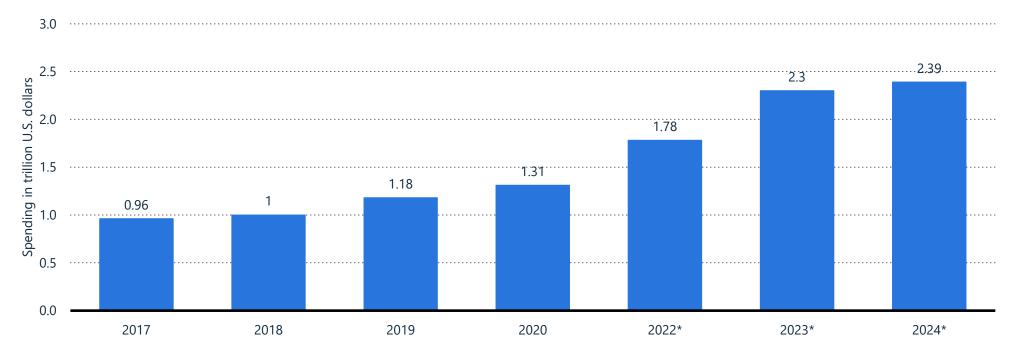


Digital Transformation

strategicinsights

Spending on digital transformation technologies and services worldwide from 2017 to 2024 (in trillion U.S. dollars)

Digital transformation spending worldwide 2017-2024

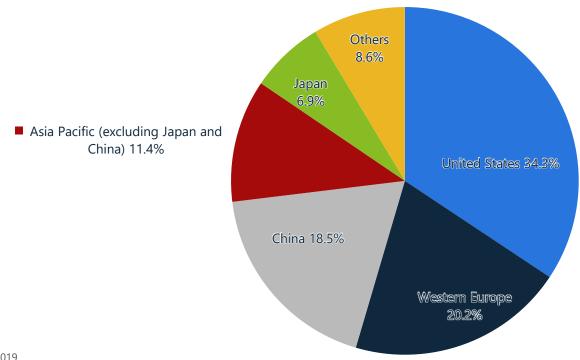


Note(s): Worldwide; 2017 to 2020

Further information regarding this statistic can be found on <u>page 60</u>. **Source(s):** IDC; Statista estimates; Salesforce.com; <u>ID 870924</u>

Digital transformation market share worldwide in 2019, by region

Share of digital transformation market worldwide 2019, by region



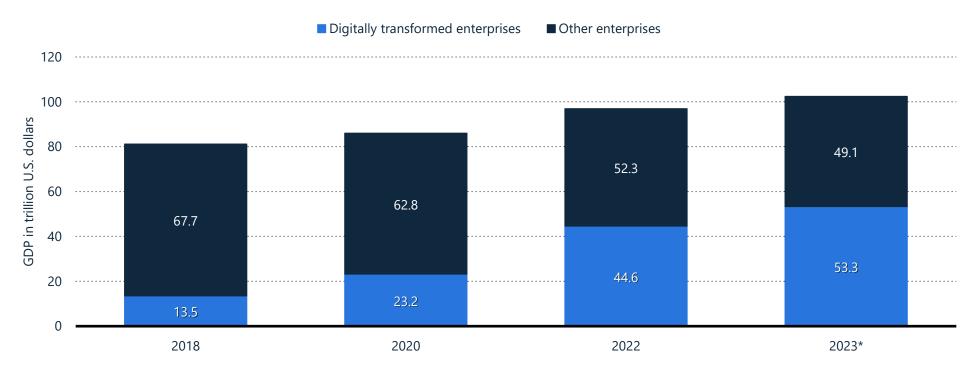
Note(s): Worldwide; 2019

Further information regarding this statistic can be found on page 61.

Source(s): IDC; <u>ID 1026344</u>

Nominal GDP driven by digitally transformed and other enterprises worldwide from 2018 to 2023 (in trillion U.S. dollars)

Nominal GDP driven by digitally transformed and other enterprises worldwide 2018-2023



Note(s): Worldwide; 2018 to 2023

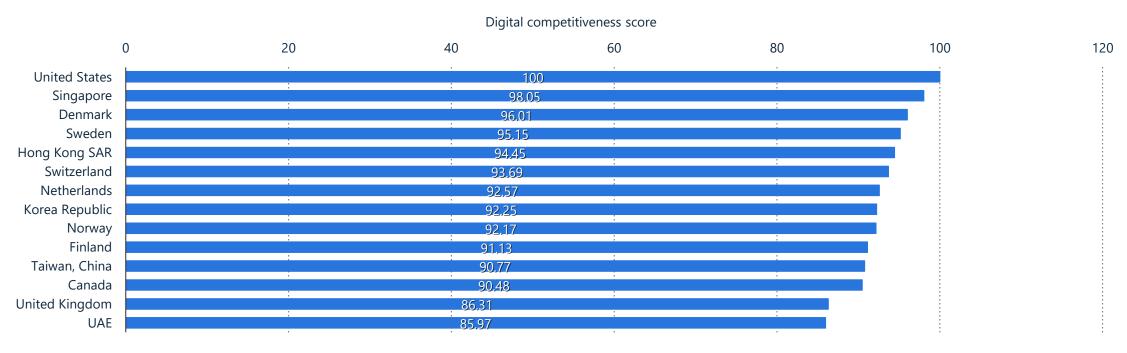
Further information regarding this statistic can be found on page 62.

Source(s): IDC; <u>ID 1134766</u>



Country-level digital competitiveness rankings worldwide as of 2020

Digital competitiveness rankings by country worldwide 2020



Note(s): Worldwide; 2020

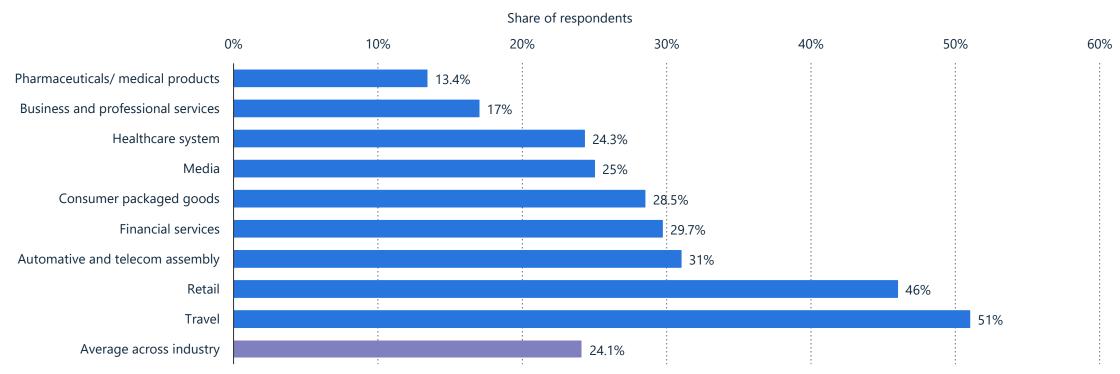
Further information regarding this statistic can be found on <u>page 63</u>. **Source(s):** International Institute for Management Development; <u>ID 1042743</u>





Global companies' level of digital maturity as of 2018, by vertical

Digital frontier gap worldwide in 2018, by industry



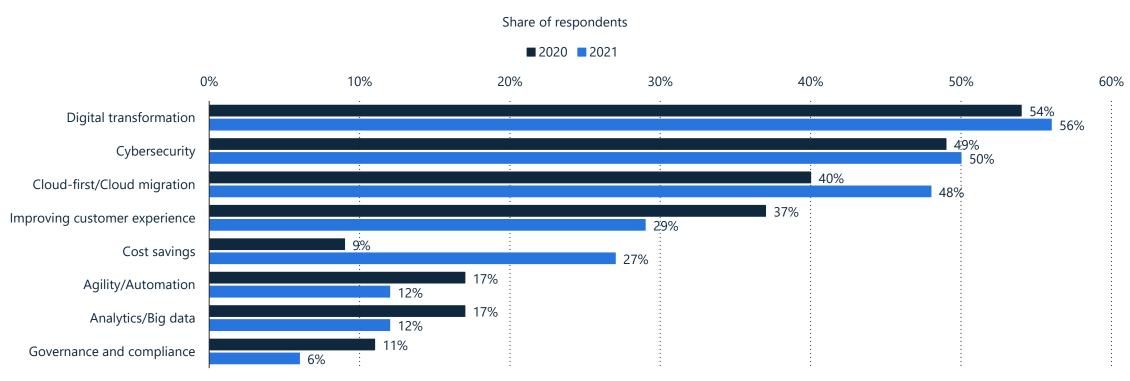
Note(s): Worldwide; 2018; 1,600 respondents; companies

Further information regarding this statistic can be found on page 64.



Priorities for IT technology initiatives in companies worldwide from 2020 to 2021

Priorities for IT technology initiatives 2020-2021



Note(s): Worldwide; 2019 and 2020; 303 (2020) / 474 (2021); Executives and high-level managers in IT with visibility into their organizations' overall IT budgets. Organizations with at least 2,000 employees.

Further information regarding this statistic can be found on page 65.

Source(s): Flexera Software; ID 1106032

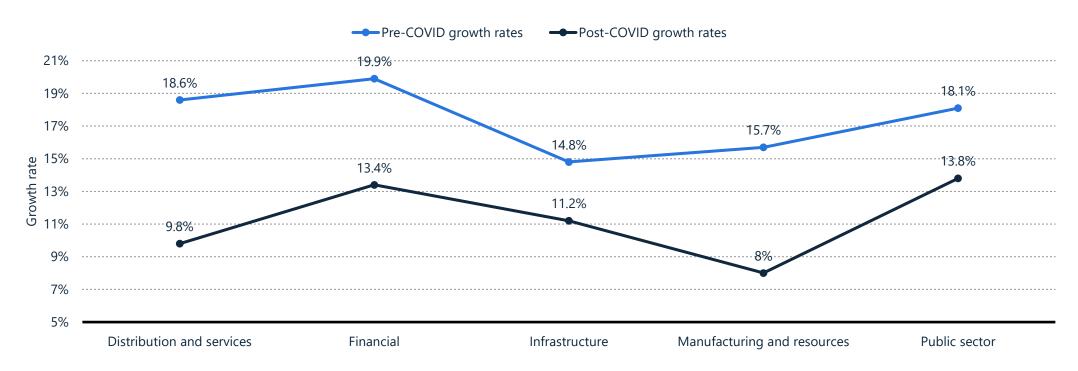




COVID-19 Impact

Digital Transformation spending growth forecast worldwide by sector in 2020, pre and post COVID-19

Pre and post COVID-19 digital transformation spending growth worldwide 2020



Note(s): Worldwide; 2020

Further information regarding this statistic can be found on page 66.

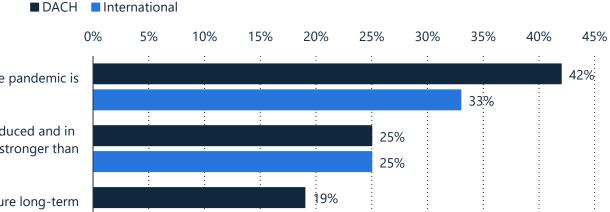
Source(s): IDC; <u>ID 1127865</u>



How will the coronavirus pandemic affect the overall economic situation of the digital economy?

COVID-19 impact on digital economy worldwide 2020





12%

16%

24%

The digital economy will actually benefit economically once the acute pandemic is past

There will be a consolidation: the number of market players will be reduced and in the mid-term the major corporations will emerge from the crisis even stronger than they were before

Like the economy as a whole, the digital economy will have to endure long-term revenue losses

No forecast possible at this point in time

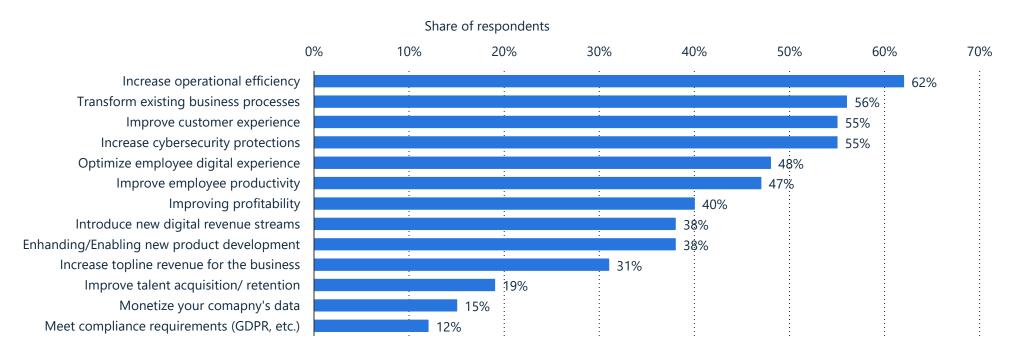
Note(s): Worldwide; 2020; DACH (n=527), International (n=305); digital decision-makers Further information regarding this statistic can be found on page 68.

Source(s): DMEXCO; ID 1134429



How has the pandemic impacted the way your organization is prioritizing the following business initiatives? (Showing increased priority)

The impact of the COVID-19 pandemic on organizations' business priorities 2020



Note(s): Worldwide; April 2020; 414 respondents; CIOs

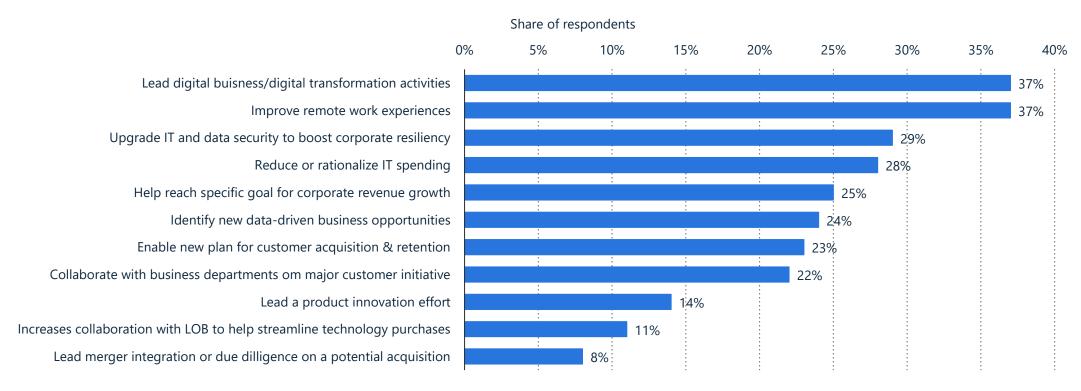
Further information regarding this statistic can be found on page 69.

Source(s): IDG Research Services; ID 1131705



Given the current state of the business what are the CEO's top three priorities for you to help business preserve through the current disruption?

CEOs' top priorities for CIOs to preserve business amid COVID-19 2020



Note(s): Worldwide; April 2020; 414 respondents; CIOs

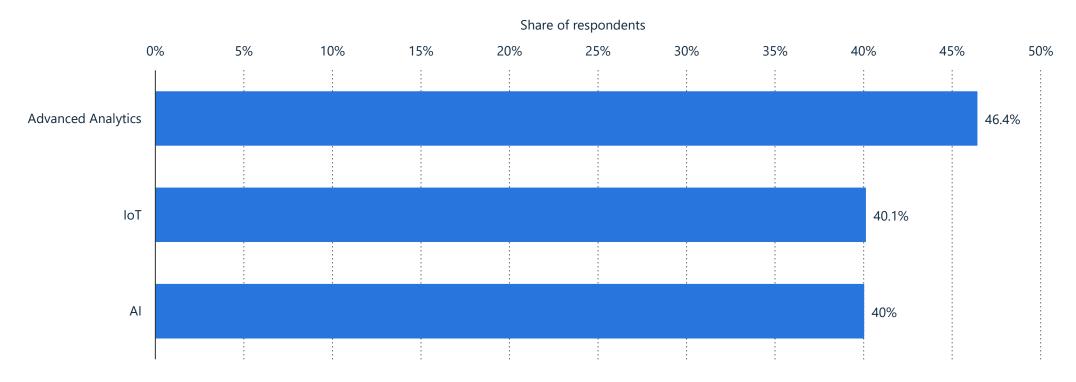
Further information regarding this statistic can be found on page 70.

Source(s): IDG Research Services; CIO; ID 1131695



The impact of coronavirus (COVID-19) on increased demand for tech innovation accelerators as of 2020*

Demand for innovation accelerators post-COVID-19 in 2020



Note(s): Worldwide; 2020; 908 respondents

Further information regarding this statistic can be found on page 71.

Source(s): IDC; <u>ID 1121625</u>

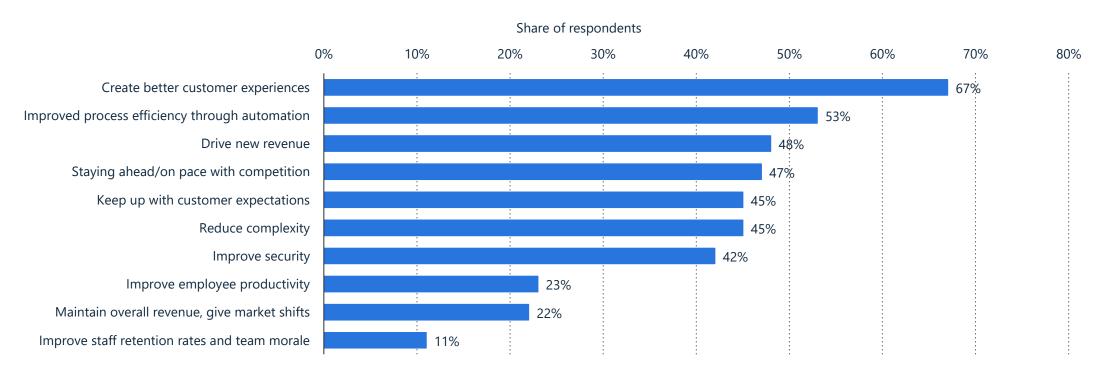




Drivers, Challenges, and Success Factors

Key objectives of digital business strategy in organizations worldwide as of 2019

Objectives for digital transformation in organizations 2019



Note(s): Worldwide; 2019; 702 respondents; survey respondents are within organizations that have plans to adopt/or already launched a "digital first" approach Further information regarding this statistic can be found on page 72.

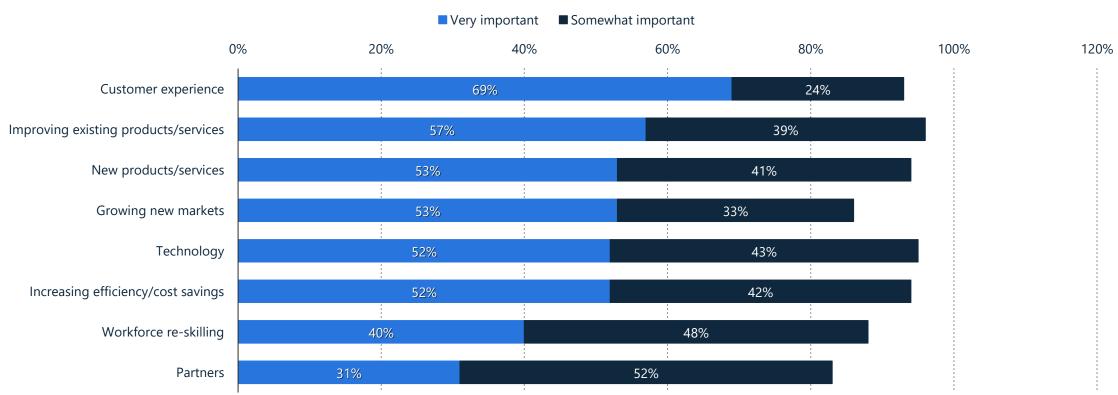
Source(s): IDG Research Services; <u>ID 1017623</u>



Priorities driving digital information efforts in companies worldwide as of 2020

Priorities driving digital transformation efforts in organizations worldwide 2020





Note(s): Worldwide; 2020; 302 respondents; Majority of respondents are C-suite executives (CIOs and senior IT executives) from organizations with at least 2,000 employees Further information regarding this statistic can be found on page 73.

Source(s): Flexera Software; <u>ID 1106144</u>



Challenges encountered as a result of digital transformations in global organizations as of 2020

Share of respondents

Obstacles encountered in digital transformation worldwide 2020



Skill gaps have opened up on traditional teams as top talent moves to digital teams or products

Cultural differences or conflicts have arisen between traditional and digital teams

Traditional teams have struggled to keep up with the pace of how digital teams work

Digital technologies have been harder to integrate into core architecture than previously thought

Speed of digital delivery and releases has made it difficult for the business to keep up Employees have struggled in new roles (eg, scrum master, product owners), despite training provided

Likelihood of cyberthreats and/or security breaches has increased

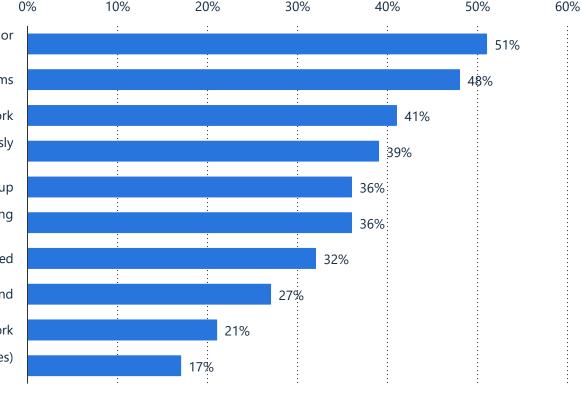
Newer ways of working have made it more difficult to manage funding and demand

Newer ways of working have reduced valuable governance or transparency on teams' work

Likelihood of technology outages or greater instability (eg, higher break/ fix-incident rates) has increased

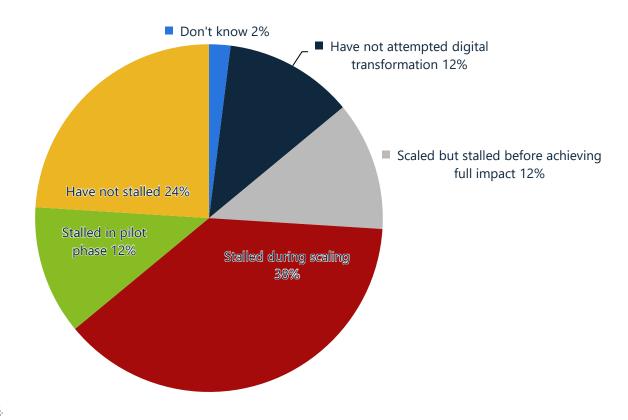
Note(s): Worldwide; 2020; 283*

Further information regarding this statistic can be found on page 74.



Where companies have stalled in their digital progress

Stalling points of digital transformation initiatives in global companies 2020

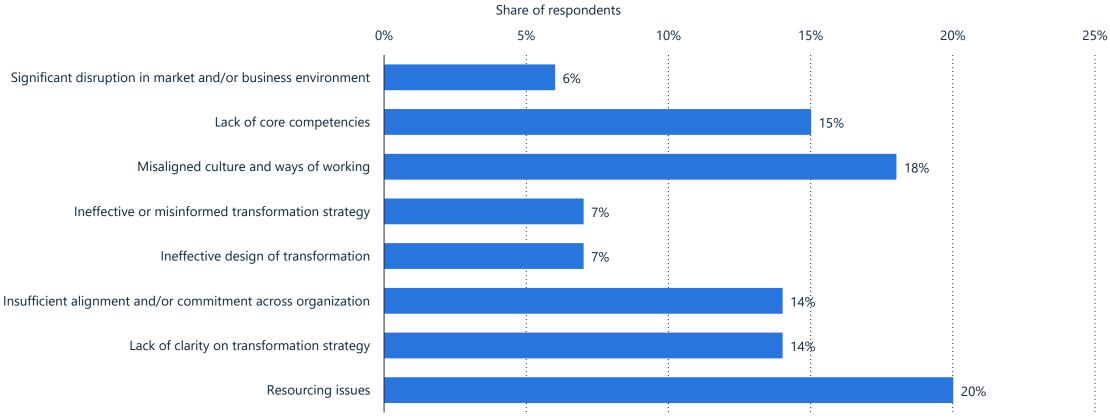


Note(s): Worldwide; 2020; 1,256 respondents

Further information regarding this statistic can be found on page 75.

Factors that stalled digital transformation initiatives in global companies as of 2020

Primary reasons that stalled momentum for digital transformation worldwide 2020



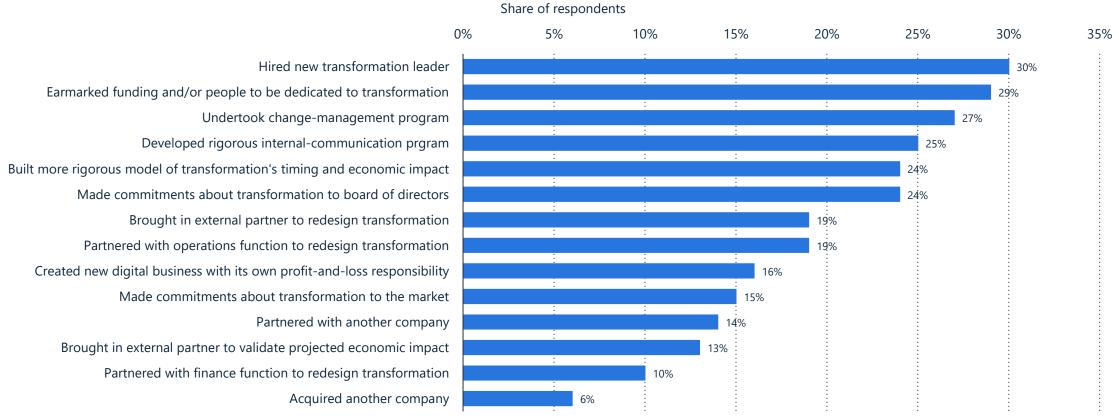
Note(s): Worldwide; 2020; 731 respondents

Further information regarding this statistic can be found on page 76.



Actions taken in global organizations after digital transformations' loss of momentum or failure to scale, as of 2020

Interventions to jump-start stalled digital transformations worldwide 2020



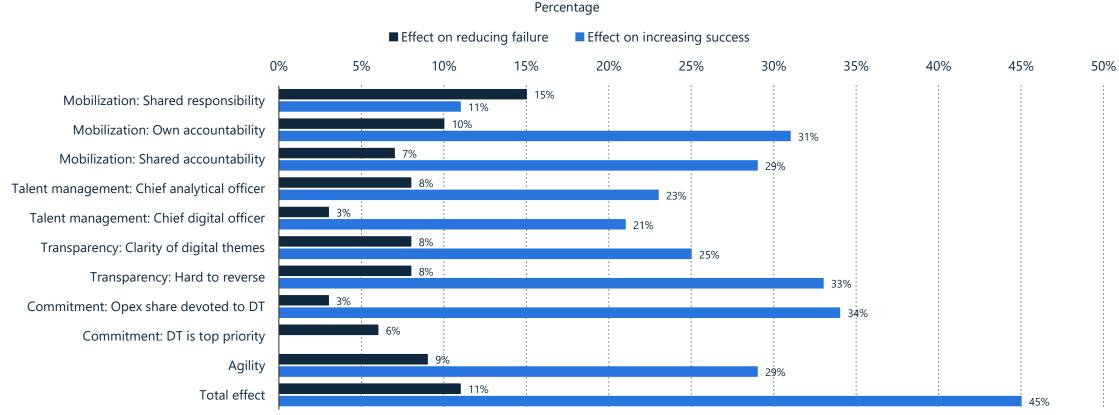
Note(s): Worldwide; 2020; 731*

Further information regarding this statistic can be found on page 77.



Management factors affecting the odds of digital transformation worldwide as of 2018

Key themes that affect success rate of digital transformation 2018



Note(s): Worldwide; 2018

Further information regarding this statistic can be found on page 78.



Reasons that global organizations have avoided stalls when undertaking digital transformations, as of 2020

Main reasons for avoiding stall during digital transformation 2020



Note(s): Worldwide; 2020; 302*

Further information regarding this statistic can be found on page 79.

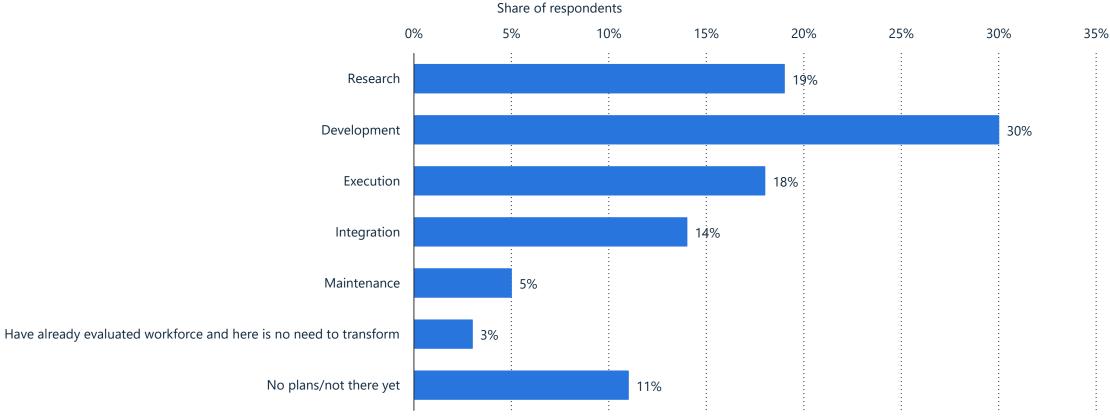




Impact on Workforce

How would you describe your organization's progress with respect to workforce transformation?*

Implemention level of workforce digital transformation in organizations 2019

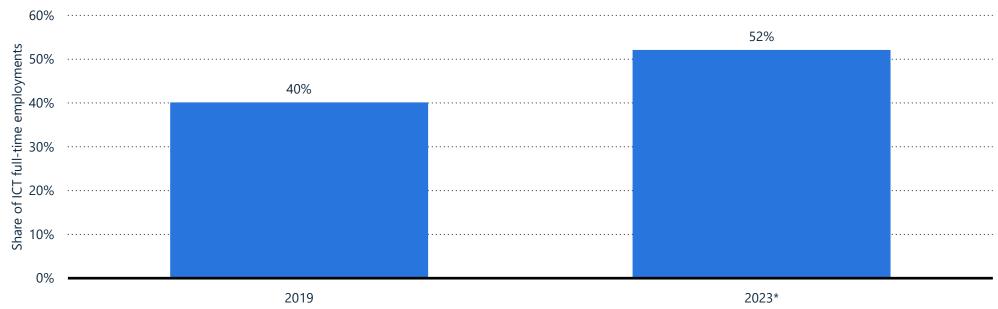


Note(s): Worldwide; 2019; 702 respondents; survey respondents are within organizations that have plans to adopt/or already launched a "digital first" approach Further information regarding this statistic can be found on <u>page 80</u>. **Source(s):** IDG Research Services; ID 1135545



Digital transformation (DX) roles' share of information and communication technology (ICT) full-time employments worldwide in 2019 and 2023

DX roles share of ICT full-time employment worldwide in 2019 and 2023



Note(s): Worldwide; 2019

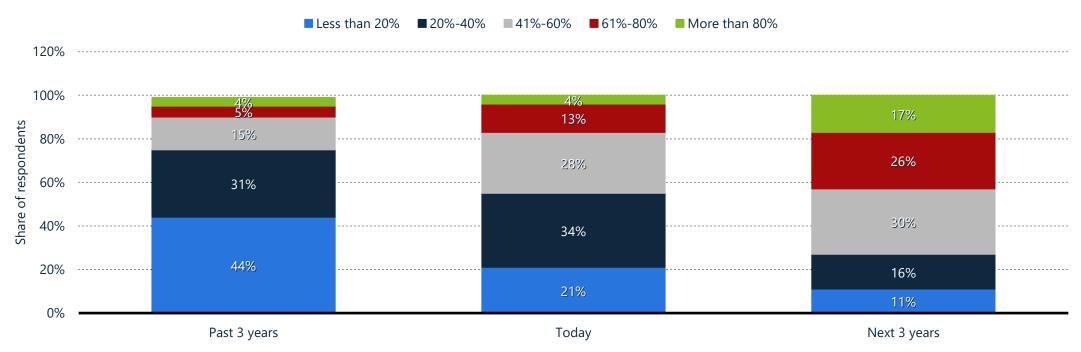
Further information regarding this statistic can be found on page 81.

Source(s): IDC; <u>ID 1126689</u>



Share of workforce that have moved/will move into new roles due to technological impact in organizations worldwide, as of end 2018

Technology's impact on workforce within organizations worldwide 2018

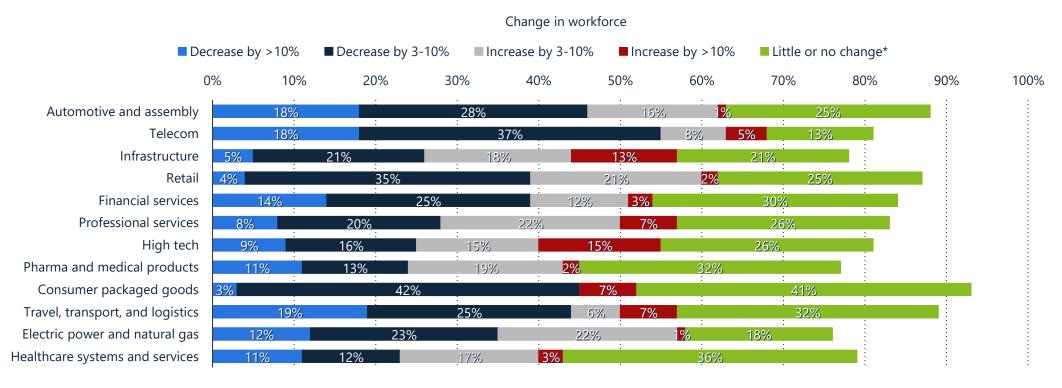


Note(s): Worldwide; October through December 2018; 6672 respondents; Business and IT executives Further information regarding this statistic can be found on <u>page 82</u>. **Source(s):** Accenture; <u>ID 1059460</u>



Predicted workforce changes from artificial intelligence (AI) adoption in organizations worldwide from 2020-2023, by industry

Worldwide workforce changes from adopting AI in companies 2020-2023, by industry

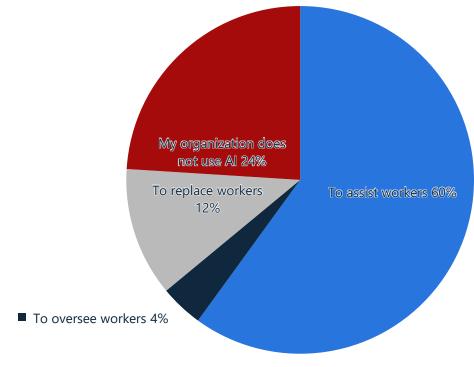


Note(s): Worldwide; March 26 to April 5, 2019; 1,872 respondents Further information regarding this statistic can be found on page 83.



Leading reasons for using AI in their organization according to global business and HR leaders as of 2020

Global business and HR leaders primary reason for using AI in their organization 2020

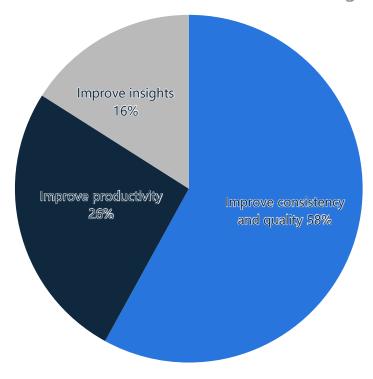


Note(s): Worldwide; 2020; 8,949 respondents; business and HR leaders Further information regarding this statistic can be found on <u>page 84</u>. **Source(s):** Deloitte; ID 1119804



Leading uses of AI to assist workers in their organization according to global business and HR leaders as of 2020

Global business and HR leaders use of AI to assist workers in their organization 2020



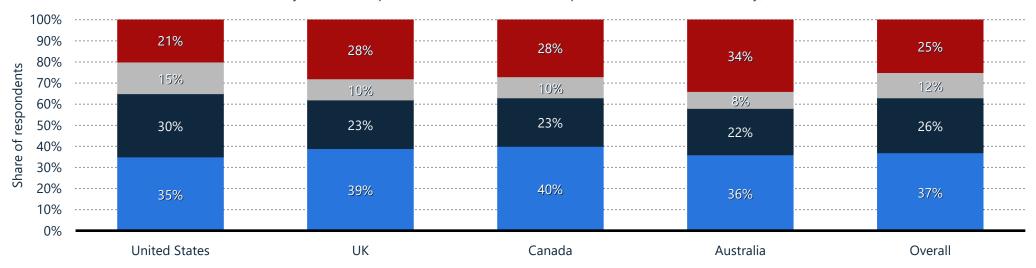
Note(s): Worldwide; 2020; 5,369 respondents; business and HR leaders Further information regarding this statistic can be found on <u>page 85</u>. **Source(s):** Deloitte; ID 1120120



Company policy on remote work in companies with digital output in 2020, by country

Company policy on remote work with digital output by country 2020

- Remote work is allowed or tolerated, but is not the norm or default
- 100% remote, every employee is synched to a company-mandated time zone
- 100% remote, each employee works in their own native time zone
- Hybrid-remote (part of the team works in-office, part of the team works remotely)



Note(s): Australia, Canada, United Kingdom, United States; January 30, 2020 to February 10, 2020; 21 years and older; 3000+ respondents; Adult professionals who work remotely or have the option to work remotely and are in roles with digital output

Further information regarding this statistic can be found on page 86.

Source(s): GitLab; <u>ID 1111377</u>

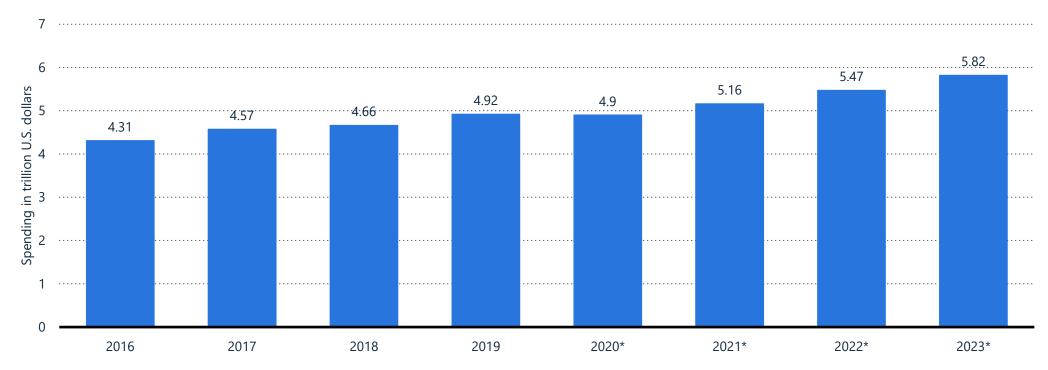




ICT Spending

Total information communication technology (ICT) market spending worldwide from 2016 to 2023 (in trillion U.S. dollars)

Worldwide ICT spending 2016-2023



Note(s): Worldwide; 2016 to 2019

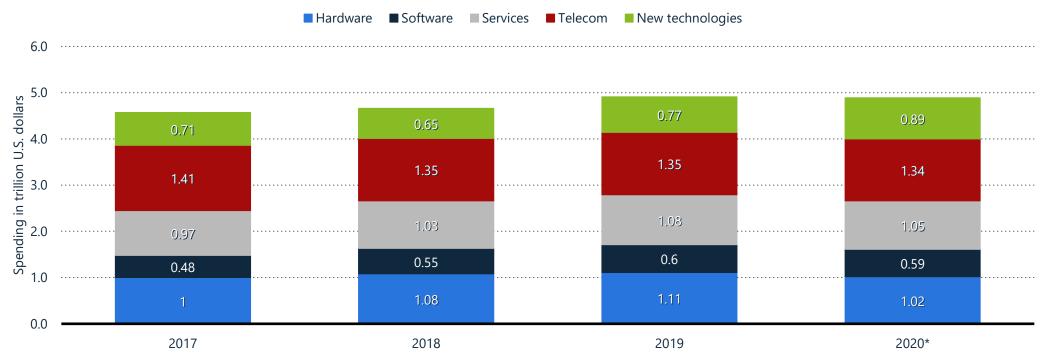
Further information regarding this statistic can be found on page 87.

Source(s): IDC; <u>ID 946785</u>



Total information communication technology (ICT) market spending worldwide from 2017 to 2020, by category (in trillion U.S. dollars)

Worldwide ICT spending 2017-2020, by category



Note(s): Worldwide; 2017 to 2019

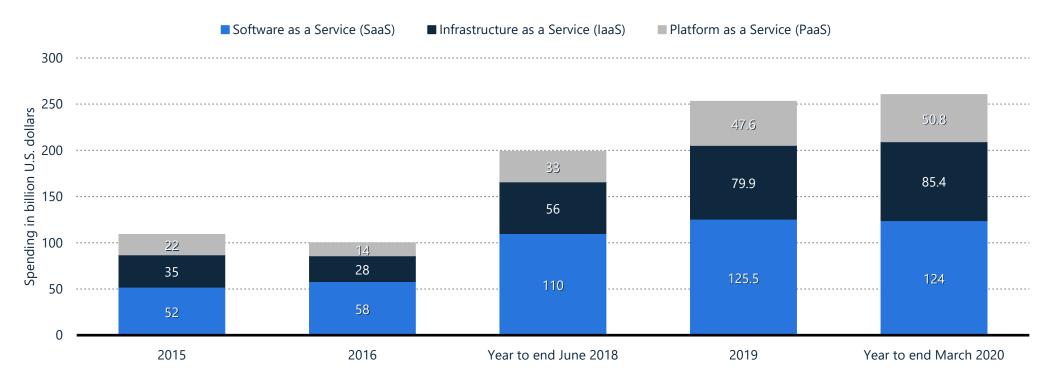
Further information regarding this statistic can be found on page 88.

Source(s): IDC; <u>ID 946808</u>



Cloud services market spending by segment worldwide from 2015 to 2020 (in billion U.S. dollars)*

Cloud computing worldwide revenue 2015-2020, by segment



Note(s): Worldwide; 2015 to 2020

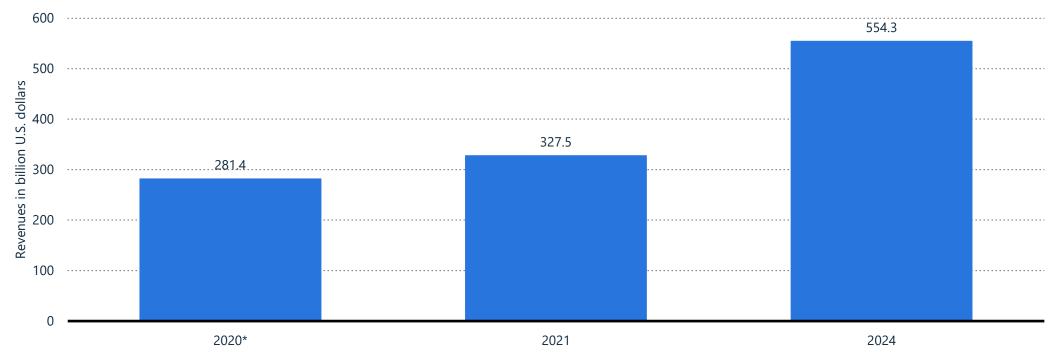
Further information regarding this statistic can be found on page 89.

Source(s): ITCandor; <u>ID 540499</u>



Artificial intelligence (AI) market revenues worldwide in 2020 and forecasts for 2021 and 2024 (in billion U.S. dollars)

Artificial Intelligence market size worldwide 2020-2024



Note(s): Worldwide; 2020

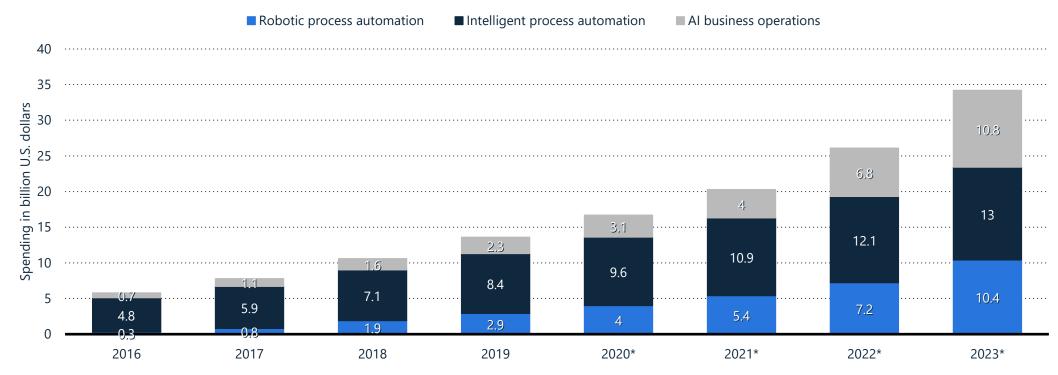
Further information regarding this statistic can be found on page 90.

Source(s): IDC; Statista; ID 694638



Robotic/intelligent process automation (RPA/IPA) and artificial intelligence (AI) automation spending worldwide from 2016 to 2023, by segment (in billion U.S. dollars)

Spending on automation and AI business operations worldwide 2016-2023, by segment



Note(s): Worldwide; 2017 to 2019

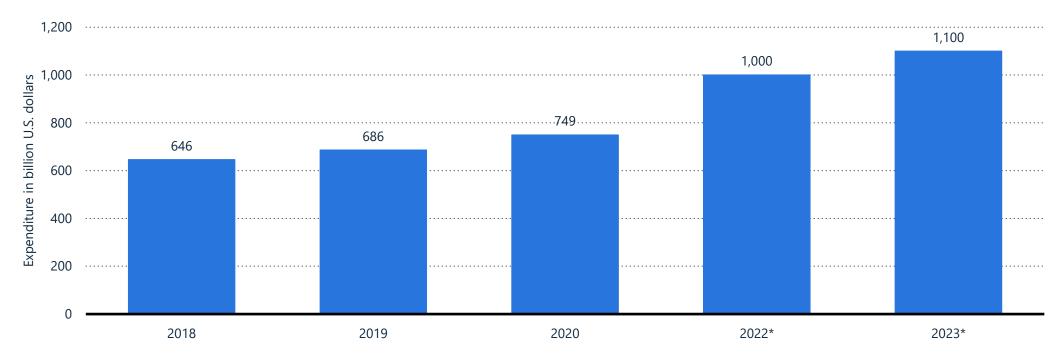
Further information regarding this statistic can be found on page 91.

Source(s): HfS Research; ID 740436



Prognosis of worldwide spending on the Internet of Things (IoT) from 2018 to 2023 (in billion U.S. dollars)

Internet of Things (IoT) spending worldwide 2023



Note(s): Worldwide; 2018 to 2020

Further information regarding this statistic can be found on page 92.

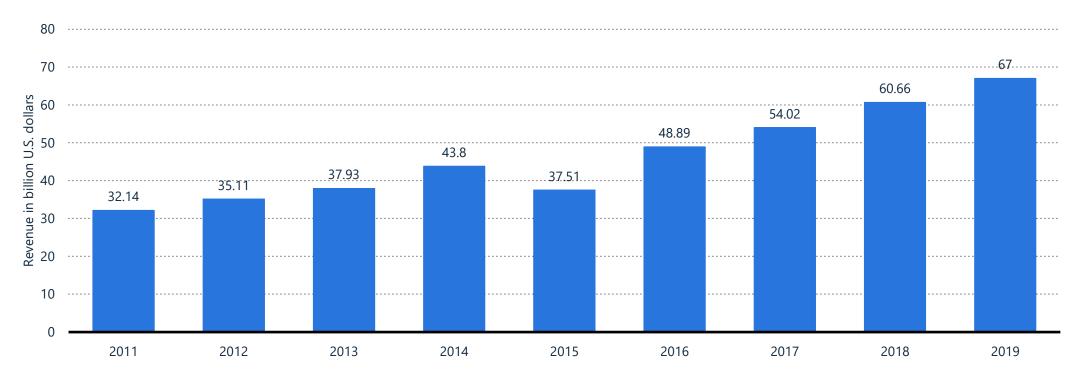
Source(s): IDC; <u>ID 668996</u>



DIGITAL TRANSFORMATION

Big data and analytics software revenue worldwide from 2011 to 2019 (in billion U.S. dollars)*

Big data and analytics software market worldwide 2011-2019



Note(s): Worldwide; 2011 to 2019

Further information regarding this statistic can be found on page 93.

Source(s): IDC; SAS Institute; ID 472934



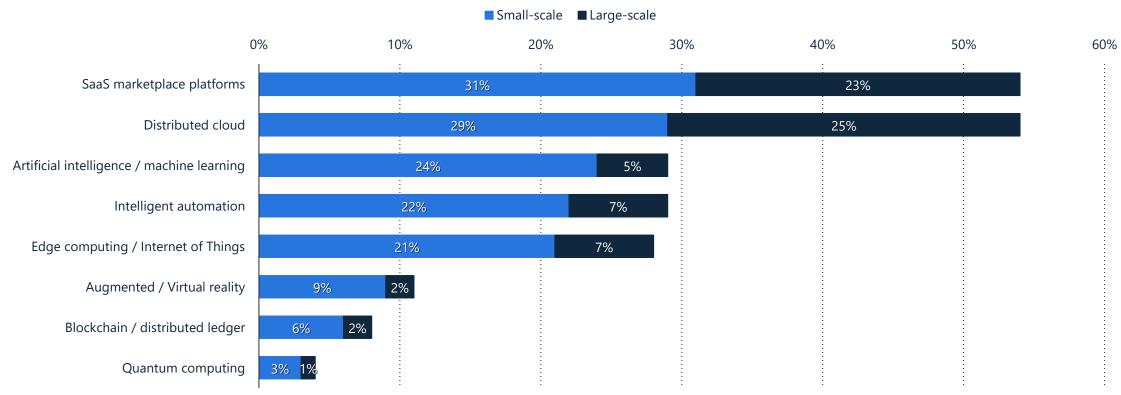


Technology Adaptation

Adoption rate of emerging technologies in organizations worldwide as of 2020, by scale

Implementation of emerging technologies in companies worldwide 2020





Note(s): Worldwide; December 2019 to March 2020 / May to August 2020; 2,791 / 1,428; CIOs and IT leaders across 83 countries

Further information regarding this statistic can be found on page 94.

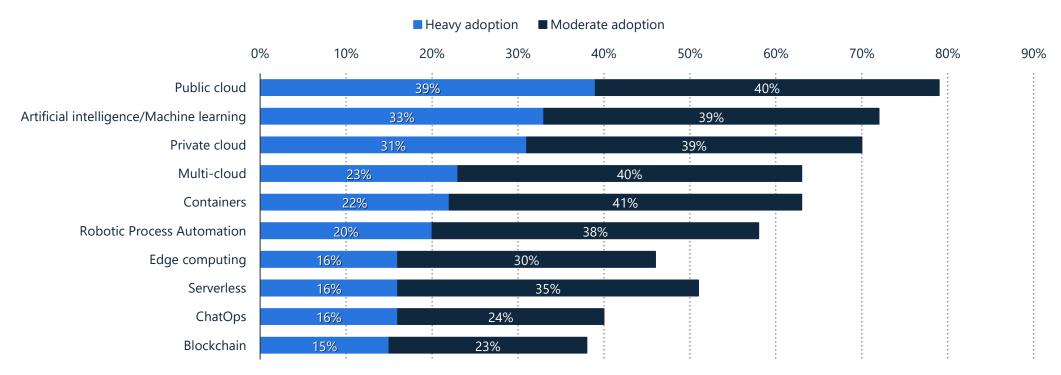
Source(s): KPMG; Harvey Nash; ID 661164



Planned adoption of technologies in organizations worldwide as of 2020

Adoption of technologies in companies worldwide 2020





Note(s): Worldwide; 2020; 302 respondents; Majority of respondents are C-suite executives (CIOs and senior IT executives) from organizations with at least 2,000 employees Further information regarding this statistic can be found on page 95.

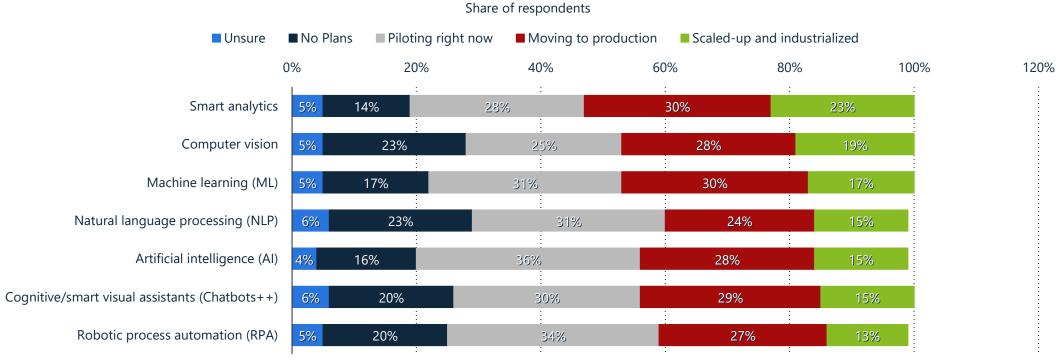
Source(s): Flexera Software; <u>ID 1106157</u>



DIGITAL TRANSFORMATION

Adoption rate of intelligent automation (IA) technologies in organizations worldwide in 2019*

Global adoption of intelligent automation (IA) technologies in organizations 2019



Note(s): Worldwide; 2019; 590 respondents; Business leaders including 100 C-level executives

Further information regarding this statistic can be found on page 100.

Source(s): HfS Research; ID 1114893

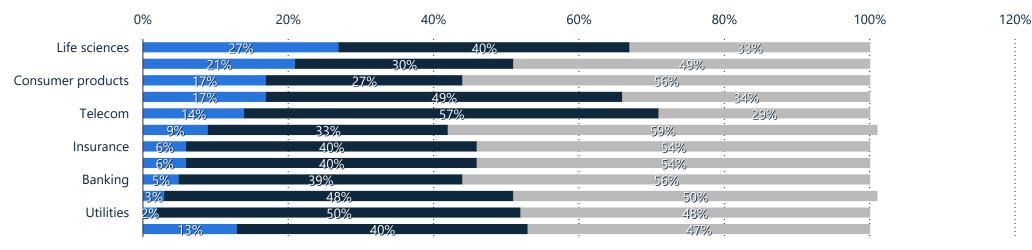


Maturity of artificial intelligence (AI) implementation in organizations worldwide as of 2020, by sector

Al implementation maturity among Al implementers 2020, by sector

Share of repondents

- We have successfully deployed use cases in production and continue to scale more throughout multiple business teams
- We have deployed a few use cases in production on a limited scale
- We have launched AI pilots/PoCs but they are not yet deployed in production



Note(s): Worldwide; March to April 2020; 954 respondents; Organizations implementing Al

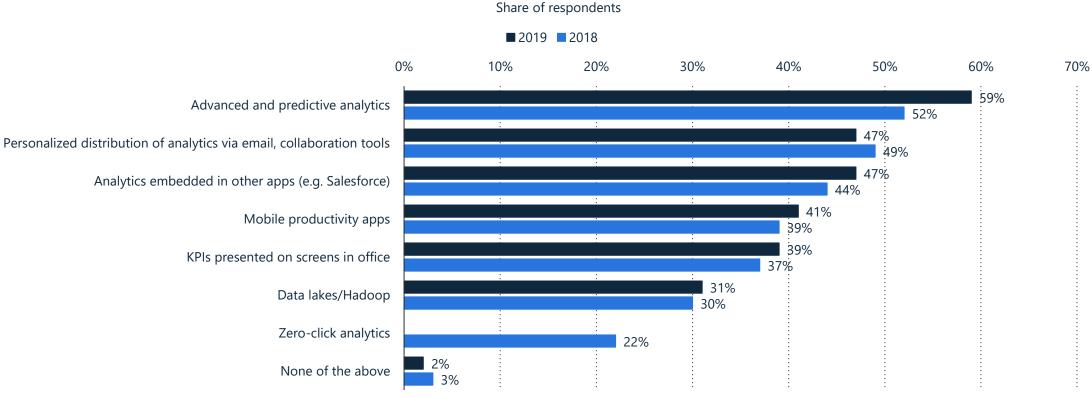
Further information regarding this statistic can be found on page 101.

Source(s): Capgemini; ID 732992



Tools being leveraged to provide greater insights and contextual intelligence into company operations worldwide in 2018 and 2019

Tools providing insights and contextual intelligence for organizations worldwide 2018



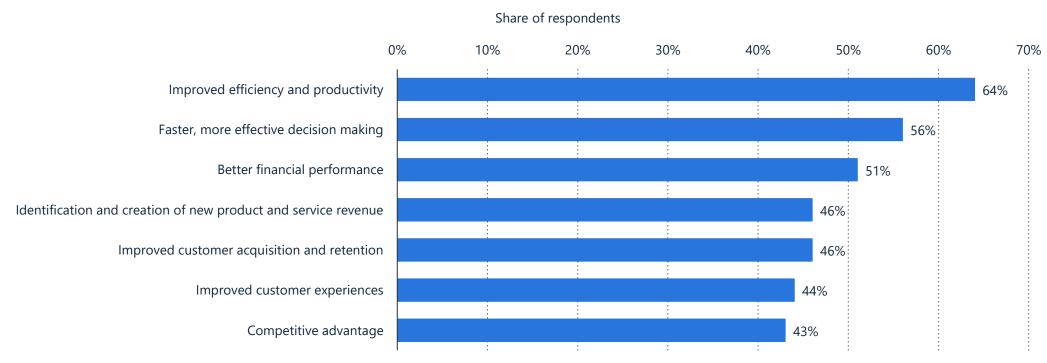
Note(s): Worldwide; 2018 and 2019; 500 respondents; business intelligence and analytics professionals Further information regarding this statistic can be found on page 102.

Source(s): Forbes; MicroStrategy; <u>ID 893853</u>



Top benefits that companies realize through the use of data and analytics worldwide as of 2019

Benefits of effective data and analytics use in organizations worldwide 2019



Note(s): Worldwide; 2019; 500 respondents; business intelligence and analytics professionals

Further information regarding this statistic can be found on page 103.

Source(s): Forbes; MicroStrategy; ID 895263

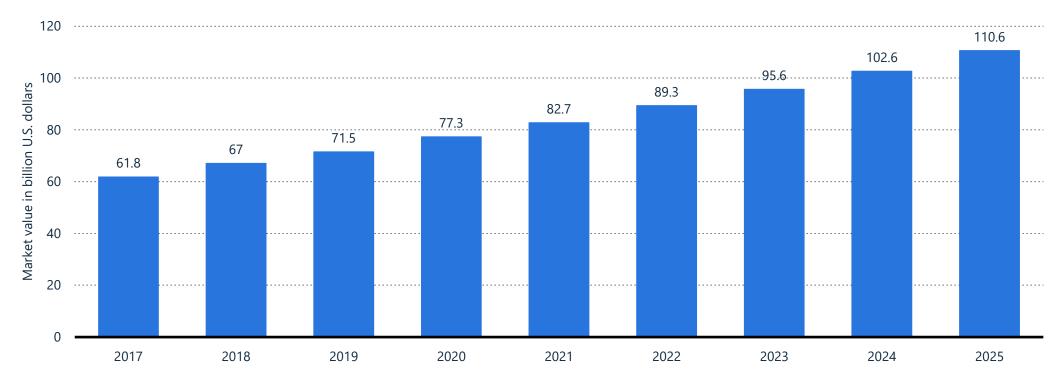




Industrial DX

Industrial Internet of Things market size worldwide from 2017 to 2025* (in billion U.S. dollars)

Industrial IoT - market size worldwide 2017-2025



Note(s): Worldwide; 2017 to 2020

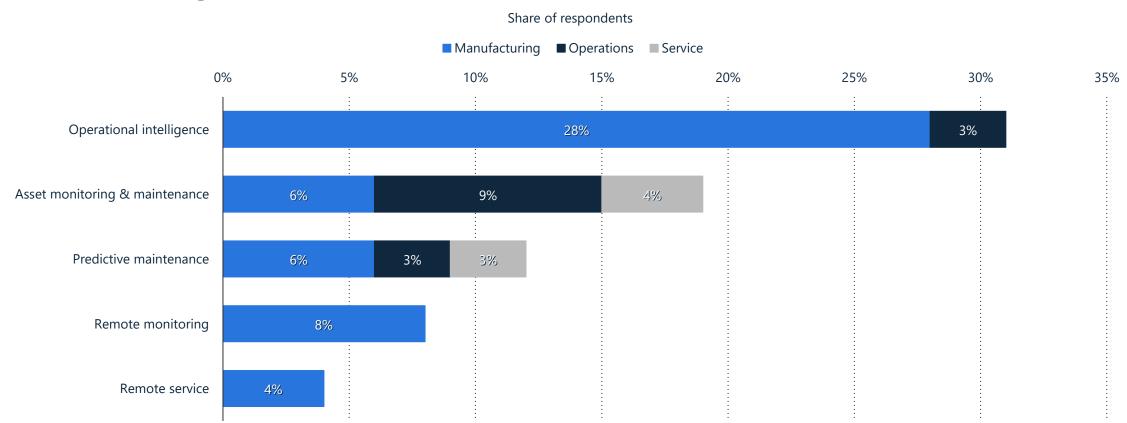
Further information regarding this statistic can be found on page 104.

Source(s): MarketsandMarkets; Statista estimates; ID 611004



Industrial Internet of Things (IIoT) leading use cases worldwide as of 2019*

Industrial IoT: leading use cases worldwide 2019



Note(s): Worldwide; 2019

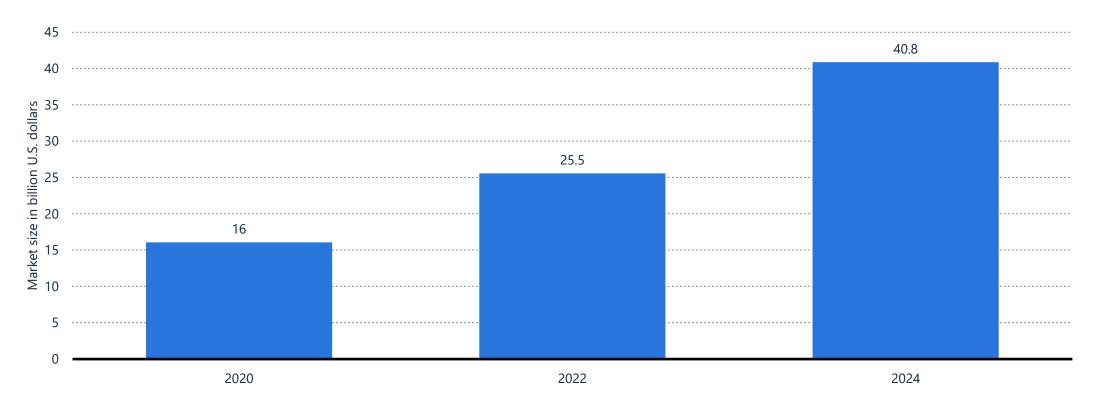
Further information regarding this statistic can be found on page 105.

Source(s): PTC; <u>ID 1102202</u>



Global 3D printing products and services market size from 2020 to 2024 (in billion U.S. dollars)

3D printing industry - worldwide market size 2020-2024



Note(s): Worldwide; as of February 2020

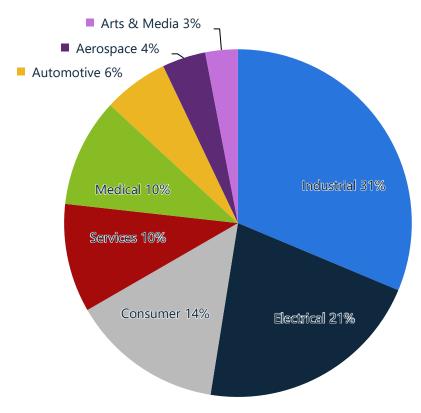
Further information regarding this statistic can be found on page 106.

Source(s): Wohlers Associates; <u>ID 315386</u>



Share of the global online 3D printing demand by industry/application in 2018

Online 3D printing demand share worldwide by industry/application 2018



Note(s): Worldwide; 2018

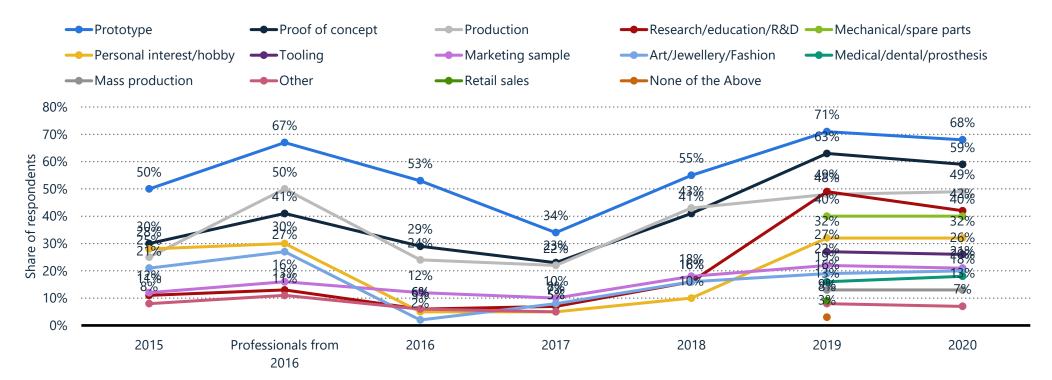
Further information regarding this statistic can be found on page 107.

Source(s): 3D Hubs; <u>ID 1008507</u>



Leading uses of 3D printing from 2015 to 2020

Uses of 3D printing 2015-2020



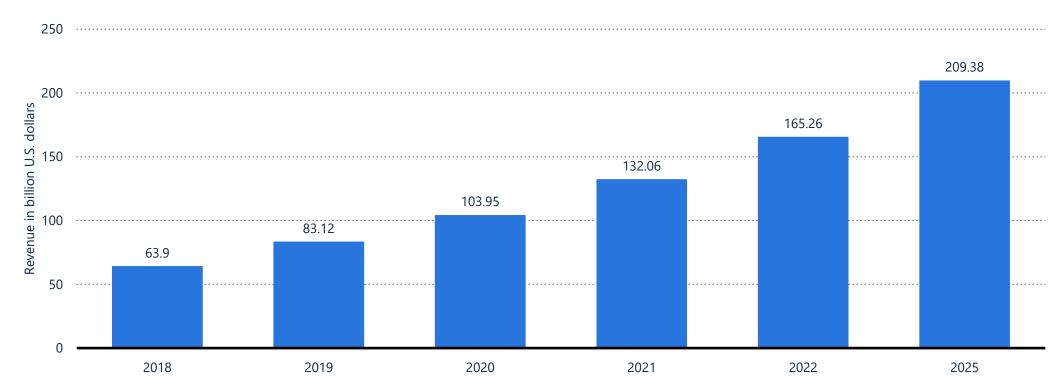
Note(s): Worldwide; 2015 to 2020; 18 years and older; 1,600 respondents; 3D printing users from 71 countries Further information regarding this statistic can be found on page 108.

Source(s): Forbes; Sculpteo; Statista estimates; <u>ID 560271</u>



Size of the global market for industrial and non-industrial robots between 2018 and 2025 (in billion U.S. dollars)

Global robotics market revenue 2018-2025



Note(s): Worldwide; as of Q3 2019

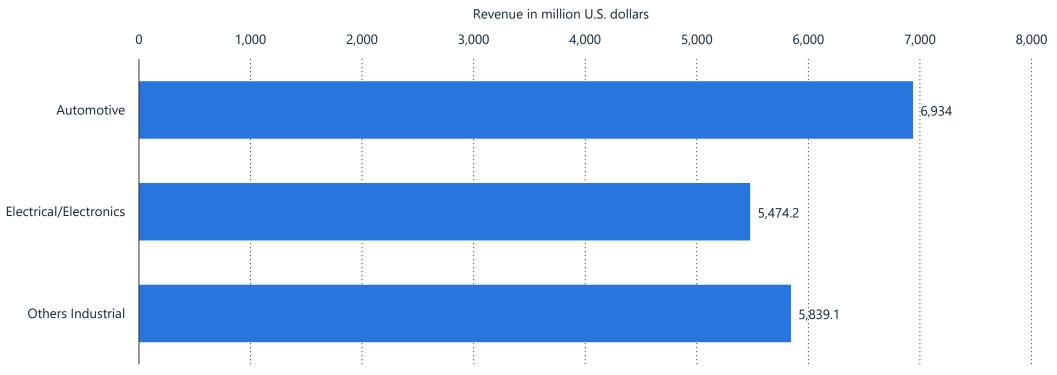
Further information regarding this statistic can be found on page 109.

Source(s): Tractica; ID 760190



Projected industrial robotics market size worldwide in 2025, by major segment (in million U.S. dollars)

Global industrial robotics market revenue by segment 2025



Note(s): Worldwide; as of Q3 2019

Further information regarding this statistic can be found on page 110.

Source(s): Tractica; ID 760210

