

Digital, Connected and Resilient Enterprises to Embrace the Future

September 2021

Sponsored by:





MAJOR STRATEGIC FOCUS ON DIGITAL TRANSFORMATION (DX)

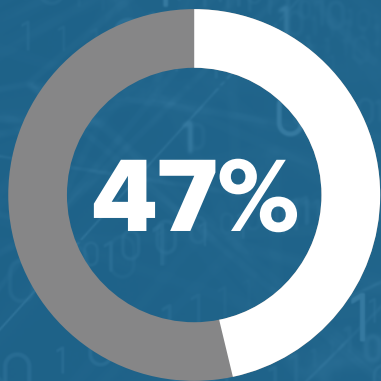
IDC Infobrief

Digital, Connected and Resilient
Enterprises to Embrace the Future

Digital transformation represents an embodiment of the greater strategic prioritization attached to the perceived benefits in productivity and efficiency, which are now broadly attached to ICT spending, marking a **significant shift from the "IT doesn't matter" or "good-enough computing" era of a decade ago.**

Further, **COVID-19 has forced DX investment acceleration** when compared with **non-DX investments** over the next few years. In fact, **non-DX spend has a five-year CAGR of -1.6%** compared with the double-digit CAGR of **14.9% for DX investments.**

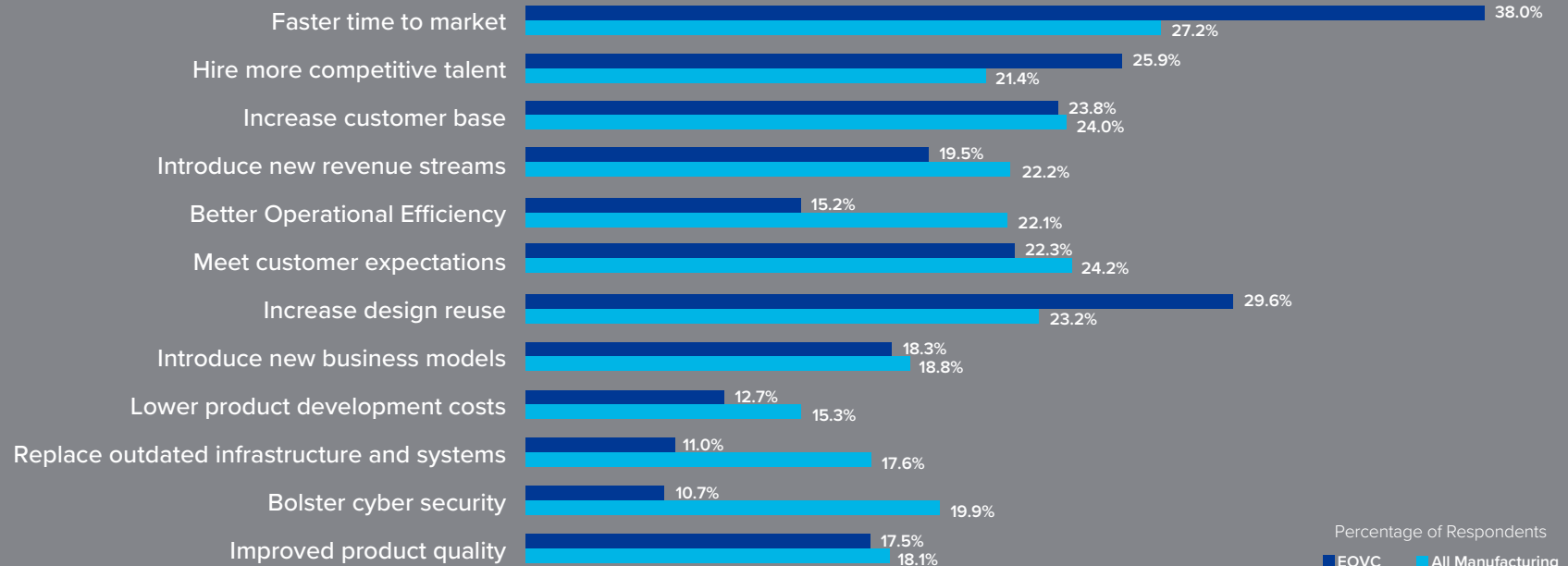
BUILD DIGITAL INNOVATION CAPACITY TO BUILD DIGITAL RESILIENCY



Of organizations that had ***longer-term digital transformation strategies and investments*** before the pandemic are showing ***strong signs of business growth.***

SHORT TERM DX GOALS

What are your top 3
business goals for
digital transformation
over the next 12 months?



DIGITIZATION AND INNOVATION ARE THE TOP BUSINESS OUTCOMES DATA FIRST ENTERPRISES

***Future IT organizations must deliver
Systems of Intelligence*** – embedding
data and intelligence at the core of the
enterprise platform and enabling intelligent
decision-making, automation,
augmentation, and modeling.

Digitization has already unlocked new horizons in industry for product innovation, with **data playing a key role**. **New digital services and products are generated by new technologies and plant, machinery, product, and process connectivity**. Last year, IDC's survey entitled "How to seize digitization opportunities with digital business models and new partnerships" highlighted the challenges this poses. However, advances made by industrial enterprises in their digitization activities are indeed identifiable.

The COVID-19 pandemic highlighted that the **ability to rapidly adapt** and respond to unplanned/unforeseen business disruptions is a clearer determiner of success in our increasingly digitalized economy compared with a heavy reliance on tradition approaches such as business continuity and IT recovery.

CHALLENGES AND OPPORTUNITIES OF TRANSPORTATION & MOBILITY



Connected and autonomous vehicle data presents opportunities and challenges: How to analyze and make decisions quickly to improve vehicle quality and customer experience is critical.



Industry suppliers in this market that are looking for the new opportunities focus on meeting changing customer demands and achieving profitable results.



Changing customer attitudes towards mass marketed products have led to the wider introduction of mass customization. Managing complexity, optimizing performance, and ensuring vehicle safety are top priorities.



Managing costs, ensuring quality, implementing the local and global requirements are challenging the next generation manufacturers.

IDC defines the digital automotive and transportation market as any automotive and transportation technology that utilizes the internet, Internet of Things (IoT), and 3rd Platform technologies (e.g., mobile technologies, social networking, cloud services, and big data and analytics).

The drive to SAE level 4-5 autonomy by 2022 continues, with ecosystem collaboration across auto, tech, telco, and retail, and an open, product innovation platform.

Transportation and Mobility Industry Needs



An integrated solution that provides a central "single source of truth" while synchronizing all data and projects in multiple sites including any changes in the design & development process.



THE FUTURE OF INDUSTRY ECOSYSTEM: BUILT ON THE PLATFORM & SHARING ECONOMY



Essentially, the future enterprise is IDC's vision for the end state of DX. Given our experiences in 2020, we now believe that being digitally resilient is a central tenet of the future enterprise.

Future industry ecosystems will be built on a shared foundation of platforms and services, with a bias toward cross-industry collaboration and innovation. Partnerships, rather than supply chain transactions, will be the amplifier that will empower organizations to meet the challenges. Leverage will come as a result of shared strategic assets including data and insight, applications, operations expertise, and industry clouds. Future industry ecosystems will be transformed from linear value chains to integrated ecosystems, and industry definitions will become blurred as companies of all sizes emerge from traditional industry sectors and morph to satisfy the new preferences that technology will make possible.

The future enterprise is IDC's vision for how firms must organize and invest to participate in increasingly digitally centric markets. Future enterprises are organizations that underpin business processes with technology, are fueled by innovation, platform-enabled, ecosystem-centric, and are digitally resilient at the core. They adopt a tech-everywhere and ecosystem-centric culture.

SHIFTING FROM DIGITALLY TRANSFORMING ENTERPRISE OPERATIONS TO COLLABORATING MORE AND EXCHANGING DATA IN ECOSYSTEMS

Manufacturing organizations are increasingly understanding the importance of closer engagement with their broader ecosystems. This means a closer integration with suppliers, partners, OEMs and customers to increase the efficiency of operations and customer experience. Data availability and usage across the entire ecosystem will be key to drive digitalization and automation.

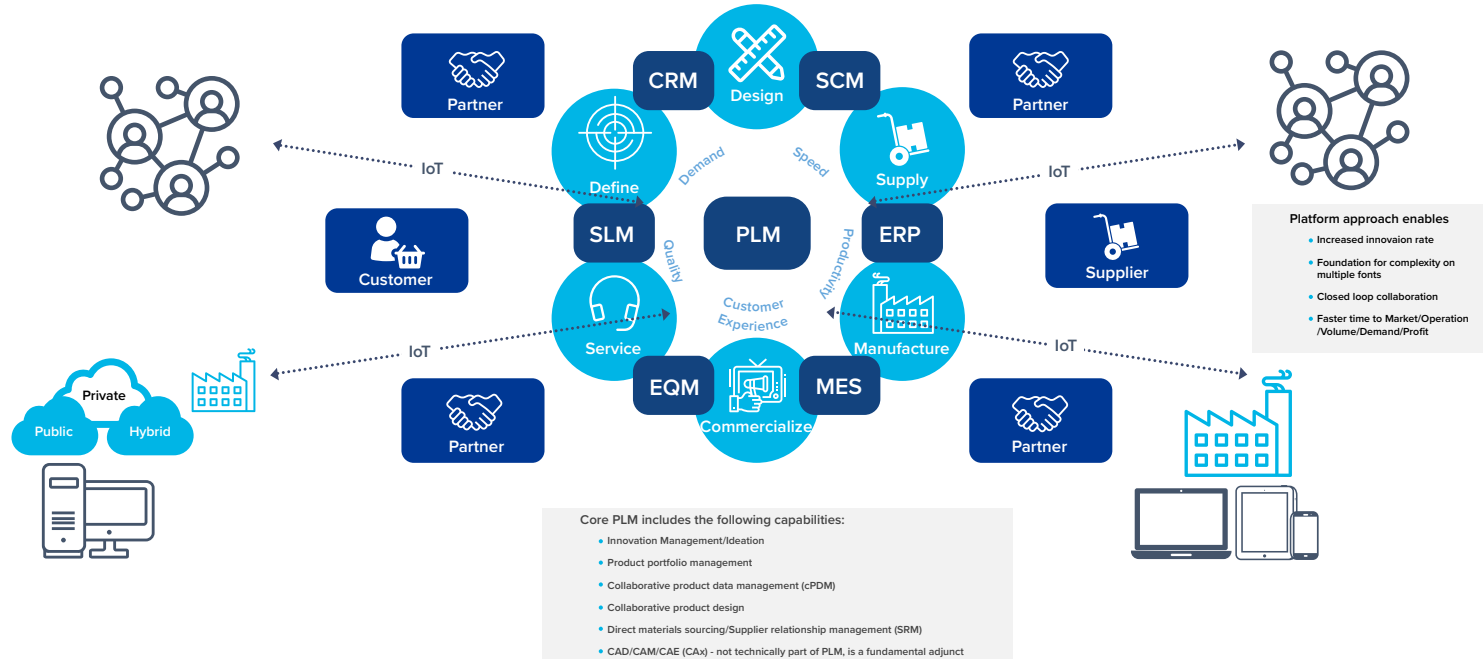
Enabling the ecosystem economy is very much about data, data platforms, data governance, and to a very large extent, changing the culture and mindset of people.

An aerial, grayscale photograph of a dense urban skyline with numerous skyscrapers and buildings. The image is slightly blurred, giving it a sense of depth and scale.

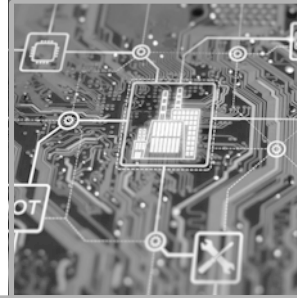
This is a shift from “egosystems” to “ecosystems”.

PLM has Transformed:

Harmonize the Organization on a Digital Thread Across your Product Innovation Platform



3 WAYS ENGINEERING & R&D IS EVOLVING TODAY



INTERCONNECTED

Design and engineering are no longer on an island; it is not enough to only integrate processes like we did with PLM, we must take a platform approach with product and service design, development, and operation



AUTOMATED

Guided, generative, closed loop design/engineering and analytics is the only way we meet the “do more with less, faster” mandate of digital

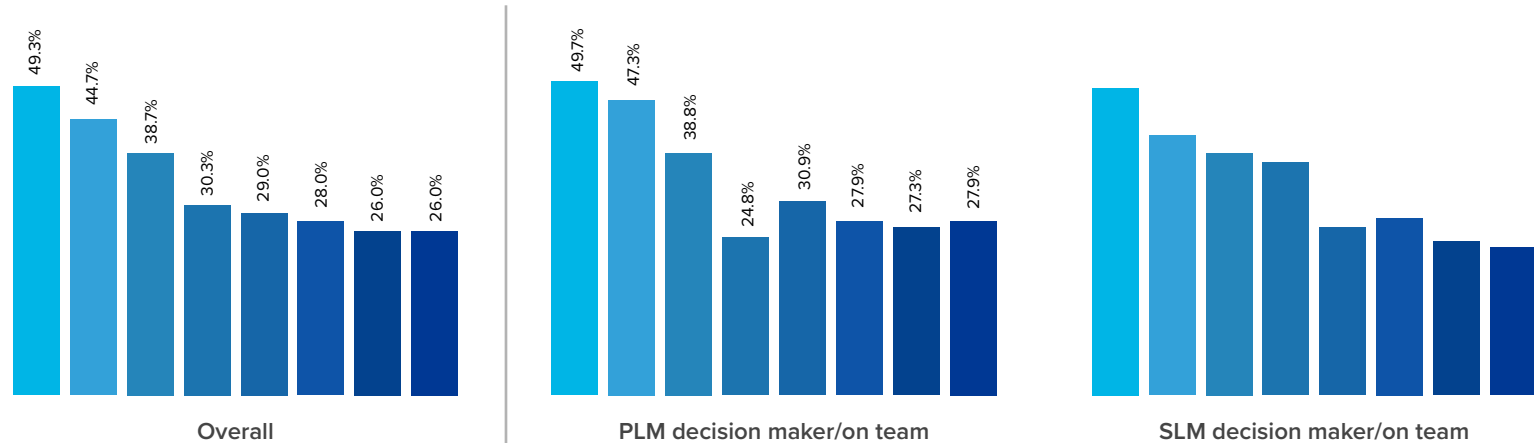


CONVERGED

The physical and the digital are coming together to define how engineering supports new business models, which is what digital twins support

Interconnected:

Improving Cross-organization
Collaboration the Top Focus for PLM & SLM



- Improve collaboration with internal design, engineering, product management, manufacturing, or service teams
- Increased use of Product and Service analytics for costing, compliance, and quality, decision making
- Improved innovation/idea management
- Improve collaboration with external partners and suppliers
- Partner more closely with 3rd party service providers for product innovation
- Include customer feedback in the product and service design process
- Standardization of components for reuse

Automated:

Moving to an Evidenced Based Culture



Portfolio Analysis: Executives can make better, more timely portfolio decisions

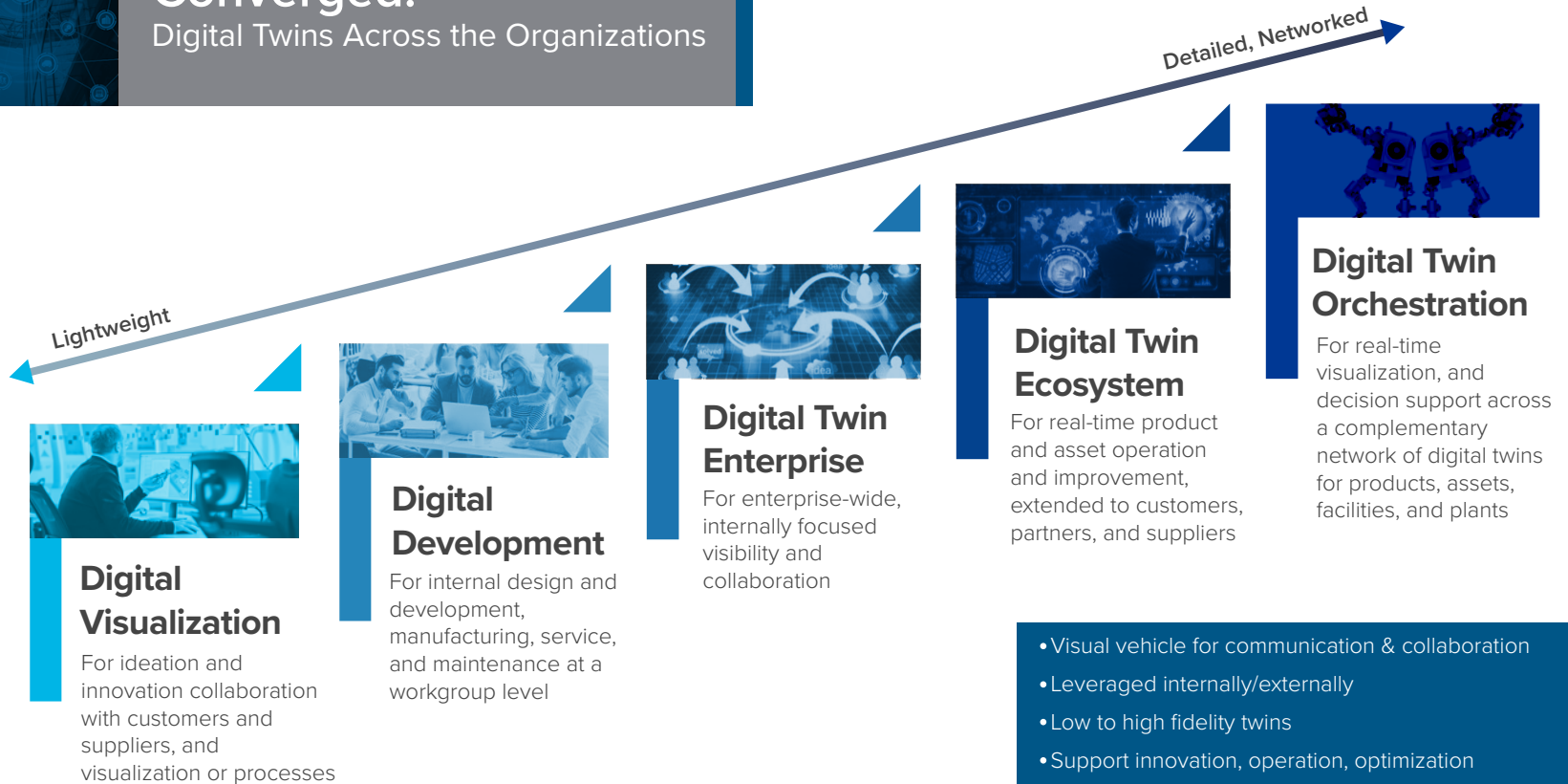
Scenario Analysis: Sr. Management can answer "what if" questions to identify opportunities and vulnerabilities

Value Analysis: Middle management can trade off costs, schedules, prices, suppliers, and supply chain plans

Situation Analysis: Front line knowledge workers can identify the right corrective or reinforcement actions to take

Converged:

Digital Twins Across the Organizations



DIGITAL IMPROVEMENT AREAS

Increased Complexity of Requirements and Products

Interruptions in Digital Continuity and Security

Standardization of Digital Processes Due to Multiple Locations

Problems Created by File-Based Process Management

Cost Pressure Because of Competition

Integration Problems of Different Software Used for Different Purposes

CLOUD STRATEGY AS A FRAMEWORK FOR TRANSFORMATION

A cloud-based platform enable collaboration in the ecosystem, involving not only the employees from different departments, but also suppliers and partners. Through a secure cloud platform, data can be shared within the ecosystem, which is essential for ecosystem-based innovation.

Cloud-Based Platforms

The key element of a digital platform strategy is a cloud-based platform that enables the integration and connection of industrial machinery and equipment operating at the customer's production site.

Moreover, a cloud-based digital platform will enable:

- Flexible, agile and cost-effective deployment model for organizations.
- Availability to connect with own industrial machinery as well as with machines or components from other OEMs
- Closer integration with customers, for example, to optimize spare parts provisioning via an online shop
- Opportunities for software providers to offer relevant applications for their customers

INDUSTRIAL RENAISSANCE WITH 3DEXPERIENCE



Dassault Systèmes believes in the power of digital transformation and has moved its entire software portfolio (12 software brands for 11 industries) to a single platform, called 3DEXPERIENCE, available both on cloud and on premise, which shares a common data and security model.

3DEXPERIENCE **platform-as-a-business experience** provides software solutions for every department — from engineering to manufacturing to marketing — that **support the value creation process and enables organizations to create differentiating consumer experiences**. It offers solutions for product lifecycle management, 3D design, analysis, simulation, manufacturing and business intelligence in a collaborative, interactive environment. The platform also acts as a marketplace, or trading platform, that connects service providers and buyers.

The use case journey is different for each industry and Dassault Systèmes offers industry-specific applications delivered on the 3DEXPERIENCE platform, including Design & Engineering, Manufacturing & Production, Simulation, Governance & Lifecycle, 3D Design Experience for Professionals, as well as a broad catalog of services.

ESSENTIAL GUIDANCE



Continue to Focus on **Building a Cloud-based, Digital, Closed-loop Innovation Platform**, from Ideation to Commercialization



Open your **Product Innovation Platform to industry**, and cross-industry ecosystems



Enhance PLM **with customer/consumer and commercialization information** to ensure strong trust, and good customer experience



Infuse **PLM with AI and Machine Learning** for Rapid, more accurate Decision Making

ABOUT CADEM DIGITAL

In the rapidly-advancing manufacturing world of today, the way to create an end-to-end production value chain for brands is via digital transformation. With fast, efficient and safe transformation, it is possible to optimize the time to market, boost quality and productivity, enhance flexibility and streamline the development of new business models.

Operating in digital transformation since 1998, CADEM DIGITAL offers PLM and 3DEXPERIENCE Platform solutions leveraging its clients' expertise, providing speed and productivity in product development and processes digitalization by adapting to time and conditions.

Being the largest platin business partner of Dassault Systemes in Turkey for over 20 years, CADEM DIGITAL provides innovative, integrated technologies in industrial manufacturing processes primarily for the automotive industry along with aviation, defense and machinery. CADEM DIGITAL is a reliable, experienced and innovative solution partner in the digital transformation journey of brands in the process of creating their future, empowered by its experience and expertise in digitalization, technology, education and innovation in the industry.



İstanbul Merkez Ofis
Burhaniye Mah. Taş Ocakları Sk.
No:3/A-B Beylerbeyi
Üsküdar/İstanbul

Tel. +90 (216) 557 64 65

Fax. +90 (216) 557 67 77

www.cademdigital.com.tr

About IDC



International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives.

IDC is a subsidiary of IDG, the world's leading technology media, research, and events company. Further information is available on our websites at www.idc.com

Global Headquarters

5 Speen Street Framingham, MA
01701 USA
P.508.872.8200
F.508.935.4015
www.idc.com



IDC Türkiye



IDC Türkiye

Copyright Notice

The external publication of IDC information and data—this includes all IDC data and statements used for advertising purposes, press statements, or other publication—requires written approval from the appropriate IDC Vice President or the respective Country Manager or business leader. A draft of the text to be published must be attached to the request. IDC reserves the right to reject the external publication of data.

Copyright: IDC, 2021. Reproduction of this document without written permission is strictly forbidden.