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Digital Maturity Index Survey 2022



Digital value creation in an unsettled environment

Content



Executive Summary

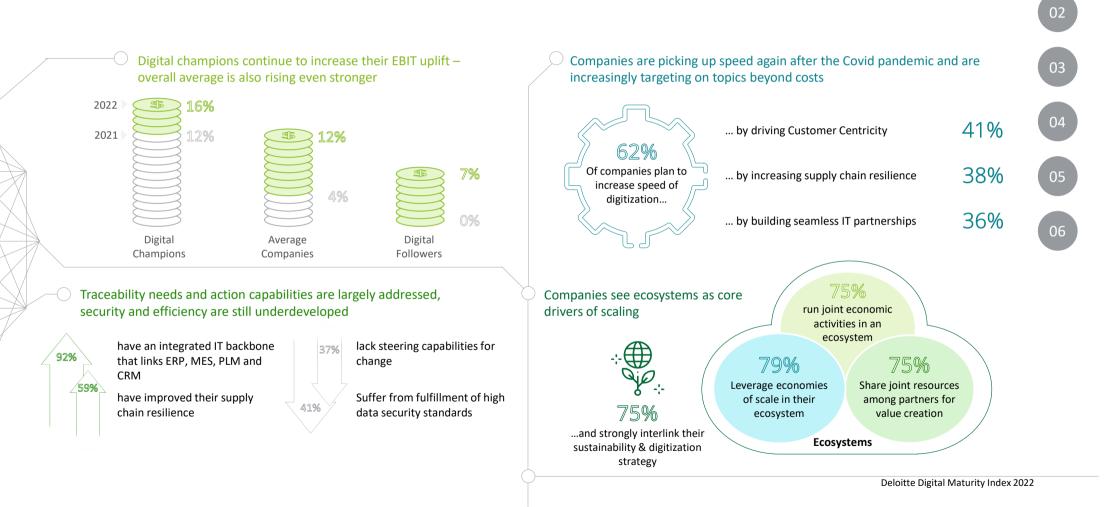
After last four year's of the **Digital Maturity Survey** showed that, despite expectations, Covid was not an accelerator in digitization, this year's survey shows that companies have used the return to business as usual to drive their digitization agenda forward, albeit somewhat hesitantly.

The spotlight is shifting more from traditional efficiency improvement to a diversified digital solutions portfolio that focuses on **sustainability, resilience**, and **flexibility**. The continued high level of investment in the past year is also offset by increased revenues across all maturity levels of the companies. However, the **investment peak has not yet been reached** for the vast majority of companies and new investment areas are being developed. Capital intensity reduction still needs to be prioritized significantly.

The tentative transition to the development of a profitable ecosystems also plays a decisive role here, slowing the need for capital only hesitantly, but also opening up new opportunities for the first movers.

In summary, mature companies are taking up additional transformation signature issues and have largely left the core challenges of digital transformation behind them, at the same time capture most of the financial value add.

Key Results of the Digital Maturity Survey 2022



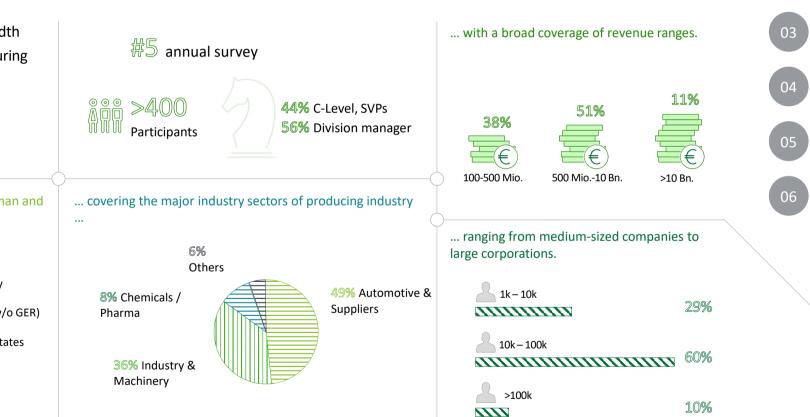
Participants of the Survey 2022

Our participants represent the breadth of decision makers in the manufacturing industry...

... across the globe with focus on German and European market ...



73%Germany12%EMEA (w/o GER)9%United States5%APAC



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Sectors progress in digitization varies

MANUFACTURING SECTOR IN FOCUS

Automotive Industry

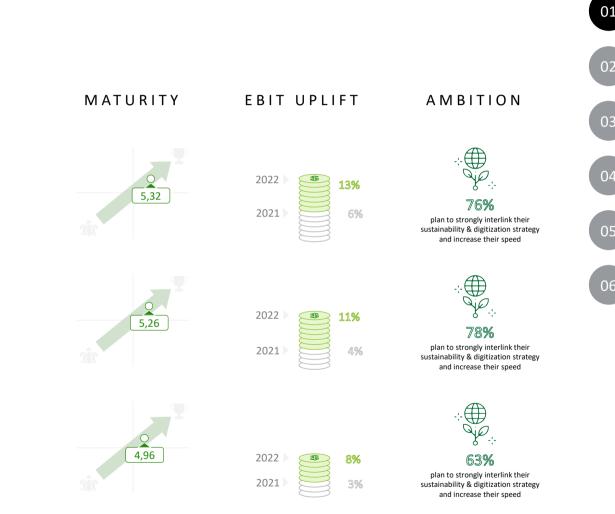
The automotive industry has developed more strongly than the other sectors and is the most reticent in comparison with regard to the further acceleration of digitization but bold considering hot transformation plays.

Industrial Products

The industrial sector performed rather weakly last year but plans to accelerate all of its digitalization efforts in the current year. This is already supported by the solid earnings from efforts to date. Linkage between key transformations is on the top of the agenda already.

Chemicals

In the chemical industry, the Ebit uplift has increased the most, and further signs point to an acceleration of digitization activities. Still the industry needs to consider sustainability and ecosystems as top priority.



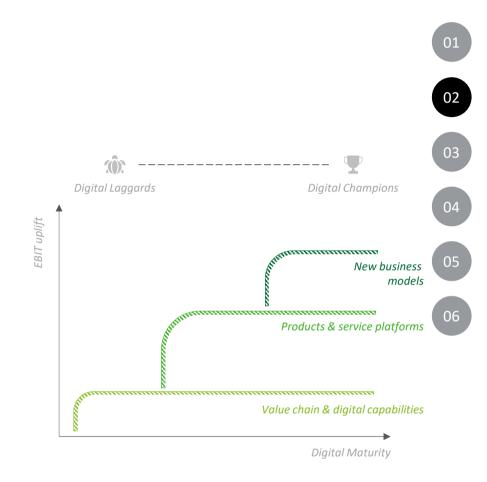
Background and Methodology of the Survey

Annually, Deloitte analyzes the degree of digitalization in the German manufacturing industry as part of an expert survey.

The basis of this study is the **Deloitte Digital Maturity Index**, which is made up of more than 90 different operational and strategic parameters resulting in six digital archetypes types - from Digital Laggards to Digital Champions characterized by different digitalization approaches.

This year's survey is being conducted against a backdrop of broad economic recovery from two-year pandemic and ongoing disruptions of global supply chains.

When the pandemic hit in March 2020, manufacturing companies had varying levels of maturity; the following year, 2021, added supply chain bottlenecks and increasing global uncertainty. This year's survey aims to map the tangible, financially verifiable progress of post-pandemic digital maturity and how topics like resilience, sustainability, and ecosystems are paying into this.

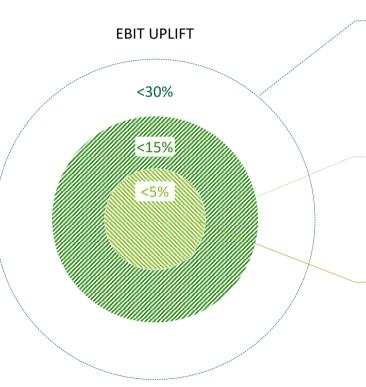


Digital Maturity drives profitability uplifts

Digital maturity is not an end in itself, but the core factor for achieving revenue growth and profit growth today, as well as in the future.

Digital maturity pays off in hard currency and leading companies differentiate themselves in terms of EBIT uplift and create real competitive advantages.

Digitization has a self-reinforcing effect companies that are already achieving high digital profitability today are planning all the more ambitiously for the coming year.



NEW BUSINESS MODELS

The faster strategic measures, such as the creation of digital products/ services or new business models are taken, the higher the success

PRODUCTS & SERVICES PLATFORMS

Significant investments and the creation of organizational prerequisites are the preconditions to realize higher EBIT impact

VALUE CHAIN & DIGITAL CAPABILITIES

Initial EBIT impact is achieved through classic measures and use cases along the value chain and is based on efficiency gains

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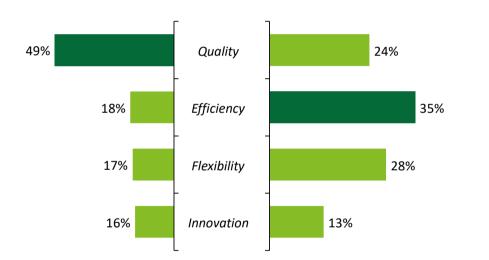
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Digitalization goals support companies competitive advantage

Quality pledge and innovative strength is seen as decisive competitive strengths for leading companies, who also have aligned their digitalization goals accordingly.

However, for the majority of companies efficiency and flexibility gains are the top priorities executing on digital strategies - in many cases driven by previous beliefs about digitization as bottom line optimization.



Competitive Advantage vs. Digitalization Goals (Average of all companies)

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Key challenges and opportunities of digitalization remain

Digital transformation operational challenges are the no. 1 concern of directors, senior executives and CEOs also in 2022 as in the previous years.

Nevertheless, 50% of companies have fulfilled their transformation ambitions in the past 12 months, realizing financial ambition compared to previous years. Companies also unlocked on adapting to new demands.

However transformational prerequisites are still only partially in place.

Key challenges so far

41% Suffer from fulfillment of high data security standards

Opportunities already seized

92%

have an integrated IT backbone that links ERP, MES, PLM and CRM

63%

37%

change

lack steering

capabilities for

interlink digitization & sustainability

36%

fail to implement scalable digital solutions

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59%

have improved value chain resilience

Increasing speed as a key factor in improving digitalization prospects

The tailwind from last year is leading to increased expectations regarding digitization progress in the current year.

Companies that are already successful capturing benefits, having a similar view of the future as companies that are still in the middle of their transformation.

Expectations of an increasing pace of digitization go hand in hand with increased expectations of returns in the form of increases in corporate profitability

Expected speed for the next 12 months

Solution of the second second

% of participants Ø Expected EBIT uplift

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Six Digital Archetypes evolving

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

Strategic and operative maturity

STRATEGIC INDEX

OPERATIVE INDEX

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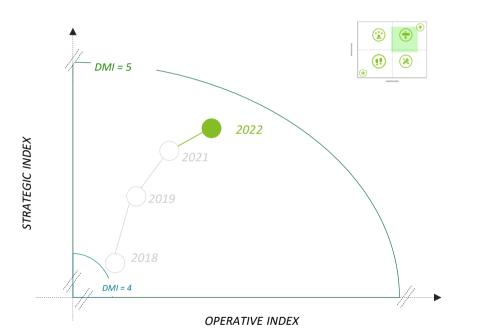
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Digital Maturity Index evolving slowly recovering from pandemic

Companies predominantly pursue a balanced strategy of bottom line excellence (efficiency) and top line growth (revenue and profitability uplift), which are reflected here on the axes shown.

Although the total number of companies is developing, the proportion of very mature companies is increasing only slowly - the higher the current maturity, the less progress can currently be observed.



Maturity development over time

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Digital key capabilities & parameters determine maturity

Our Digital Maturity Index considers four holistic indices to analyze the status quo of a digital journey covering more than 90 different operational and strategic parameters.

We use the performance in each of these different parameters to define the six different digital archetypes.

STRATEGIC INDEX **OPERATIVE INDEX** 03 <u>_</u>} \models À 04 Digital Digital Dynamic Digital Capability Business Capability Activity Product Dynamic Partner Smart Digital lifecycle Smart forecasting network F&E DNA logistics mgmt. New Clear Loyalty Connected Digital Asset roadmap programs Customer investment investment Identify Digital Technology Value Smart Smart business scorecard architecture monitoring factory Planning oppor-E2E Flexible tunities Hybrid-agile digital Digital control Knowledge approach supply services processes mgmt. Organichain Agile Software-Digital Intelligent zational Ecosystem governance enabled KPIs Backbone structure Plav structures New services CxO enterprise Develop Intelligent sponsorship Connective boundaries business Supply platforms apps De-Innovation centralization mgmt. level Data Customer collection & integration analytics

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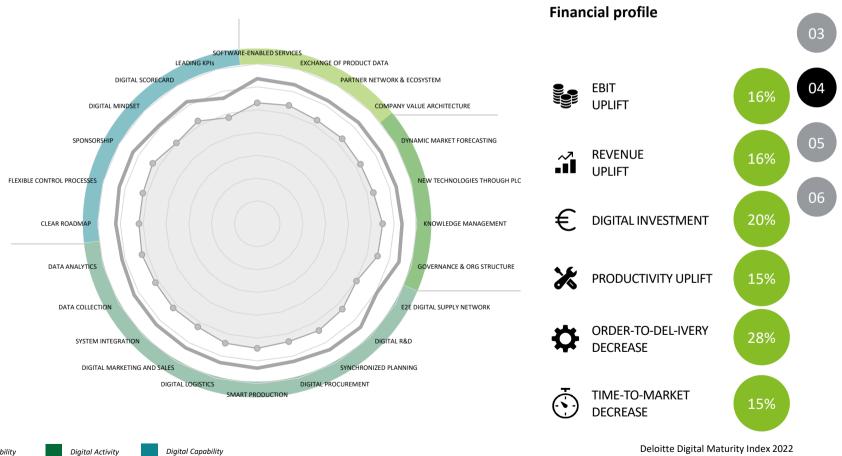
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Insights on Digital Archetypes – Champions

The Champions outperforms the average along all key capabilities and parameters, as well as in key financial figures.

On average, the champion achieves an profitability improvement of 4pp, mainly driven by sales growth +3pp However, reduction in efficiency ratios compared to previous year, therefore efficiency remains in focus



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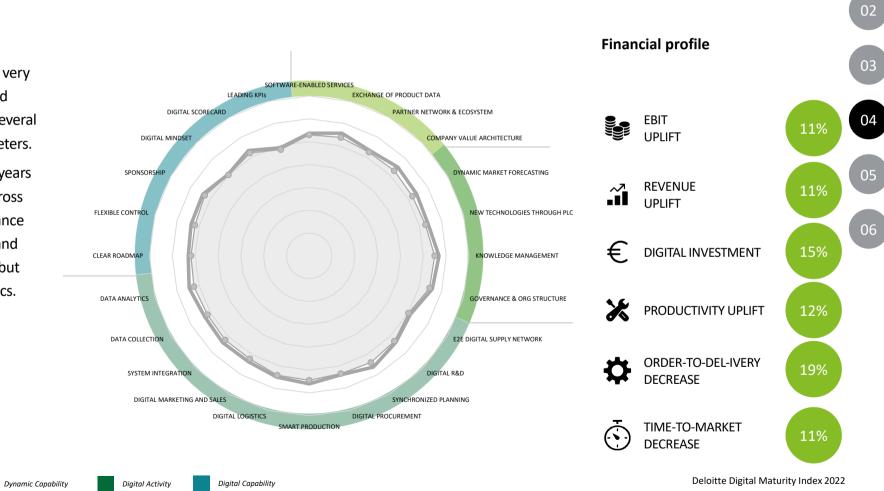
Digital Business Strategy

Dynamic Capability

Digital Capability

Insights on Digital Archetypes – Potentials

The Potential performs very close to the average and even outperform it in several capabilities and parameters. Compared to previous years they have improved across the board with significance regarding profitability and revenue uplift (+ 3pp), but also on efficiency metrics.



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Digital Business Strategy

Insights on Digital Archetypes – Innovators

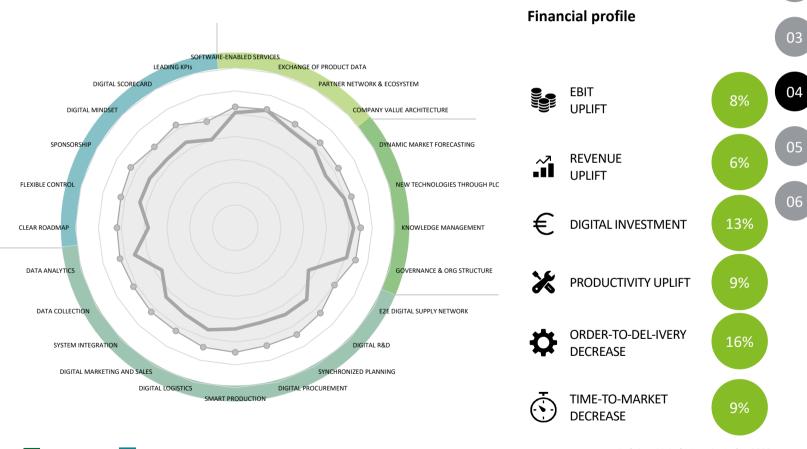
Within manufacturing industry the Innovator group is one of the smaller groups (~5%).

Innovators are outperforming on strategic dimension while lagging behind somewhat in other fields.

With regards to the financial performance Innovators are behind the average, however improved all financial metric compared to previous years (+3pp).

Digital Business Strategy

Dynamic Capability

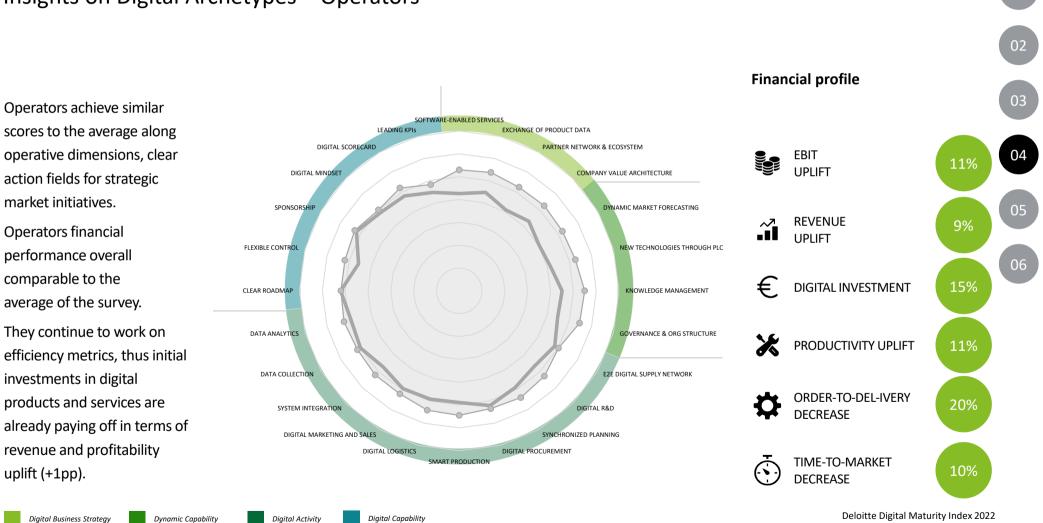


Digital Capability

Digital Activity

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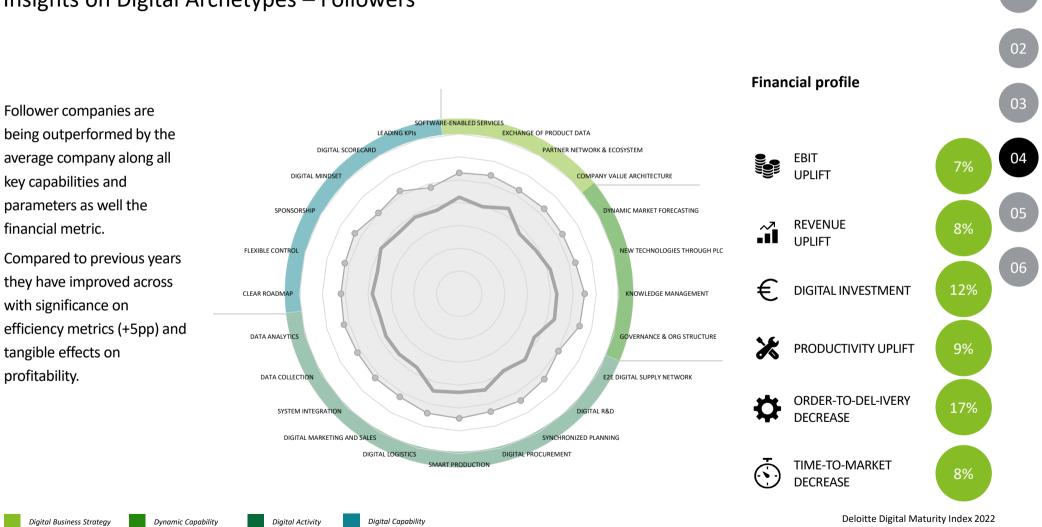


Insights on Digital Archetypes – Operators

Digital Business Strategy

Digital Activity

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Insights on Digital Archetypes – Followers

Digital Business Strategy

Digital Activity

Digital Capability

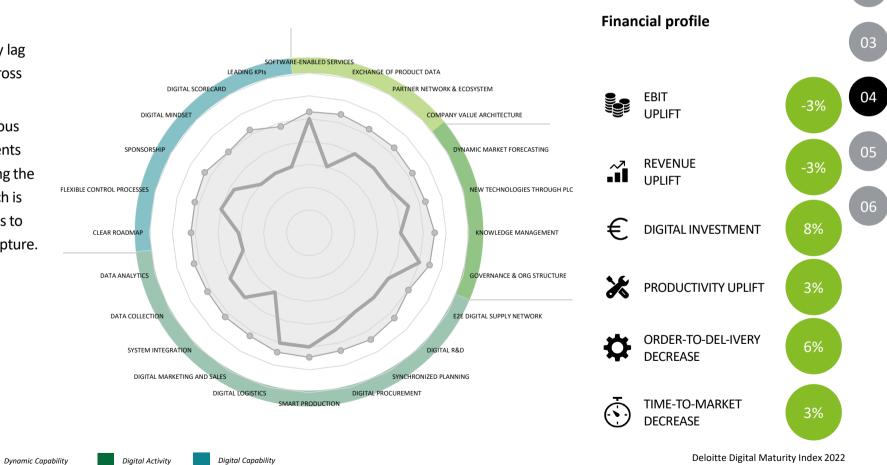
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Insights on Digital Archetypes – Laggards

Laggards still noticeably lag behind competition across the board.

Compared to the previous year, minor improvements are discernible regarding the efficiency metrics, which is also considered as focus to jump-start the value capture.

Due to the COVID crisis topline improvements couldn't been realized.



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Digital Business Strategy

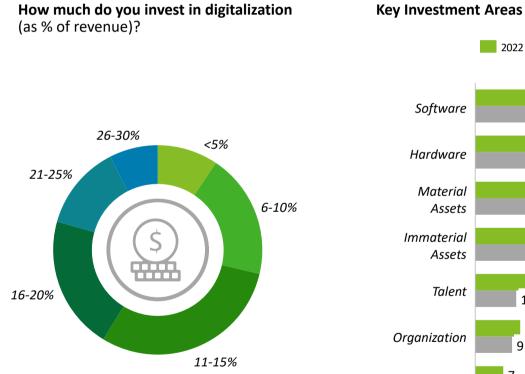
Investment Behavior

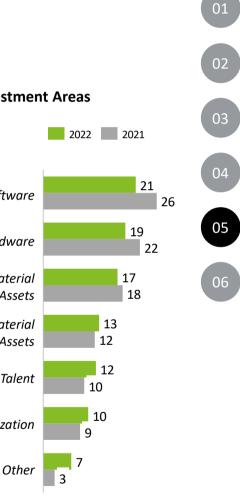
Digital transformation is now one of the largest cost blocks in the Profit & Loss statements of companies.

As already known from previous digital maturity surveys, at least 10% investment is required to initiate an EBIT-effective transformation.

50% of companies already surpassed this threshold with roughly half of them investing between 10-20 % of their revenues.

Those with a lower investment share in digitalization focus their efforts on acquiring and implementing necessary hardware and software capabilities, others still work on prerequisites.



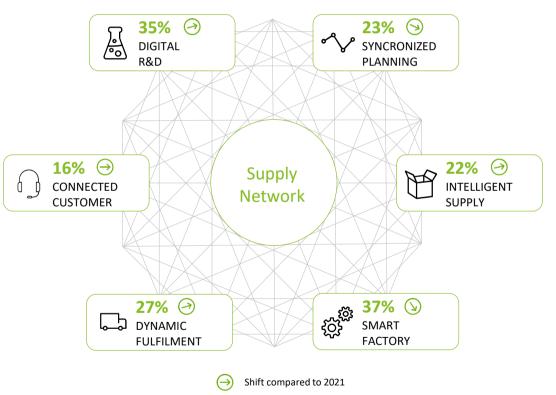


Investment Behavior relies on connectivity

As in previous years, many companies are focused their investments predominantly on production as the core of value creation. Learning from leading companies shifting investments into digital R&D, dynamic fulfillment, synchronized planning to achieve end-to-end value stream connectivity.

It is becoming clear that for the transformational shift, investments in digital R&D are the game changers to unlock future profits fueled by massive investments into soft- and hardware infrastructure.

Focus areas of investment



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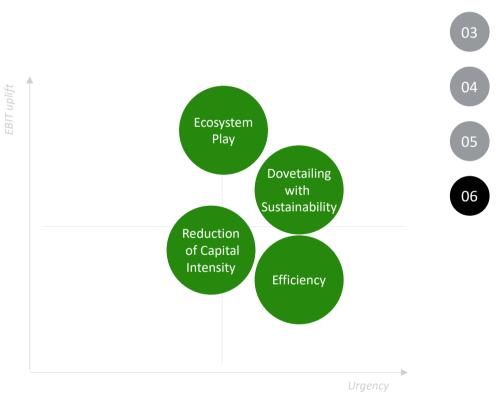
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Better manage complexity through digitalization

Mature companies are able to drastically reduce complexity through of digitization (e.g., elimination of interfaces, better data availability, end-to-end alignment of value chains).

At the same time, the effects describe a necessity for even realizing additional transformational signature topics coming up, such as dovetailing of sustainability and digitization, manufacturing-as-a-service or a profitable ecosystem play. These transformational themes are increasingly displacing more traditional transformation topics such as efficiency.

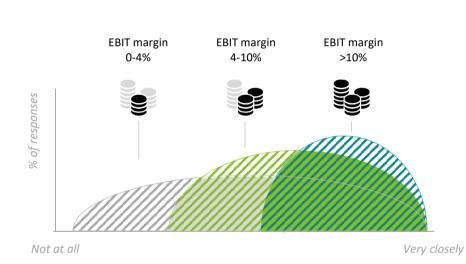


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Early dovetailing of sustainability and digitization

Leading companies, those who already generate high returns from their digital branches, have meanwhile anchored the topic of sustainability even more firmly on their digital agenda.

This results in an interlinked approach that takes ESG criteria into account holistically.



How closely are sustainability and digitization intertwined in your company?

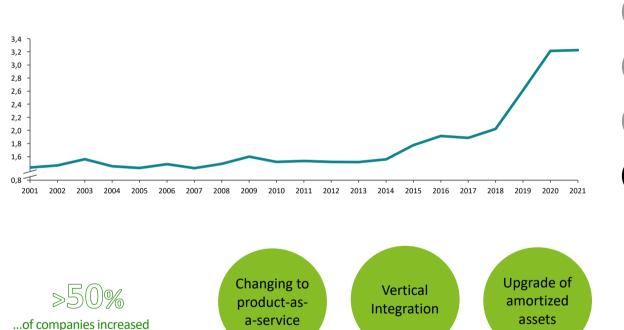


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Key challenge is to enable basic requirements

Companies are suffering from the enormous capital requirements driven by costly back-end software implementations as well as the creation of hardware infrastructure.

For many companies, the challenge of capital lockup is already on the agenda and innovative strategies to reduce it have been initiated.



Increasing capital intensity (total asset/ revenue) for manufacturing industry)

capital intensity noticable or

sigificantly

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Profitable Ecosystem Play

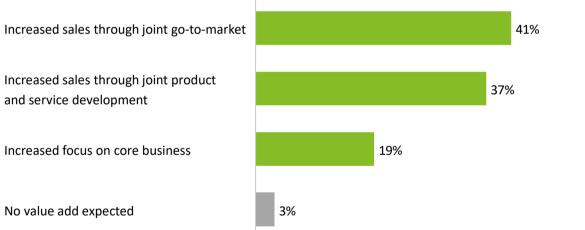
Most companies are putting great effort into building ecosystems because they expect added value in return. Through joint product and service development or joint go-tomarket activities, companies anticipate an uplift in sales.

Value-add expected from ecosystem play

Increased sales through joint product and service development

Increased focus on core business

No value add expected



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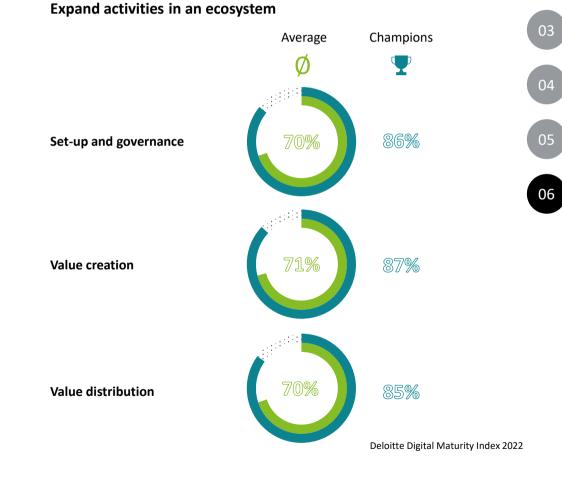
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Profitable Ecosystem Play & Success Factors

Companies consider all factors for building an profitable ecosystem as equally relevant

- Ecosystem Governance for joint economic activities most importantly to consider participants involved and how collaboration, governance and steering must be designed
- Ecosystem Value Creation for modularization in cooperation a dynamic, open, and flexible approach should be followed that enables continuous value creation
- Ecosystem Value Distribution with joint resources and benefits among partners and an effective steering are basic prerequisite for long-term collaboration between ecosystem participants.

Those criteria are of higher importance for those companies aspiring an above-average profitability expectation (>16%).



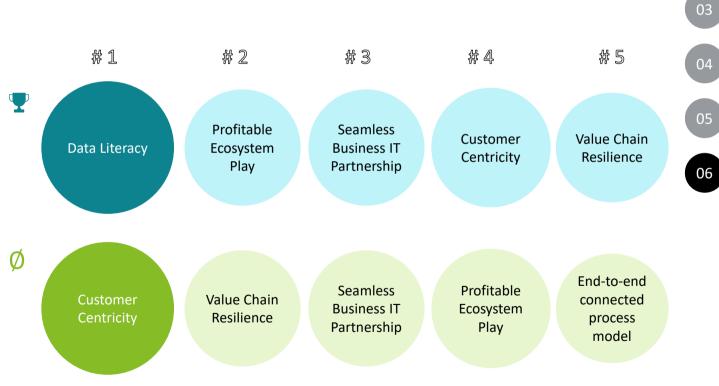
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Top 5 Priorities for the upcoming 12 months

Leading companies have put data literacy as top priority to achieve end-to-end connectivity entering next transformation into a profitable ecosystem play.

However, majority of companies top priorities on CDO agendas solve key digital transformation requirements for example customer centricity, and resilience and collaboration between business and IT, which still remains a seemingly insurmountable hurdle for all companies.

Key action areas for the upcoming 12 months



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