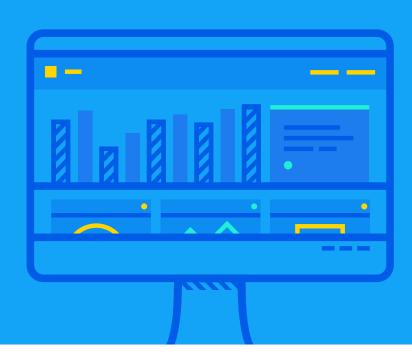
Digital transformation: quantifying the impact and momentum

Staggering numbers depict high stakes and call for urgency.



Global investments in digital transformation:



\$2.0 trillion

Predicted spending on digital transformation by 2020¹



30%

The portion of 2020 digital spending that analysts predict will be made by discrete and process manufacturing¹



30%

The amount of tech spend that goes to cloud infrastructure. Other spending areas include business services (22.0% CAGR), and applications (21.8% CAGR)¹

From operations to experience

IDC Worldwide Semiannual Digital Transformation Spending Guide says half of all digital transformation investments in 2017 will go toward technologies that **support operating model innovations**, focusing on making business operations more responsive and effective by leveraging digitally-connected products/services, assets, people, and trading partners.

The second-largest area of investment will be **omni-experience technology innovations** that transform how customers, partners, employees, machines and equipment communicate with each other, as well as the products and services created to meet unique and individualized demand.



Current state of transformation



Operational



Capgemini says nearly half of all the manufacturers surveyed (43%) have begun an operational smart factory initiative, and another 33% are in the process of formulating one.²

IDC reports that globally, **29.4%** of discrete manufacturers

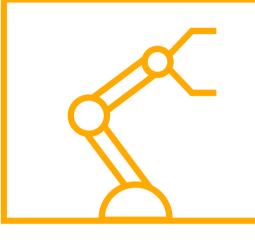


Deployed IoT



have already deployed an IoT solution, and the remainder have plans to launch one in the **next 12–24 months.**³

Almost there



56% in the \$100M club

More than half of manufacturers have aligned \$100 million or more towards smart factories says IDC.⁴

With cloud at the core

Manufacturers and distributors are investing in digital strategies, with cloud deployment playing a key role.

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For line-of-business executives, cloud offers a quick and economical way to support business requirements, which is critical, given the accelerating pace most manufacturers are facing. For CIOs and the IT organizations, cloud represents a new model of developing and deploying IT resources with implications for vision, people, process, and technology."

Kimberly Knickle, Research Vice President, IDC Manufacturing Insights⁵

Key findings of IDC's cloud benchmark research in worldwide manufacturing include:

65.1% of manufacturers worldwide are **using public cloud** for more than one or two small applications.⁵

45.8%

of manufacturers have stated that within 24 months they will have broadly implemented a cloud-first strategy that is proactively managed and is clearly driving business.⁵

The impact of digitization

Internet of Things Institute says:6





enterprise systems



19% Simplifying operator views to optimize machine performance



0	
200	
0	

11% Adding predictive analytics

IoT Institute asked what upgrades to existing systems did organizations make in order to become digital and deploy an Industrial Internet of Things (IIoT) project?



Capgemini: Benefits reported by organizations who are self-designated "Digital Masters"⁶



Average gains in productivity credited to digital initiatives, by industry:



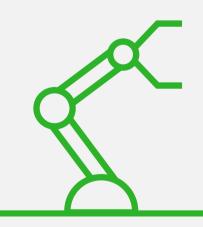


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Digital transformation calls for organizations to engage with stakeholders to transform business models through disruptive technologies. Manufacturers looking to jump start growth and overcome strategic pressures have turned to digital transformation as an ongoing program to transform their businesses."

R "Ray" Wang, Constellation Research, May, 2017 Nine Starting Points to Digital Transformation⁷

Projections for the future



Smart factories could add **\$500 billion to \$1.5 trillion** in value added to the global economy in five years



Manufacturers predict overall efficiency to grow annually over the next five years at **7 times the rate of growth** since 1990



Digital initiatives can nearly **double operating profit and margin** for an average automotive OEM manufacturer²

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Manufacturers must continue to innovate and create value from their tech investments to solve business challenges and enable new revenue streams. The coming years will greatly alter the technology landscape for business functions in the manufacturing industry."

Kimberly Knickle, Research Vice President, IDC Manufacturing Insights⁵

To learn more about starting your digital journey, download *"Nine Entry Points to Digital Disruption,"* by R "Ray" Wang, Constellation Research

Download now >



¹ Worldwide Semiannual Digital Transformation Spending Guide from International Data Corporation (IDC)

- ² Capgemini, "Smart Factories: How can manufacturers realize the potential of digital industrial revolution," May 2017
- ³ IDC, "Digital Transformation in Industrial Manufacturing," May, 2017
 ⁴ IDC Press release, "IDC Forecasts \$1.2 Trillion in Worldwide Spending on Digital Transformation Technologies in 2017"
- ⁵ Industry Today, "IDC Manufacturing Insights 2017 Predictions for worldwide manufacturing," January, 2017
- ⁶ Internet of Things Institute and PTC, "Been There, Done That: How Manufacturers are Achieving Success with the IIOT," May, 2017
- ⁷ Constellation Research, "*Nine Entry Points for Digital Disruption*," R "Ray" Wang, May, 2017