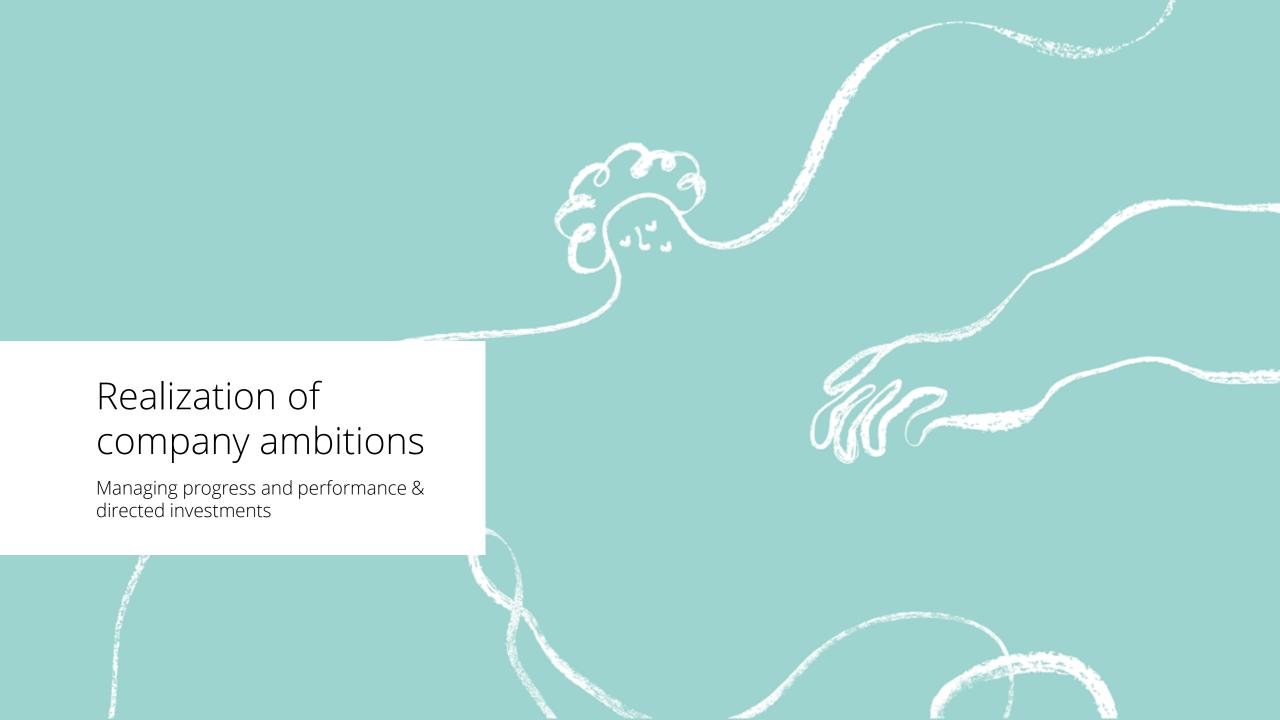
3. Creation of an overarching customer solution

The influence of digitalization on the parameters Change of product or service architecture and Implementation of structured decision-making remain the second and third highest values in comparison with 2019 and 2023.

Support of management of digital transformation ranks fourth in the 2023 DMI survey, with the Introduction of new digitalized services taking first place. This is related to the increasing maturity of digital services.

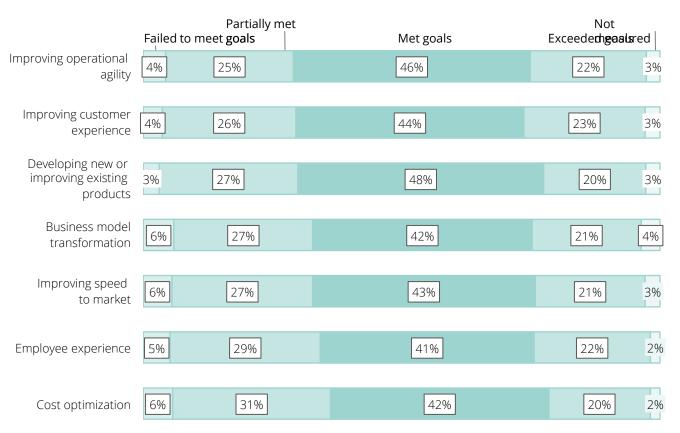
The highest relative growth has been in mitigating the trade-off (efficiency vs. flexibility) through digitalization. Moreover, the DMI's findings over the last few years show the impact of R&D on productivity – it is again clear that investing in digital R&D is the game changer to unlock future profits. And the pursuit of ecosystems continues to grow, in that the creation of an overarching customer solution is showing high relative growth.

19 | Deloitte Digital 2023 *) TOP4 in 2023



Directly from the digital engine room – Performance of initiatives

Performance of digital initiatives (% of respondents)



The assessment of company or business unit performance with regard to each of the respective digital initiatives is equally distributed.

It becomes clear that companies set their targets realistically, as on average only 5% of goals are not met. In addition, the performance of the digital initiatives is measured at a high percentage, with an average value of 97%.

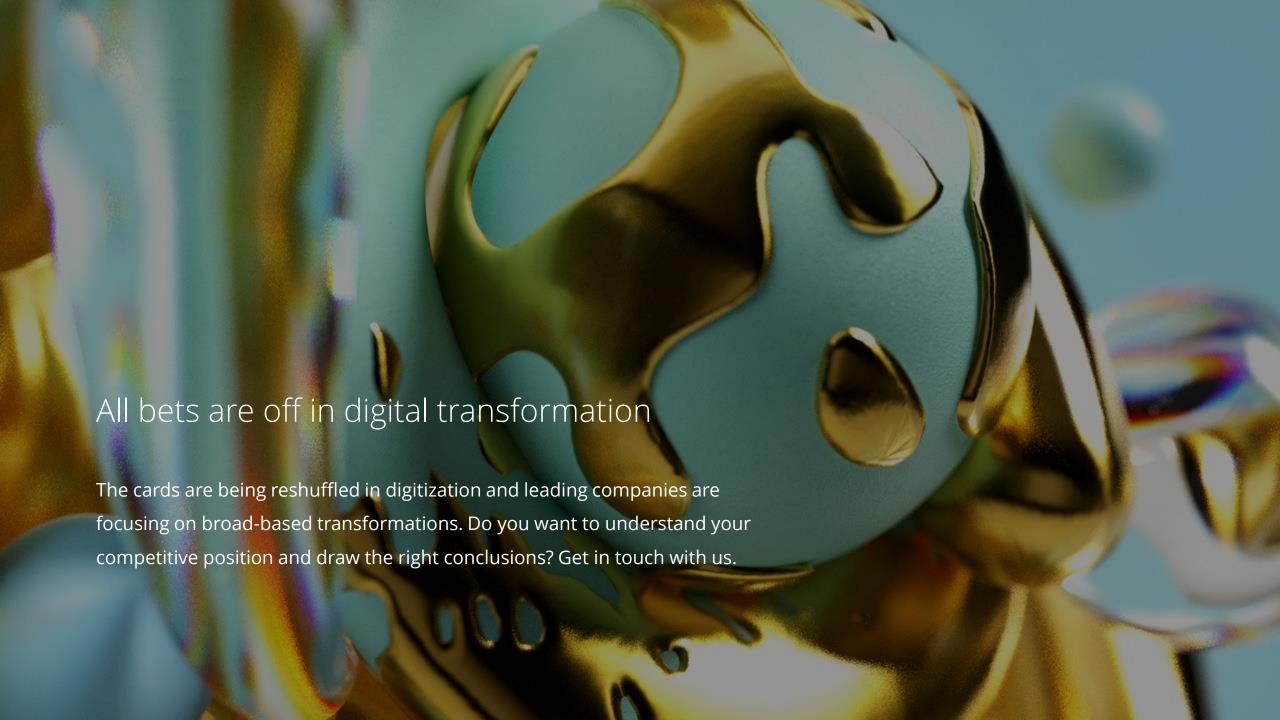
Improving operational agility, customer experience and developing new or improved products especially have a high goal achievement rate. These initiatives are gaining importance due to the shift towards service orientation and customer centricity, which makes a high goal achievement rate more important.

Top investment goals by digital initiatives 2023

Several organizational/business unit initiatives are planned for investment in the following digital initiatives. Investments are being made to enhance the customer experience in order to increase customer loyalty to the product or service through an individualized approach.

Moreover, companies have shifted their investments to digital R&D, driving the trend to automate strategic and operational processes.







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