## **DCL**Technologies

## Digital Transformation Index 2020

Vanson Bourne Research Findings & Methodology

Global benchmark indicates businesses' status of digital transformation across the globe and how they are performing in this digital age.

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# O1 Research Methodology



# **Research Methodology**

Vanson Bourne

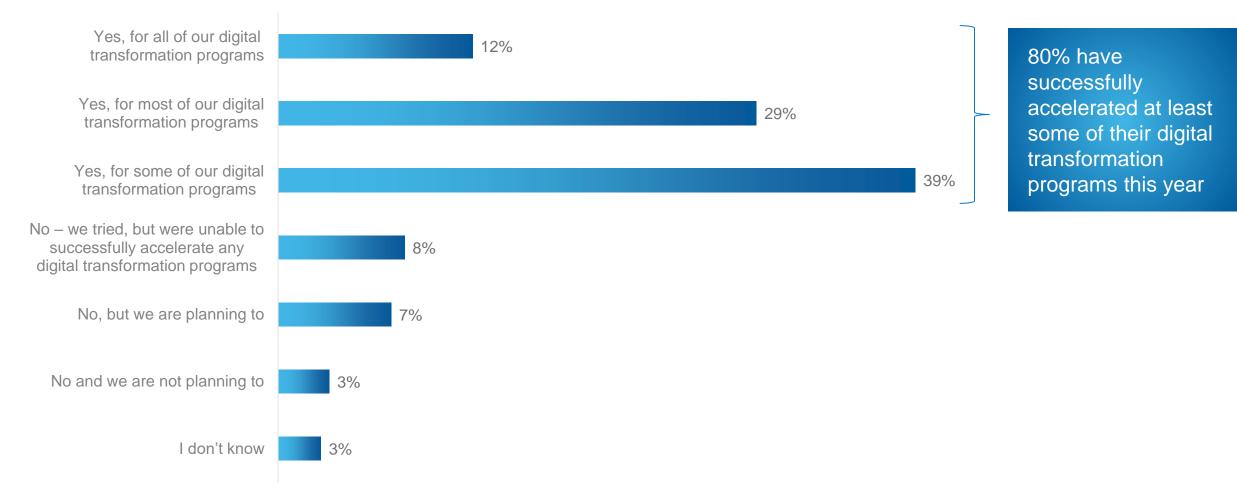
		Biennia	al study	
			0,	digital transformation progress of mid- in 2018, and now also in 2020.
Reponses from Direc	JANTITATIVE etor, C-Suite, mid-size to v/key functions	<b>13</b> IND	USTRIES	<b>18</b> COUNTRIES
<ul> <li>Finance</li> <li>Sales</li> <li>IT/Tech</li> <li>Customer services</li> <li>Marketing</li> <li>Production &amp; Manufacturing</li> </ul>	<ul> <li>Owner/ Executive</li> <li>R&amp;D</li> <li>Digital</li> <li>Customer Experience</li> <li>Logistics &amp; Supply Chain</li> </ul>	<ul> <li>Automotive</li> <li>Financial Services</li> <li>Public Healthcare</li> <li>Private Healthcare (combined with public healthcare in reporting)</li> <li>Insurance</li> </ul>	<ul> <li>Life Sciences</li> <li>Manufacturing</li> <li>Media and Entertainment</li> <li>Oil and Gas</li> <li>Retail and Consumer</li> <li>Technology</li> <li>Telecoms</li> <li>Other commercial</li> </ul>	<section-header><section-header><text><text><text><text><text></text></text></text></text></text></section-header></section-header>

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# 02 Pace of Transformation



#### Successful Acceleration Of Digital Transformation Programs

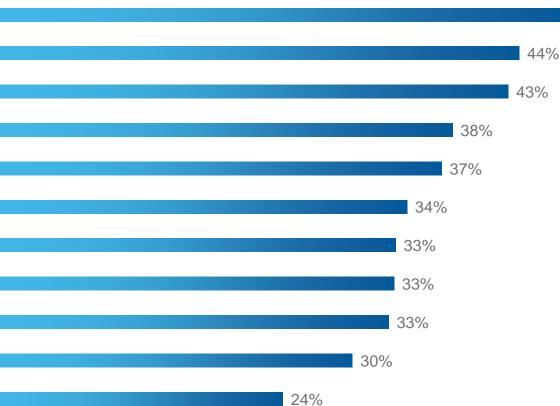


"Have you successfully accelerated any of your digital transformation programs this year?" Base: all 2020 respondents (4300)

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#### **Digital Transformation Programs Accelerated**

Strengthening our cybersecurity defenses Rolling out broader working from home/remote working capabilities Remote patient care and diagnosis \*\* Reinventing how we deliver digital experiences to customers & employees Using data in completely new ways Transforming our services and consumption models Extending our business domain Transforming our Edge deployments (and its connection with the core and the cloud) Smart Manufacturing/Industry 4.0 initiatives \* Transforming our processes with AI initiatives Personalized/Precision medicine \*\*



Strengthening cybersecurity and remote work capabilities have been the most accelerated areas of digital transformation programs in 2020

"Which digital transformation programs have you successfully accelerated this year?" Base: respondents from organizations which have successfully accelerated

at least some digital transformation programs (3427), except asterisked answer options. Not showing "Other" or "Don't know" options

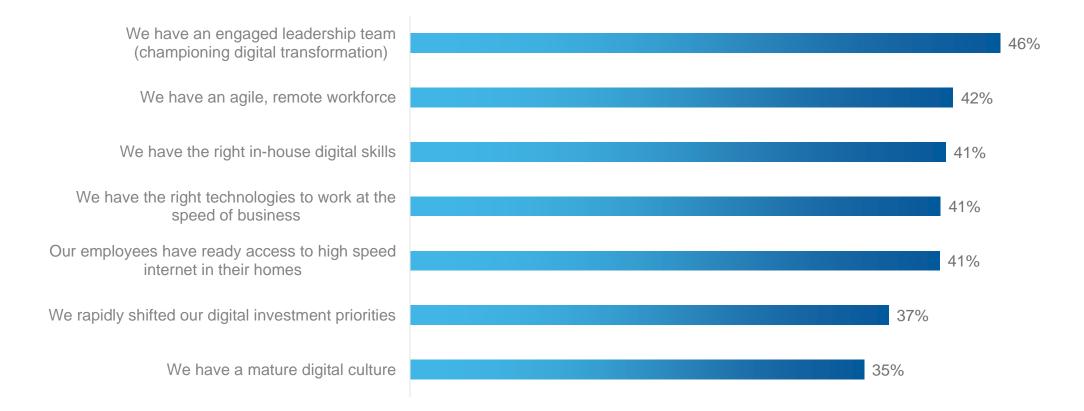
\* Indicates answer only shown to respondents from the manufacturing industry

\*\* Indicates answer only shown to respondents from the public and private healthcare industries



48%

#### **Acceleration Enablers**



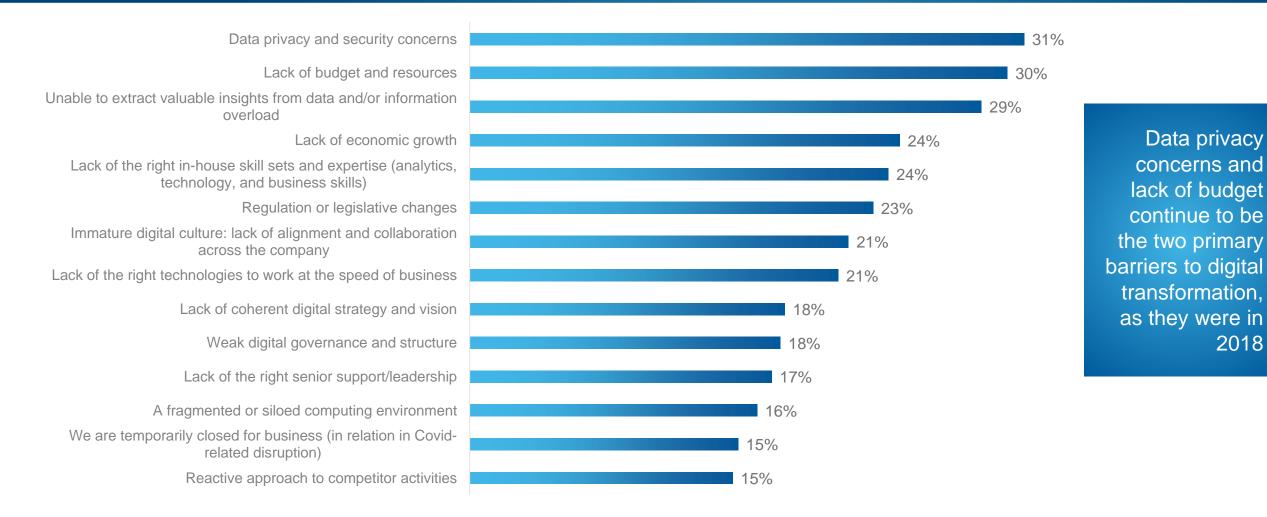
"What enabled you to successfully accelerate your transformation programs?" Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427).



# 03 Barriers to Transformation



## **Barriers To Digital Progress**



"What are the main barriers to digitally transforming your organization?" Base: all 2020 respondents (4300) Not showing respondents who selected "Other" or "There are no barriers"

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2018

## Barriers To Digital Progress: Historical Comparison

		-					
	2016			2018			2020
1	Lack of budget & resources	│ <u>.</u> …>	1	Data privacy & security concerns	·····•	1	Data privacy & security concerns
2	Lack of the in-house right skills sets and		2	Lack of budget & resources		2	Lack of budget & resources
3	expertise Lack of senior support/leadership	· · · >	3	*Unable to extract valuable insights from data and/or information overload	·····Þ	3	*Unable to extract valuable insights from data and/or information overload
4	Lack of the right tech to work at the speed of		4	Lack of the in-house right skills sets and		4	NEW Lack of economic growth
	business		expertise			5	Lack of the in-house right skills sets and
5	Data privacy & security concerns		5	Regulation & legislative changes			expertise
6	Reactive approach to competitor activities		6	Immature digital culture		6	Regulation & legislative changes
7	Lack of a coherent digital strategy & vision	-	7	Lack of the right tech to work at the speed of		7	Immature digital culture
		-	business			8	Lack of the right tech to work at the speed of
8	Immature digital culture		8	Lack of senior support/leadership		-	business
9	Regulation & legislative changes		9	Lack of a coherent digital strategy & vision		9	Lack of a coherent digital strategy & vision
10	A fragmented or siloed computing environment		10	Weak digital governance & structure		10	Weak digital governance & structure
11	*Unable to extract valuable insights from data and/or information overload		11	Reactive approach to competitor activities		11	Lack of senior support/leadership
12	Weak digital governance & structure	1	12	A fragmented or siloed computing environment		12	A fragmented or siloed computing environment

"What are the main barriers to digitally transforming your organization?" Base: all 2020 respondents (4300), all 2018 respondents (4600) and all 2016 respondents (4000) \* Indicates answer option asked and reported on as two separate options in 2016 and 2018

14 Reactive approach to competitor activities

relation in Covid-related disruption)

13

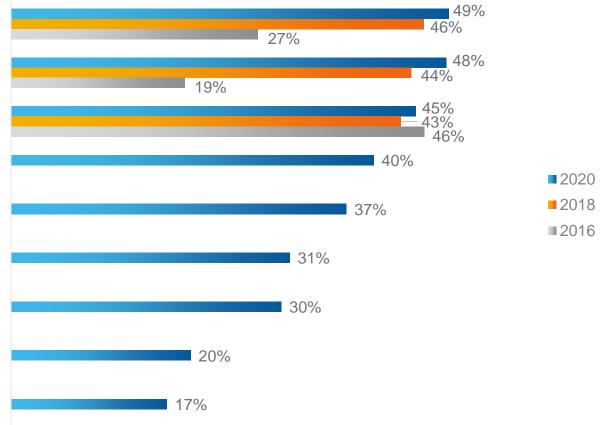
NEW We are temporarily closed for business (in



# 04 How Will Organizations Transform?



### How Organizations Are Transforming Today



Investing in digital skills/talent

Sharing knowledge across business functions

Integrating digital goals into all departmental/staff objectives

Using emerging tech to develop and motivate staff in different, more engaging ways (e.g. through gamification)

Addressing the digital skills gap through our diversity and inclusion programs

We've always encouraged remote working

In communication with/from the C-Suite to identify discrete projects in the business that can be digitized

Appointing/ed a Chief Data Officer

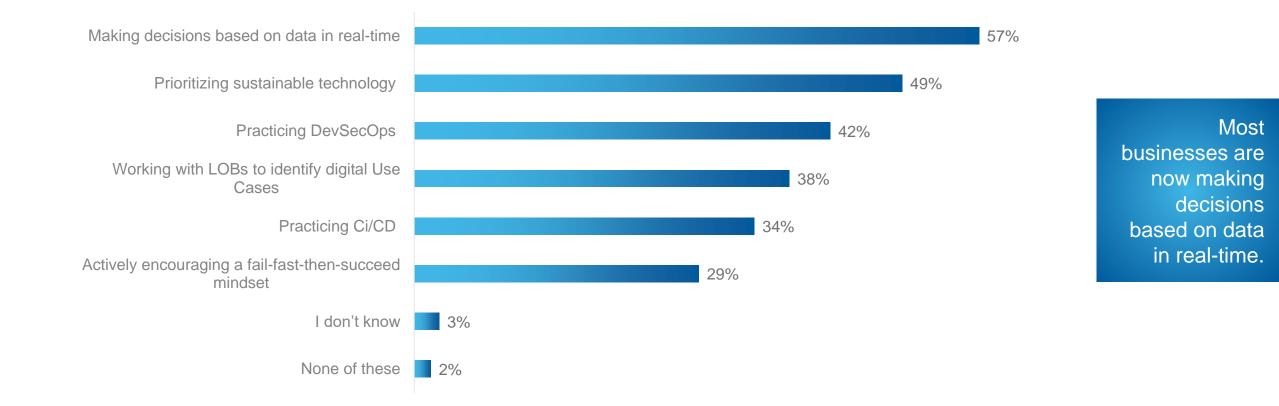
Hosting hackathons/scrums to encourage innovation and collaboratively fix problems

"Thinking about what a digital business looks like, which of the following is your organization doing?" Base: Base: all 2020 respondents (4300), all 2018 respondents (4600) and all 2016 respondents (4000)



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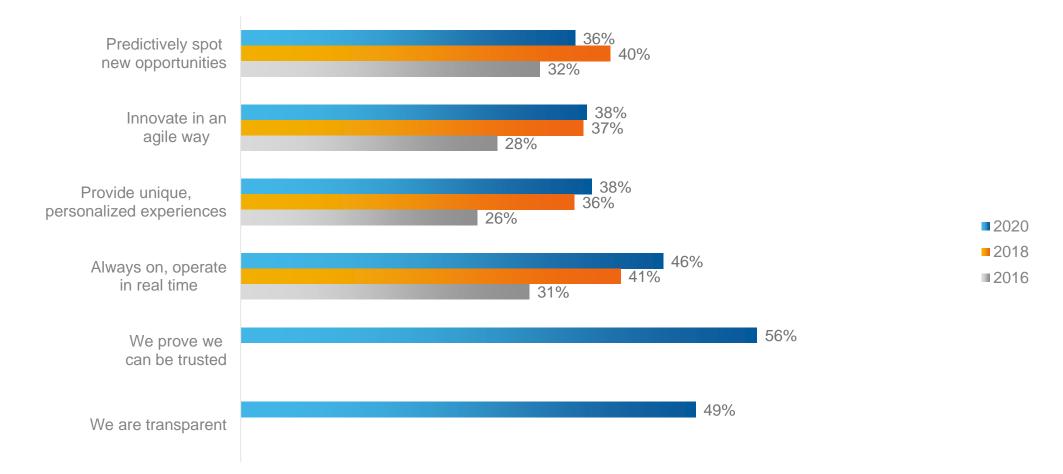
## **Digital Transformation Strategies**



"Thinking about your digital transformation strategy, which of the following is your organization doing?" Base: all 2020 respondents (4300)



## Addressing the Following 'Attributes of a Digital Business'



"How is your organization addressing each of the below to stay competitive and succeed in this increasingly digital world?" Base: all 2020 respondents (4300), all 2018 respondents (4600) and all 2016 respondents (4000). Showing the proportion of respondents who selected "Doing well, organization-wide"

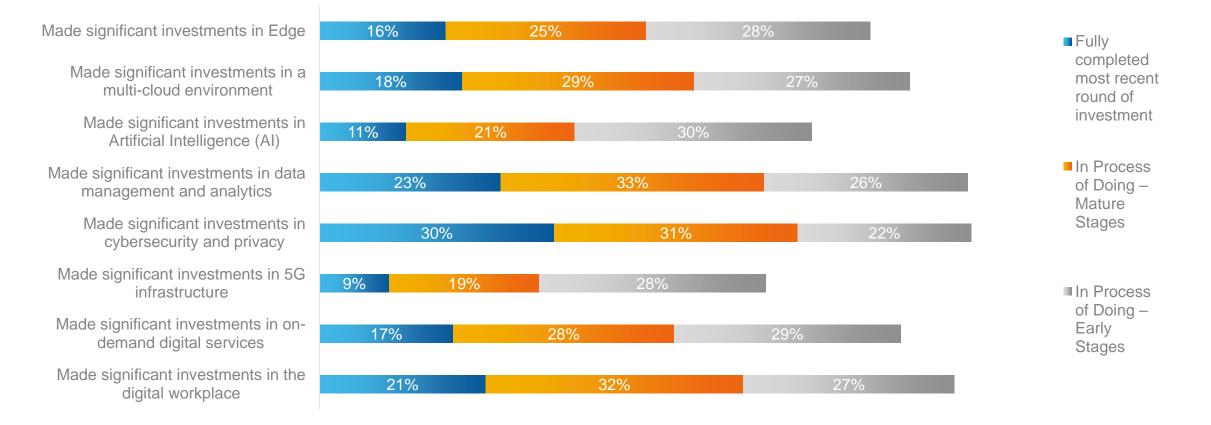




# i 05 Areas of Investment



#### **Current Investments in Digital Technology**

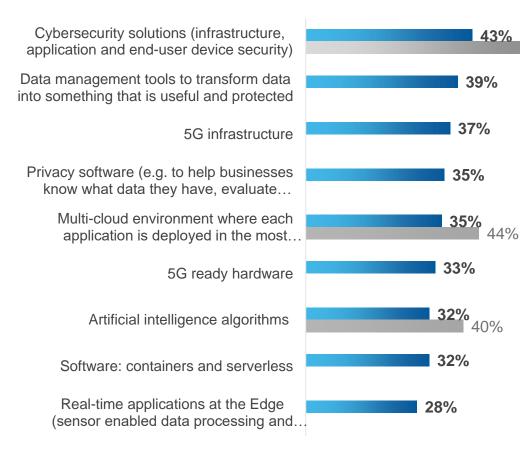


"In terms of your organization's existing IT strategy, to what extent are you doing the following to support your digital business transformation?" Base: all 2020 respondents (4300). Not showing "Don't know" answers



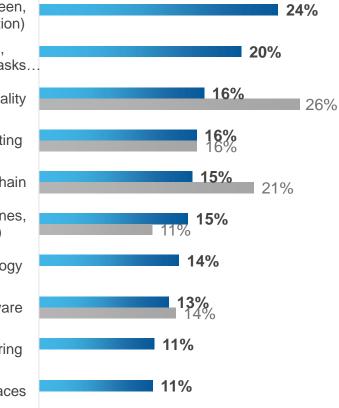
#### Technology Investment Plans Over the Next 1-3 Years: High to Low

#### **■2020 ■**2018



#### Natural user interfaces (touch screen, 58% gesture analysis, speech recognition) Industrial robotics (automated, programmed robots, to perform tasks... Mixed Augmented or Virtual Reality Quantum computing Distributed ledgers such as Blockchain Commercial robotics (UAVs/drones, medical robots, co-bots etc.) Evolutionary nanotechnology Neuromorphic hardware Additive manufacturing Brain-machine interfaces

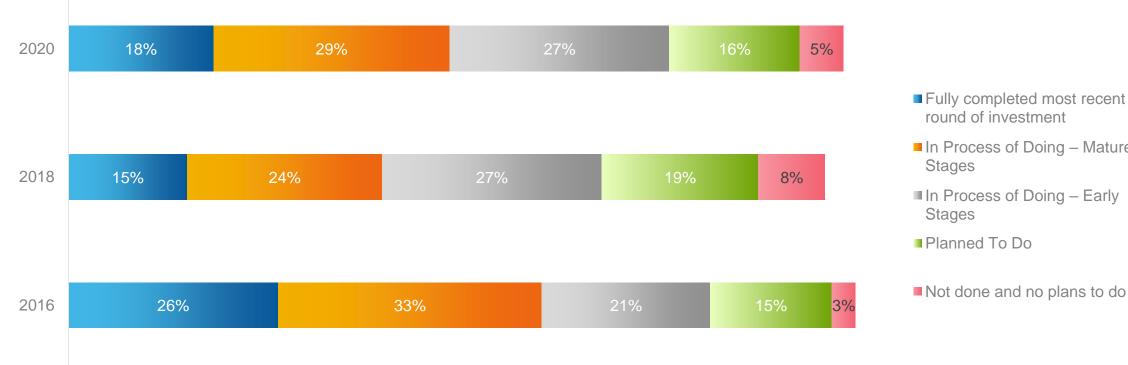




"What new innovations or solutions is your organization investing in over the next 1-3 years to enable digital business?" Base: all 2020 respondents (4300), all 2018 respondents (4600). Comparisons shown for options asked in 2018



#### Investment in Multi-Cloud Environments: Year On Year Breakdown



"In terms of your organization's existing IT strategy, to what extent are you doing the following to support your digital business transformation? Made significant investments in a multi-cloud environment" Base: all 2020 respondents (4300), all 2018 respondents (4600) and all 2016 respondents (4000). Not showing "Don't know" answers

round of investment

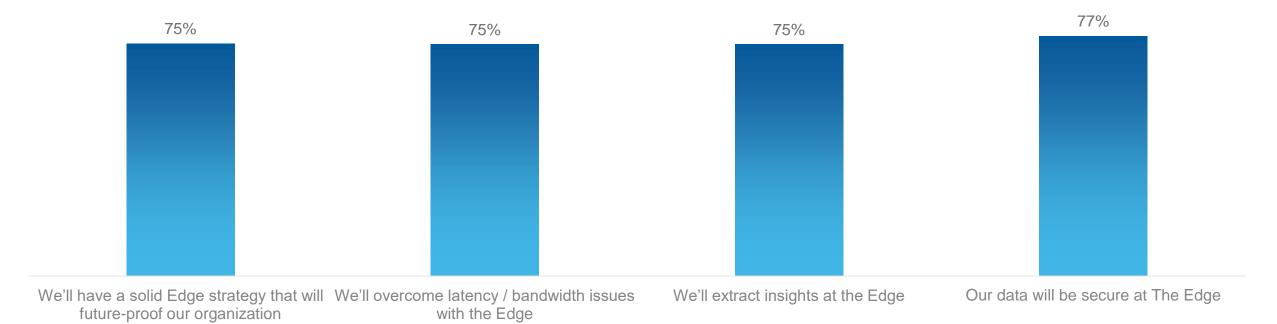
- In Process of Doing Mature
- In Process of Doing Early

Not done and no plans to do



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#### Future Hopes for Edge Computing



"How confident are you that your organization will achieve the following, over the next 12 months, by investing in Edge?" Base: respondents who have, are currently or plan to invest in Edge (3782). Showing the proportion of respondents who selected "Very confident" or "Fairly confident"

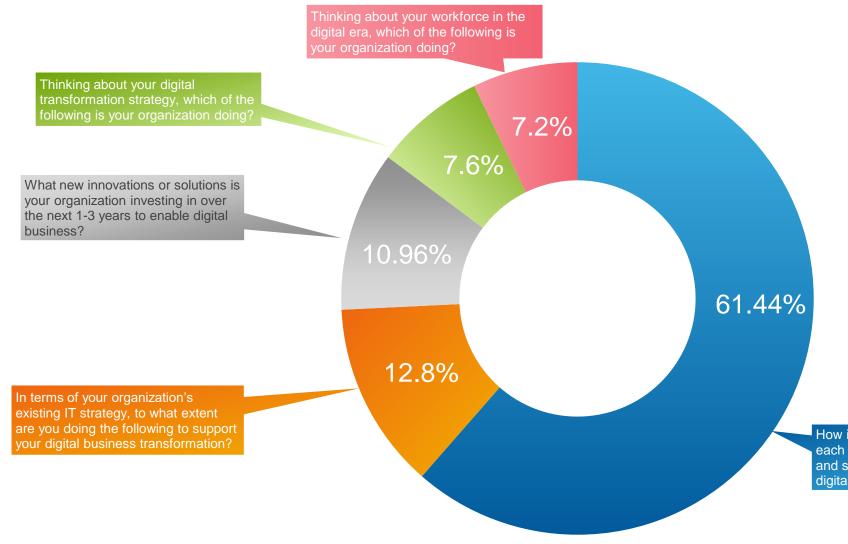


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# 06 The Digital Transformation Index III Benchmark Methodology



## Question Weighting For DT Index



Methodology: Index based on respondents' performance and progress against digital business attributes they agreed were imperative; current and planned investments for digital transformation.

All performance related questions from research were filtered through, and 1250 points allocated across the curve.

How is your organization addressing each of the below to stay competitive and succeed in this increasingly digital world?



### Benchmark Questions and Scores (i)

How is your organization addressing each of the below to stay competitive and succeed in this increasingly digital world?

- Predictively spot new opportunities
- Innovate in an agile way
- We prove we can be trusted
- We are transparent
- Provide unique, personalized experiences
- Always on, operate in real time

For each of the above, respondents selected one of the below statements (score in brackets):

Doing well, organization-wide (128 points)

Doing well, in pockets of the organization (e.g. some regions/departments) **(70 points)** Not doing well, organization-wide **(20 points)** Not doing well, in pockets of the organization **(10 points)** Research/planning stage **(5 points)** No plans **(0 points)** I don't know **(0 points)** 

Maximum score = 768 points

In terms of your organization's existing IT strategy, to what extent are you doing the following to support your digital business transformation?

- Made significant investment in Edge (bringing computation, connectivity and data storage closer to where it is needed rather than waiting for data to be sent to the cloud and back)
- Made significant investments in a multi-cloud environment
- Made significant investments in Artificial Intelligence (AI)
- · Made significant investments in data management and analytics
- Made significant investments in cybersecurity and privacy
- Made significant investments in 5G infrastructure
- Made significant investments in on-demand digital services
- Made significant investments in the digital workplace

For each of the above, respondents selected one of the below statements (score in brackets):

Fully completed most recent round of investment (20 points) In process of doing – mature stages (15 points) In process of doing – early stages (10 points) Planned to do (3 point) Not done and no plans to do (0 points) I don't know (0 points)

Maximum score = 160 points



## Benchmark Questions and Scores (ii)

What new innovations or solutions is your organization investing in over the next 1-3 years to enable digital business?

- Artificial intelligence algorithms (near-autonomous/ learning technology, trained to automatically answer questions, discover insights and provide recommendations) (11 points)
- Real-time applications at the Edge (sensor enabled data processing and location aware technologies that can send and receive data) (11 points)
- Quantum computing (use the properties of quantum physics to store data and perform computations; resulting in a leap in processing power) (0 points)
- Neuromorphic hardware (an electronic system for information processing. It resembles the behavior of a biological nervous system, can learn from its inputs and requires very little power) (6 points)
- Brain-machine interfaces (devices that enable its users to interact with computers by mean of brain-activity only) **(0 points)**
- Evolutionary nanotechnology (in shaping matter at the atomic and molecular scale, nanotechnology offers the potential for new, faster kinds of computers and more efficient power sources) (0 points)
- Additive manufacturing (creates three dimensional objects by depositing materials, usually in layers) **(5 points)**
- Mixed Augmented or Virtual Reality (11 points)
- Natural user interfaces (touch screen, gesture analysis, speech recognition) (11 points)
- Distributed ledgers such as Blockchain (6 points)

- 5G ready hardware (5 points)
- 5G infrastructure (5 points)
- Data management tools to transform data into something that is useful and protected (11 points)
- Cybersecurity solutions (infrastructure, application and end-user device security) (11 points)
- Privacy software (e.g. to help businesses know what data they have, evaluate their risks and disclose data to customers upon request) (11 points)
- Commercial robotics (UAVs/drones, medical robots, co-bots etc.) and/or Industrial robotics (automated, programmable robots, to perform tasks with high precision and repeatability) (11 points)
- Software: containers (standard unit of software that packages up code and all its dependencies so the application runs quickly in any IT infrastructure) and serverless (built on next-generation cloud services that auto-scale and charge only when used) (11 points)
- Multi-cloud environment where each application is deployed in the most appropriate cloud (private, public or hybrid) (11 points)
- We are not investing in any technology initiatives to enable digital business (0 points)
- I don't know (0 points)

Respondents scored for each of the above (score in brackets)

#### Maximum score = 137 points



## Benchmark Questions and Scores (iii)

Thinking about your digital transformation strategy, which of the following is your organization doing?

- Practicing Ci/CD (continuous integration, continuous delivery) (18 points)
- Actively encouraging a fail-fast-then-succeed mindset (18 points)
- Working with LOBs to identify digital Use Cases (18 points)
- Practicing DevSecOps (creating a 'security as a code' culture. Building robust security and privacy protocols into all devices, applications and algorithms) (18 points)
- Making decisions based on data in real-time (18 points)
- Prioritizing sustainable technology (i.e. using recyclable material/technologies that use less power) (5 points)
- I don't know (0 points)
- None of these (0 points)

Respondents scored for each of the above (score in brackets)

#### Maximum score = 95 points

Thinking about your workforce in the digital era, which of the following is your organization doing?

- Integrating digital goals into all departmental/staff objectives (10 points)
- Sharing knowledge across business functions (for example, equipping IT leaders with business skills and business leaders with IT skills and / or dispatching IT staff to specific LoB departments) (10 points)
- Appointing/ed a Chief Data Officer (10 points)
- In communication with/from the C-Suite to identify discrete projects in the business that can be digitized (10 points)
- Investing in digital skills/talent (i.e. teaching all employees how to code, training IT staff on automation, cloud, etc.) **(10 points)**
- Hosting hackathons/scrums to encourage innovation and collaboratively fix problems (10 points)
- We've always encouraged remote working (10 points)
- Addressing the digital skills gap through our diversity and inclusion programs (10 points)
- Using emerging tech to develop and motivate staff in different, more engaging ways (e.g. through gamification) (10 points)
- I don't know (0 points)
- None of these (0 points)

Respondents scored for each of the above (score in brackets)

Maximum score = 90 points



#### **Benchmark – Overall Maturity Distribution**

VARIABLES	DIGITAL LAGGARDS	DIGITAL FOLLOWERS	DIGITAL EVALUATORS	DIGITAL ADOPTERS	DIGITAL LEADERS
ATTRIBUTE PERFORMANCE	Not done, in planning	Limited to pockets, poorly done	Spread more widely yet not done well	Done well in pockets	Well done and organization wide
DIGITAL	Limited	A small number	4-5 initiatives	5-6 initiatives	8+ adopted
ADOPTED CURRENTLY	Little or none	In planning or early stages	Early to mid stages	In mature stage, few fully completed	Most fully completed
IT STRATEGY & DIGITAL INVESTMENT	Very few in line	A handful in scope	3-4 innovations in scope for future investment	Growing number of innovations (4-6)	8+ in line for future investment
INNOVATION & FUTURE INVESTMENT	3%	13%	39%	39%	6%
			20		<b>D&amp;LL</b> Technologi

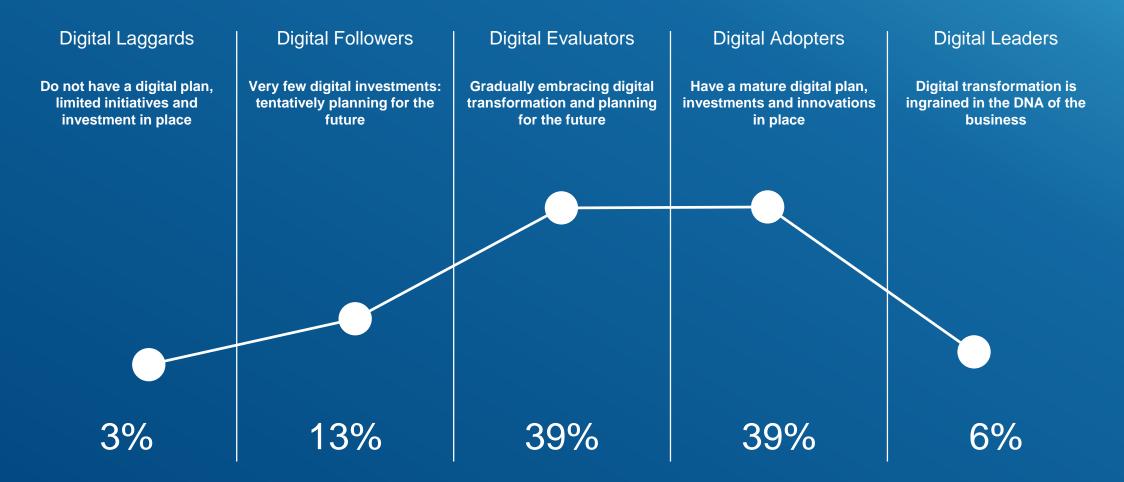
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# 07 The Digital Transformation Index III Rankings and Digital Maturity



## **Digital Transformation Index 2020**

#### How are companies performing?

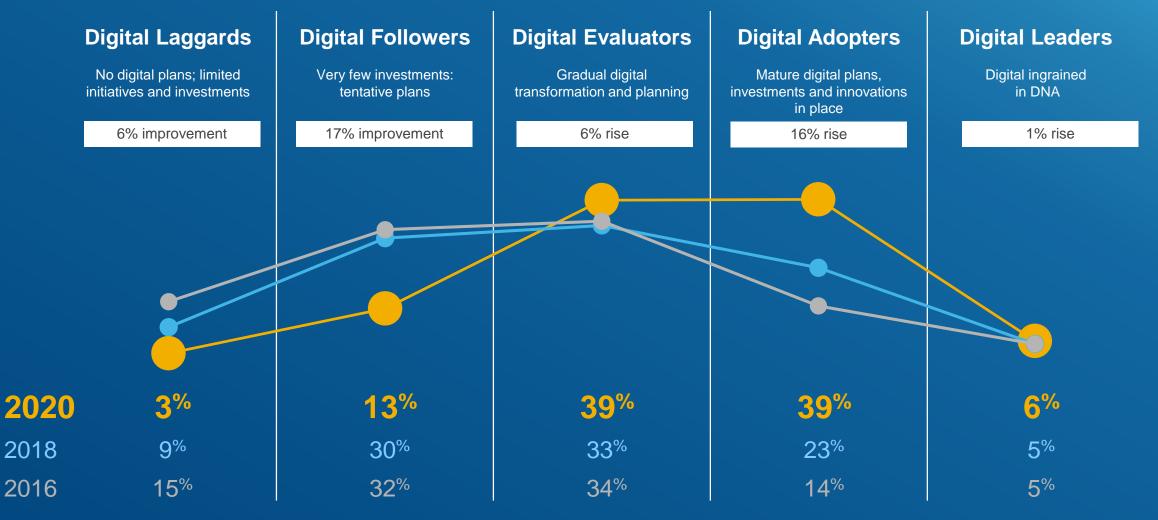


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## **Digital Transformation Index**

#### Year on Year Comparison

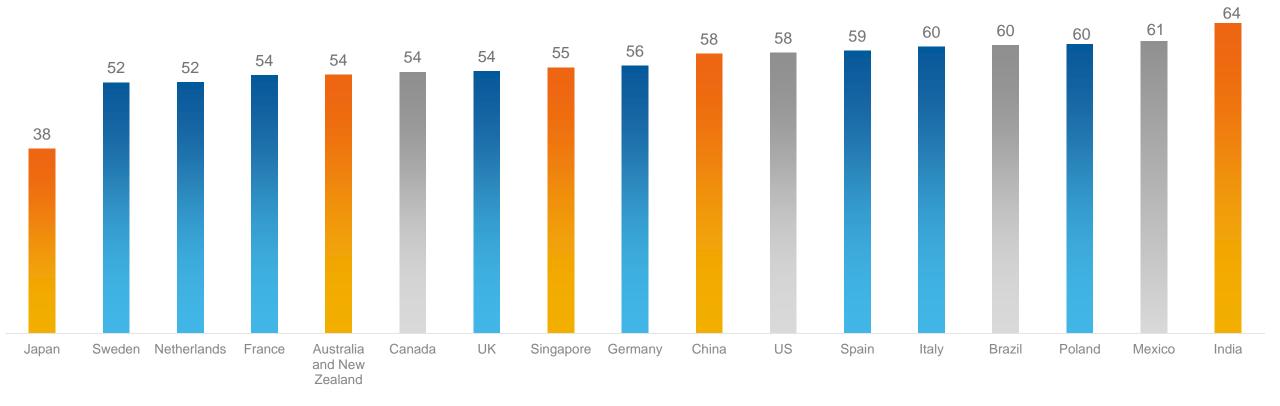


Benchmarking group respondents fell into. Base: all 2020 respondents (4300), all 2018 respondents (4600) and all 2016 respondents (4000)

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## Maturity by Country/Sub-Region

#### Average score out of 100 Color coded: **EUROPE**, **APJC**, **Americas**

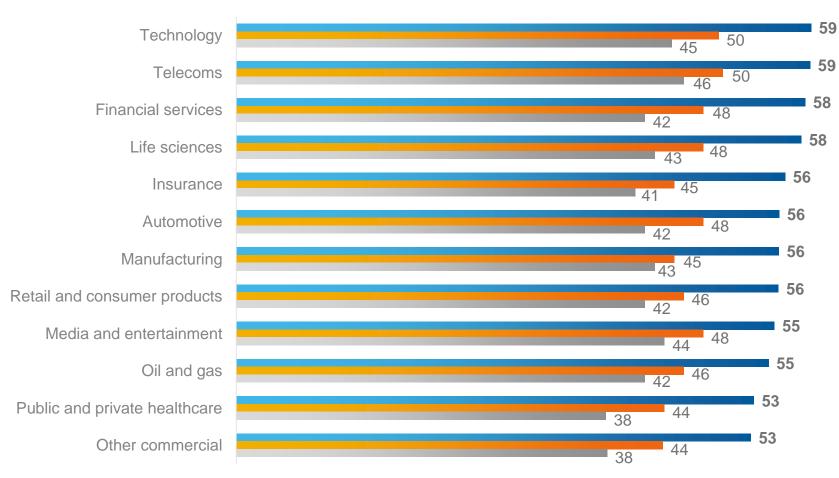


Average benchmark group scores. Base: all respondents (4300)



#### Maturity by Industry: 2016 to 2018 Comparison

Average score out of 100





Average maturity score. Base: all 2020 respondents (4300), all 2018 respondents (4600) and all 2016 respondents (4000)



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#### Best and Worst Performers By Industry

Telecoms       Technology       Technology         Financial services       Financial services       Media and entertainment		2020	2018	3	2016	6
	MATUR	Telecoms	Technolog	ју	Technology	ntertainment
Oil and gas       Manufacturing       Insurance         Public and private healthcare       Public and private healthcare       Public and private healthcare	LEAST MA	Media and entertainme Oil and gas	nt Insurance Manufactu	uring	Insurance	·

Based on average maturity scores. Base: all 2020 respondents (4300), all 2018 respondents (4600) and all 2016 respondents (4000)



\_\_\_\_

#### Most and Least Mature by Industry per Region

	APJC	Europe	Americas
MOST MA	Technology	Telecoms	Technology
MATURE	Life sciences	Financial services	Financial services
	Telecoms	Life sciences	Insurance
LEAS	Public and private healthcare	Insurance	Automotive
EAST MATURE	Media and entertainment	Public and private healthcare	Media and entertainment
	Retail and consumer products	Oil and gas/energy	Public and private healthcare

Based on average maturity scores. Base: all 2020 respondents (4300)

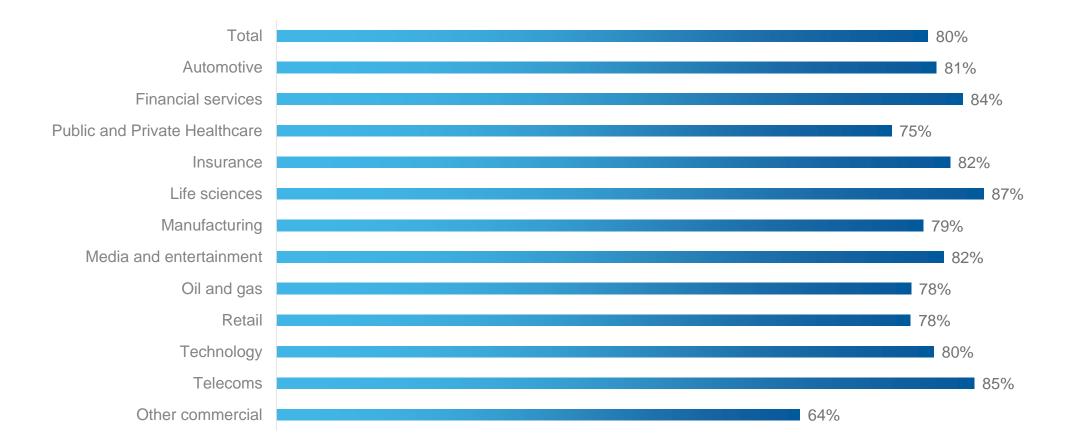


#### Best and Worst Performers by Country



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#### **Digital Transformation Acceleration**

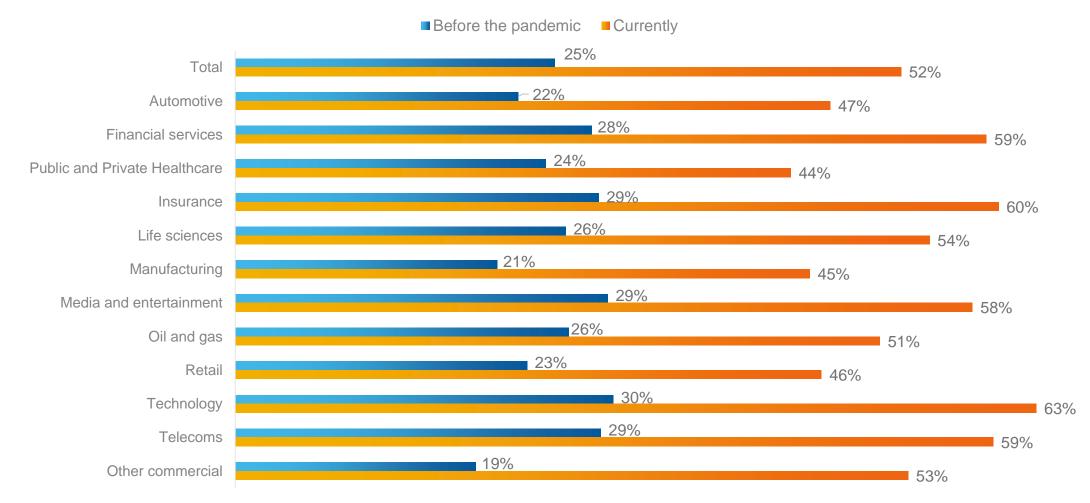


"Have you successfully accelerated any of your digital transformation programs this year?" Base: all 2020 respondents (4300) Showing the proportion of respondents who selected "Yes, for all of our digital transformation programs", "Yes, for most of our digital transformation programs" or "Yes, for some of our digital transformation programs" or "Yes, for most of our digital transformation programs" or "Yes, for some of our digital transformation programs", "Yes, for most of our digital transformation programs" or "Yes, for some of our digital transformation programs" or "Yes, for some of our digital transformation programs".



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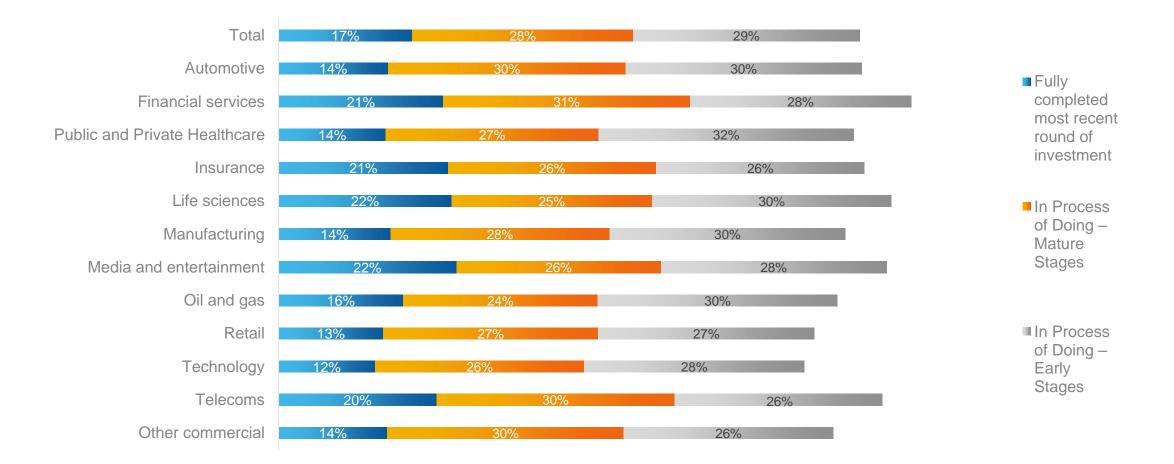
#### Proportion Of Staff Working Remotely



"What proportion of your organization's staff worked remotely before the pandemic/are currently working remotely?" Base: all 2020 respondents (4300)



#### Made significant investment in on-demand digital services



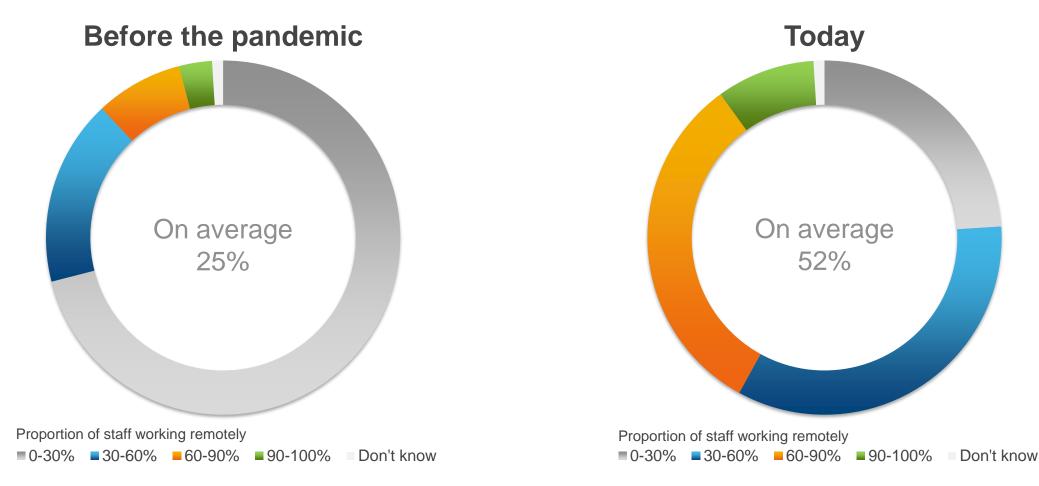
"In terms of your organization's existing IT strategy, to what extent are you doing the following to support your digital business transformation?" Answer: Made significant investments in on-demand digital services; Base: all 2020 respondents (4300). Not showing all answer options

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# 08 Digital Transformation and COVID-19



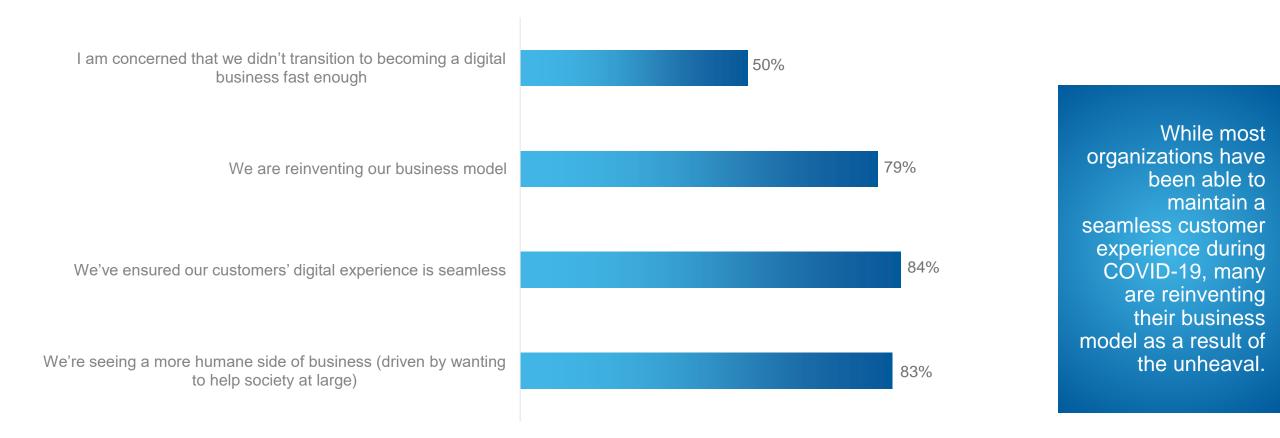
#### **Proportion Of Staff Working Remotely**



"What proportion of your organization's staff worked remotely before the pandemic/are currently working remotely?" Base: all 2020 respondents (4300) © Copyright 2020 Dell Inc. 39



#### **Responses To COVID-19**



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: all 2020 respondents (4300). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"

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#### Actions Taken to Support Wider Coronavirus Effort

Opened-up new digital channels to support customers

Loaned people with IT skills/knowledge to the relief effort

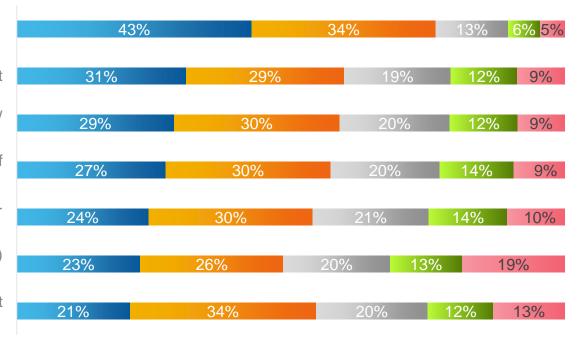
Set-up funds to support organizations that urgently need new technology and mobile devices

Sharing data with a public body/another business to aid the relief effort

Loaned unused computing power to the relief effort (i.e. via crowdsourced computing platforms)

Deploying our additive manufacturing capabilities (i.e. 3D printers) to produce vital medical equipment (to ease supply shortages) \*

Providing emerging technologies such as robotics or VR to support the safe treatment of patients at a distance \*\*



#### We have done this

We are in the process of doing this

We've not done this yet but would do in the event of subsequent disasters We have no plans to do this neither now nor in the future

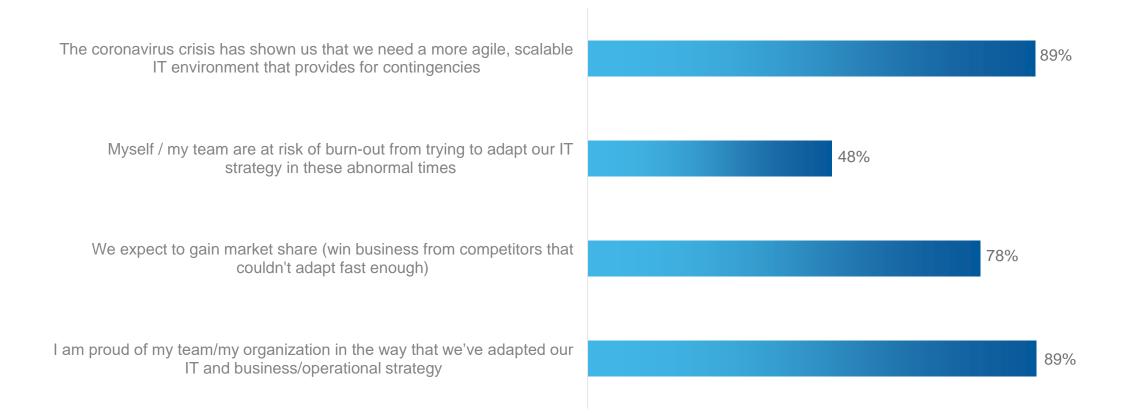
We're not equipped to do this/not applicable to our business

Which of the following has your organization done to support the wider coronavirus effort?" Base: all 2020 respondents (4300), except asterisked options: \* Indicates option was only shown to respondents from organizations in the manufacturing industry, or who work in the production and manufacturing, or supply chain or logistics departments

\*\* Indicates option was only shown to respondents from organizations in the public and private healthcare industry



#### **Responses to Unprecedented Upheaval**



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: all 2020 respondents (4300). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"



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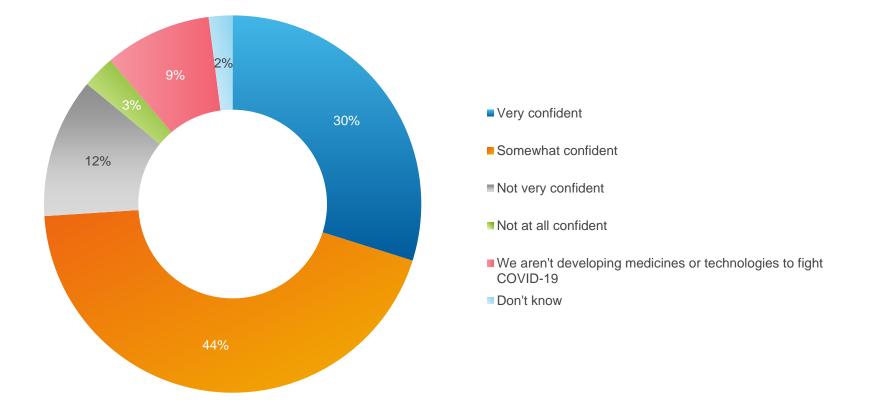
#### **Survival Expectations**



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: all 2020 respondents (4300). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"



#### Confidence in Data and AI to Support The Healthcare Response



"How confident are you that your organization's data and AI are advanced enough to be able to support efforts to develop medicines/technologies to fight COVID-19?" Base: respondents from organizations in the public and private healthcare industries (392)



# O9 Expectations For The Future



### How Emerging Technology will Impact our Lives in 3-5 Years

We'll be part of a more globally connected, remote workforce	51%	38%		
Data privacy will be a protected basic human right	57%	30%		
Businesses will use AI and data models to predict potential	100/	100/		
disruptions, so we can mitigate disasters/disruptions	43%	42%		
People will use Augmented Reality to learn how to do things/fix things in an instant	39%	43%		
Distributed Ledgers, like Blockchain, will make the gig economy fairer	34%	44%		
5G holographic projection will transform marketing efforts	38%	38%		
An AI will become my work partner, and do the stuff I don't	33%	39%		
want to do or can't do	■ Very likely	Somewhat likely		

"How do you envision emerging technology impacting our lives/work/business 3-5 years from now?" Base: all 2020 respondents (4300)

## Appendix

# <sup>2</sup> 1 O Regional Spotlights

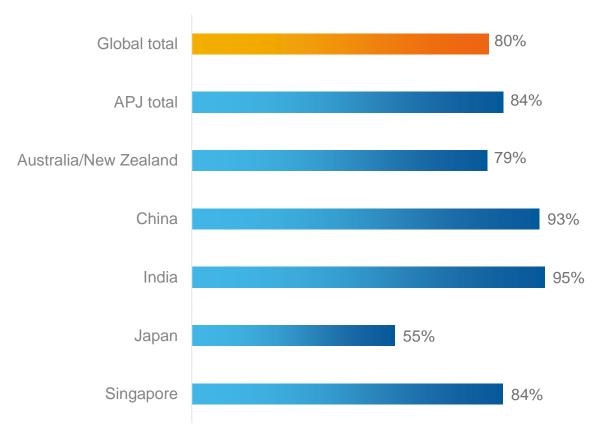


## APJC





#### **Digital Transformation Acceleration**

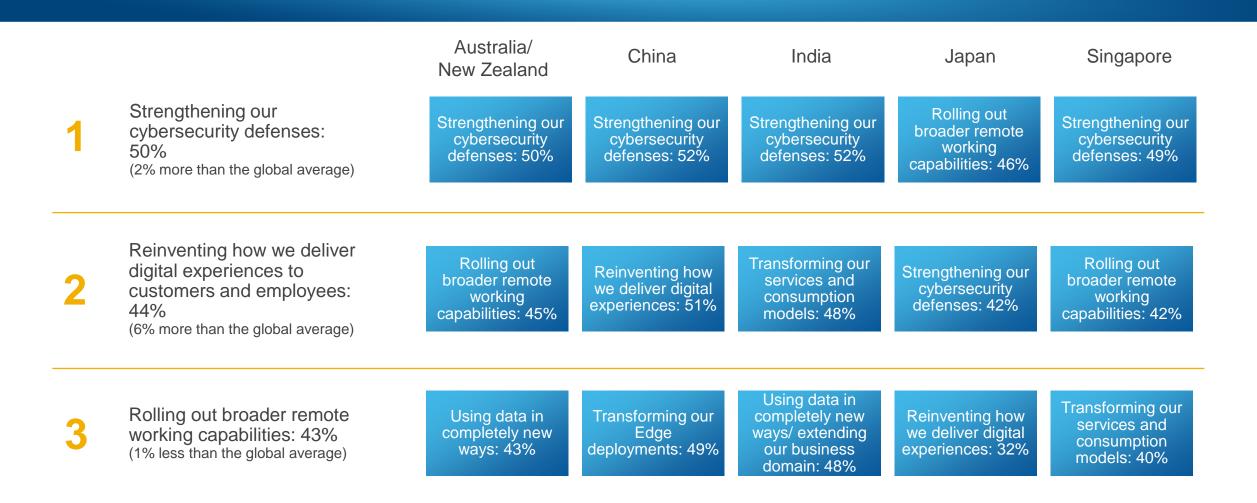


"Have you successfully accelerated any of your digital transformation programs this year?" Base: all 2020 respondents (4300) APJC (1400) Showing the proportion of respondents who selected "Yes, for all of our digital transformation programs", "Yes, for most of our digital transformation programs" or "Yes, for some of our digital transformation programs".



**APJC** 

### **Top Three Digital Transformation Programs Accelerated**

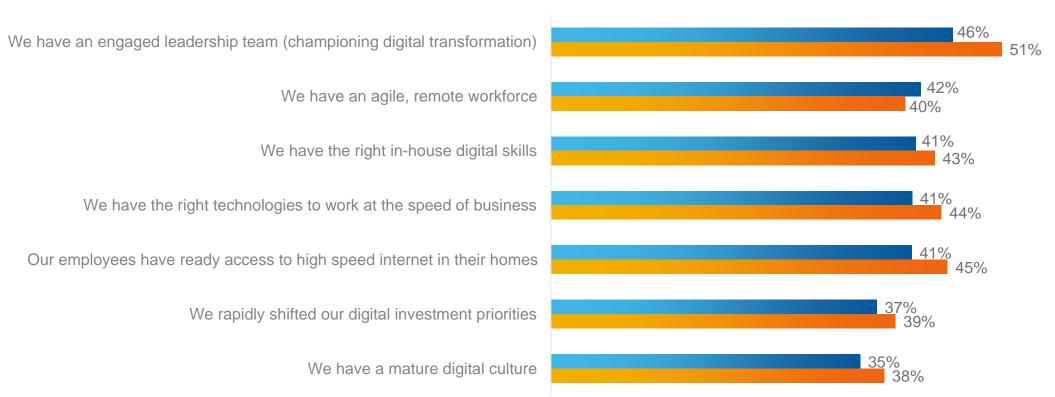


"Which digital transformation programs have you successfully accelerated this year?"

Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427) APJC (1171)

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#### **Acceleration Enablers**



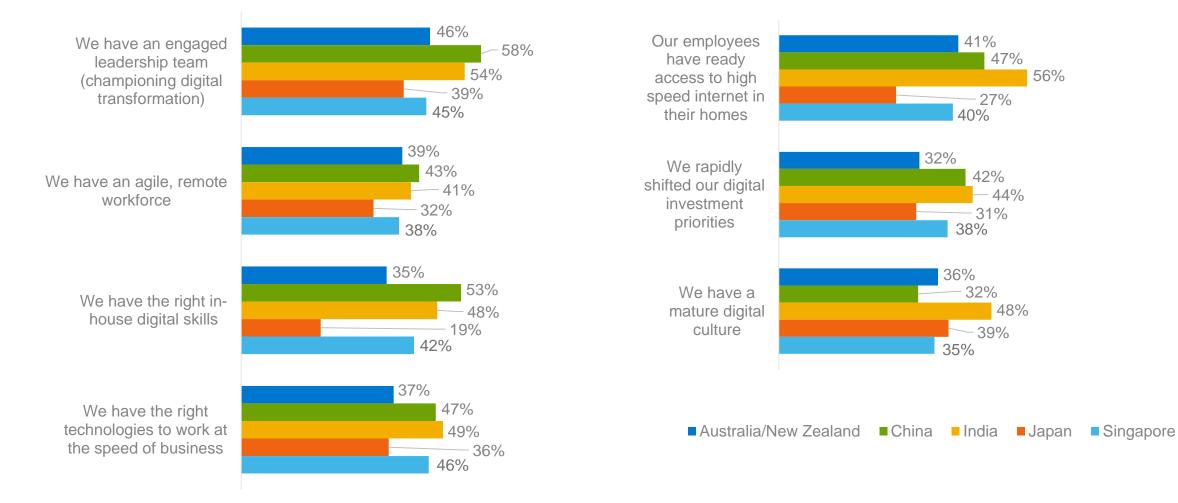
Global APJC

"What enabled you to successfully accelerate your transformation programs?"

Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427), APJC (1171)



#### **Acceleration Enablers**



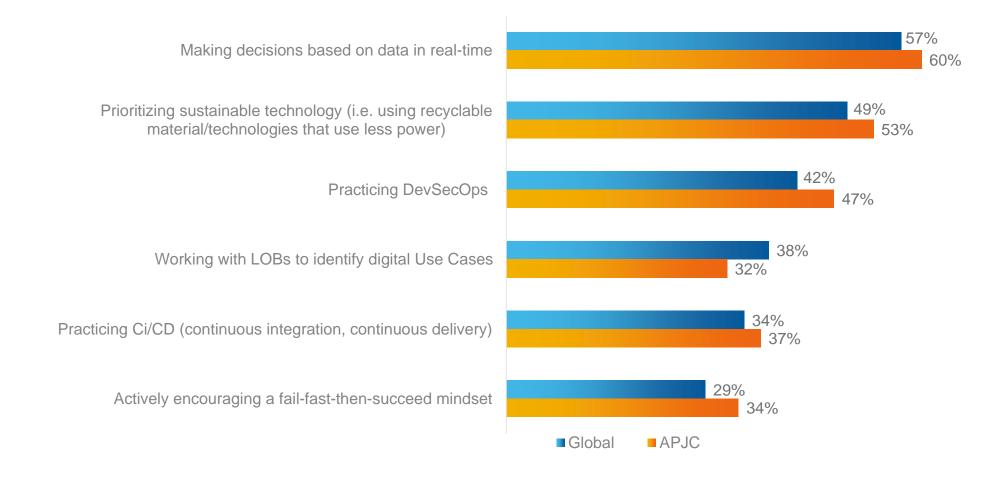
"What enabled you to successfully accelerate your transformation programs?"

Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427), APJC (1171)



APJC

#### **Digital Transformation Strategies**

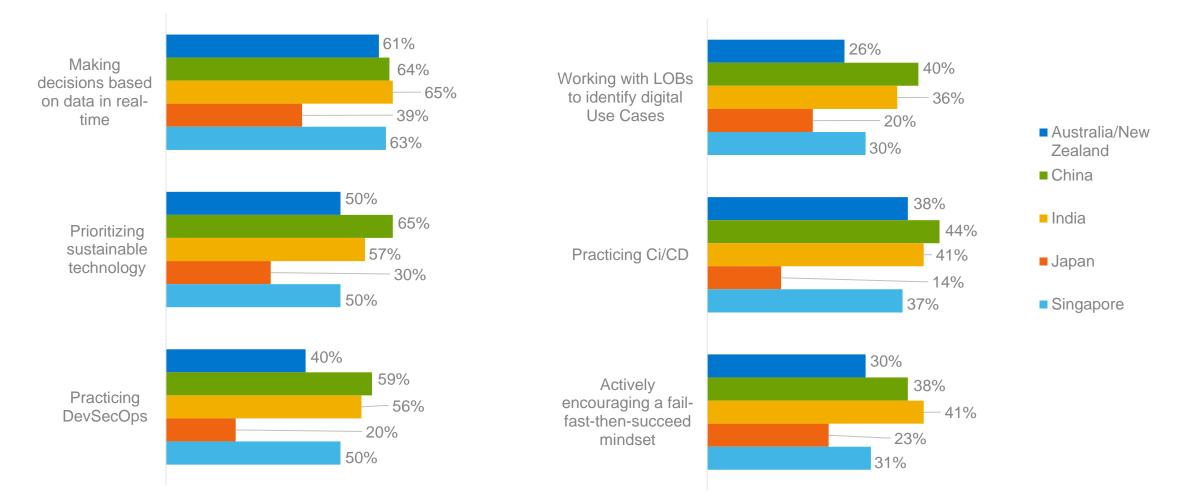


"Thinking about your digital transformation strategy, which of the following is your organization doing?" Base: all 2020 respondents (4300) APJC (1400) Not showing "Don't know" or "None of these"



APJC

#### **Digital Transformation Strategies**



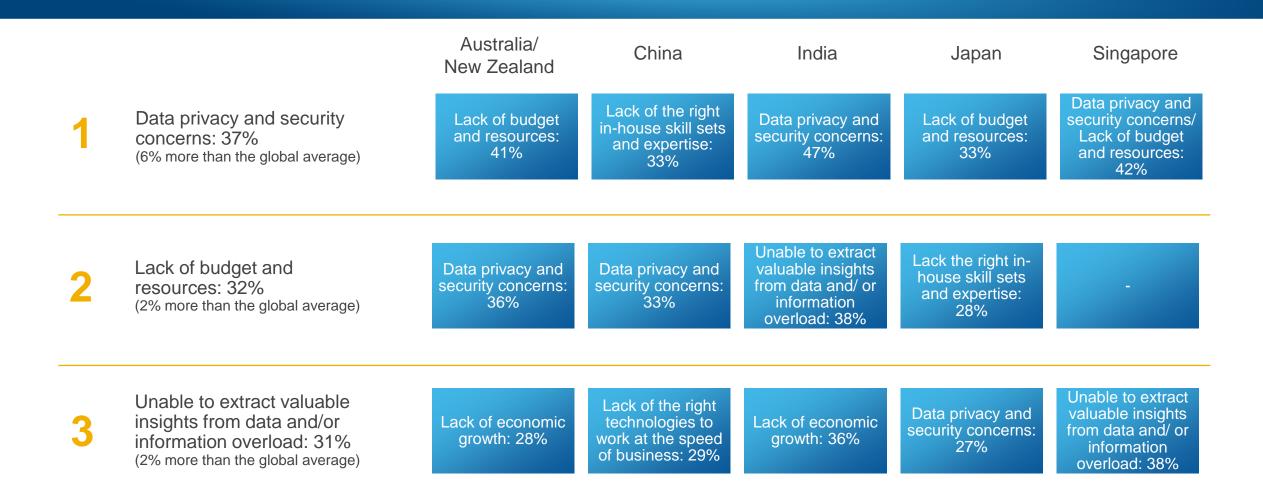
"Thinking about your digital transformation strategy, which of the following is your organization doing?" Base: all 2020 respondents (4300) APJC (1400) Not showing "Don't know" or "None of these"



**APJC** 

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#### **Top Three Barriers To Digital Transformation**

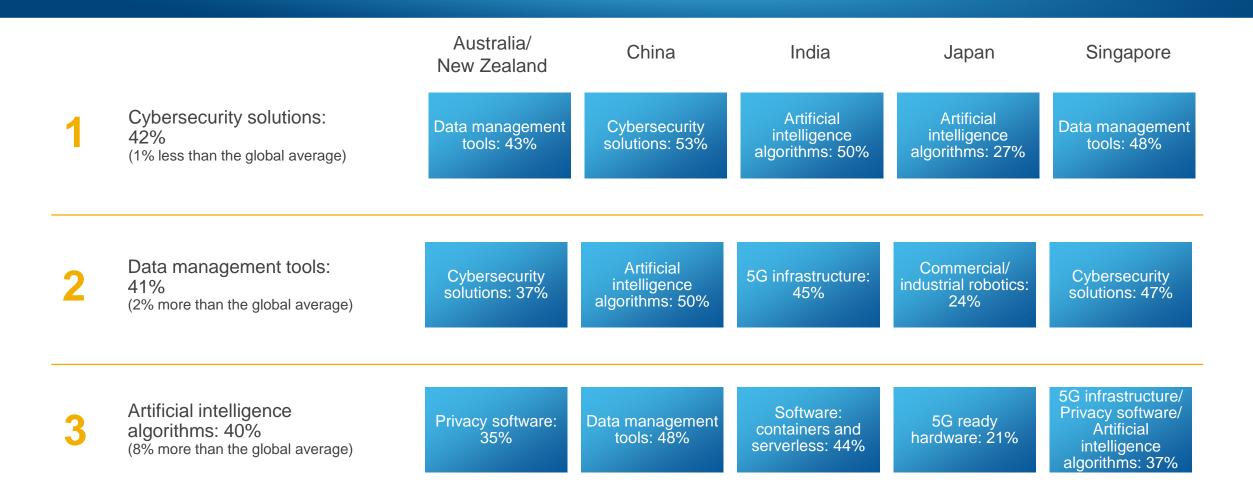


"What are the main barriers to digitally transforming your organization?" Base: all 2020 respondents (4300) APJC (1400)



**DCL**Technologies

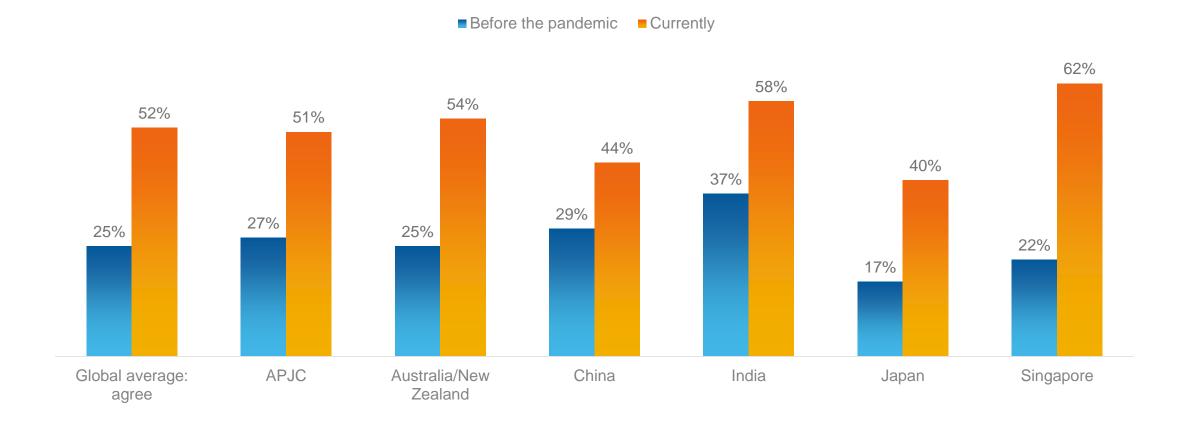
### **Top Three Tech Investments**



"What new innovations or solutions is your organization investing in over the next 1-3 years to enable digital business?" Base: all 2020 respondents (4300) APJC (1400)

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#### Proportion Of Staff Working Remotely



"What proportion of your organization's staff worked remotely before the pandemic/are currently working remotely?" Base: all 2020 respondents (4300) APJC (1400)



**APJC** 

#### Adapting to Unprecedented Upheaval

Global APJC

92% 89% 89% 89% 86% 79% 54% 48% The coronavirus crisis has shown us Myself / my team are at risk of burn-We are reinventing our business I am proud of my team/my that we need a more agile, scalable out from trying to adapt our IT model organization in the way that we've strategy in these abnormal times IT environment that provides for adapted our IT and contingencies business/operational strategy

"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: all 2020 interim respondents (4300) APJC (1400). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"



APJC

#### Adapting to Unprecedented Upheaval

■ Australia/New Zealand ■ China ■ India ■ Japan ■ Singapore



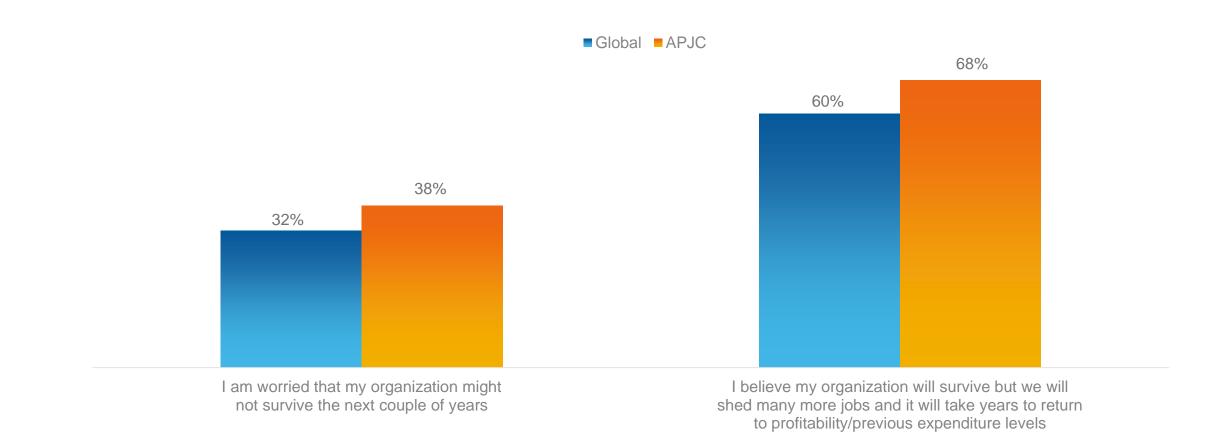
"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: respondents from APJC (1400). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"



#### **Survival Expectations**

APJC

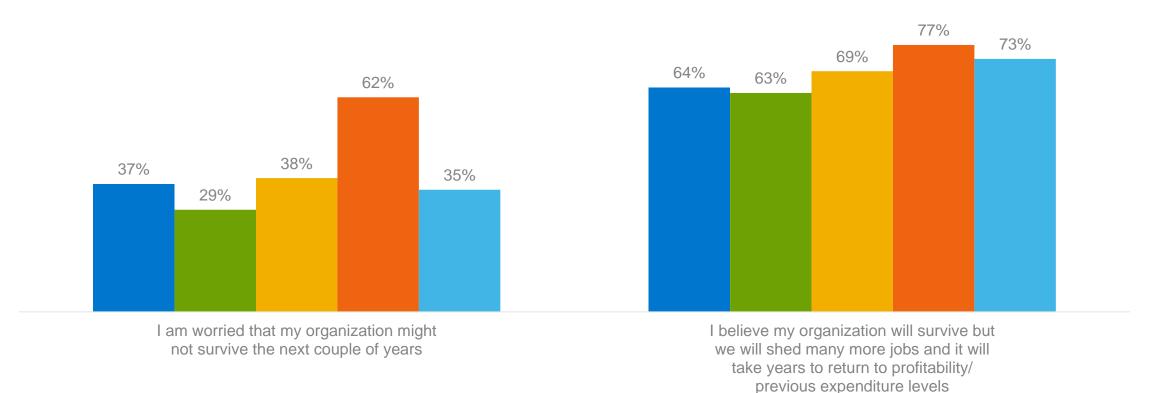
**DCL**Technologies



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: all 2020 respondents (4300) APJC (1400). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"

#### **Survival Expectations**

■ Australia/New Zealand ■ China ■ India ■ Japan ■ Singapore



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: respondents from APJC (1400). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"



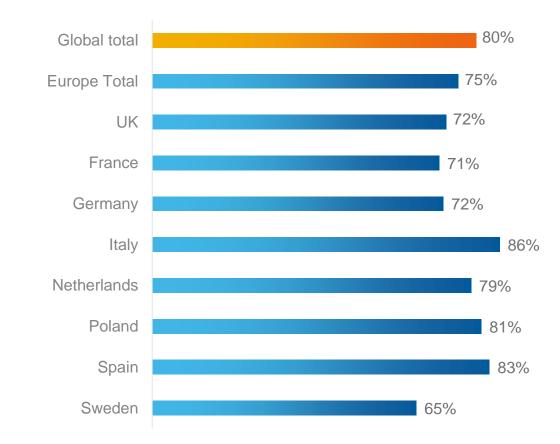
APJC

## EUROPE





#### **Digital Transformation Acceleration**



"Have you successfully accelerated any of your digital transformation programs this year?"

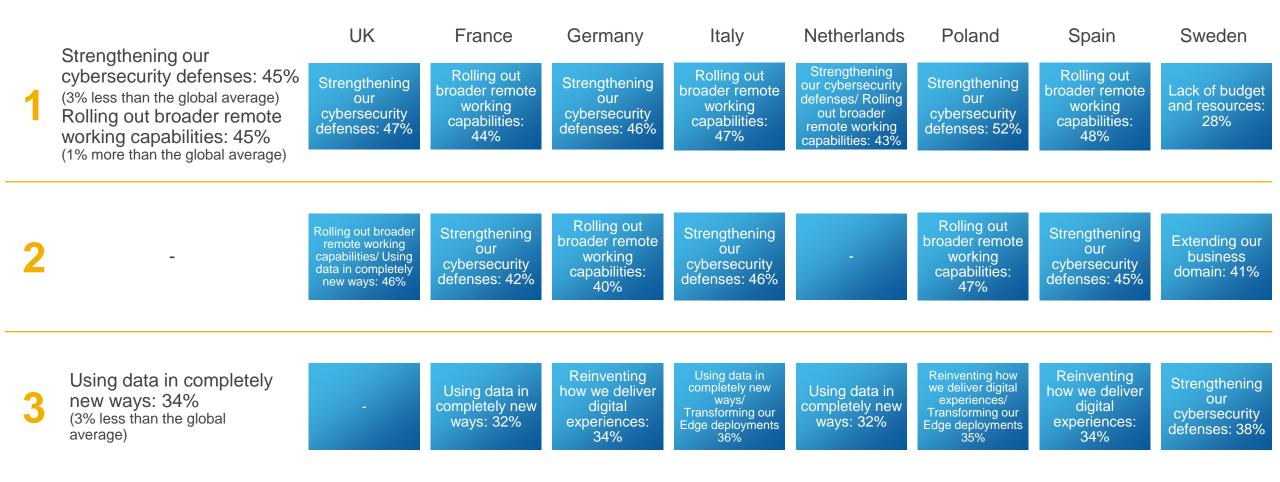
Base: all 2020 respondents (4300), Europe (1900). Showing the proportion of respondents who selected "Yes, for all of our digital transformation programs", "Yes, for most of our digital transformation programs" or "Yes, for some of our digital transformation programs"



Europe

**DCL**Technologies

#### **Top Three Digital Transformation Programs Accelerated**

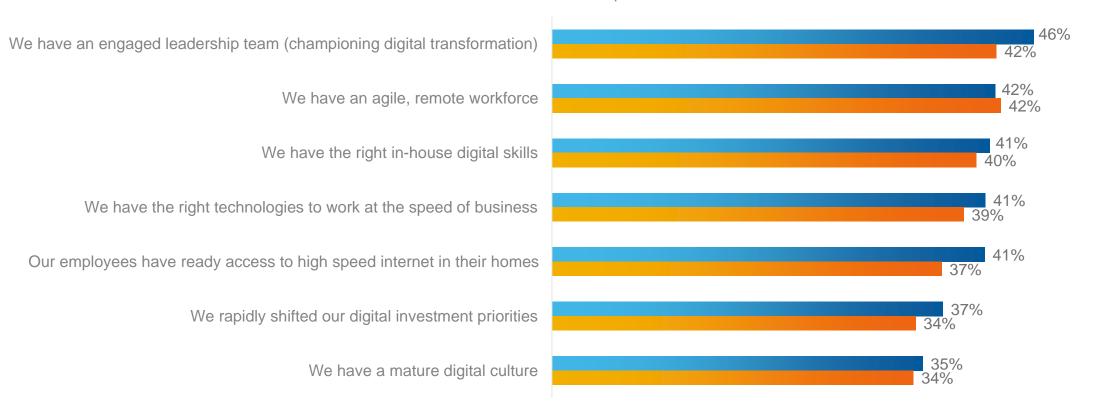


"Which digital transformation programs have you successfully accelerated this year?"

Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427) Europe (1430)

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#### **Acceleration Enablers**



■Global ■Europe

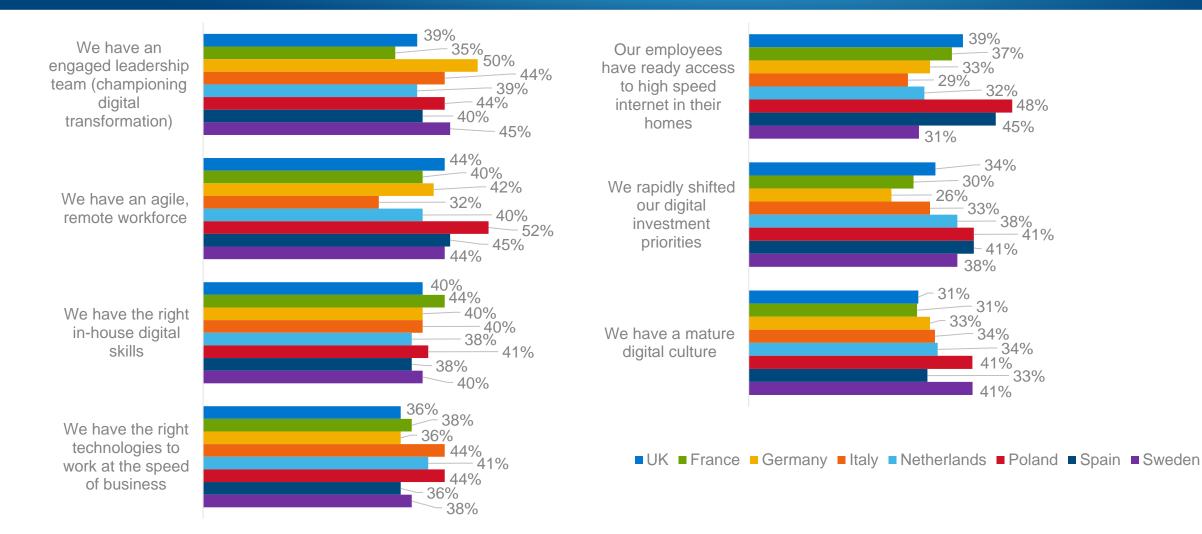
"What enabled you to successfully accelerate your transformation programs?"

Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427), Europe (1430)



Europe

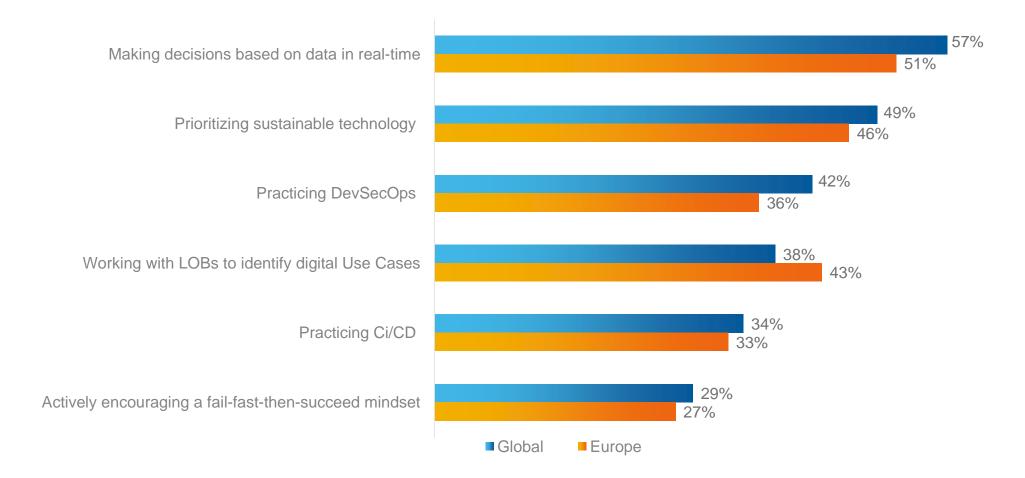
#### **Acceleration Enablers**



"What enabled you to successfully accelerate your transformation programs?" Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427), Europe (1430) © Copyright 2020 Dell Inc. 67

#### **D&LL**Technologies

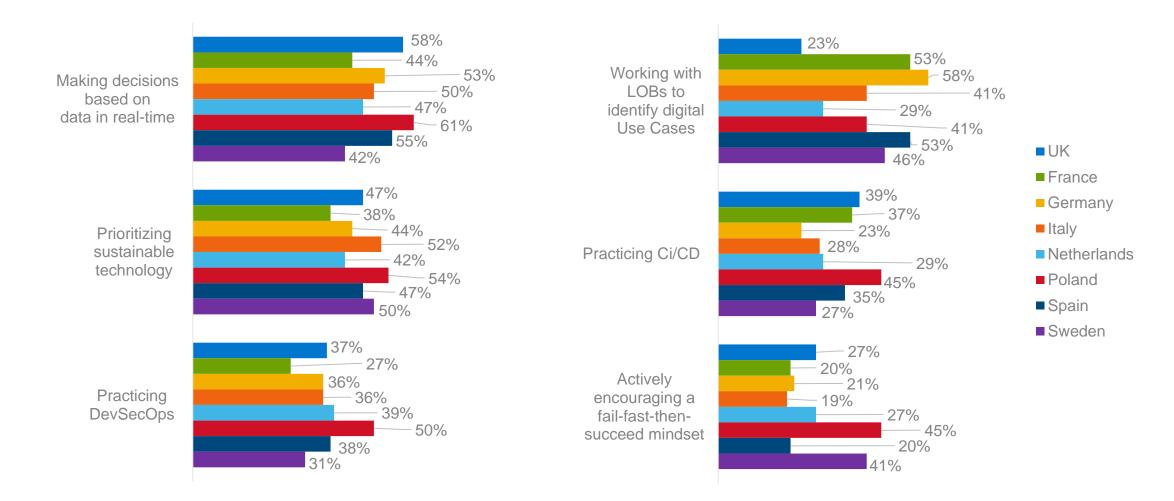
#### **Digital Transformation Strategies**



"Thinking about your digital transformation strategy, which of the following is your organization doing?" Base: all 2020 respondents (4300) Europe (1900) Not showing "Don't know" or "None of these"



#### **Digital Transformation Strategies**

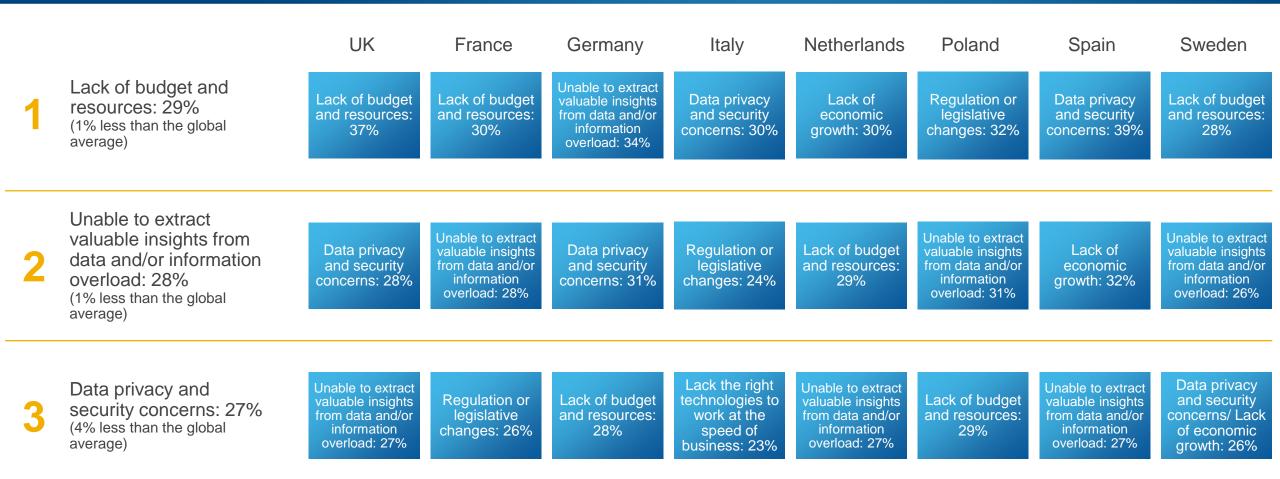


"Thinking about your digital transformation strategy, which of the following is your organization doing?" Base: all 2020 respondents (4300) Europe (1900) Not showing "Don't know" or "None of these"



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#### **Top Three Barriers To Digital Transformation**



70

"What are the main barriers to achieving digital transformation within your organization?" Base: all 2020 respondents (4300) Europe (1900)



### Top Three Tech Investments

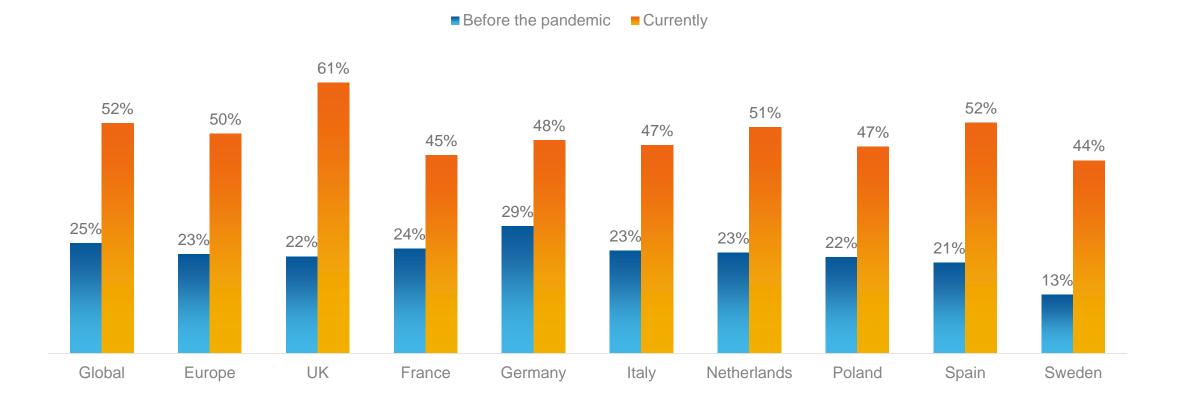
		UK	France	Germany	Italy	Netherlands	Poland	Spain	Sweden
1	Cybersecurity solutions: 42% (1% less than the global average)	Cybersecurity solutions: 50%	Cybersecurity solutions: 38%	Cybersecurity solutions: 39%	5G infrastructure: 45%	Cybersecurity solutions: 41%	5G infrastructure: 50%	Cybersecurity solutions/5G infrastructure/ Privacy software: 46%	5G infrastructure: 45%
2	5G infrastructure: 36% (1% less than the global average)	Data management tools: 48%	5G ready hardware: 31%	Privacy software: 38%	Cybersecurity solutions: 45%	5G infrastructure: 39%	5G ready hardware: 44%	-	5G ready hardware: 37%
3	Data management tools: 35% (4% more than the global average)	Multi-cloud environment: 39%	5G ready hardware: 31%	Multi-cloud environment: 34%	5G ready hardware: 10%	5G ready hardware: 38%	Cybersecurity solutions: 41%	-	Cybersecurity solutions/ Data management tools: 35%

"What new innovations or solutions is your organization investing in over the next 1-3 years to enable digital business?" Base: all 2020 respondents (4300) Europe (1900)

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Europe

#### Proportion Of Staff Working Remotely

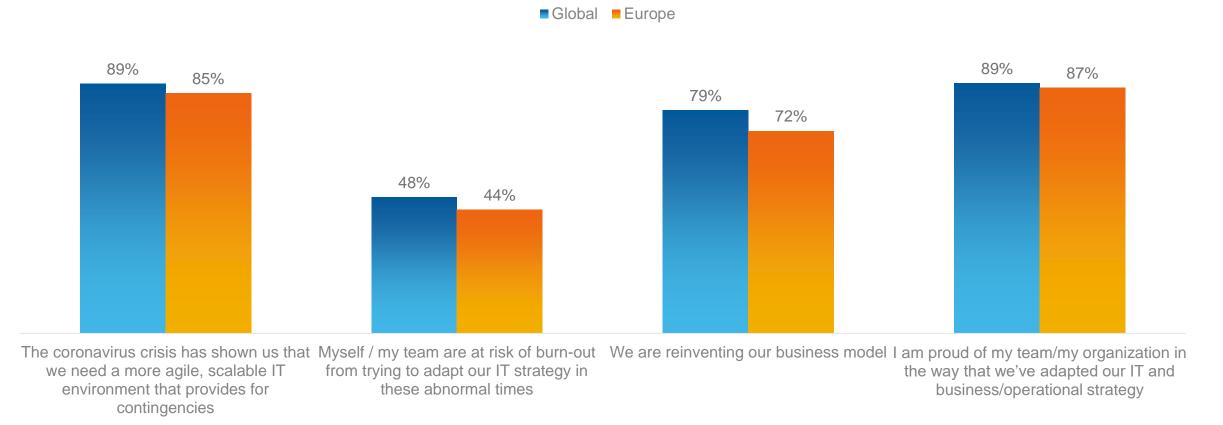


"What proportion of your organization's staff worked remotely before the pandemic/are currently working remotely?" Base: all 2020 respondents (4300) Europe (1900)



Europe

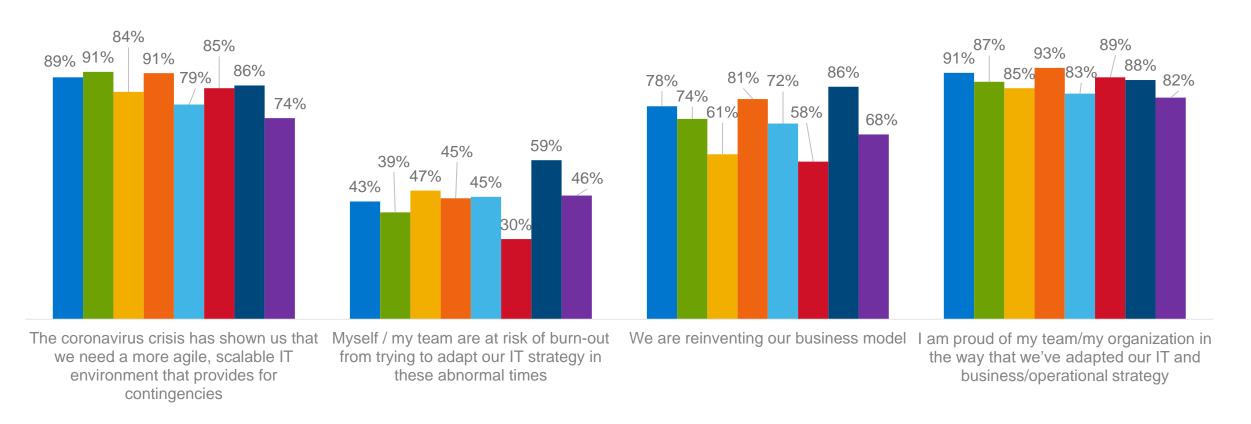
### Adapting to Unprecedented Upheaval



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: all 2020 respondents (4300) Europe (1900). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"

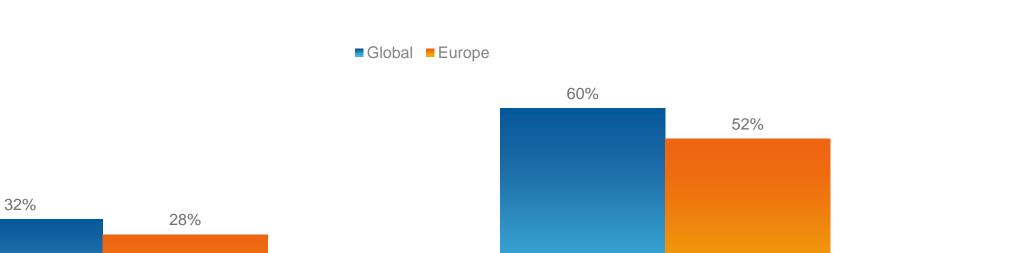
### Adapting to Unprecedented Upheaval

■UK ■France ■Germany ■Italy ■Netherlands ■Poland ■Spain ■Sweden



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: respondents from Europe (1900). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"

### **Survival Expectations**



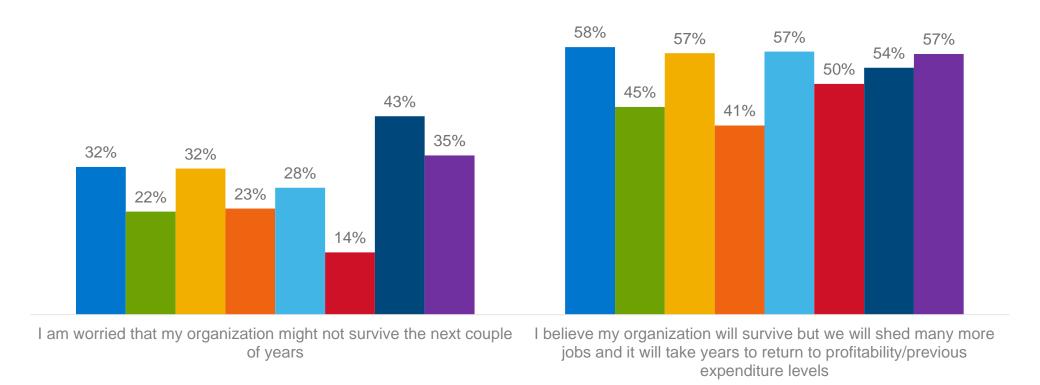
I am worried that my organization might not survive the next couple of years I believe my organization will survive but we will shed many more jobs and it will take years to return to profitability/previous expenditure levels

"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: all 2020 respondents (4300) Europe (1900). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"



### **Survival Expectations**

■UK ■ France ■ Germany ■ Italy ■ Netherlands ■ Poland ■ Spain ■ Sweden



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: respondents from Europe (1900). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"

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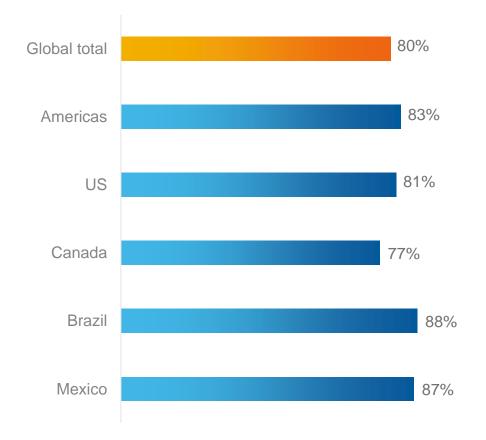
Europe

# Americas





### **Digital Transformation Acceleration**



"Have you successfully accelerated any of your digital transformation programs this year?"

Base: all 2020 respondents (4300) Americas (1000) Showing the proportion of respondents who selected "Yes, for all of our digital transformation programs",

"Yes, for most of our digital transformation programs" or "Yes, for some of our digital transformation programs"

Americas

### Top Three Digital Transformation Programs Accelerated

		US	Canada	Brazil	Mexico
1	Strengthening our cybersecurity defenses: 48% (Same proportion as the global average)	Strengthening our cybersecurity defenses: 48%	Strengthening our cybersecurity defenses: 51%	Rolling out broader remote working capabilities: 58%	Strengthening our cybersecurity defenses: 54%
2	Rolling out broader remote working capabilities: 42% (2% less than the global average)	Using data in completely new ways: 41%	Rolling out broader remote working capabilities: 40%	Rolling out broader remote working capabilities: 45%	Rolling out broader remote working capabilities: 43%
3	Reinventing how we deliver digital experiences to customers and employees: 38% (Same proportion as the global average)	Reinventing how we deliver digital experiences: 38%	Transforming our services and consumption models: 37%	Strengthening our cybersecurity defenses: 41%	Transforming our Edge deployments: 40%

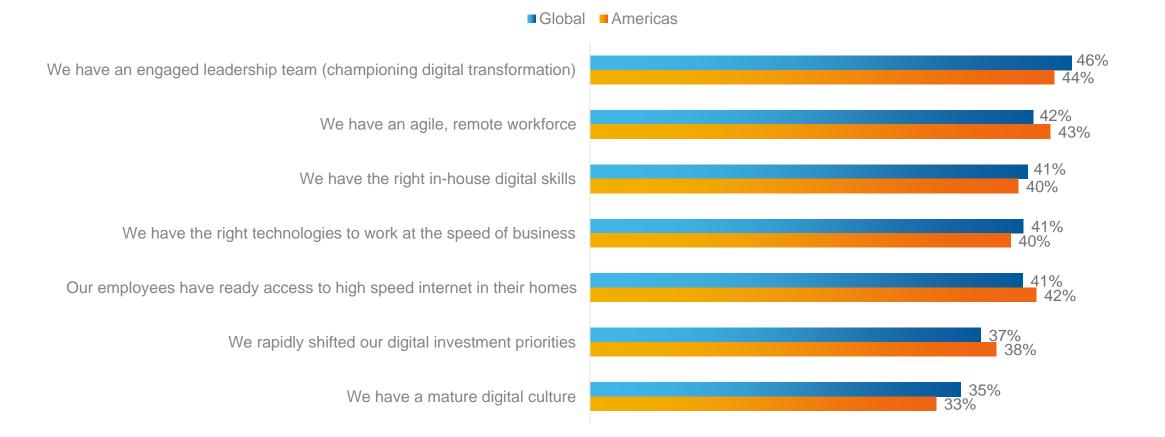
"Which digital transformation programs have you successfully accelerated this year?"

Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427) Americas (826)

**DCL**Technologies

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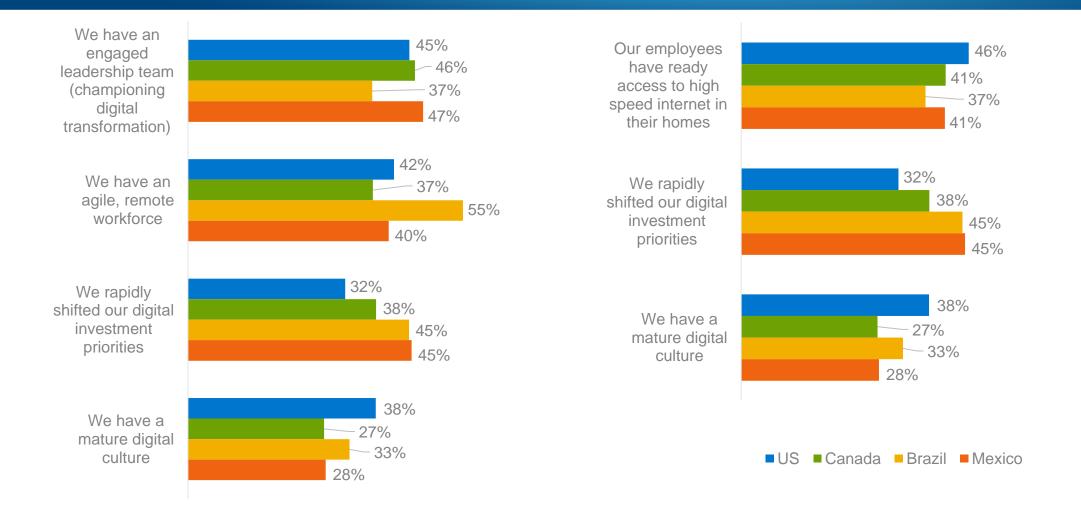
### **Acceleration Enablers**



"What enabled you to successfully accelerate your transformation programs?"

Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427), Americas (826)

#### **Acceleration Enablers**

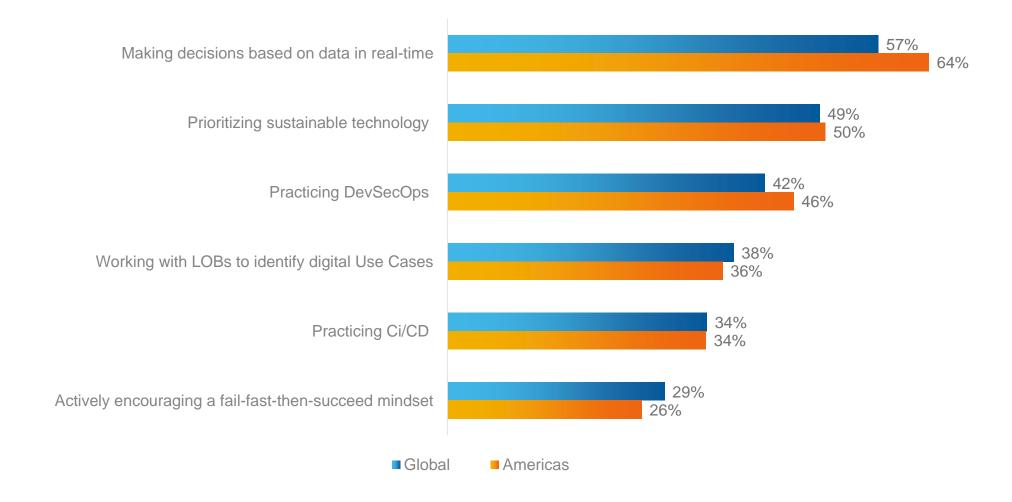


"What enabled you to successfully accelerate your transformation programs?"

Base: respondents from organizations which have successfully accelerated at least some digital transformation programs (3427), Americas (826)



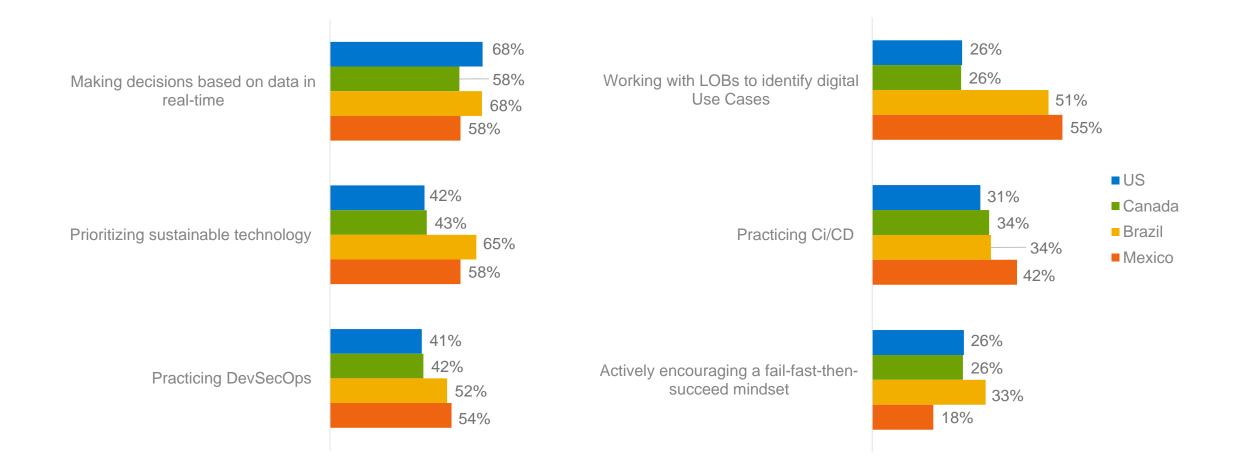
### **Digital Transformation Strategies**



"Thinking about your digital transformation strategy, which of the following is your organization doing?" Base: all 2020 respondents (4300) Americas (1000). Not showing "Don't know" or "None of these"



### **Digital Transformation Strategies**



"Thinking about your digital transformation strategy, which of the following is your organization doing?" Base: all 2020 respondents (4300) Americas (1000). Not showing "Don't know" or "None of these"



### Top Three Barriers To Digital Transformation

		US	Canada	Brazil	Mexico
1	Data privacy and security concerns: 33% (2% more than the global average)	Data privacy and security concerns: 37%	Lack of budget and resources: 44%	Lack of economic growth: 35%	Lack of the right in- house skill sets and expertise: 30%
2	Lack of budget and resources: 31% (1% more than the global average)	Lack of budget and resources: 31%	Data privacy and security concerns: 37%	Unable to extract valuable insights from data and/or information overload: 33%	We are temporarily closed for business in relation to Covid- related disruption: 28%
3	Unable to extract valuable insights from data and/or information overload: 29% (Same proportion as the global average)	Unable to extract valuable insights from data and/or information overload: 31%	Unable to extract valuable insights from data and/or information overload: 29%	Data privacy and security concerns/ Lack of budget and resources: 28%	Immature digital culture: 26%

"What are the main barriers to digitally transforming your organization?" Base: all 2020 respondents (4300) Americas (1000)



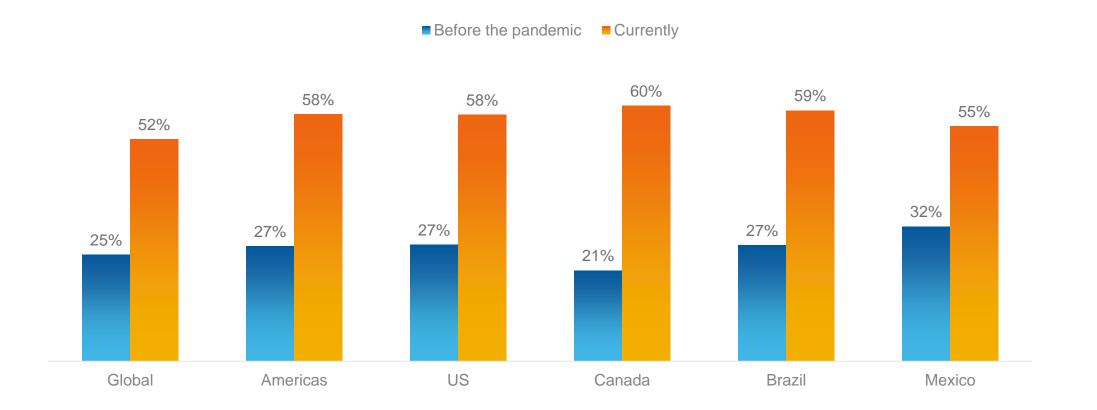
### Top Three Tech Investments in 1-3 years

		US	Canada	Brazil	Mexico
1	Cybersecurity solutions: 45% (2% more than the global average)	Cybersecurity solutions: 46%	Cybersecurity solutions: 46%	5G infrastructure: 53%	Cybersecurity solutions: 50%
2	Data management tools: 42% (3% more than the global average)	Data management tools: 40%	Data management tools: 46%	Privacy software: 52%	Privacy software: 48%
3	Privacy software: 41% (6% more than the global average)	5G infrastructure: 39%	Multi-cloud environment: 37%	Data management tools: 46%	Software: containers and serverless: 41%

"What new innovations or solutions is your organization investing in over the next 1-3 years to enable digital business?" Base: all 2020 respondents (4300) Americas (1000)

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### Proportion Of Staff Working Remotely

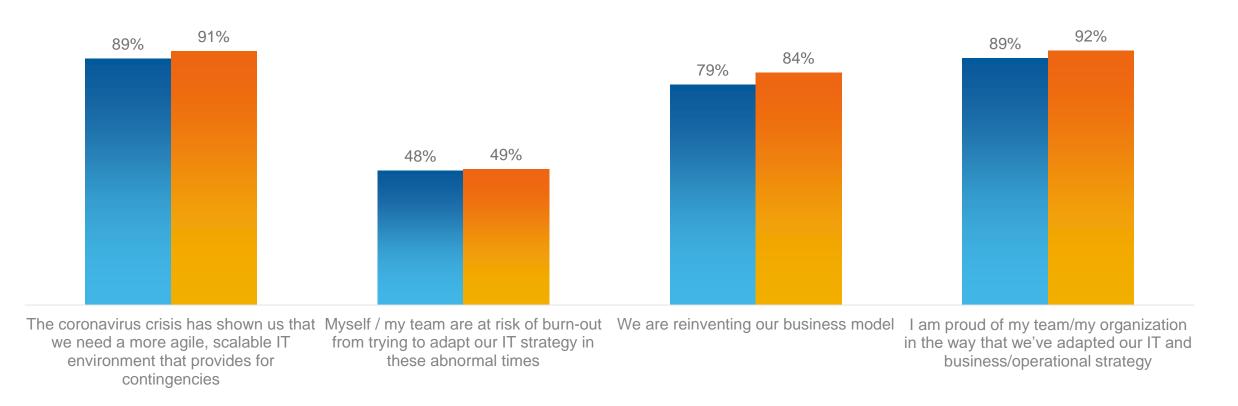


"What proportion of your organization's staff worked remotely before the pandemic/are currently working remotely?" Base: all 2020 respondents (4300) Americas (1000)



### Adapting to Unprecedented Upheaval

Global Americas

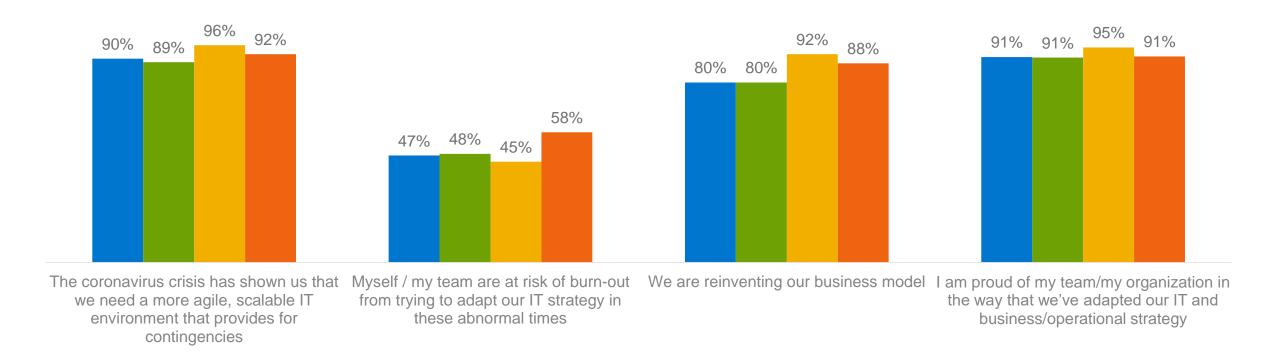


"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: all 2020 respondents (4300) Americas (1000). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"

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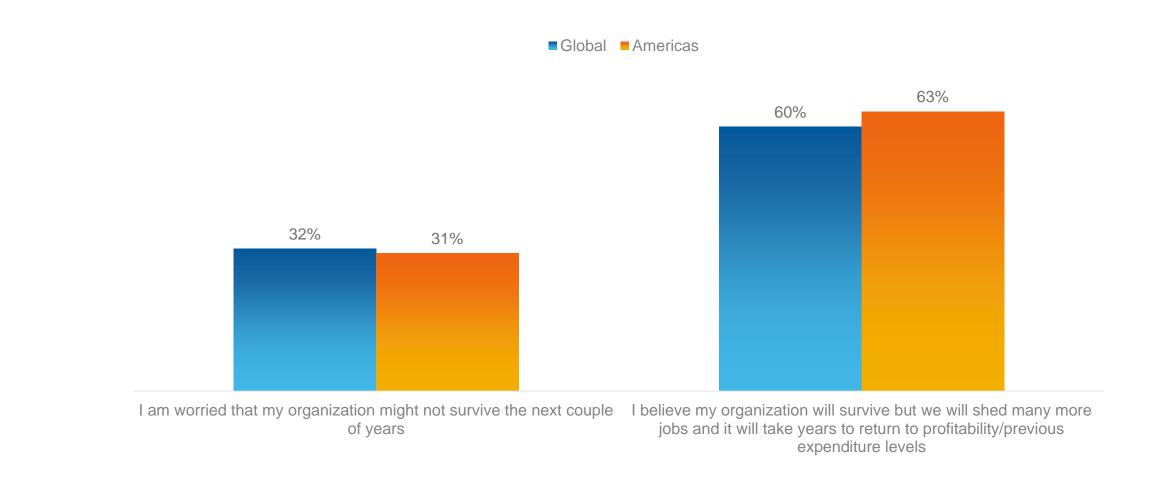
### Adapting to Unprecedented Upheaval

■US ■Canada ■Brazil ■Mexico



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: respondents from the Americas (1000). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"

### **Survival Expectations**



"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: all 2020 respondents (4300) Americas (1000). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"

### **Survival Expectations**

■US ■Canada ■Brazil ■Mexico 68% 63% 63% 61% 39% 31% 28% 28% I am worried that my organization might not survive the next couple of I believe my organization will survive but we will shed many more jobs and it will take years to return to profitability/previous expenditure levels years

"As a result of the business disruption this year, to what extent do you agree or disagree with the following statements?" Base: respondents from the Americas (1000). Showing the proportion of respondents who selected "Strongly agree" or "Somewhat agree"



90

# 11 Individual Country Curves

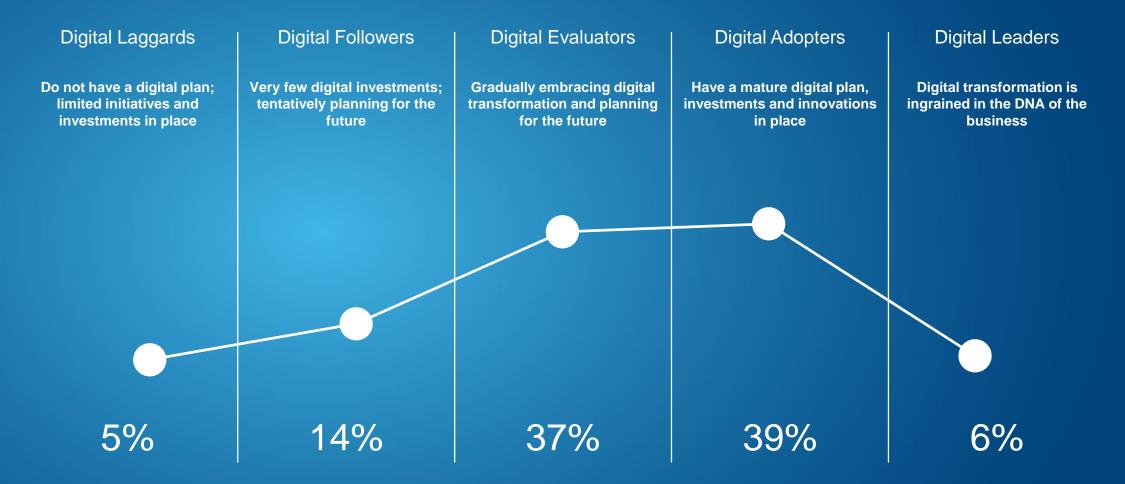


# APJC

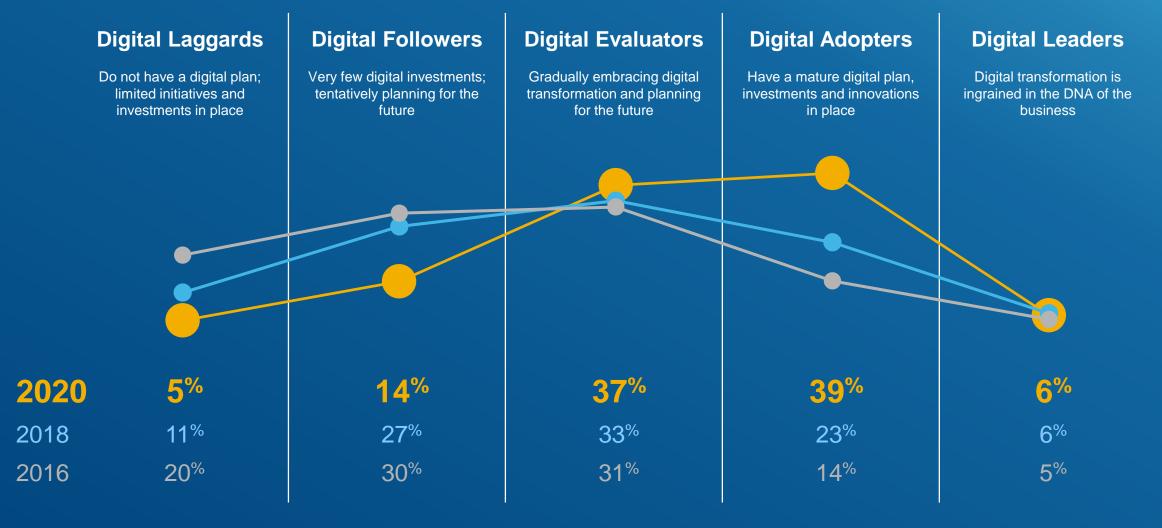




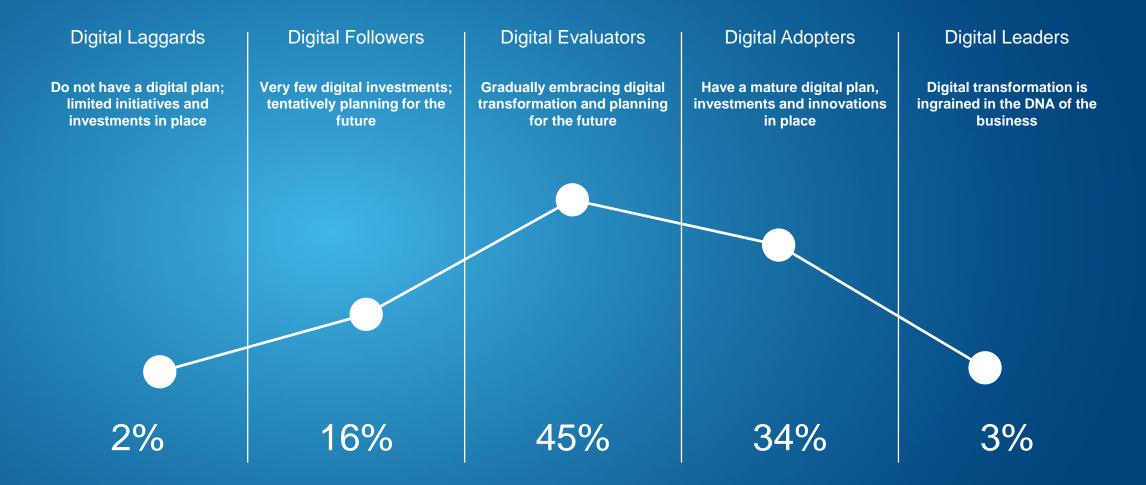
# Digital Transformation Index 2020 – APJC



# Digital Transformation Index Over the Years APJC

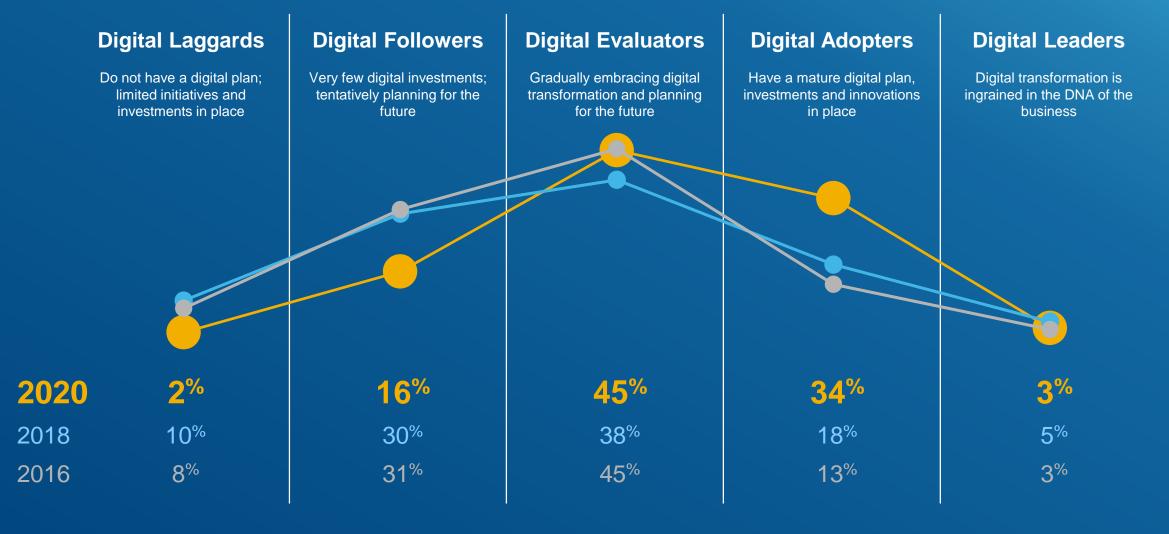


# Digital Transformation Index 2020 – Australia & New Zealand

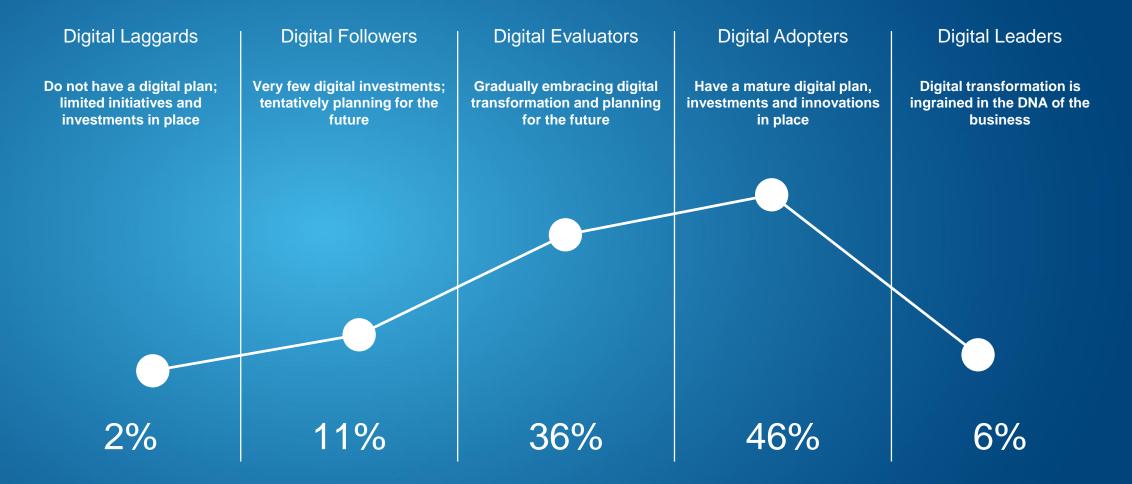


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# Digital Transformation Index Over the Years Australia & New Zealand

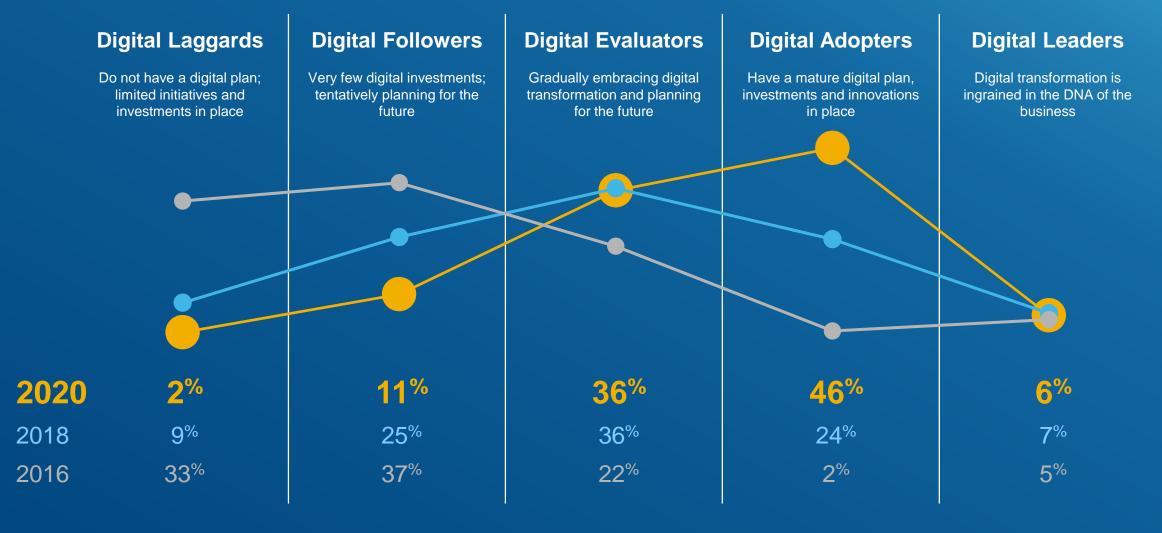


# Digital Transformation Index 2020 – Greater China

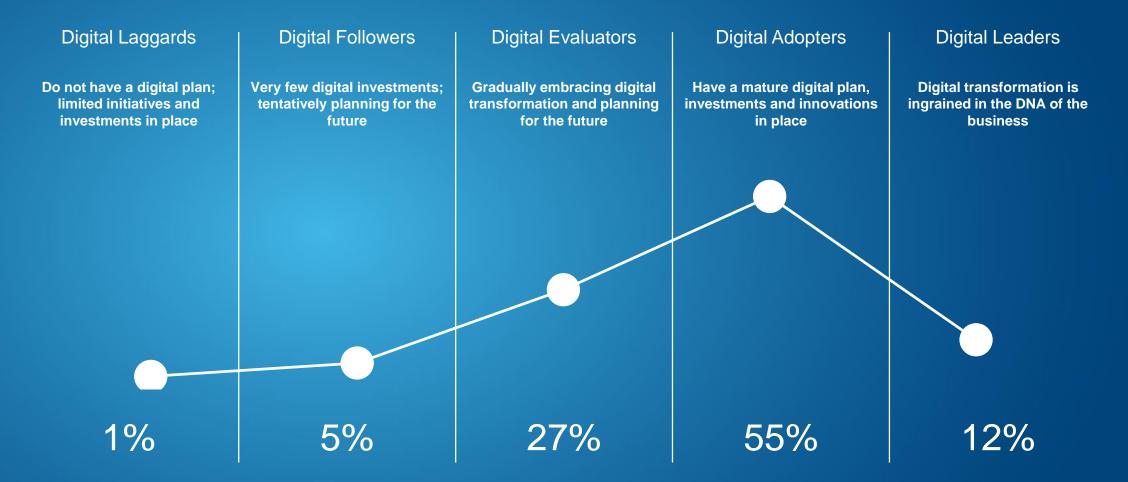


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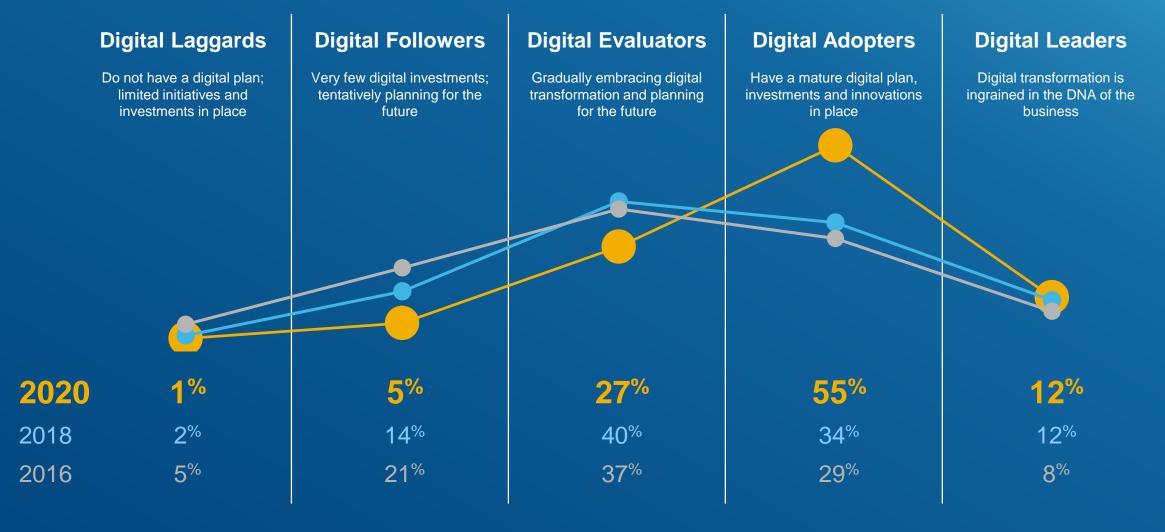
# Digital Transformation Index Over the Years Greater China



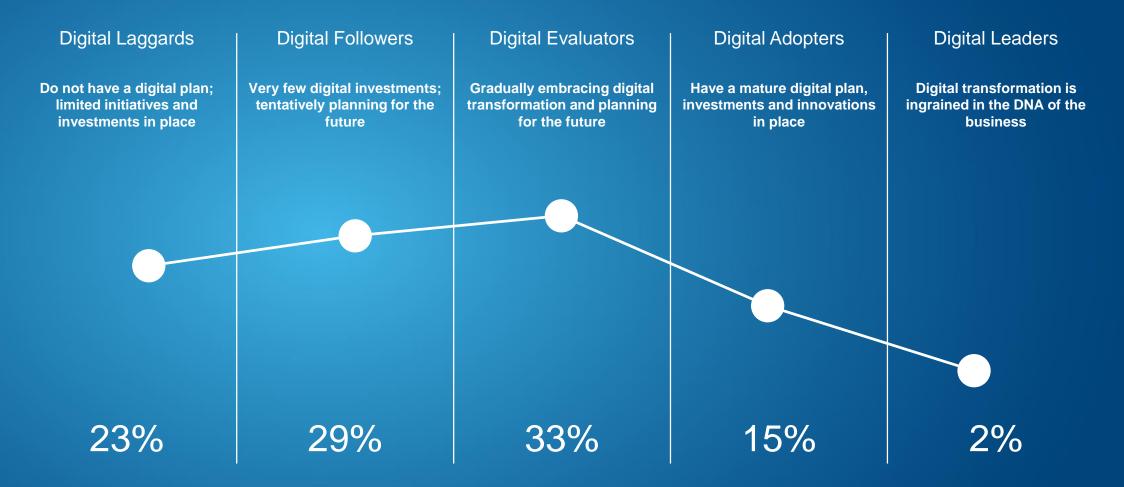
# Digital Transformation Index 2020 – India



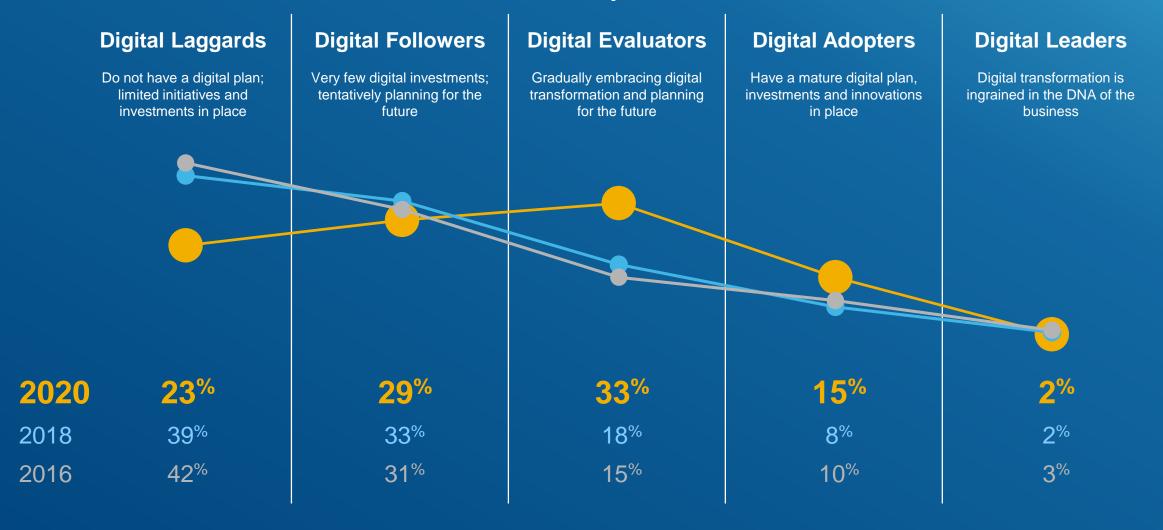
# Digital Transformation Index Over the Years India



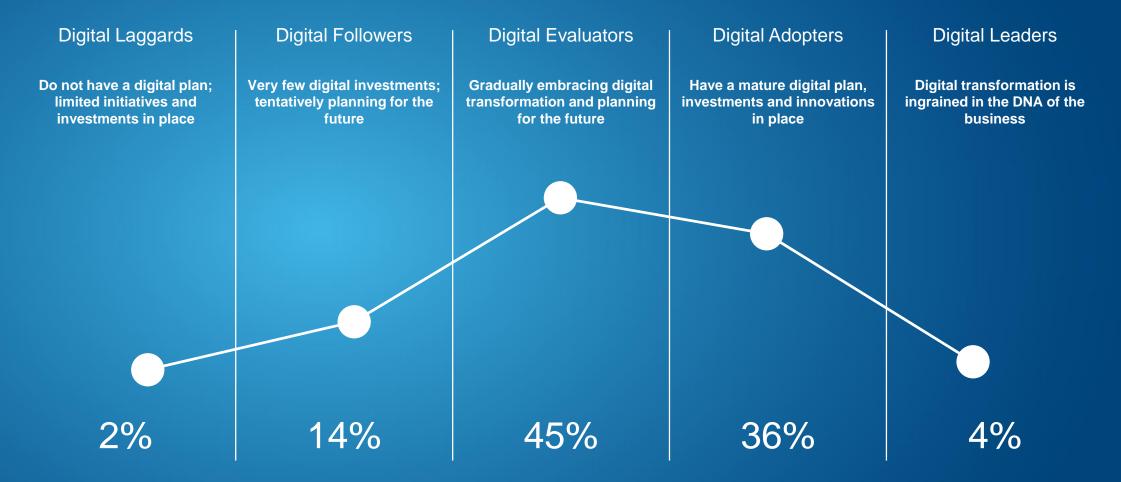
# Digital Transformation Index 2020 – Japan



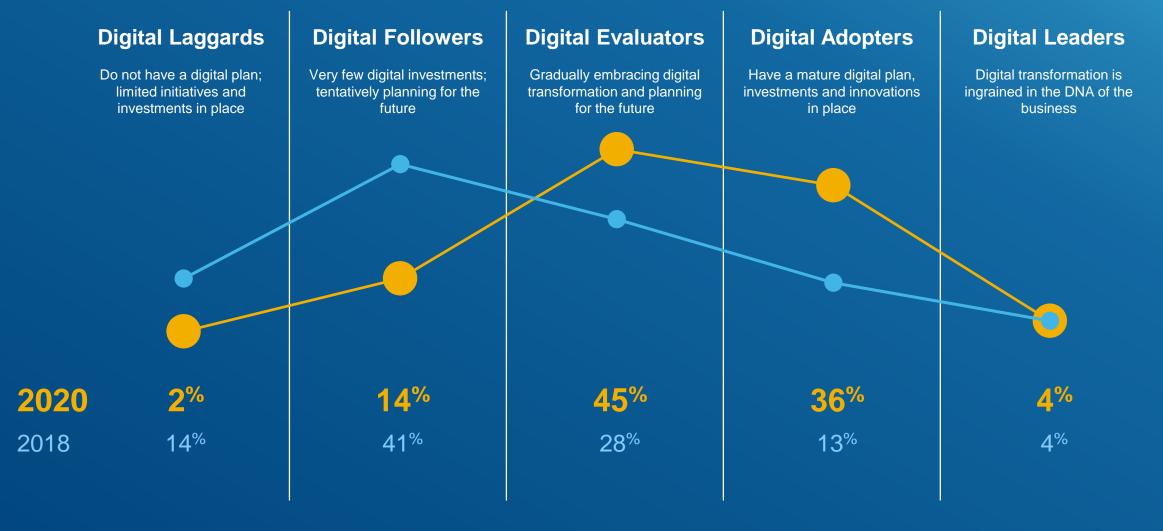
# Digital Transformation Index Over the Years Japan



# Digital Transformation Index 2020 – Singapore



# Digital Transformation Index Over the Years Singapore

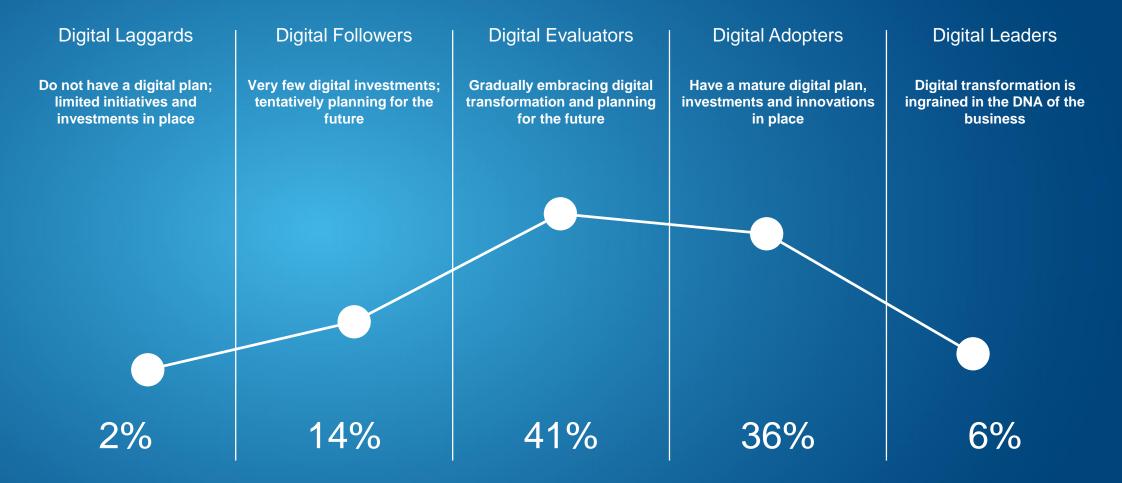


# EUROPE

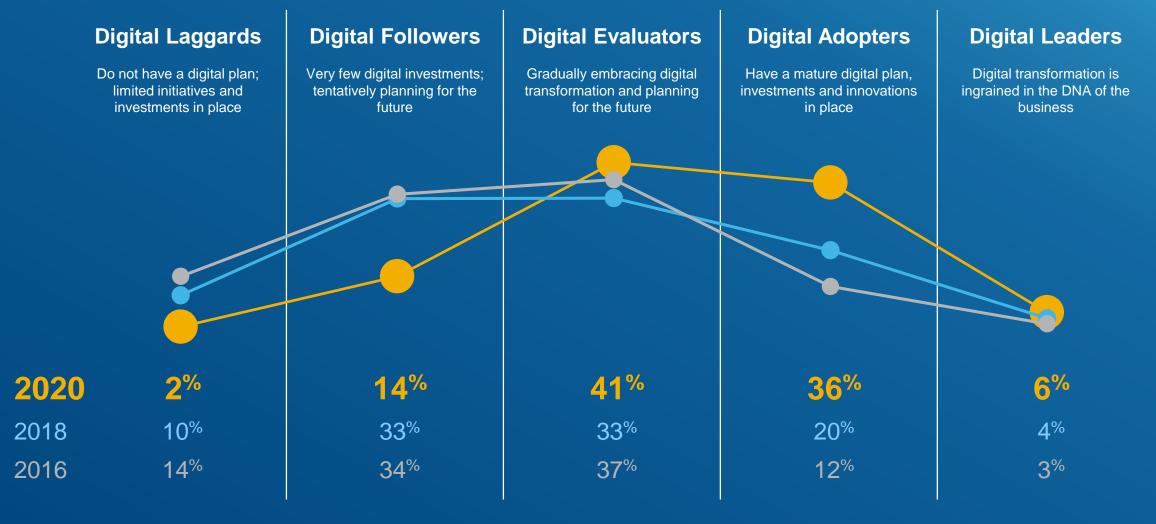




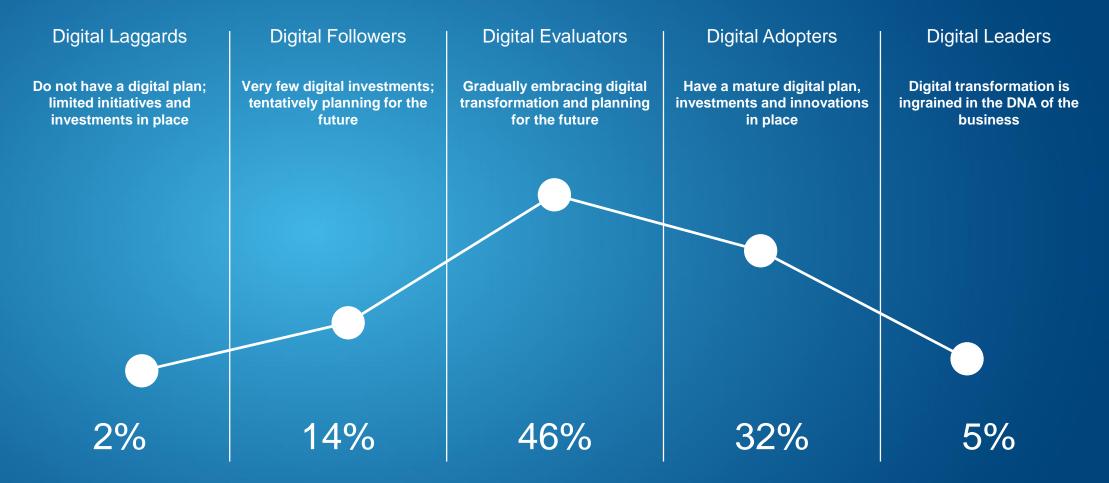
# Digital Transformation Index 2020 – Europe



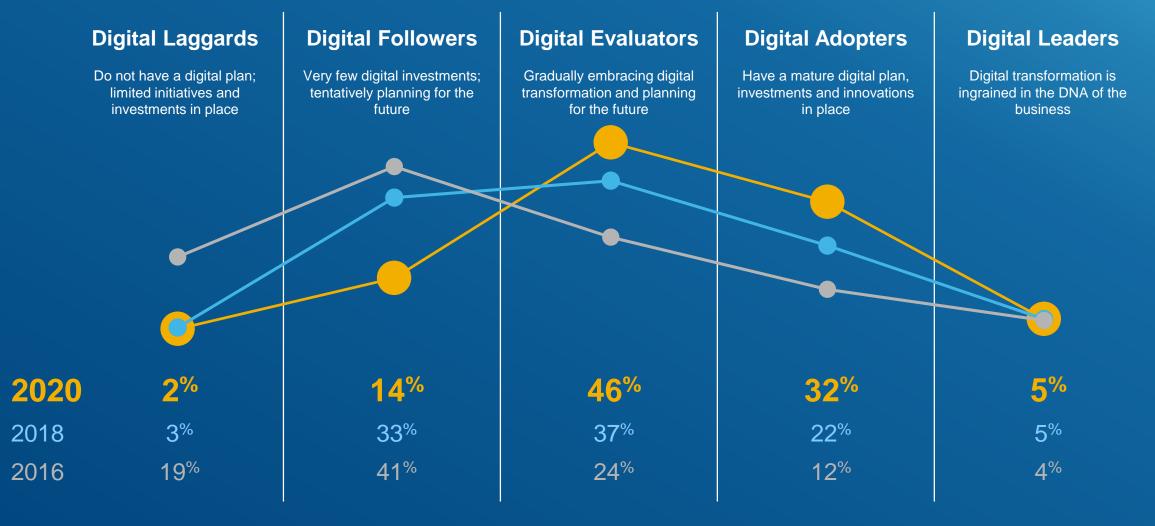
# Digital Transformation Index Over the Years Europe



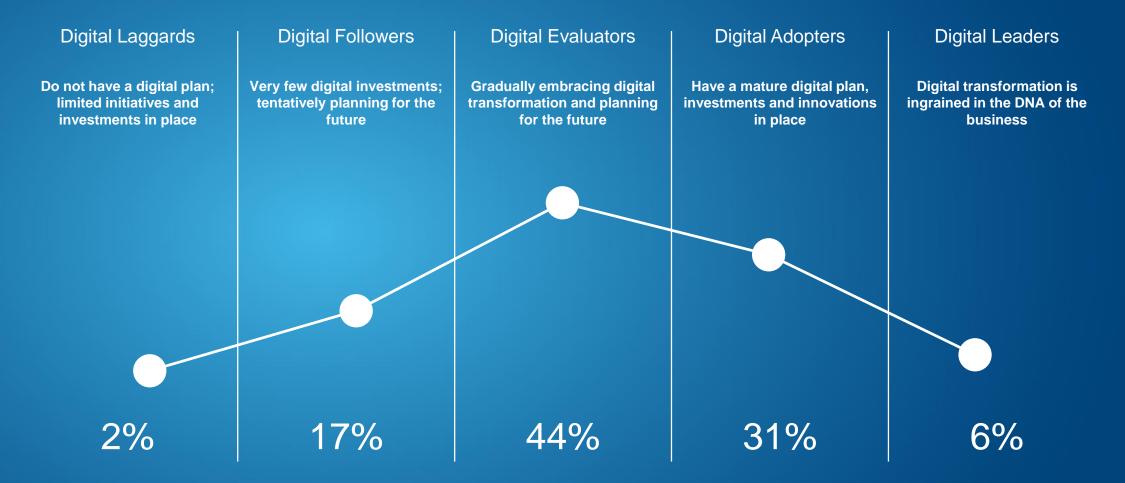
# Digital Transformation Index 2020 – UK



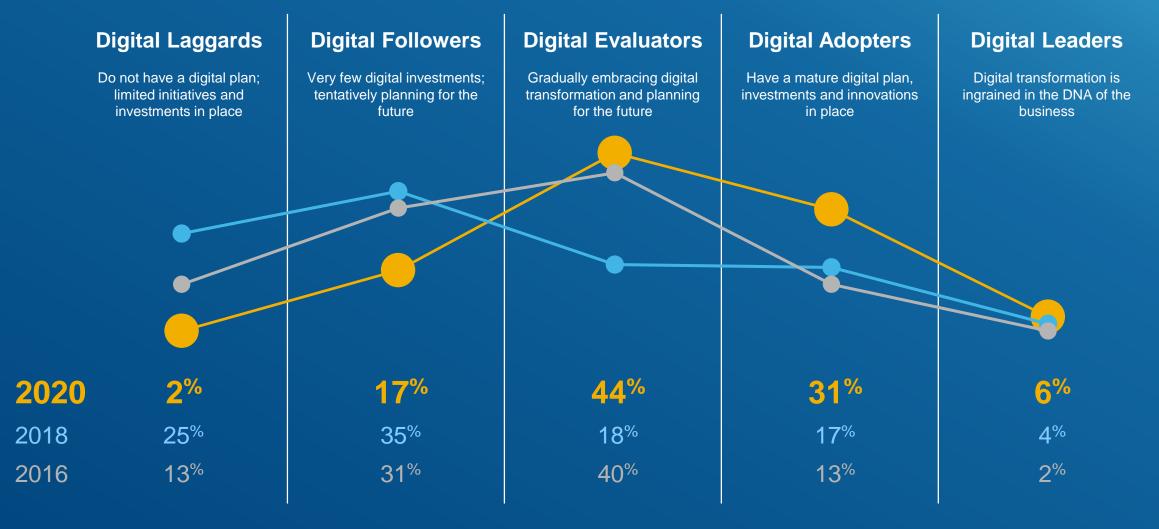
### Digital Transformation Index Over the Years UK



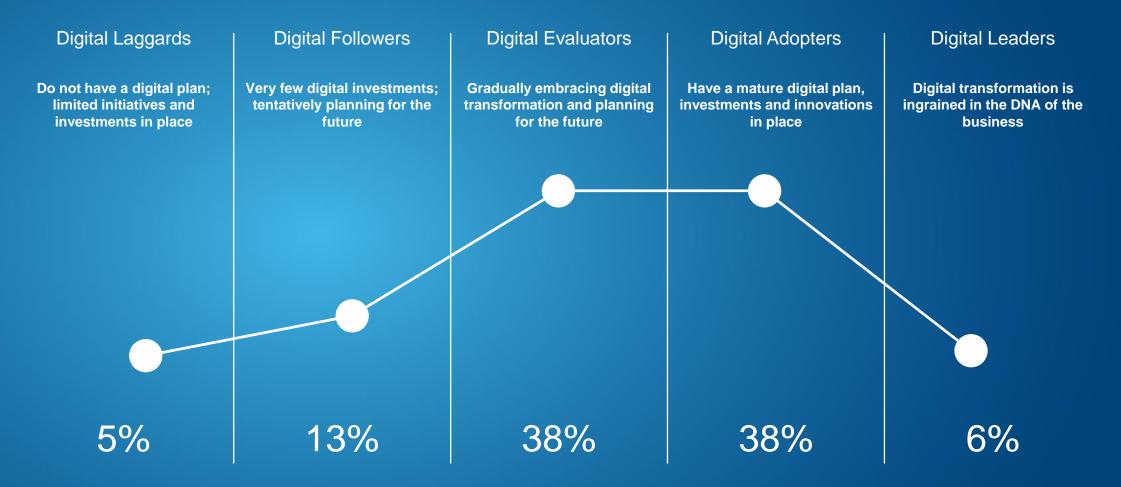
### Digital Transformation Index 2020 – France



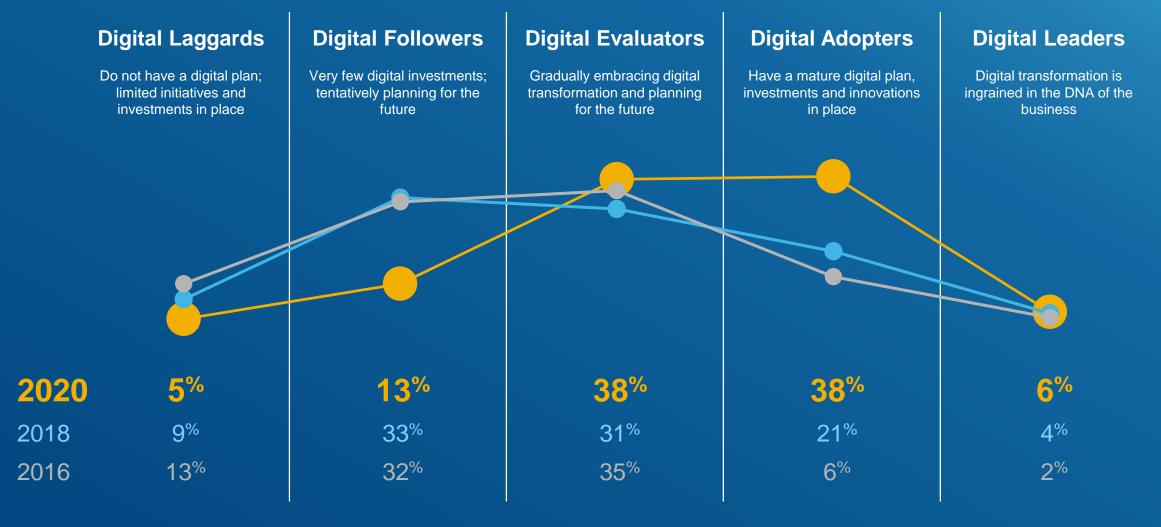
### Digital Transformation Index Over the Years France



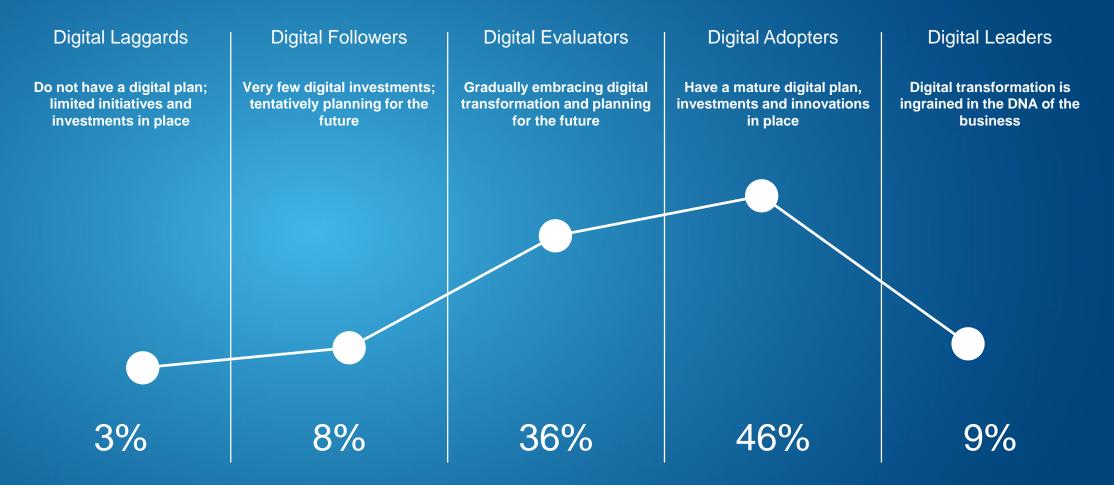
### Digital Transformation Index 2020 – Germany



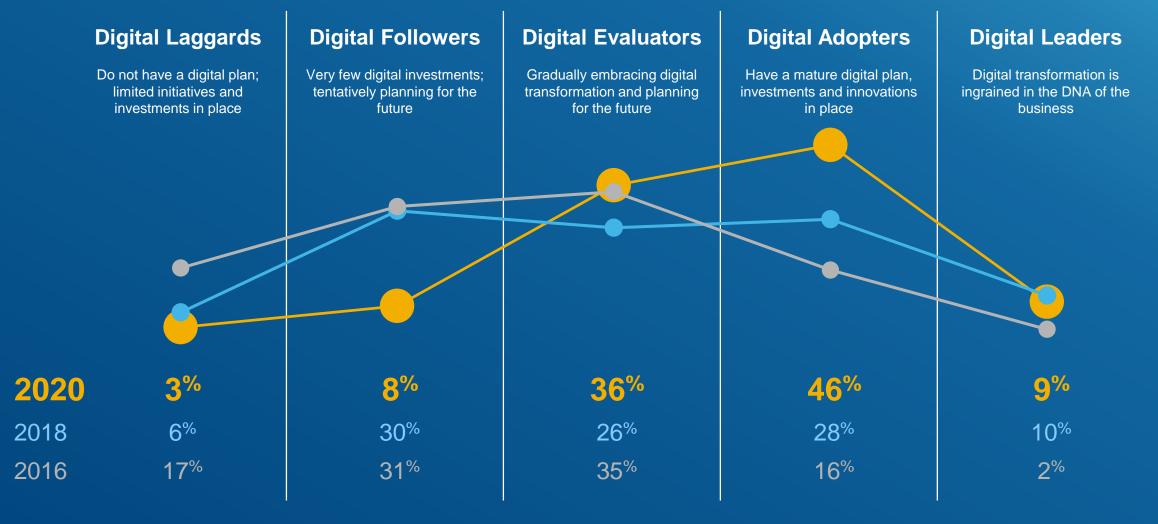
### Digital Transformation Index Over the Years Germany



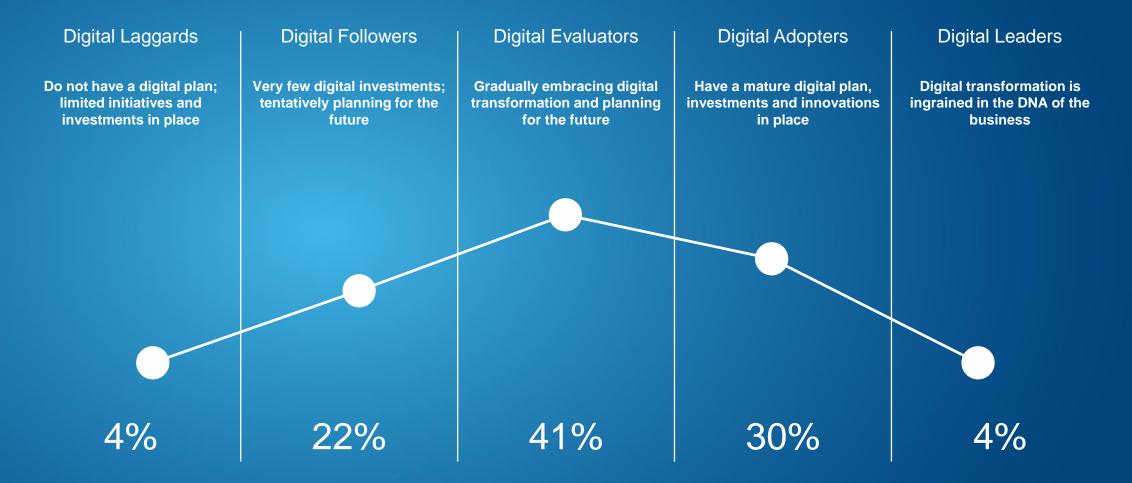
### Digital Transformation Index 2020 – Italy



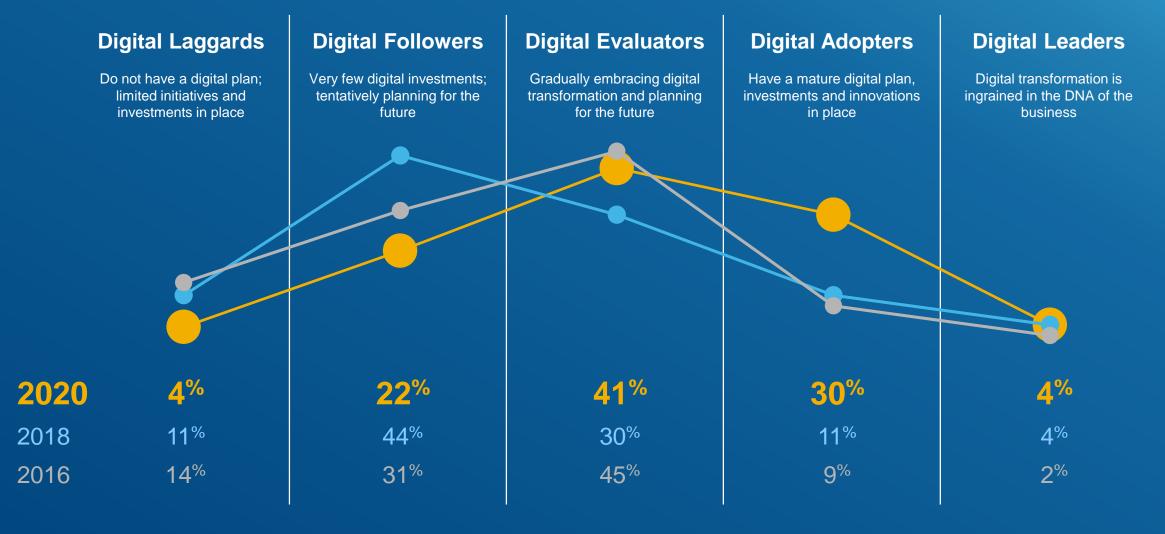
### Digital Transformation Index Over the Years Italy



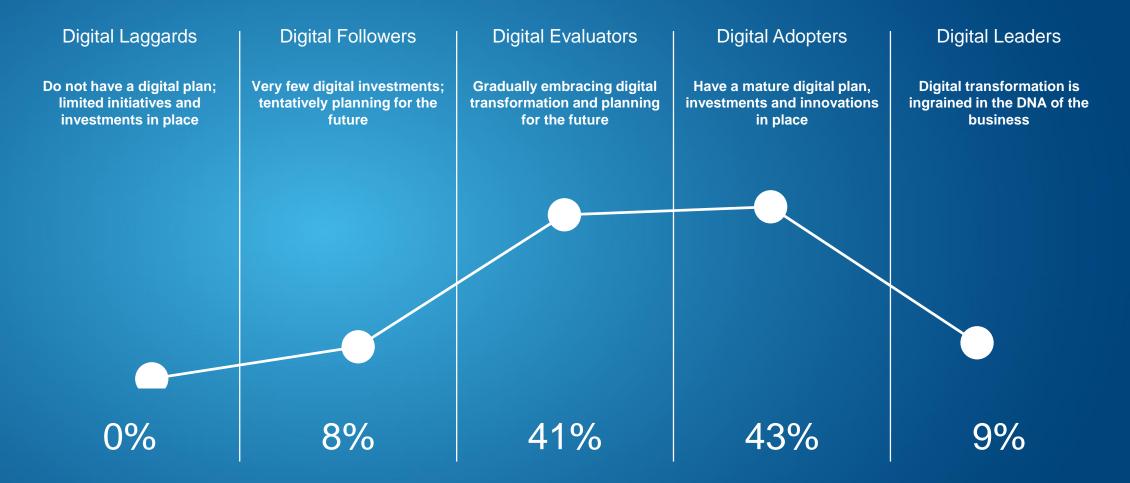
### Digital Transformation Index 2020 – Netherlands



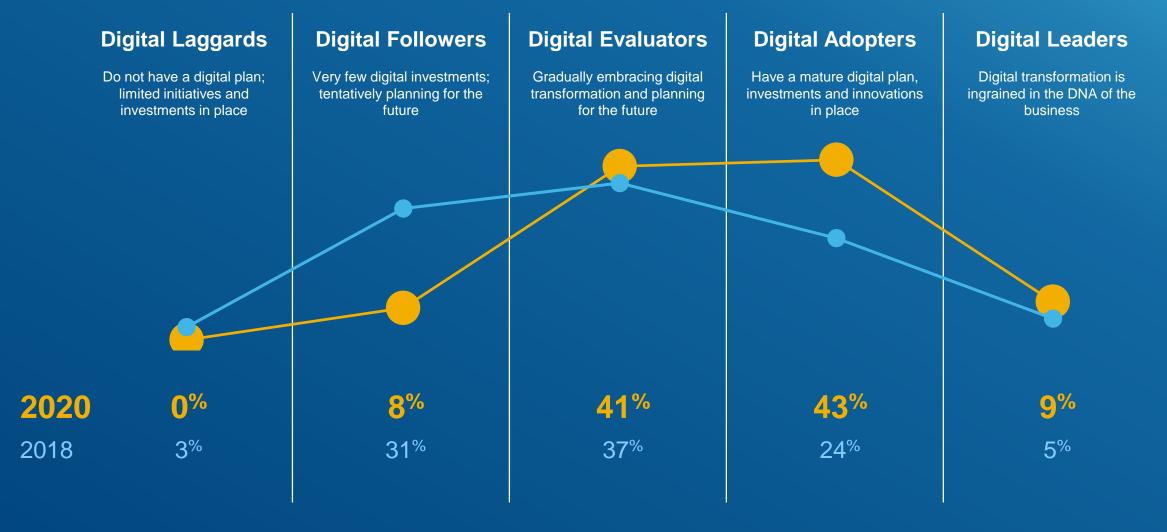
### Digital Transformation Index Over the Years Netherlands



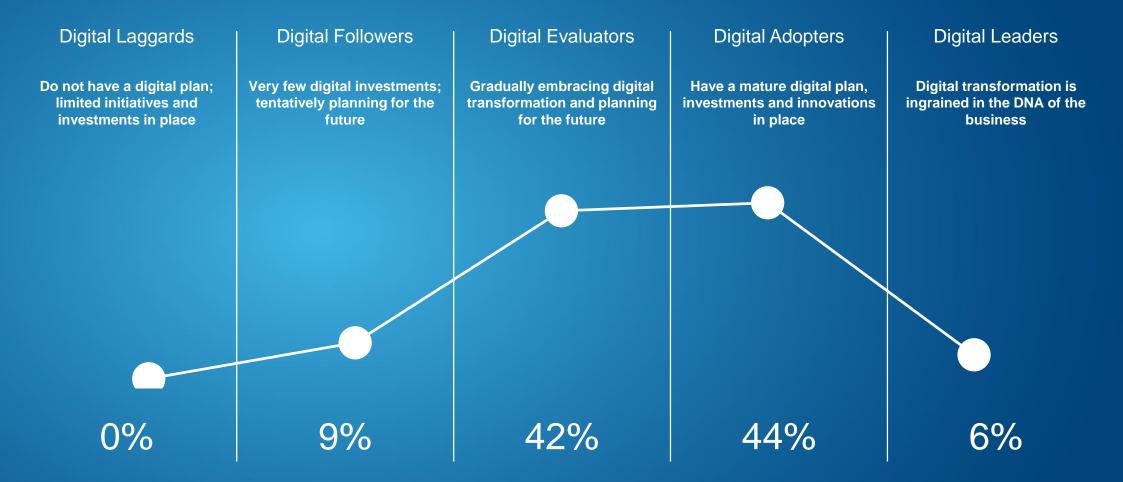
### Digital Transformation Index 2020 – Poland



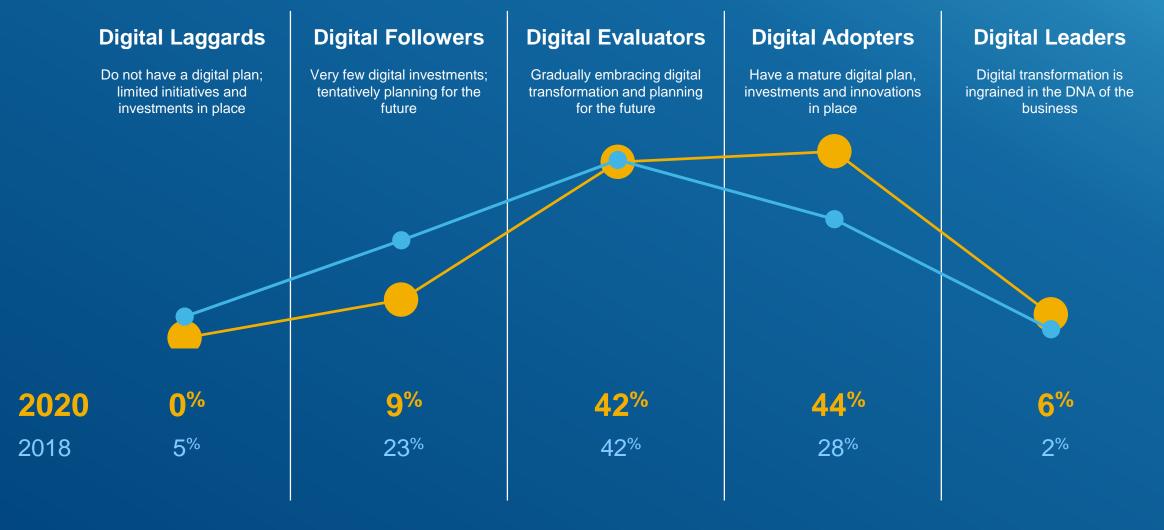
### Digital Transformation Index Over the Years Poland



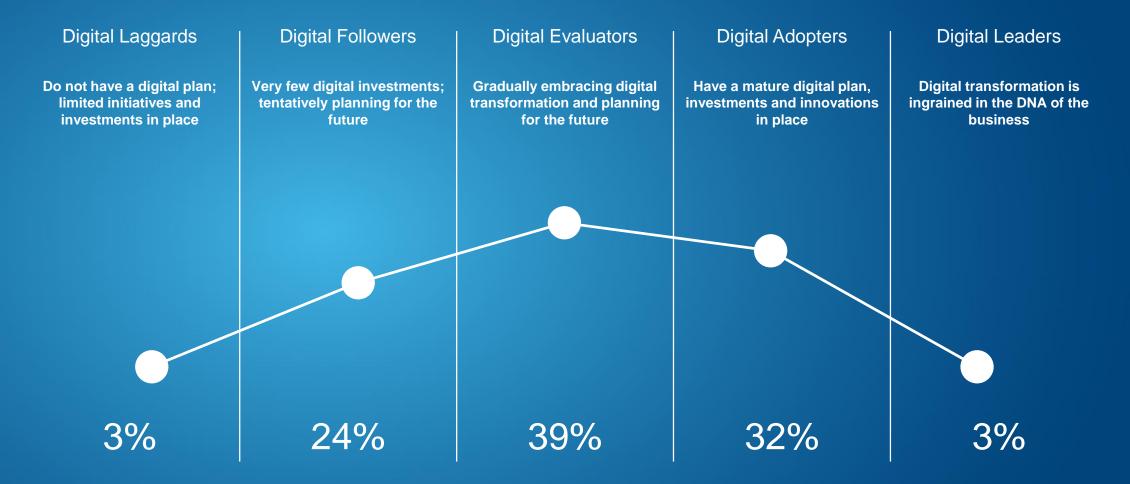
### Digital Transformation Index 2020 – Spain



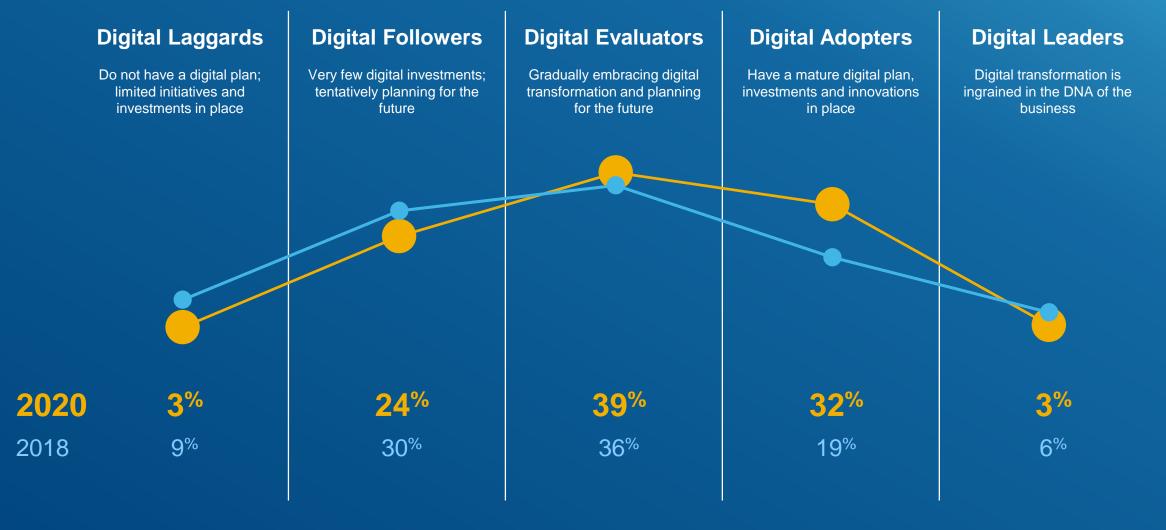
### Digital Transformation Index Over the Years Spain



### Digital Transformation Index 2020 – Sweden



### Digital Transformation Index Over the Years Sweden

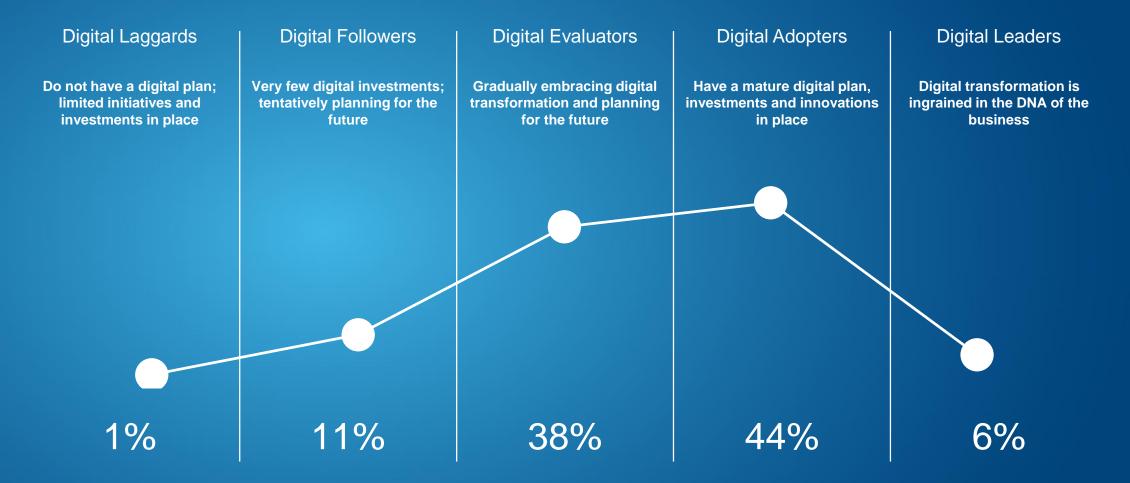


### Americas

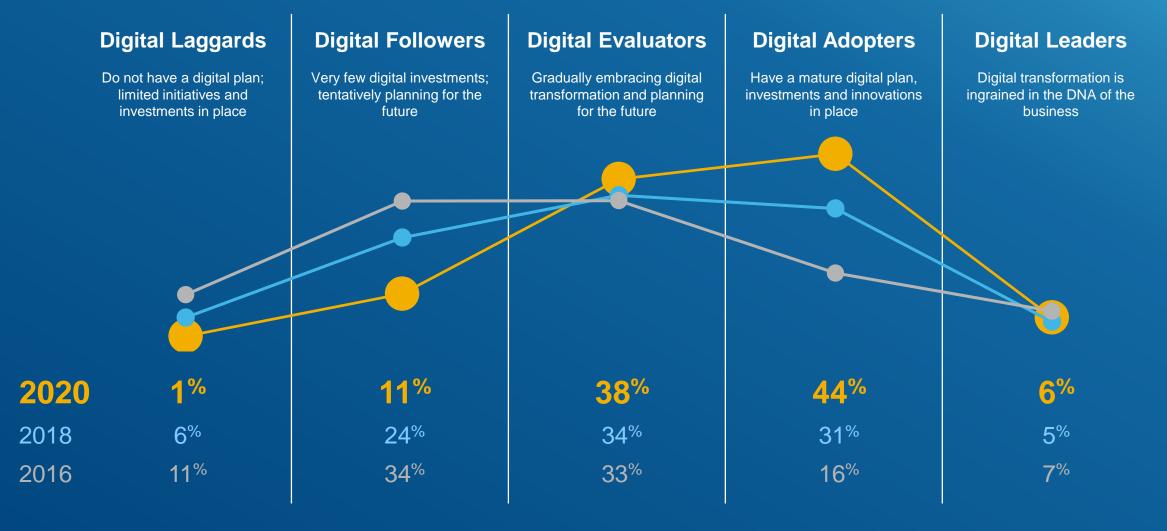




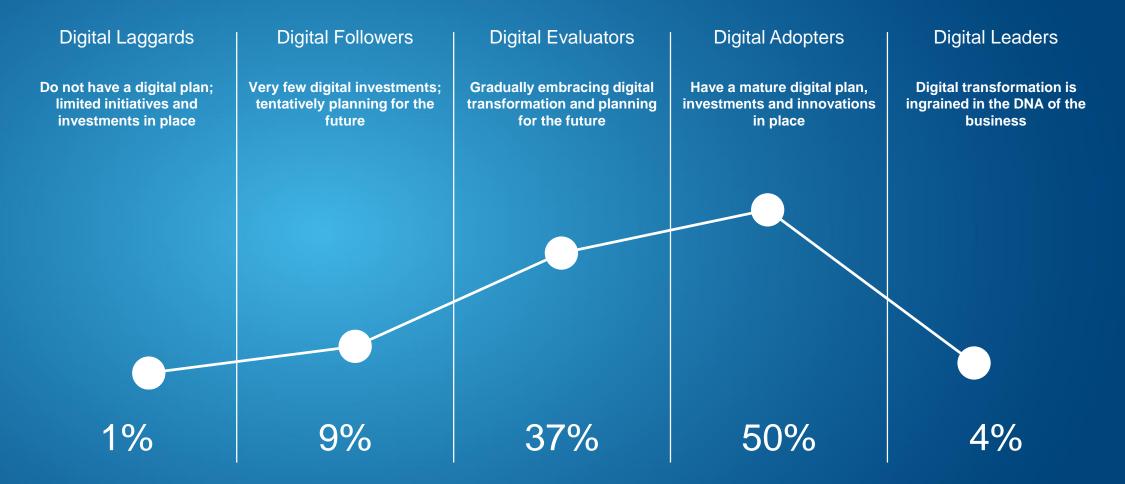
### Digital Transformation Index 2020 – Americas



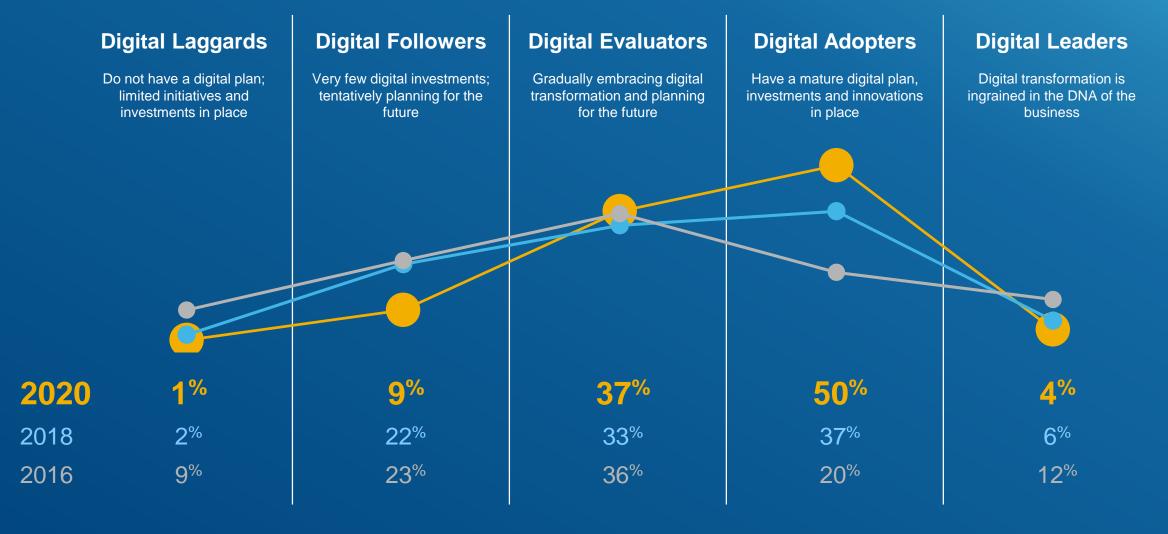
### Digital Transformation Index Over the Years Americas



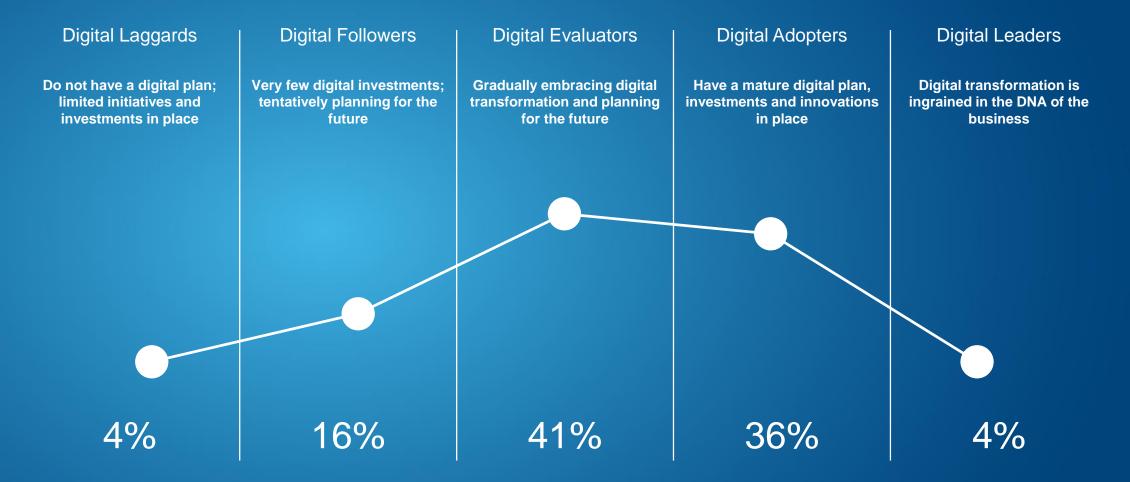
### Digital Transformation Index 2020 – Brazil



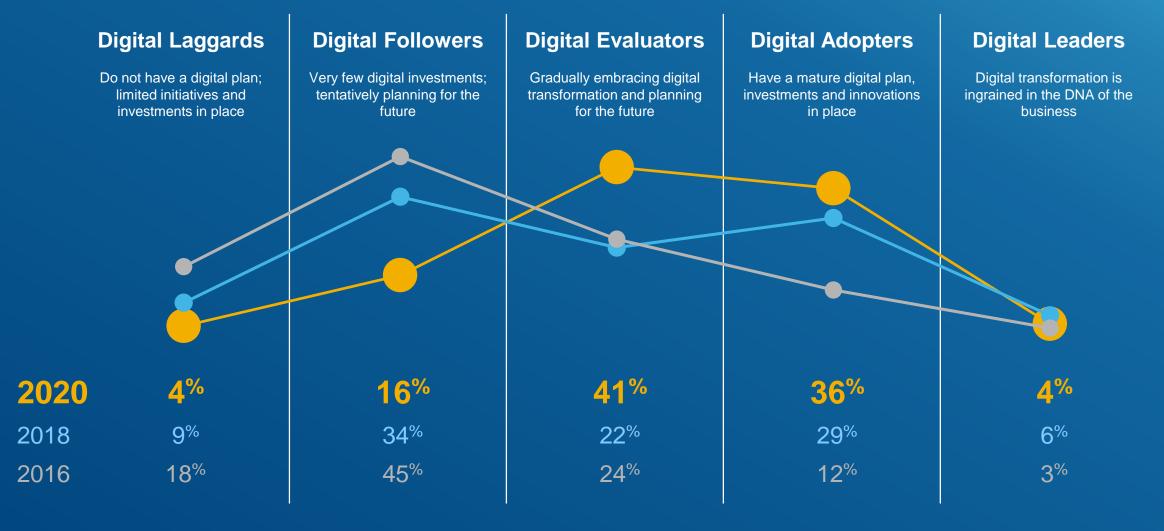
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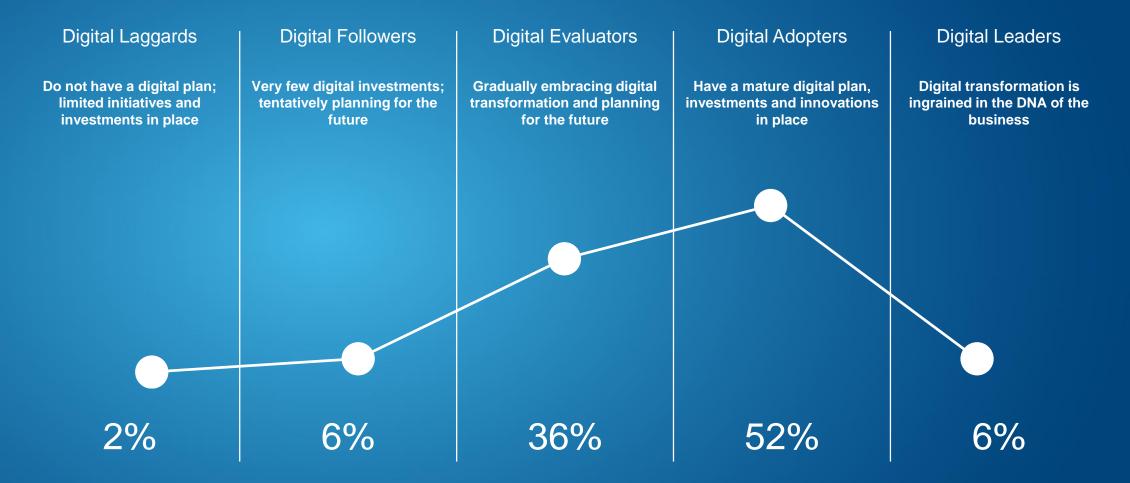
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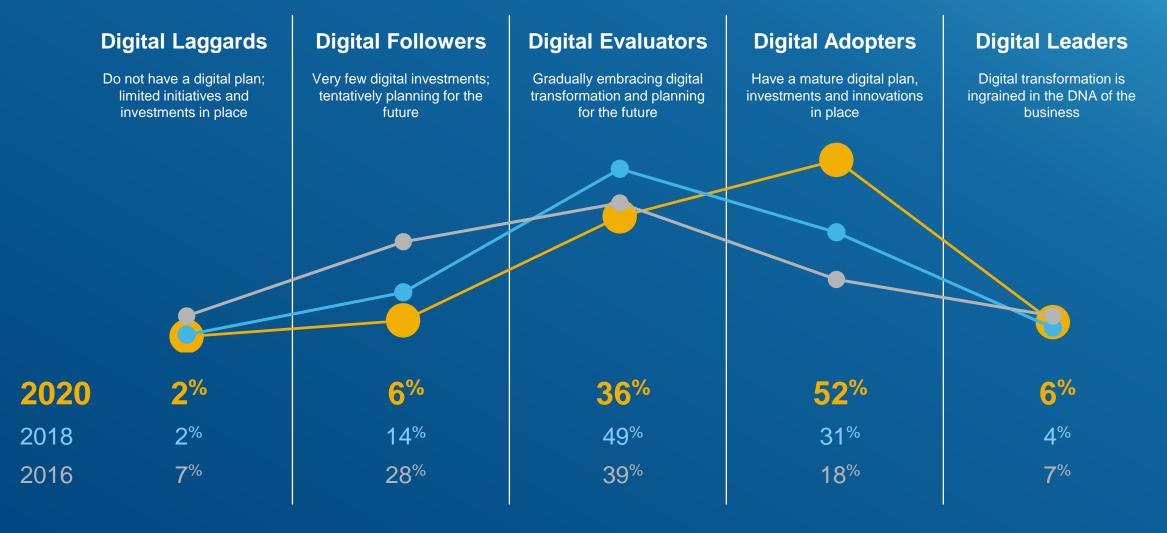
### Digital Transformation Index Over the Years Canada



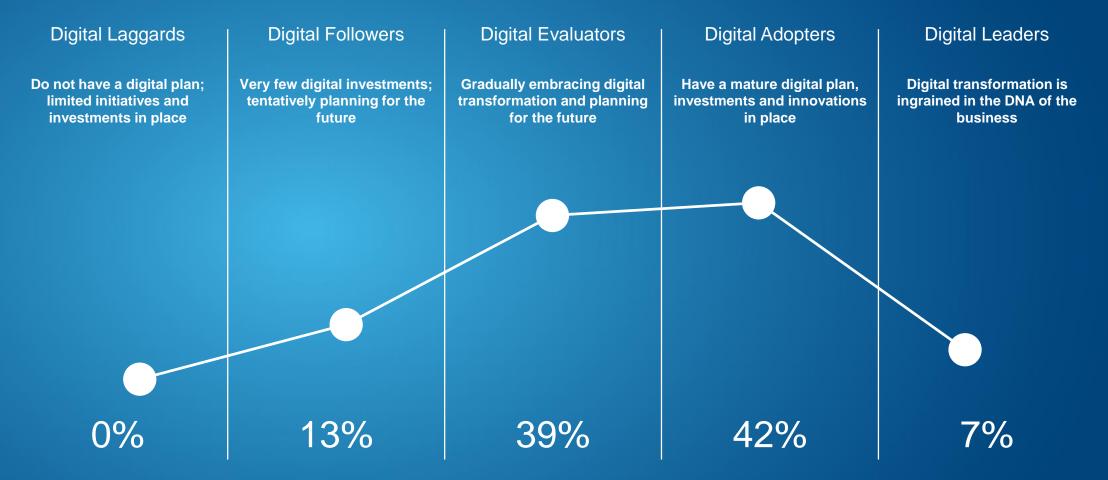
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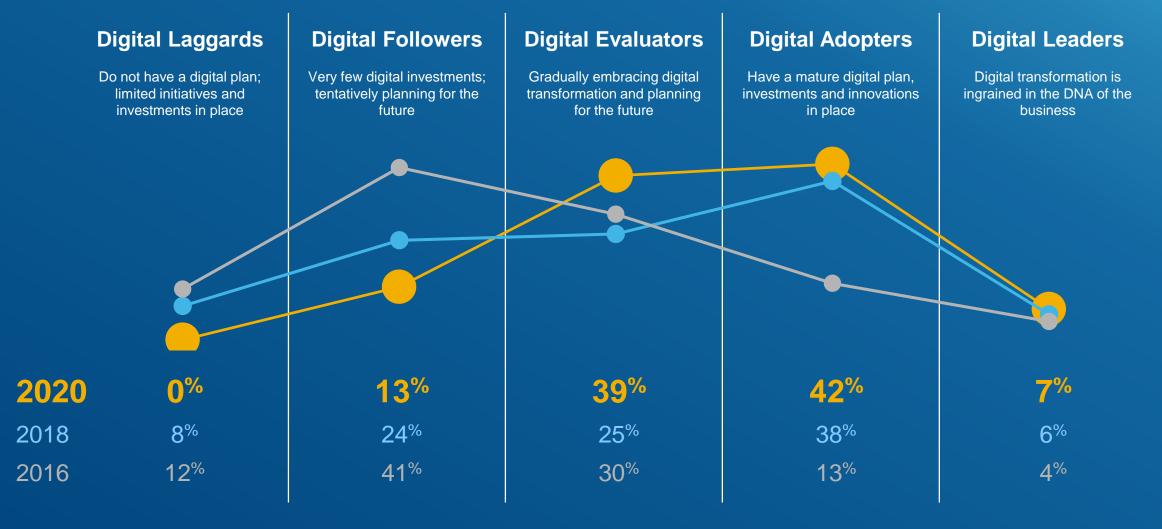
### Digital Transformation Index Over the Years Mexico



# Digital Transformation Index 2020 – USA



### Digital Transformation Index Over the Years USA



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