



## Digital Maturity Index Survey 2022

– Automotive Sector Briefing –  
Digital value creation in an unsettled environment

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# Executive Summary

After the last four years of the **Digital Maturity Survey**, showed that, despite expectations, Covid was not an accelerator in digitization. However, the automotive industry has by **no means paused the transformation to electromobility** - there was a clear prioritization in favor of future competitive advantages. Nevertheless, this year's survey shows much clearly that companies have used the return to business as usual to drive forward their digitization agenda.

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 and is tackled by innovative strategies (e.g. asset-light).

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.

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# Participants of the Survey 2022

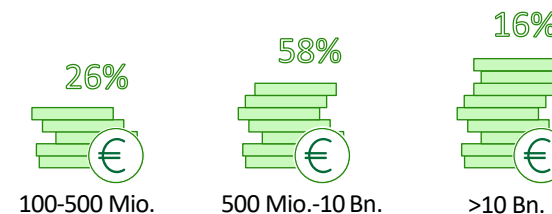
Our participants represent the breadth of decision makers in the manufacturing industry...

#5 annual survey



44% C-Level, SVPs  
56% Division manager

... with a broad coverage of revenue ranges.

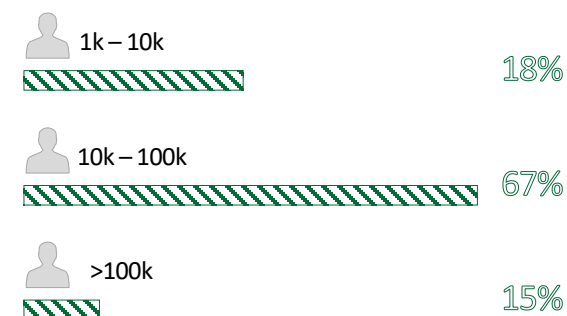


... across the globe with focus on German and European market ...



76% Germany  
13% EMEA (w/o GER)  
6% United States  
5% APAC

... ranging from medium-sized companies to large corporations.



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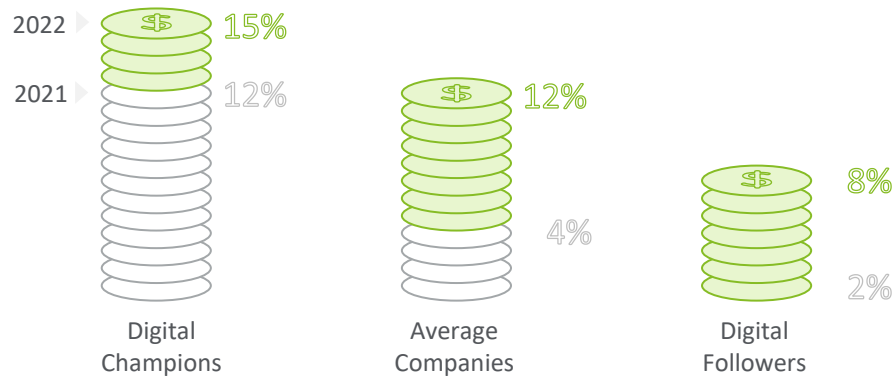
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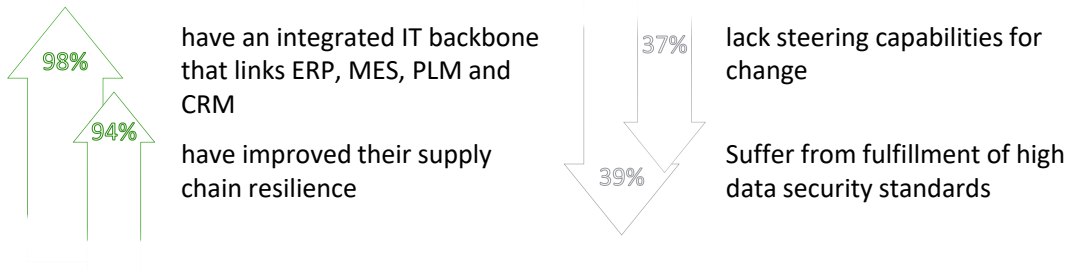
# Key Results of the Digital Maturity Survey 2022

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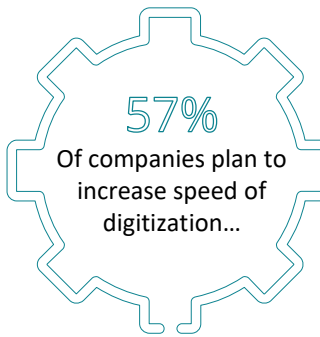
Digital champions continue to increase their EBIT uplift – overall average is also rising even stronger



Traceability needs and action capabilities are largely addressed, security and efficiency are still underdeveloped



Companies are picking up speed again after the Covid pandemic and are increasingly targeting on topics beyond costs



- ... by driving Customer Centricity **39%**
- ... by developing seamless IT partnerships **38%**
- ... by building a profitable ecosystem **37%**

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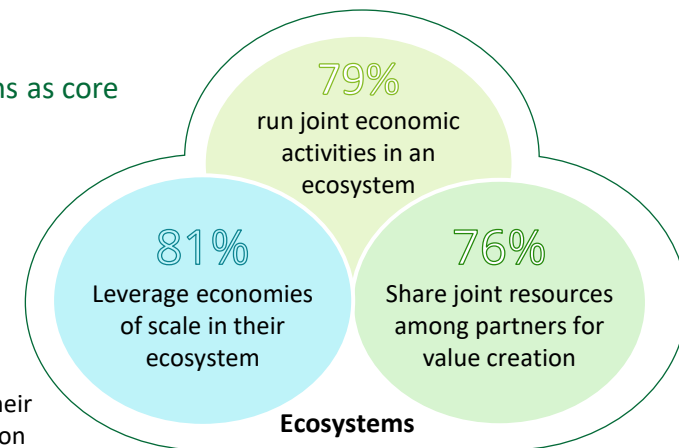
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Companies see ecosystems as core drivers of scaling



76%  
...and strongly interlink their sustainability & digitization strategy



# Sectors progress in digitization differently

## AUTOMOTIVE SECTOR IN FOCUS

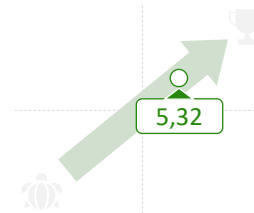
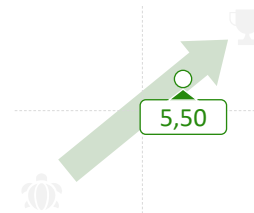
### Automotive OEMs

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.

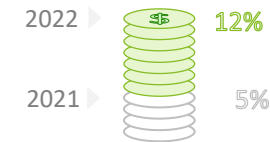
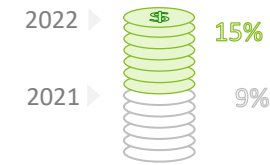
### Automotive Suppliers

The automotive suppliers industry evolved similar strong compared to Automotive OEMs. The increasing complexity of supplier industry transformation is driven not only by digitization, but also by sustainability requirements and the need to build ecosystems along the specifications of the OEMs.

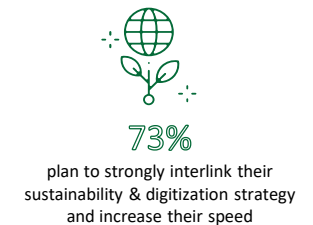
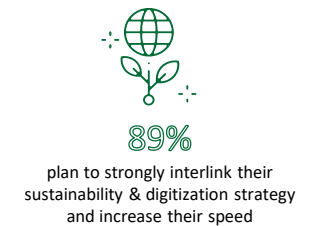
### DIGITAL MATURITY



### REALIZED EBIT UPLIFT



### 2022 AMBITION



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# Background and Methodology of the Survey

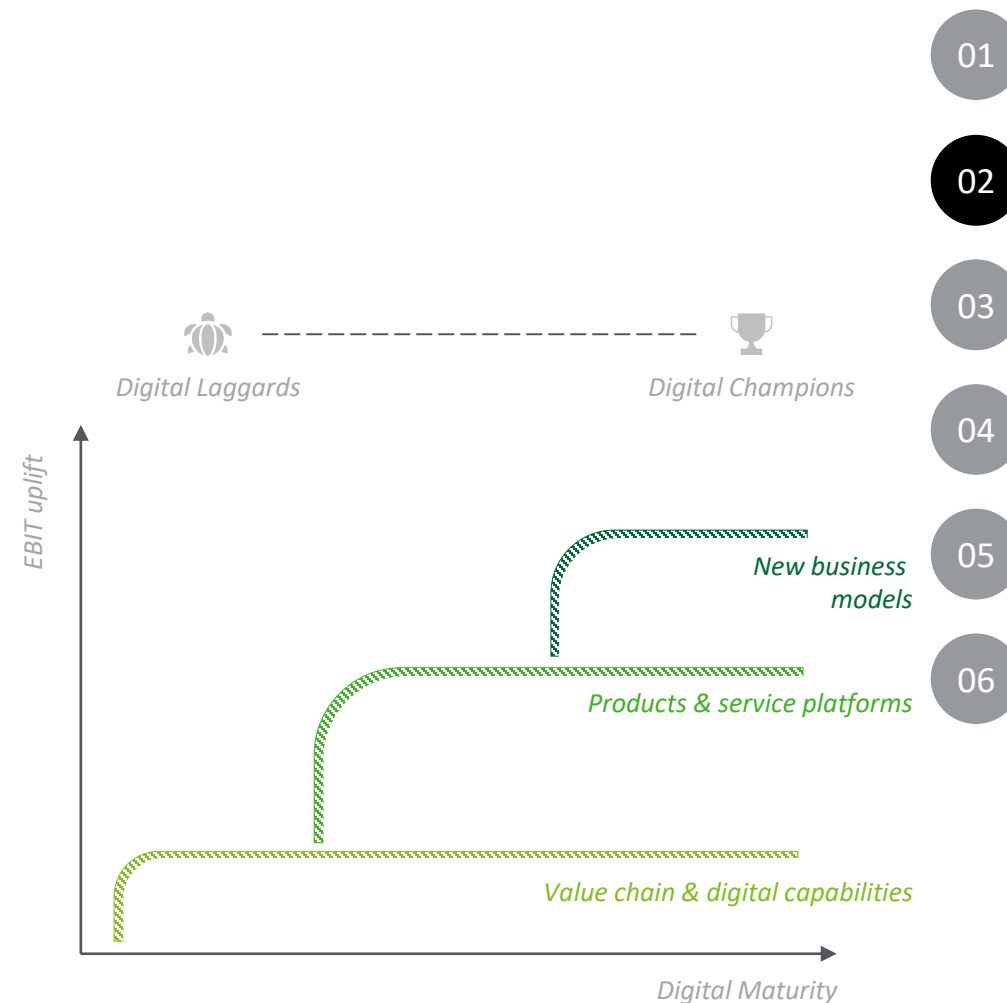
Annually, Deloitte analyzes the degree of digitalization in the German manufacturing industry as part of an expert survey.

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 Index was developed together with University Duisburg Essen – International Automotive Management

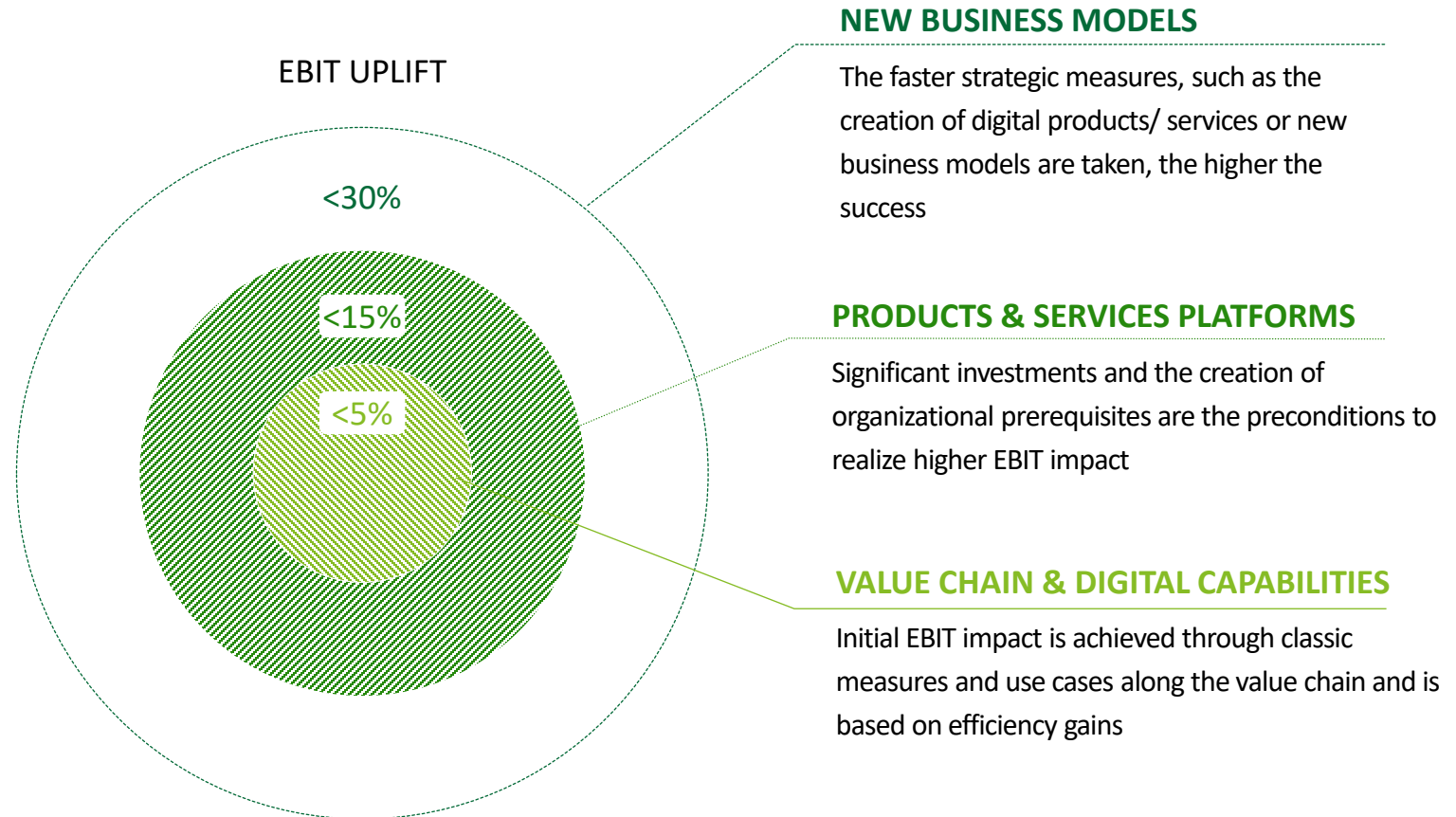


# Digital Maturity drives profitability uplifts

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.



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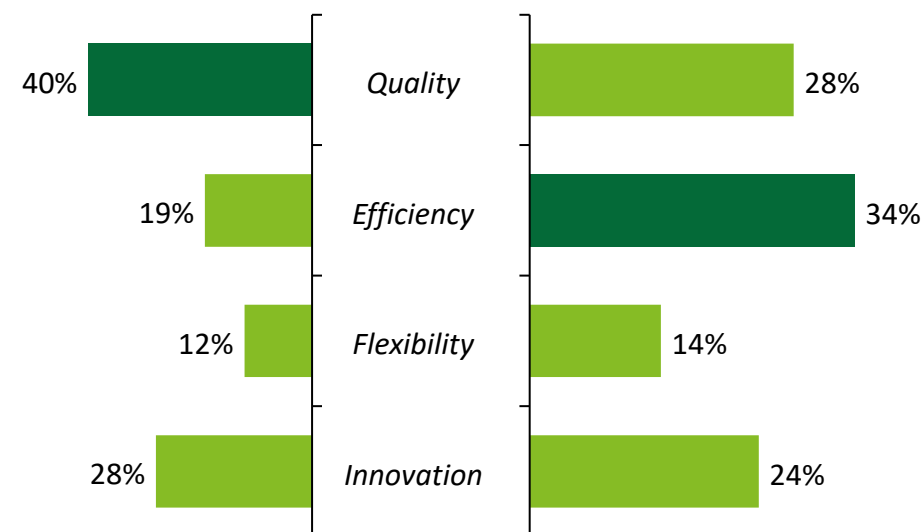


# Digitalization goals support companies competitive advantage

Quality pledge and innovative strength is seen as decisive competitive strengths for leading automotive 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 automotive 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.

Value chain resilience is considered as pre-requisite and a majority has anchored 'sustainable value creation' even more firmly on their digital agenda.

## Key challenges so far

41%  
Suffer from fulfillment of high data security standards

37%  
lack steering capabilities for change

36%  
fail to implement scalable digital solutions

## Opportunities already seized

98%  
have an integrated IT backbone that links ERP, MES, PLM and CRM

94%  
have improved value chain resilience

76%  
interlink digitization & sustainability

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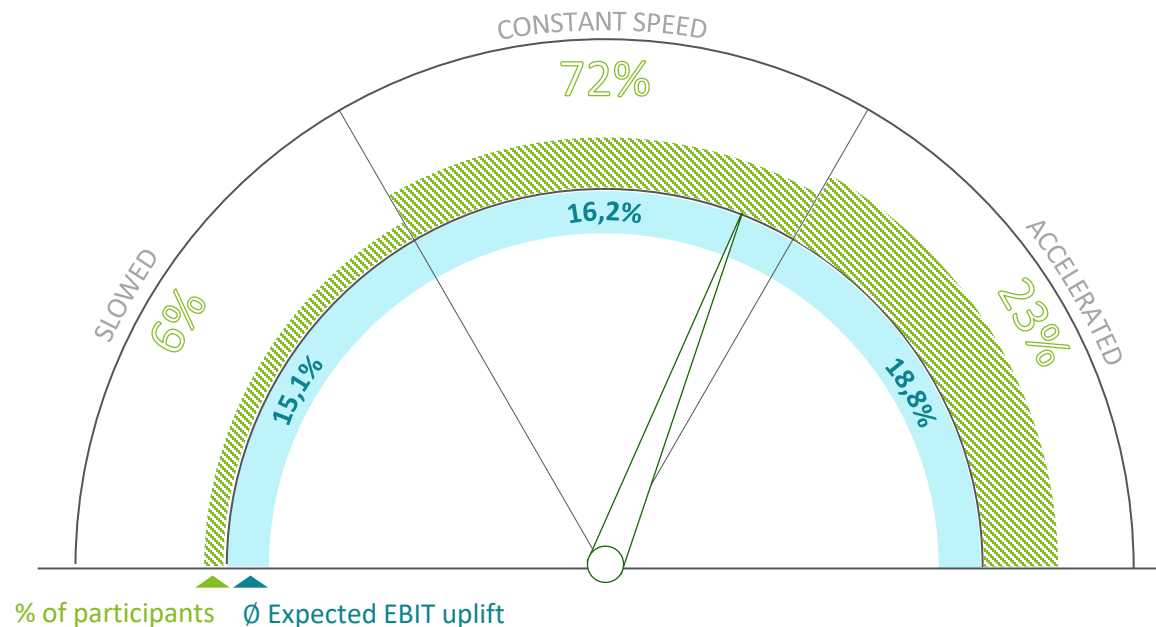
# Increasing speed as a key factor in improving digitalization prospects

## Expected speed for the next 12 months

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



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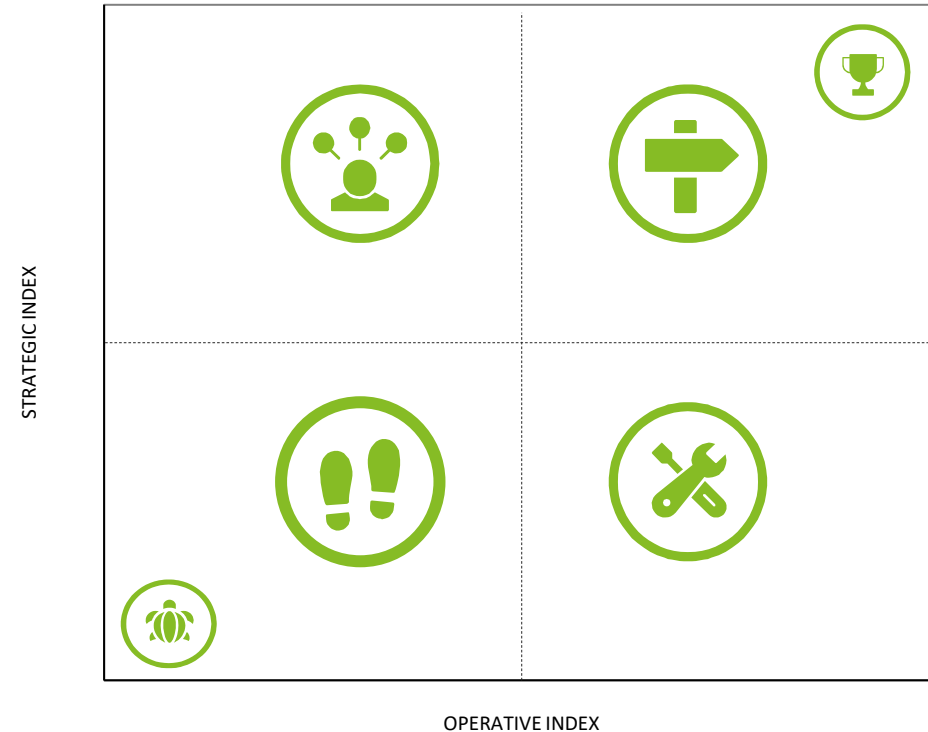
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# Six Digital Archetypes evolving

## 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

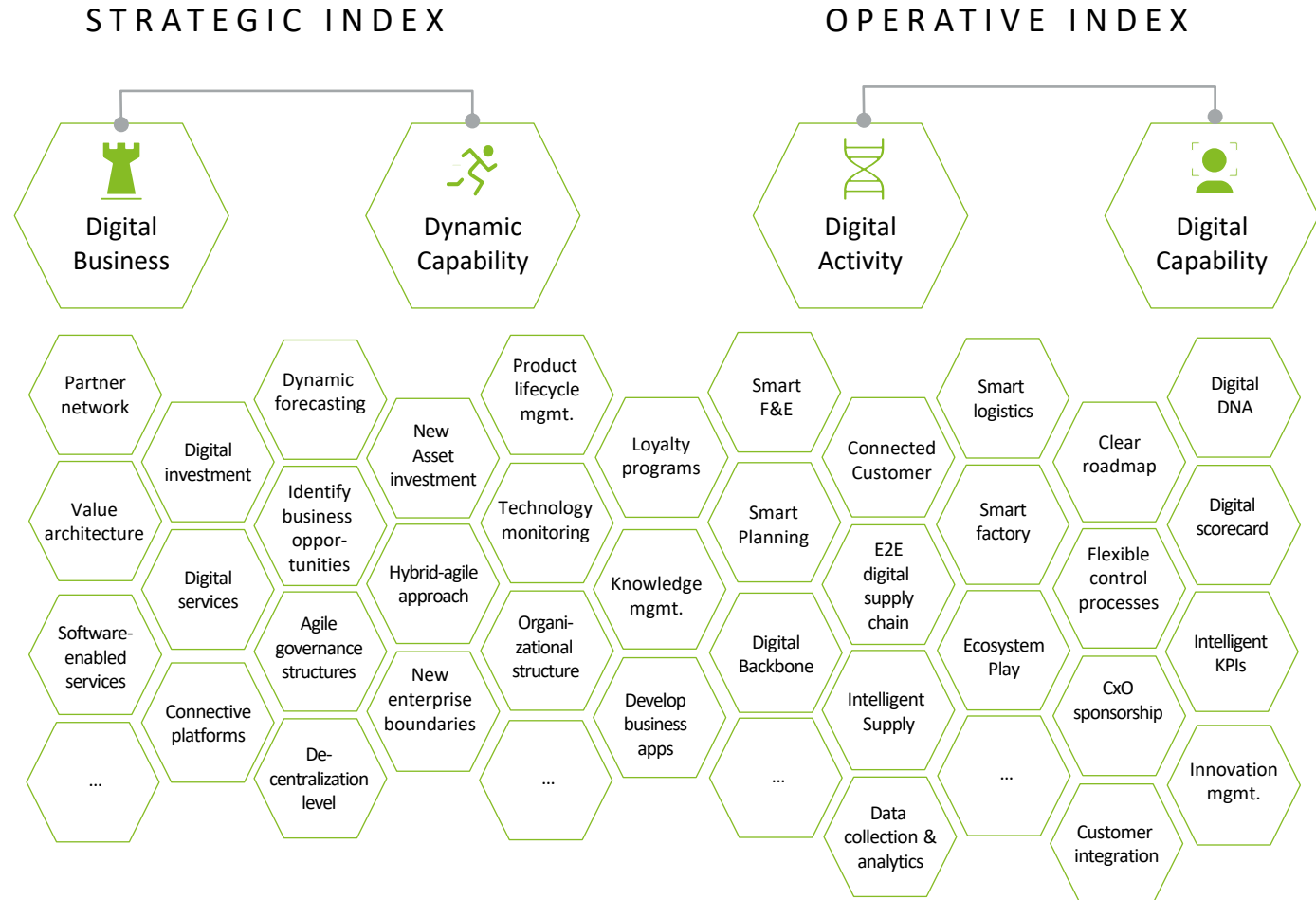


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# Digital key capabilities & parameters determine maturity

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.



# Insights on Digital Archetypes – Automotive Champion

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

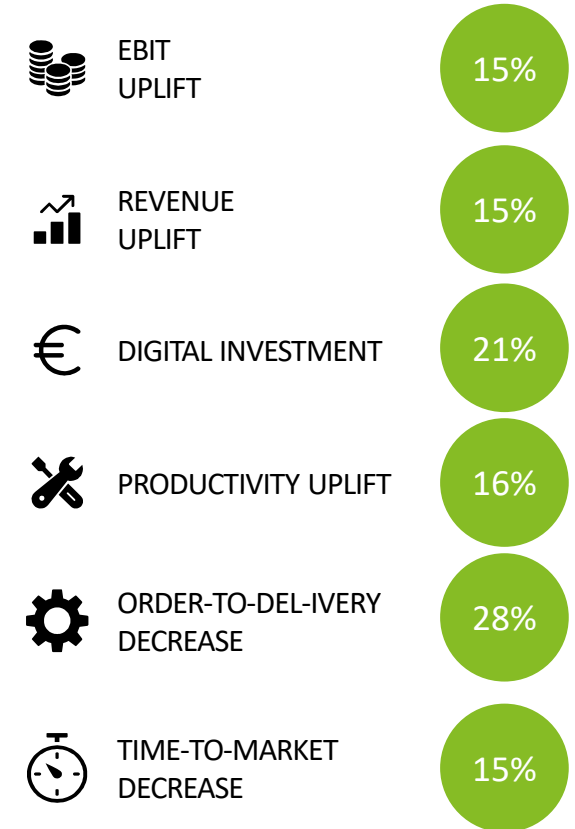
On average, the champion achieves a profitability improvement of 3pp, showing strong focus on strategic differentiators

However, reduction in efficiency ratios compared to previous year, therefore efficiency remains in focus



■ Digital Business Strategy
 ■ Dynamic Capability
 ■ Digital Activity
 ■ Digital Capability

## Financial profile

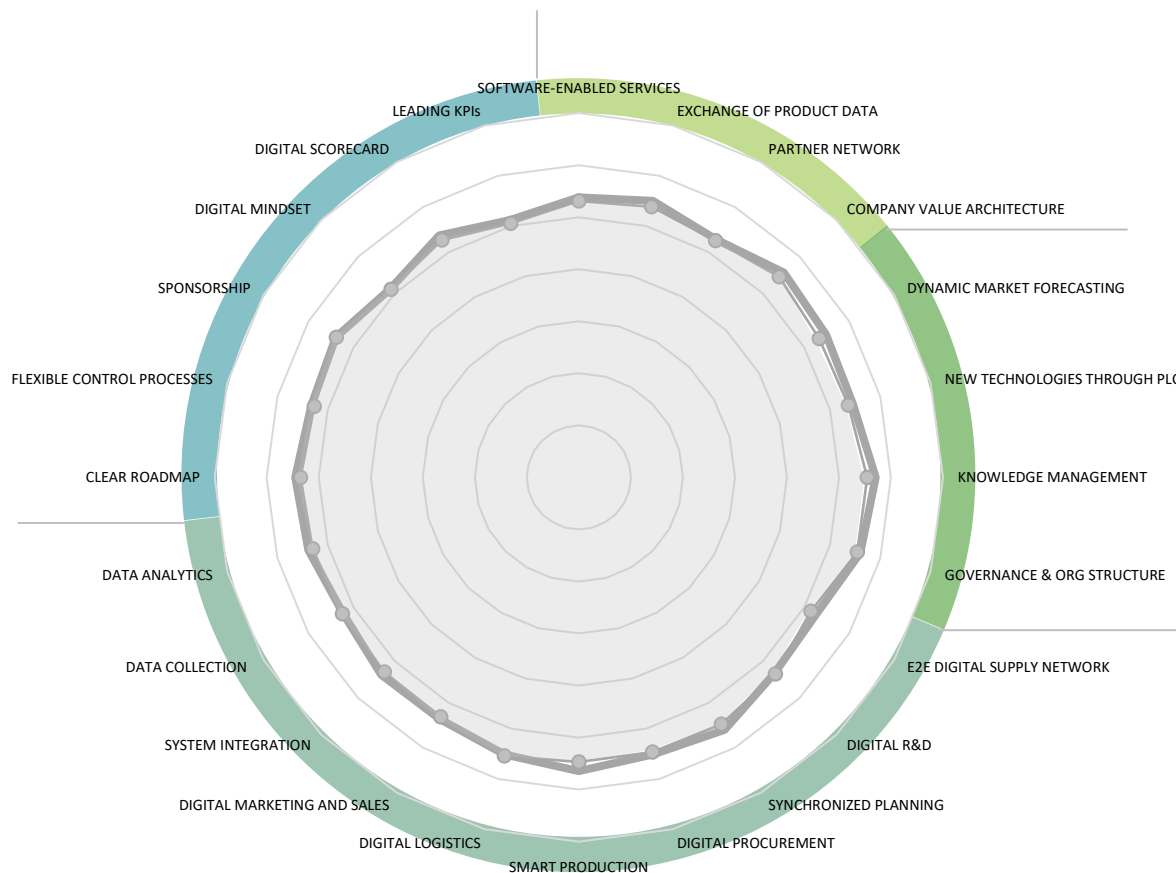


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# Insights on Digital Archetypes – Automotive Potential

The Automotive 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 (>5pp), but also on efficiency metrics.



■ Digital Business Strategy
 ■ Dynamic Capability
 ■ Digital Activity
 ■ Digital Capability

## Financial profile

EBIT UPLIFT

13%

REVENUE UPLIFT

12%

DIGITAL INVESTMENT

17%

PRODUCTIVITY UPLIFT

13%

ORDER-TO-DEL-IVERY DECREASE

20%

TIME-TO-MARKET DECREASE

12%

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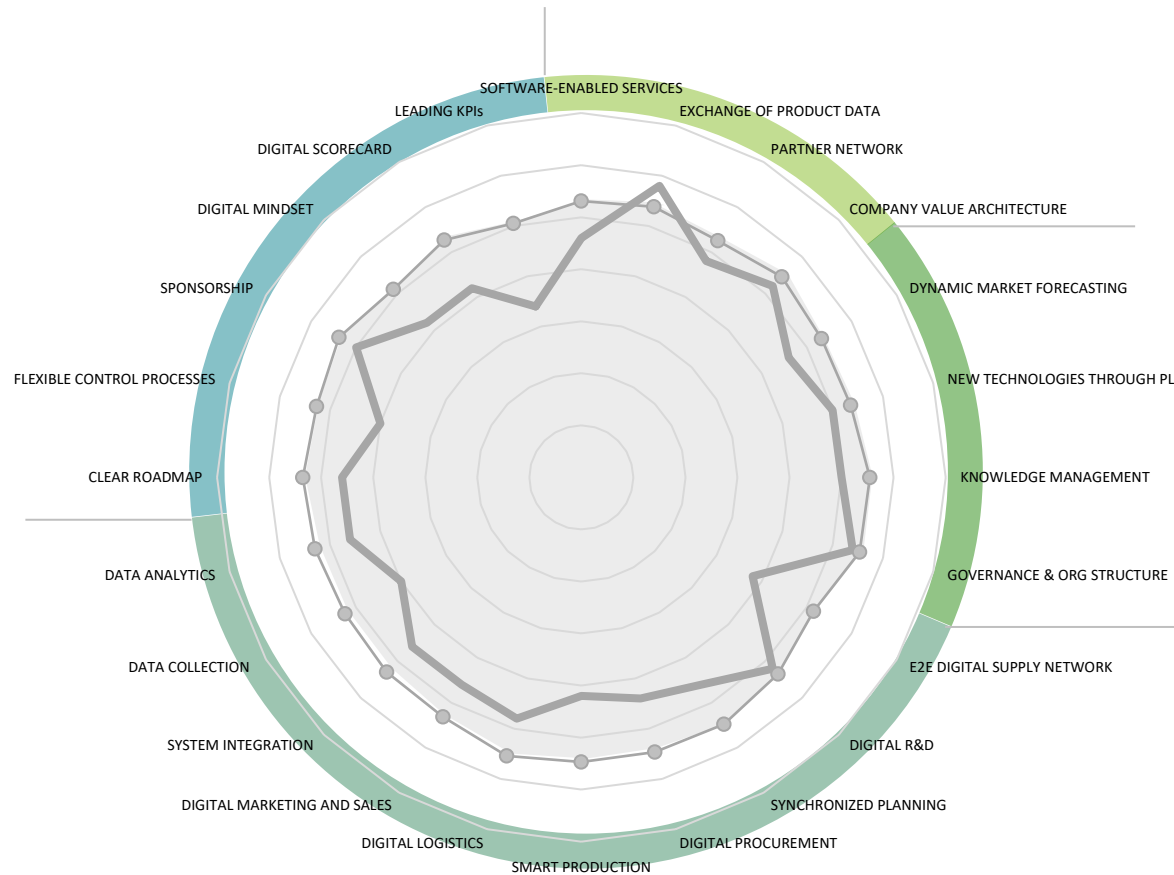
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# Insights on Digital Archetypes – Automotive Innovator

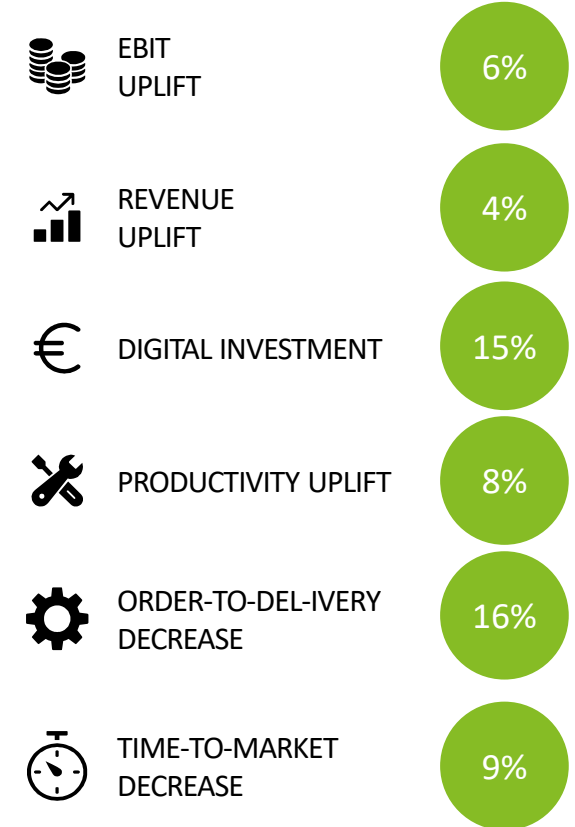
Compared to previous years the automotive innovators are outperforming on strategic dimension.

With regards to the financial performance Innovators are behind the average, however improved top-line financials compared to previous years (+4pp), however still lost some (-1pp) on operational metric. Adapting their value chains remains in focus.



■ Digital Business Strategy
 ■ Dynamic Capability
 ■ Digital Activity
 ■ Digital Capability

## Financial profile



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# Insights on Digital Archetypes – Automotive Operator

Automotive Operators are strong along operative dimension, catching up with strategic initiatives towards new products platform etc.

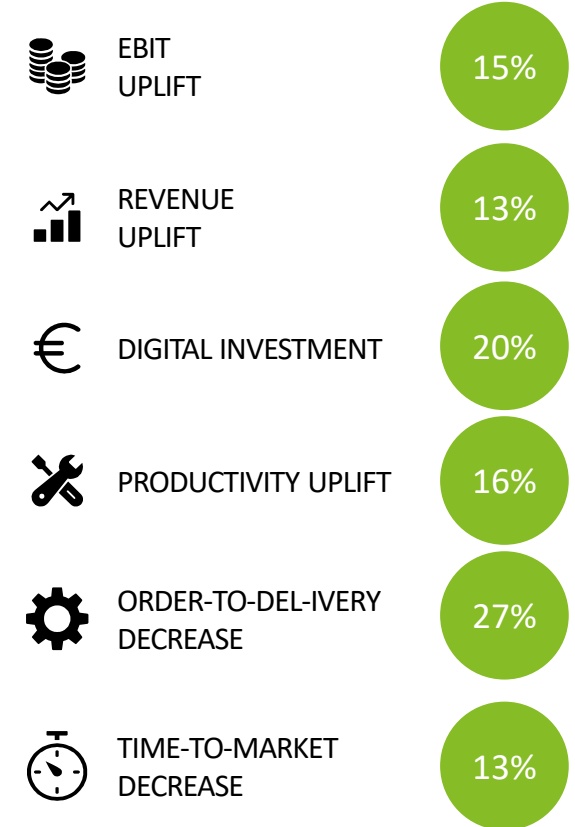
Operators financial performance overall comparable to the average of the survey.

With a strong focus on operations metric they show strong improvements (+5pp) but also in top-line growth compared to previous years.



■ Digital Business Strategy
 ■ Dynamic Capability
 ■ Digital Activity
 ■ Digital Capability

## Financial profile



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# Insights on Digital Archetypes – Automotive Follower

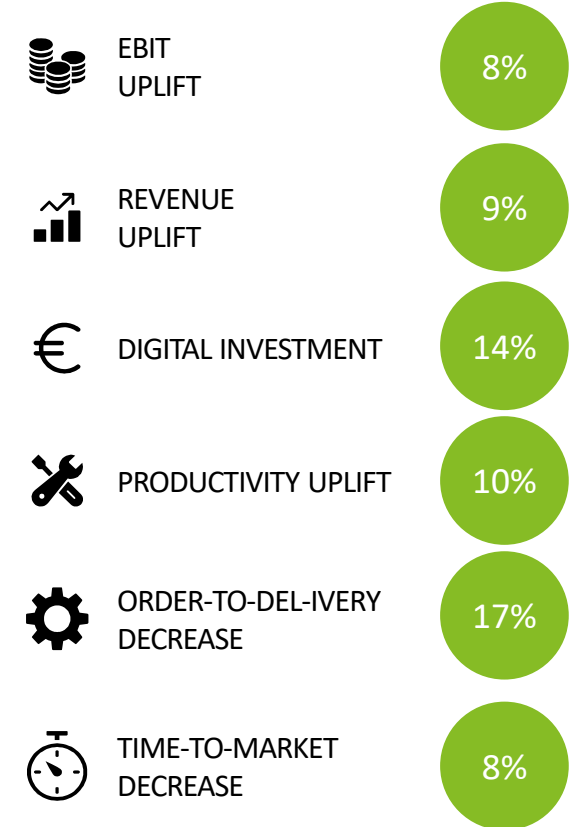
Automotive Follower are being outperformed by the average company along all key capabilities and parameters as well the financial metric.

Compared to previous years they have improved across with significance on efficiency metrics (+5pp) and small but tangible effects on profitability.



■ Digital Business Strategy
 ■ Dynamic Capability
 ■ Digital Activity
 ■ Digital Capability

## Financial profile



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# Automotives Investment Behavior

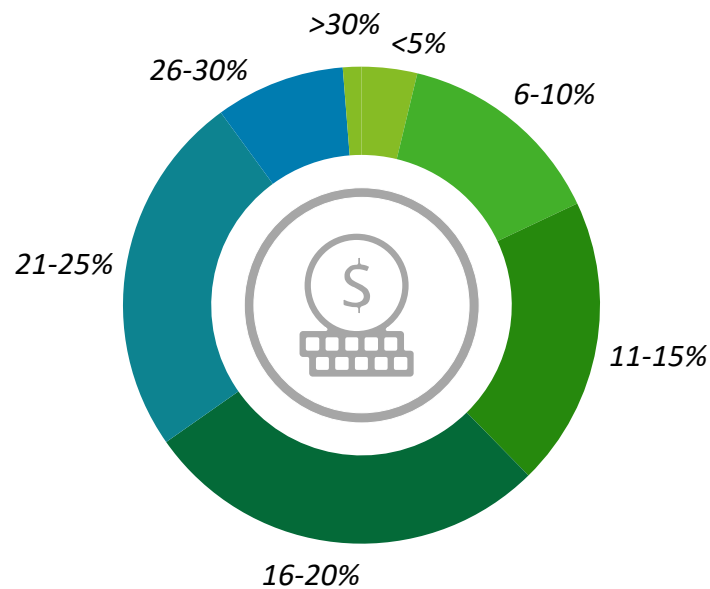
Digital transformation is now one of the largest cost blocks in the Profit & Loss statements of companies.

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

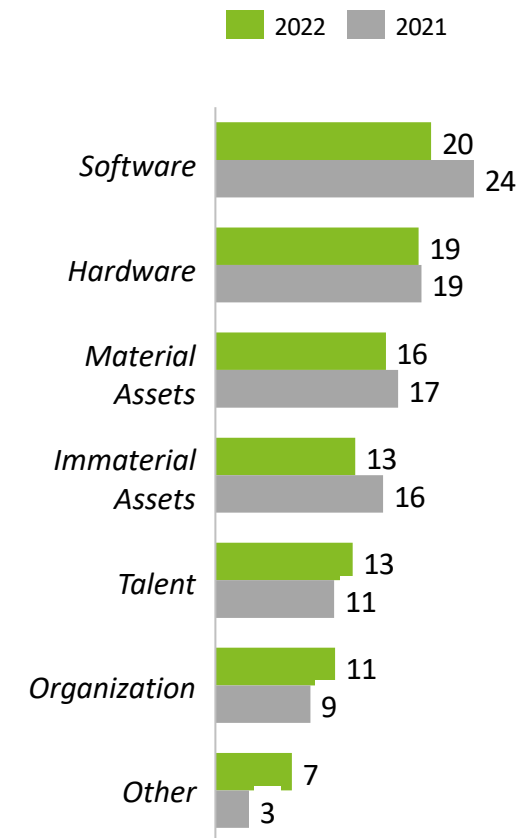
50% of companies already surpassed this threshold with roughly half of them investing between 10-20 % of their revenues.

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.

**How much do you invest in digitalization (as % of revenue)?**



**Key Investment Areas**



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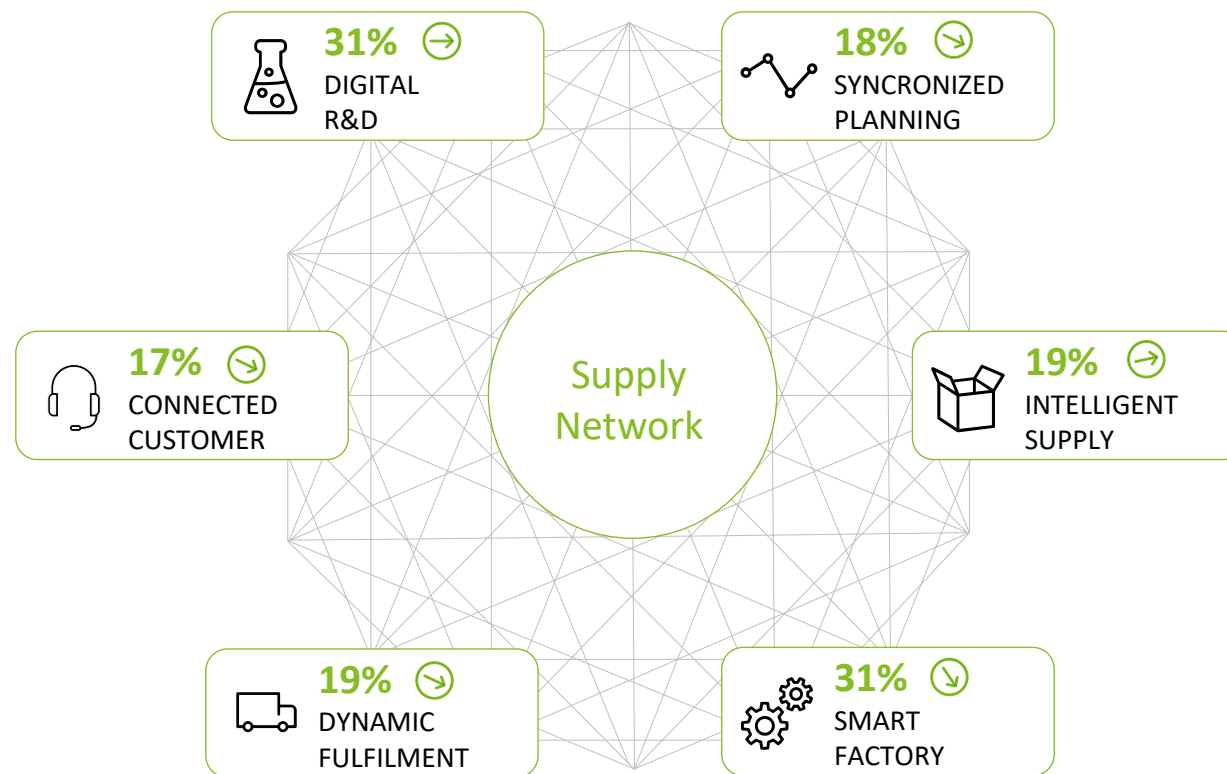
# Investment behavior unlocks transformation towards e-mobility and software-driven business

As in previous years, many automotive companies are focusing their investments primarily on core value creation (e.g. production).

It is becoming clear that investments in digital R&D are the decisive factors for unlocking future profits, driven by massive investments in software and hardware infrastructure as well as electromobility.

Compared to the average automotive companies, automotive champions consider data-driven parts of the value chain, e.g. Planning, Procurement and Fulfillment, as at least as important (25%).

## Focus areas of investment

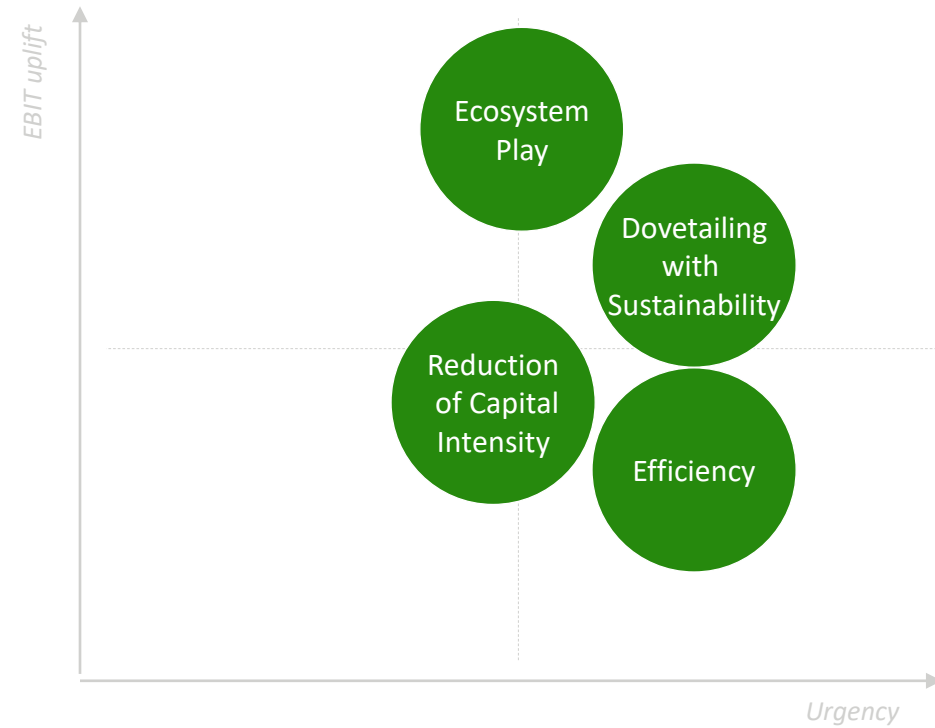


→ Shift compared to 2021

# Better manage complexity through digitalization

Mature companies are able to drastically reduce complexity through 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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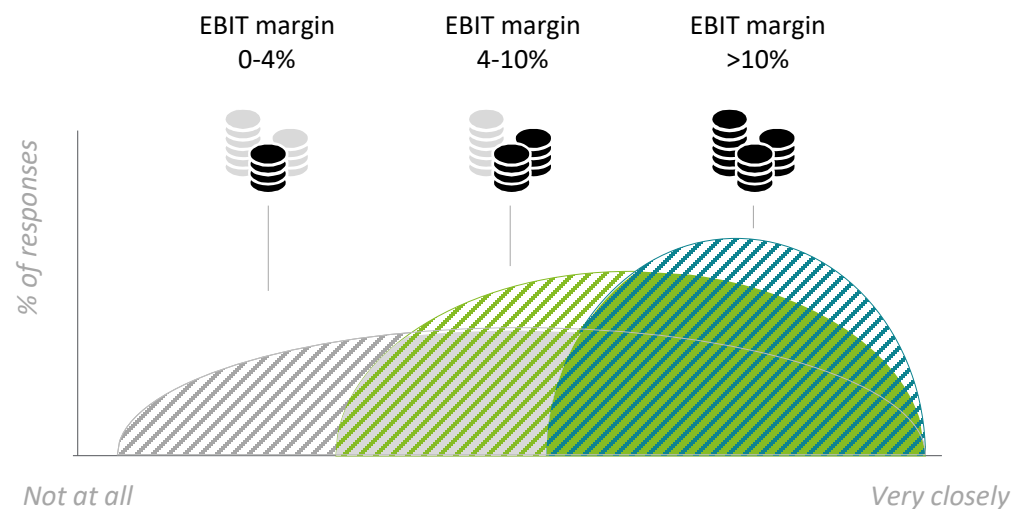
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# Early dovetailing of sustainability and digitization

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?



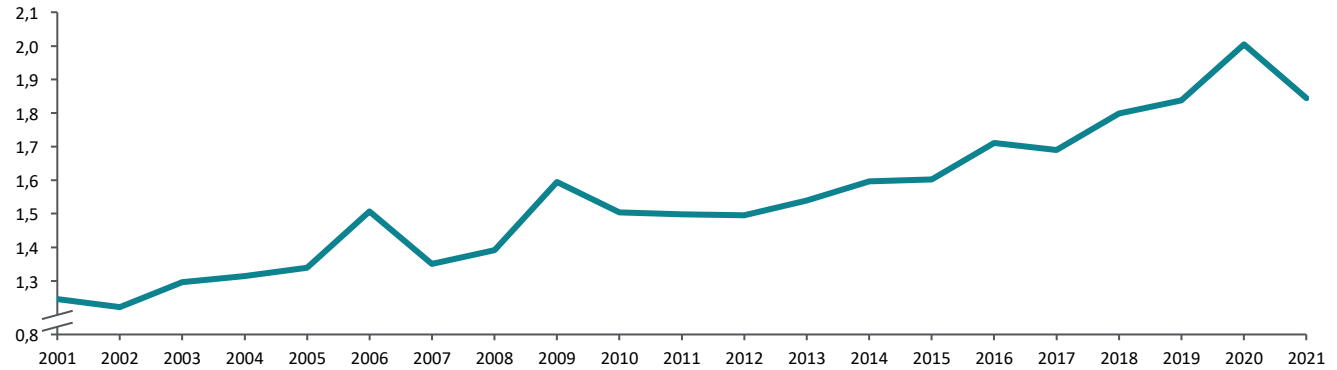
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# Key challenge is to enable basic requirements

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.

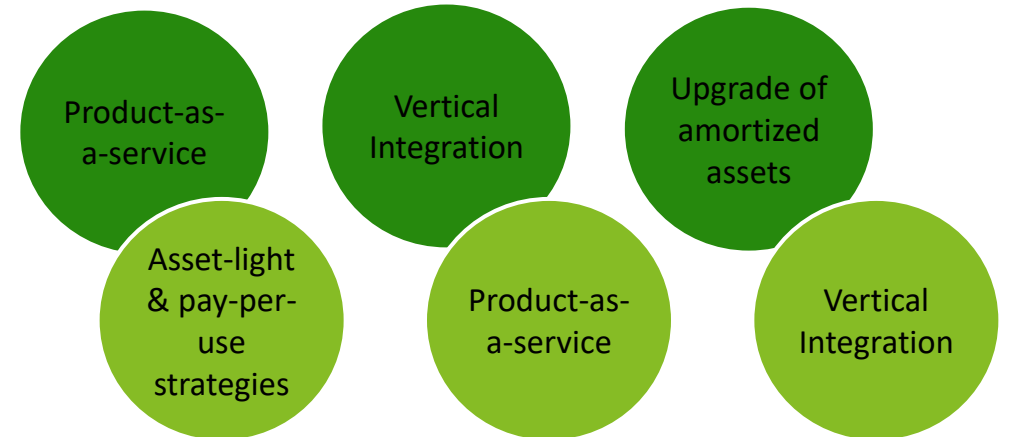
Increasing capital intensity (total asset/ revenue) for manufacturing industry



>49%

...of companies increased capital intensity noticeable or significantly

Automotive Champions



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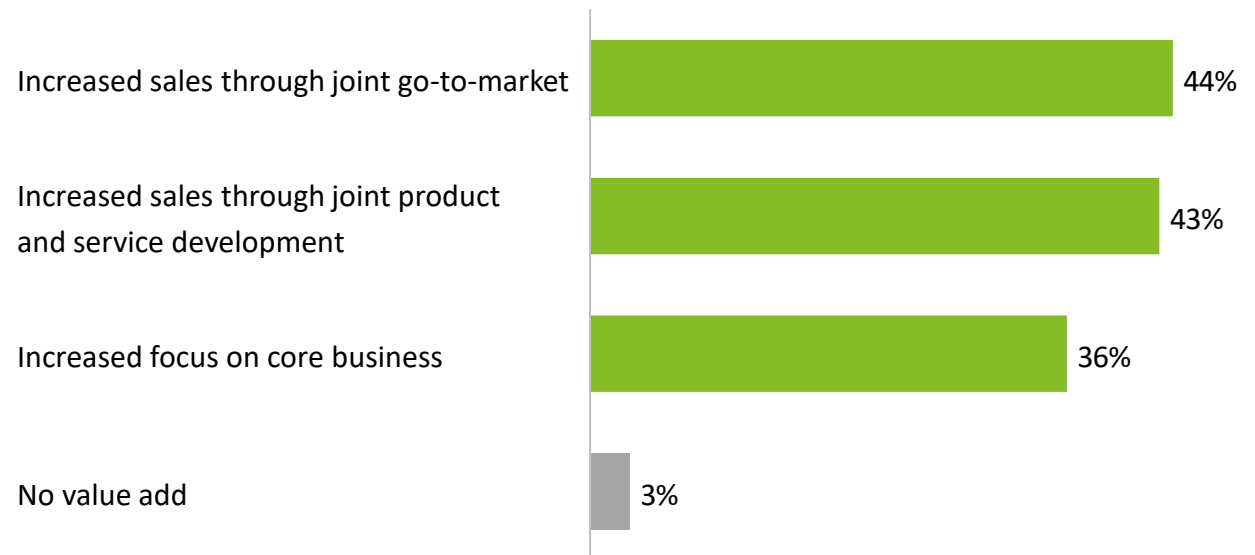
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# Profitable Ecosystem Play in Automotive

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

## Value-add expected from ecosystem play



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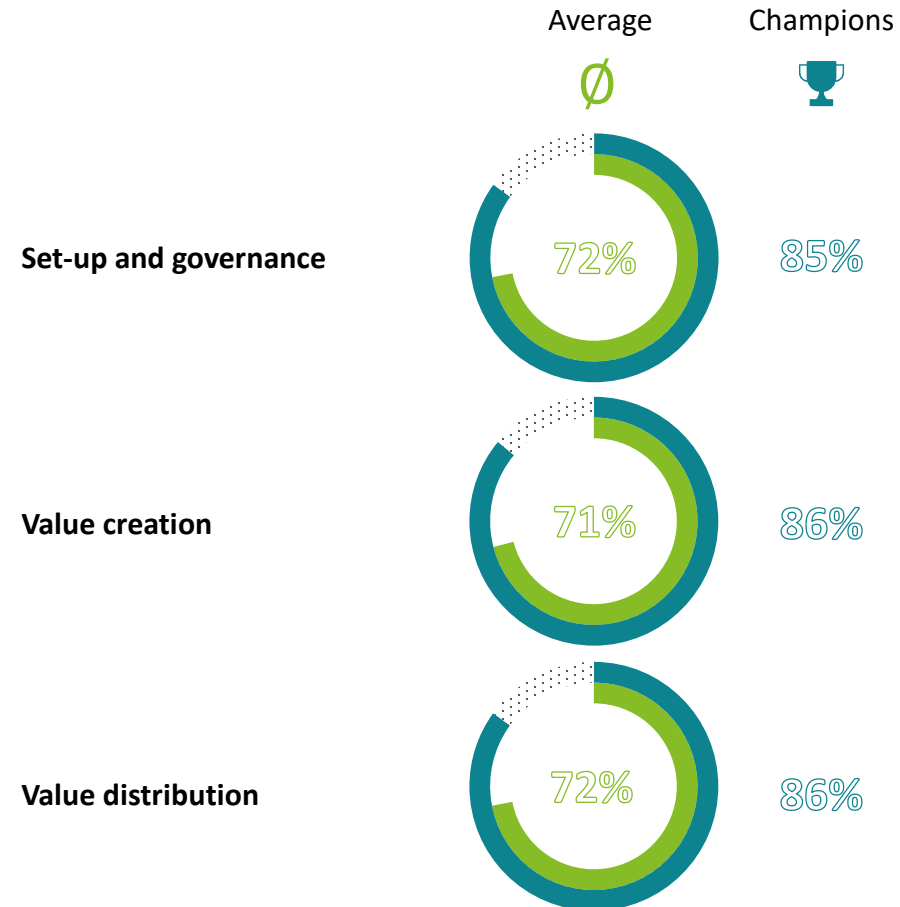
# Profitable Ecosystem Play & Success Factors for Automotive

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%).

## Expand activities in an ecosystem

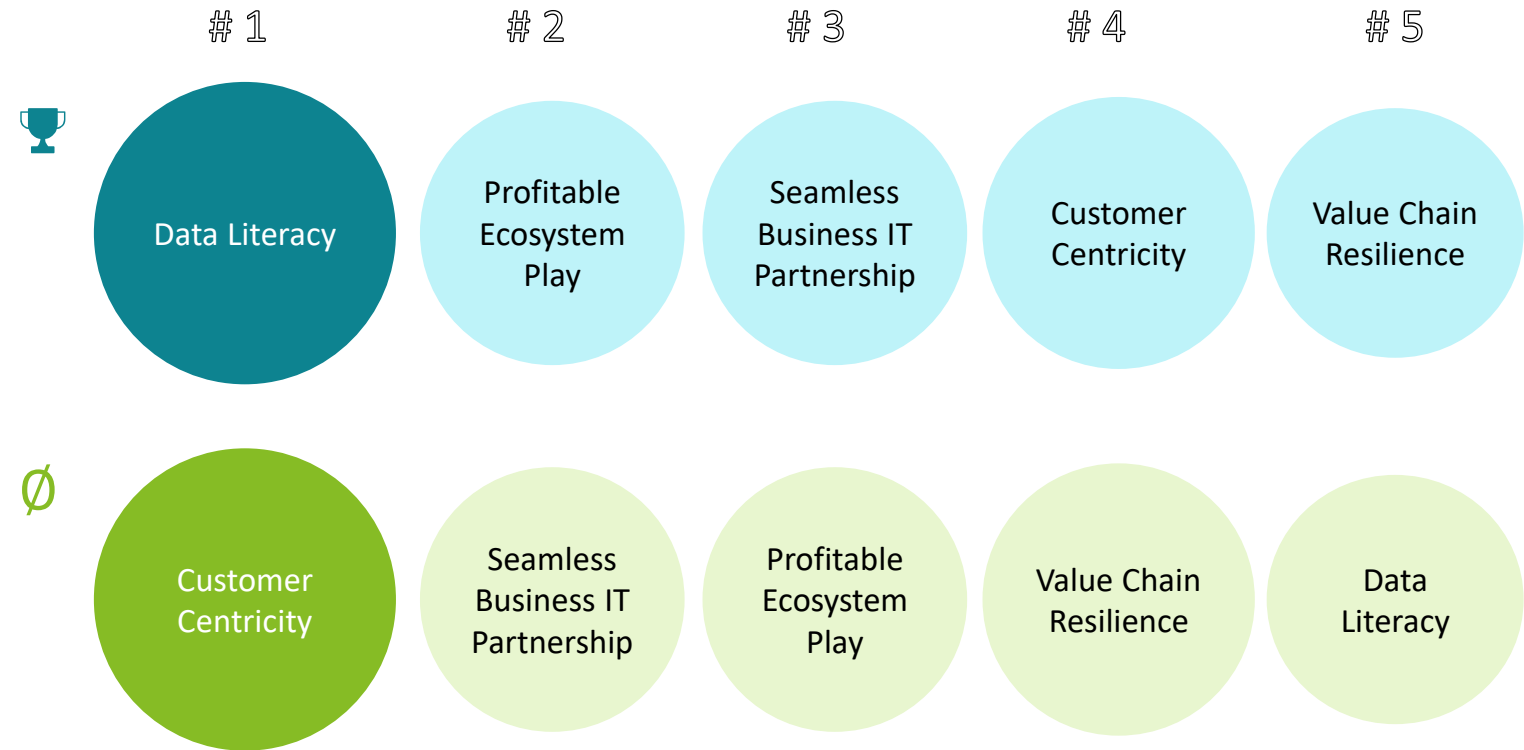


# Automotive' Top 5 Priorities for the upcoming 12 months

Leading automotive 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 collaboration between business and IT, which still remains a seemingly insurmountable hurdle for all companies. Strategic thinking into automotive ecosystems ranks under top 3 priorities in the sector.

## Key action areas for the upcoming 12 months



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## Your Contacts



**Claudia Ahrens**  
Director Digital Operations  
cahrens@deloitte.de



**Dr. Harald Proff**  
Global Lead Partner Automotive  
hproff@deloitte.de



**Dr. David Mueller**  
Senior Manager Digital Operations  
dmueller@deloitte.de



**Michael Grigore**  
Consultant Digital Operations  
migrigore@deloitte.de

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