



Building Resilient Manufacturing and AEC Companies

Spotlight report: How data-led decision
making accelerates 'return on digital'

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Author:

Giulia Carosella,
IDC European Digital Transformation Practice Lead

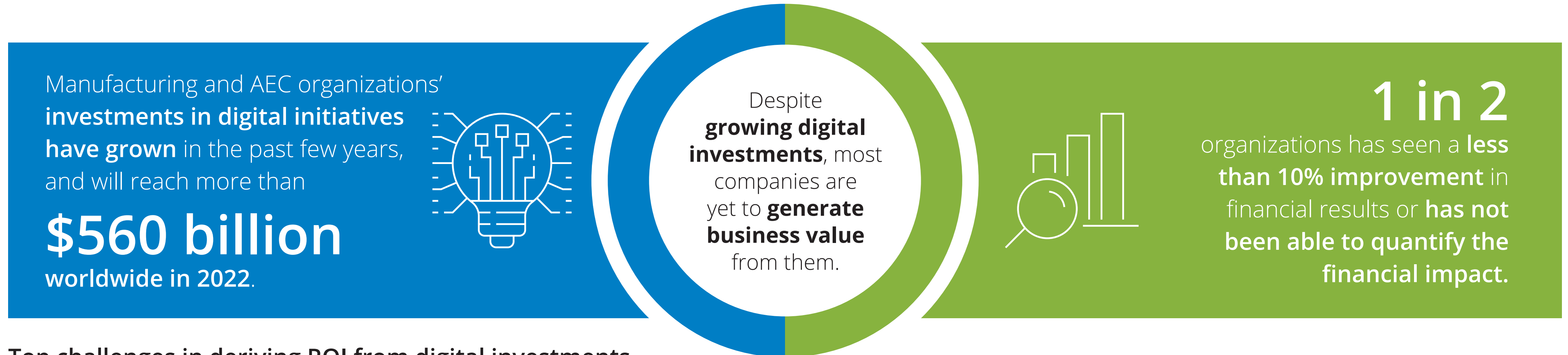
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The Urgency to Generate Business Outcomes

Organizations that want to succeed in an increasingly digital world need to generate business outcomes from digital investments.



Top challenges in deriving ROI from digital investments

Management and leadership orientation is mostly focused on processes and not on business outcomes

42%

The metrics/KPIs that we use don't allow us to adequately quantify business value

30%

We have a siloed standalone budget

28%

We don't have an integrated enterprisewide technology road map

27%

Our technology architecture does not allow for scale and innovation

26%



Leadership and organization



Tech



The **main stumbling blocks** to ROI generation relate to **leadership approach** and **organizational silos**.

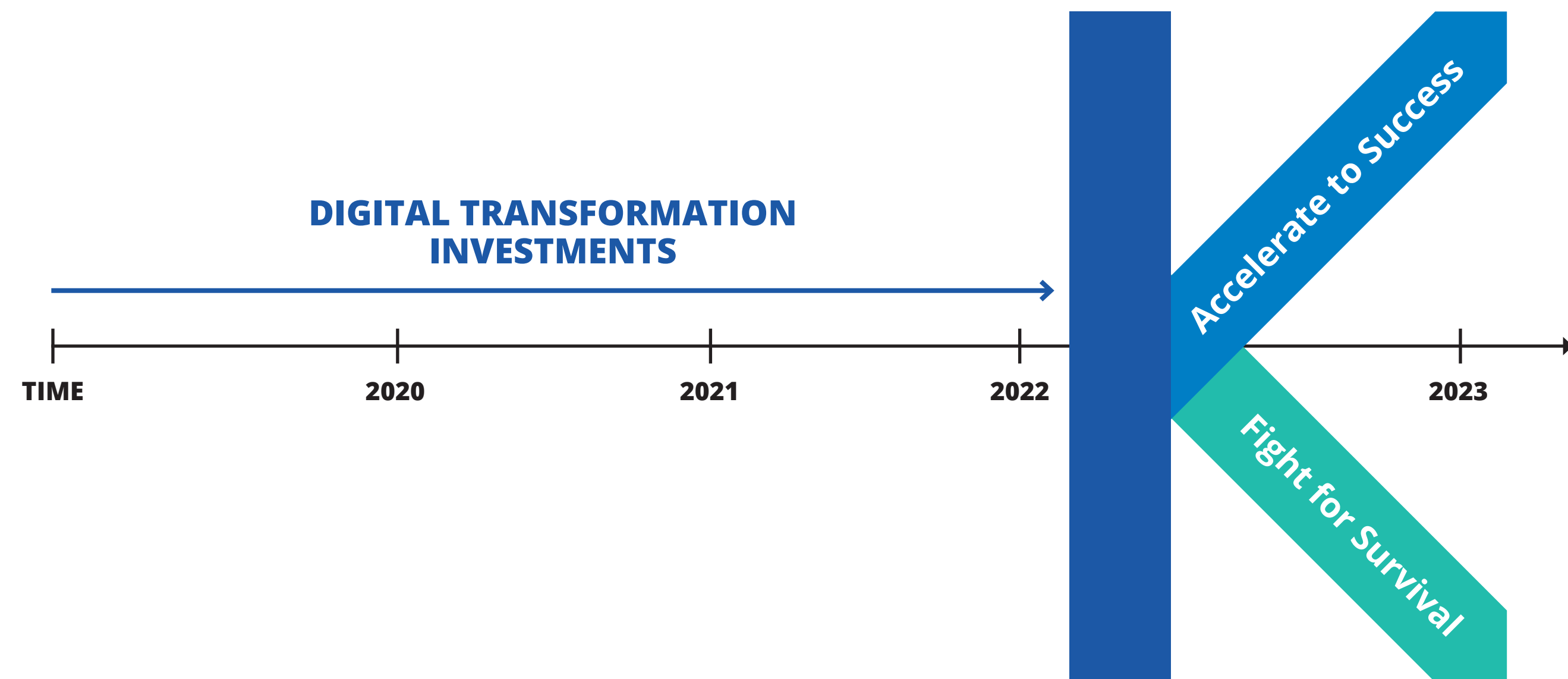
Action and change therefore need to come from the top.

The **C-suite should be at the forefront of change**, and the **CEO needs to take direct responsibility — making digital transformation (DX) an integral part of corporate strategy, setting a common vision, clear targets, and KPIs.**

Business Outcomes Are the Key to Success

Organization leaders are facing a K-shaped choice: accelerate for success or fight for survival. **Accelerating for success will be determined by the ability to achieve successful business outcomes from digital investments. Success in the future will be defined by RoD — return on digital.**

“
The economy continues toward its digital destiny. In 2022, **65% of global GDP will be driven by digitally enabled revenues.** This will be enabled by \$6.8 trillion in direct DX investments for 2020–2023.
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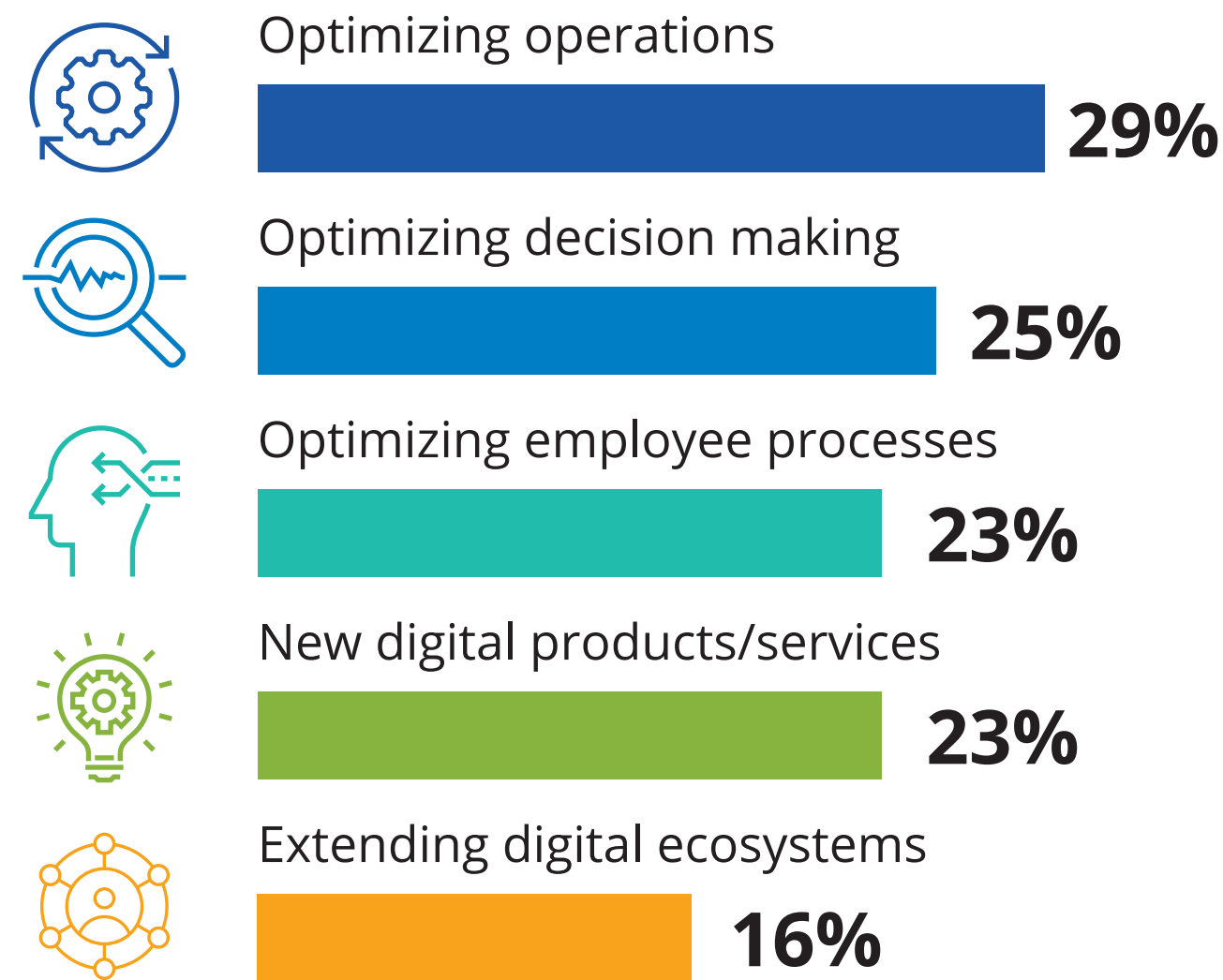


Leaders across all industries will need to continue to ramp up tech investments to outpace competitors and capitalize on changed market conditions. Understanding where the organization is on its DX path is one requirement, but being able to translate digital investments into business outcomes is the key. The first step is to understand the accelerators of digital ROI.

Five Accelerators of Digital ROI

C-suite leaders must focus on five key accelerators of digital ROI. This will enable them to build the horizons of a successful technology road map, reap the benefits of tech-based investments, and succeed as a tech-enabled business. IDC research identified the top 5 investments that have generated the greatest ROI from digital programs or initiatives and can drive organizations to the upslope of the K-curve.

Top 5 ROI areas



Optimized operations

Connecting and streamlining different organizational operations to develop resilient decision making and unify data.

Data-led decision making

Managing, combining, and extracting value from huge amounts of data to enable insight-based actions.

People-first strategy

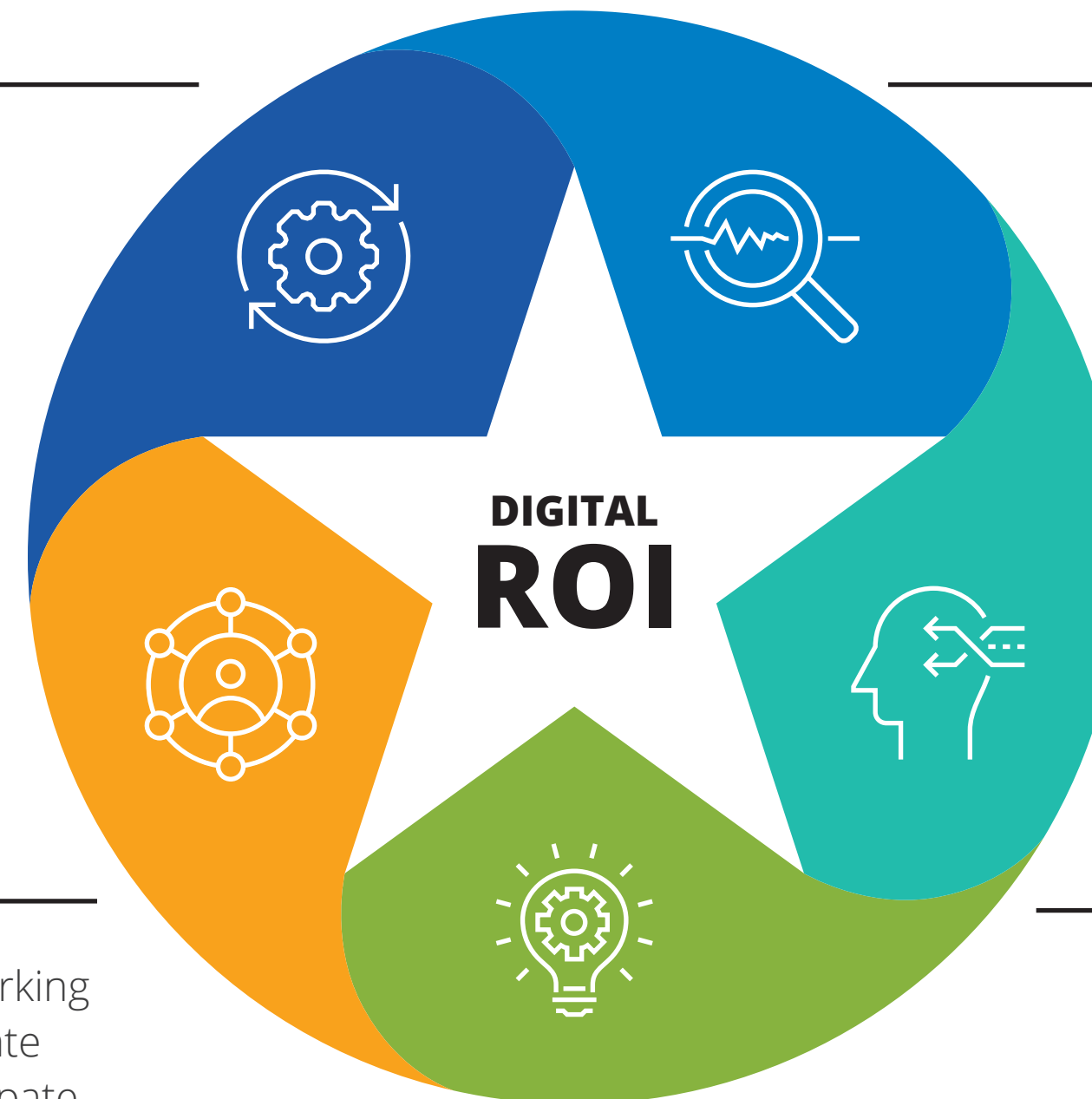
Automation of processes to free people's time, enable them to innovate, and develop new digital skills.

Innovation at scale

Accelerating DX to compress time to value is the foundation for delivering innovation at scale.

Digital ecosystems

Enabling networks of organizations working together as peers to deliver value, create resilience, foster innovation, and anticipate threats and opportunities.





Data-Led Decision Making

Data is only valuable if it can be translated into action. Very few organizations, however, have truly moved beyond collecting data to combining and sorting data sets to create tangible business value from that data. Based on IDC's Global DataSphere study, less than 3% of the data currently created is analyzed to affect enterprise intelligence. Future value and success rests on this ability. Drawing a data-centric business model is becoming increasingly crucial to stay ahead of uncertainty and quickly respond to changes.



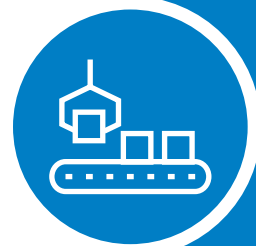

180ZB of data will be created, captured, copied, and consumed in 2025. Data created over the next five years will exceed by 2.5x the amount created in the past 10.

From predictive maintenance to digital twin or real-time supply chain monitoring and real-time financial forecasting, the **potential impact of AI and data analytics** in manufacturing and AEC industries is **significant. It is growing exponentially**, fed by the real-time continuum of data, including edge to network, IoT to mobile devices, and internal enterprise systems to supply chain. In 2021, 42% of WW organizations increased their planned budget on AI and machine learning.

Leaders need to move from data acquisition to data-enabled actionable insights that lead to business outcomes. This will require a **corporatewide data strategy** and substantial changes in terms of processes, skill sets, and talent. The C-suite needs to promote a data-led culture, encouraging data-driven decision making at all levels of the organization.

“ In 2022, 25% of G2000 firms will deploy technologies imbued with **data manipulation** and **visualization** capabilities, driving collaborative productivity. **”**

Key Industry Use Cases

 <h3>Manufacturing</h3> <ul style="list-style-type: none">Autonomic/robotic operationsAugmented and predictive maintenanceDigital twins	 <h3>AEC</h3> <ul style="list-style-type: none">Robotic constructionAsset instrumentationIntelligent project management
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Action Items for Leaders

- ✓ Set up a clear data strategy and outline data management activities, roles, and responsibilities. Make sure all necessary stakeholders are involved and have access to the relevant data.
- ✓ Build a strong data architecture, using cloud infrastructure to support data, analytics, AI, and other enterprise intelligence initiatives — the most important factors for enterprise resilience.
- ✓ Leverage real-time data and AI to trigger decision making at all levels and to unlock new forms of design and innovation.
- ✓ Use off-the-shelf AI solutions to improve time to impact.

Leadership Actions

Collaboration across the leadership team is central to delivering transformational outcomes, business value, and ROI. With over half of all IT budgets now in the hands of the business functions, individual objectives run the risk of “fighting” against the common good. Agenda items must be viewed in the context of wider outcomes. Each function must understand the goals of all the others.

Operations leader

Focus on digital resilience: the combination of IT and business. Operations must become shock-proof, and ready to capture efficiency and automation opportunities. Build process optimization to free up time and automate actions, enabling people to be more creative in their work.

Sales and marketing leader

Focus on data and ecosystem pillars. Unlock new customer engagement scenarios and develop an omni-channel experience. Make data value extraction a central watchword and unlock the power of existing and ecosystem data.

Human capital leader

Target new types of skills and profiles (data scientists, distributed ledger specialists, AI/ML specialists). Understand that reskilling existing employees will be fundamental to successful and continuous transformation.



Technology leader

Enable a solid digital platform and work with other business leaders on a joint digital road map. Become the enabler of change and ensure a cohesive digital strategy led by the business outcomes and value creation already outlined.

Finance leader

Work on tech-enabled, real-time finance tracking and consolidated view of costs, data, and resources across multiple projects for adaptive planning. Take early involvement in key investment decisions, rather than getting involved toward sign-off.

Security/risk leader

Together with the broader C-suite, develop new trust metrics that go beyond privacy and security to include employee experience, sustainability, and diversity. Take control of data value, but also communicate the individual roles of the wider C-suite in making this happen.

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IDC UK

5th Floor, Ealing Cross,
85 Uxbridge Road
London
W5 5TH, United Kingdom
44.208.987.7100
Twitter: @IDC
idc-community.com
www.idc.com

Corporate Headquarters

140 Kendrick Street,
Building B, Needham,
MA 02494 USA
508.872.8200
www.idc.com

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Corporate Headquarters: 140 Kendrick Street, Building B, Needham, MA 02494 USA P. 508.872.8200 www.idc.com

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