



# IT Digital Readiness Index

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“ Each customer faces a fundamental decision: will technology simply enable, potentially differentiate, or fundamentally define their business strategy? This decision is at the heart of the digital transition that every country, city and company is undergoing, and we intend to be the most strategic partner for our customers during each stage of this transition.”

***Chuck Robbins***  
***Cisco CEO***



# Digitization is Transforming Businesses



UPS My Choice  
Delivery Control  
Personalized Service



Workforce Efficiency  
WIP Inventory and  
Part Tracking



Starbucks Apps  
Order Ahead  
Skip the Line



Customer Experience  
Physical and Virtual  
RFID Content



American Express  
Personalized Service  
Through Mobile

Digital disruption will displace 40% of incumbent companies in the next 5 years

Cisco/IMD Digital Vortex Research, June 2015

Organizations are at different stages in their Journey  
Using technology to

**Enable**



IT Agility and  
Increased  
Productivity

**Differentiate**



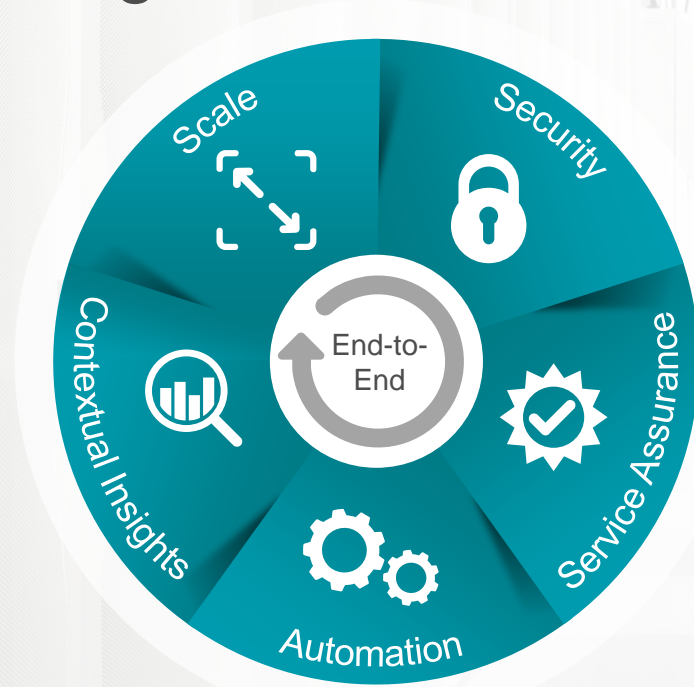
New User  
Experiences,  
Products,  
Services

**Define**



Business Model  
Innovation /  
Industry  
Transformation

# Cisco's Role in Digital Transformation



85% of Worlds Data Touches  
Cisco Infrastructure

# The IT Digital Readiness Index

measures IT organizations' readiness to support digital business transformation by assessing critical capabilities in 10 categories





# SURVEY OVERVIEW

**2040** Enterprise  
IT Leaders



**8** Countries



**8** Industries



**32**  
Questions



**10** IT Focus  
Areas

**1**

Foundational Infrastructure

**2**

Virtualization Technology

**3**

Automation & Orchestration

**4**

Self-Service IT Capabilities

**5**

IT Service Standardization

**6**

IT Financial Practices

**7**

Cloud Capabilities and Strategy

**8**

Application and Data Environment

**9**

Security Policy and Practices

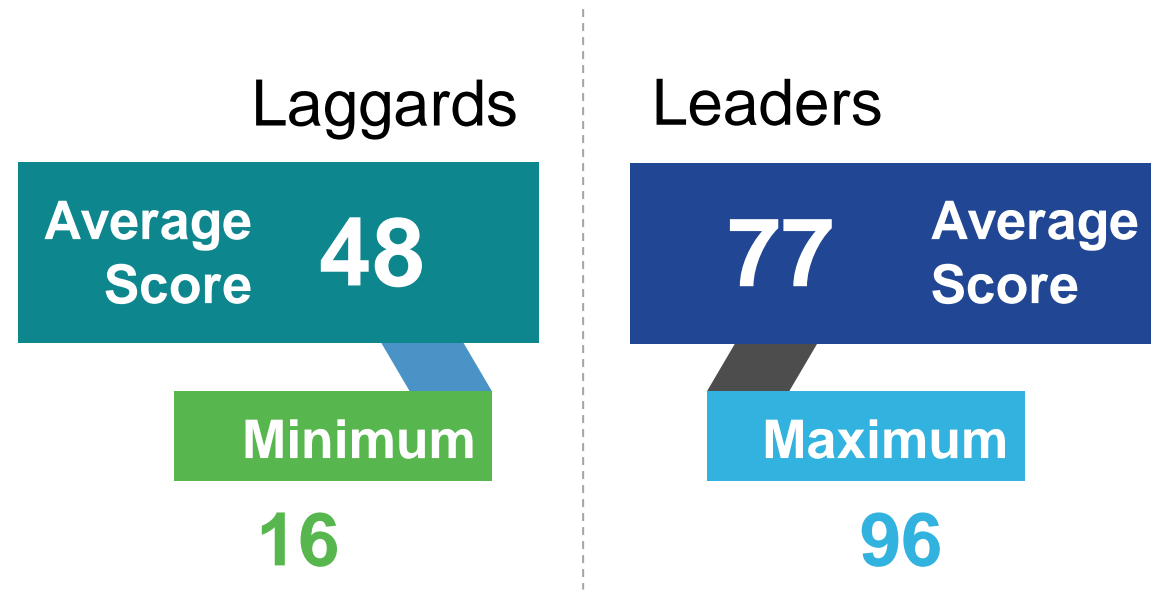
**10**

IT Operations and Skillsets

**1** Score per Respondent (0-100)

We divided the groups into thirds and compared the top third “Leaders” and the bottom third “Laggards” to understand how they differ.

## Digital Readiness Index Overall

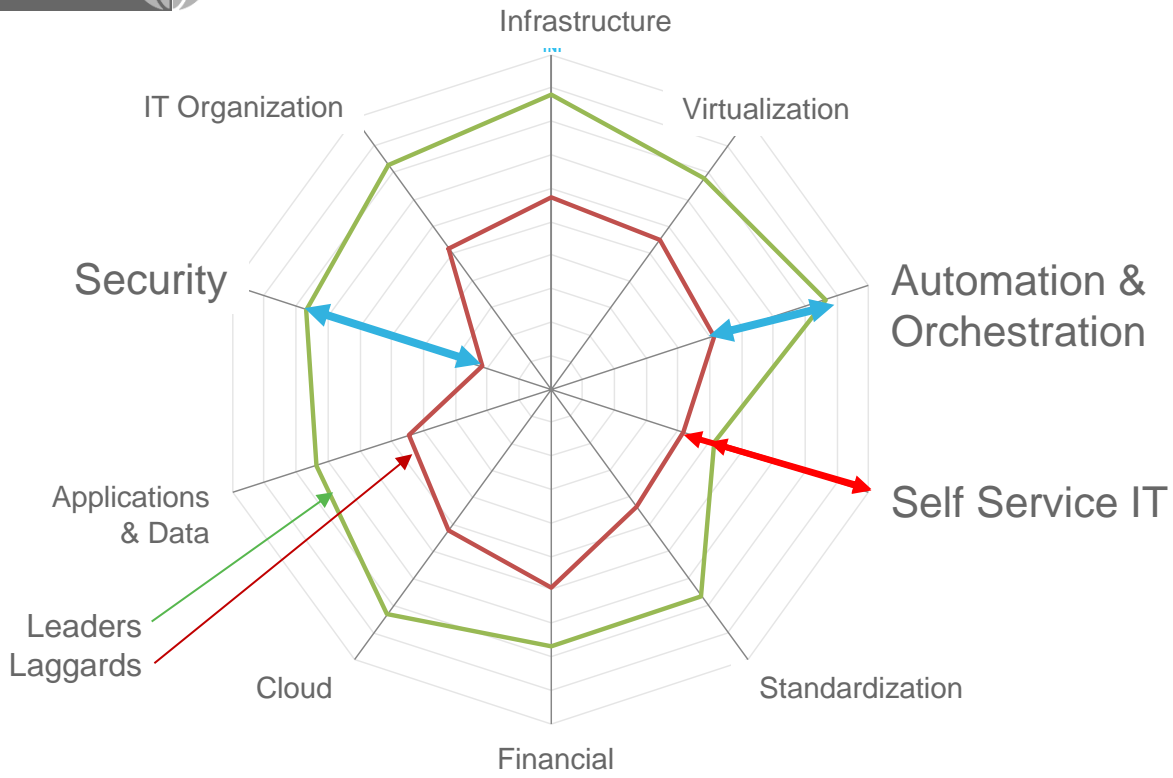






Security and Automation showed the biggest gaps between leaders and laggards

Self Service IT was problematic across all groups





## **SECURITY IS IT'S BIGGEST CHALLENGE**

When asked their most difficult challenges to overcome, IT leaders cited “Security” as #1 (43% responded Security was their biggest challenge).

Security is mentioned by more than half (52%) of US IT Leaders.

## **SECURITY POLICY AND PROCESS ARE OUTDATED**

Less than half of companies maintain a security policy that is reviewed and updated on a regular basis.

## **MANY STRUGGLE WITH COMPLIANCE TO SECURITY POLICY**

Companies have sufficient technology and processes in place to maintain just 65% compliance, on average, to the security policies that exist.

The US is ahead of the curve on compliance. Australia is far behind.



## HELP DESK DEPENDENCE

One in four IT service requests still goes through a help desk.

For government agencies, this number climbs to nearly 1 in 3.

## AUTOMATION GAP

Automation is critical to digital enablement, yet more than 60% of IT service request fulfillment is people-dependent.

This number climbs to 70% within government.

## TOO SLOW

Only 44% are able to deliver on new requests for existing IT services within a 48 hour time frame.

1 in 3 require a month or longer to provision infrastructure to support a new business application.



## IT SKILLS ARE A KEY CONCERN

Evolving the IT skill set is considered the second-most difficult challenge for IT.

Concern is especially high in the US and India with 41% and 46% of respondents citing this, respectively (vs. 33% on average).

## IT ROLE EVOLVING

IT leaders predict the need to re-train and re-deploy staff as job becomes less hands-on and more managerial. Leaders predicted the need for more multi-technology expertise, contract negotiation, and vendor management skills.

## ROLES IMPACTED

IT leaders anticipate traditional data center and network management roles will become more generalist roles.

IT Leaders anticipate rise in number of information security professionals.





## US PUBLIC CLOUD ADOPTION LAGS

Only 65% of US companies are using Public Cloud application deployments (vs. 72% globally). 15% have no plans to use public cloud (vs. 6% globally).

1 in 6 have no plans to enable data access to/from the public cloud.

## HYBRID CLOUD IS STILL NASCENT

only 10% of US respondents claim to be able to burst into the Public Cloud.

US application migration to cloud platforms also lags behind other countries.

## NO CHANGE IN THE NEAR FUTURE

US IT professionals are behind the rest of the world on ability to move workloads into the cloud, but they don't anticipate improving faster than their peers over the next two years.



## **DATA STRATEGY IS LIMITING AGILITY**

Fewer than 1 in 5 companies today can make data accessible to Public Cloud based applications

## **CRITICAL APPS ARE NOT CLOUD READY**

Only 15% of companies can automatically burst loads to public cloud services to meet demand

1 in 4 companies maintain ALL mission critical applications on dedicated physical servers.

## **LONG LEAD TIMES TO PROVISION INFRASTRUCTURE**

1 in 3, in fact, require a month or longer to provision infrastructure to support a new business application.



## IN SECURITY

- 3 in 5 have security policy framework that is documented, reviewed and updated on a regular basis
- 1 in 3 boast 90%+ compliance with security policies, and 3 in 4 have 70%+ compliance
- More than 4 in 5 are regularly tracking and reporting service delivery effectiveness metrics

## IN AUTOMATION

- 1/3 are able to move virtualized workloads automatically across interconnected data centers, public cloud services (vs. 1/4 on average)
- Half as likely still to rely on informal scripts to manage resources
- More than 9 in 10 automate non-virtualized workloads (vs. 85% on average)

## IN ADAPTABILITY

- More than half proactively manage technology lifecycles with planned upgrades and replacements (as compared to just 43% on the whole)
- 45% are able to meet 60% or more of IT service requests with current catalog (as compared to just 1 in 3 on average)



## **INDIVIDUAL BELIEFS NOT ALIGNED TO CAPABILITIES**

Some groups believe themselves to be well ahead of reality, while others do not give themselves enough credit for being ahead of the game. Beliefs in general did not map to capabilities.

## **COUNTRIES & INDUSTRIES**

China rates itself lower than it should, India rates itself higher, Australia rates itself far higher, and the US rates itself higher on some dimensions and lower on others vs. the objective Index. No vertical stood out with better subjective insights about itself.

## **ALL BELIEVE THEY ARE BETTER PREPARED THAN PEERS**

When asked to rate abilities subjectively vs peers, all countries and industries believe themselves to be more capable than their peers.





Security is considered top challenge regardless of country

Challenges



SELF SCORE

MOST DIFFICULT CHALLENGES FOR ORGANIZATIONS TO OVERCOME

TOTAL



US



MEXICO



BRAZIL



UK



GERMANY



CHINA

GLOBAL



INDIA



AUSTRALIA



	%	TOTAL	US	MEXICO	BRAZIL	UK	GERMANY	CHINA	INDIA	AUSTRALIA
Security	43		52 ▲	48	37	42	43	39	45	38
IT Skill Sets	33		41 ▲	29	28	34	27 ▼	25 ▼	46 ▲	35
Complexity	30		29	30	31	31	35	25	29	28
Ongoing Cost	30		33	31	30	32	27	24	32	29
Reliability Concerns	28		34 ▲	29	28	25	21 ▼	21 ▼	33	32
Legacy Systems	27		27	36 ▲	29	24	24	17 ▼	35 ▲	25
Loss of Control	25		23	20	23	24	26	23	32 ▲	28
Scalability	25		26	23	22	23	20	28	32 ▲	23
Data Center Management	24		23	20	23	19	14 ▼	23	39 ▲	28
Initial Set-Up Cost	24		25	29	26	27	17 ▼	14 ▼	30 ▲	22
Change Management	24		18	30 ▲	23	21	15 ▼	21	34 ▲	25
Quantifying Return on Investment	22		25	17	19	27	17	20	26	26
Fear of Staff Obsolescence	22		25	27	24	18	17	15 ▼	29 ▲	24
Governance	22		24	20	21	20	19	19	26	26
Loss of Flexibility	22		17	23	17	17	24	22	29 ▲	25
Resources	21		21	25	22	22	17	12 ▼	25	25
Vendor Management	21		18	19	20	21	12 ▼	15	36 ▲	24
Vendor Selection	20		15 ▼	24	25	15	14 ▼	13 ▼	35 ▲	23
Ensuring a Proven Solution	20		19	16	27 ▲	18	16	20	26 ▲	21
Availability Concerns	20		14 ▼	13 ▼	22	16	19	15	32 ▲	28 ▲
Managing SLAs (Service Level Agreements)	20		21	12 ▼	21	19	14 ▼	17	30 ▲	22
Disengaging from Vendors	18		13	22	20	15	11 ▼	12 ▼	27 ▲	21
Making a Good Business Case	17		15	10 ▼	18	19	11 ▼	15	29 ▲	22
None	1		3	0	1	3	4 ▲	0	0	0

Top Responses  
1 2 3

▲ Higher than TOTAL

▼ Lower than TOTAL

at 95% c.i.  
FI12. Keeping in mind the predictions about the data center of the future you just read about, which of the following challenges do you believe will be most difficult for organizations to overcome?

Base:

2040

252

231

257

253

259

262

262

264



Security is considered top challenge regardless of vertical

Challenges



SELF SCORE

MOST DIFFICULT CHALLENGES FOR ORGANIZATIONS TO OVERCOME



%

Top Responses  
1 2 3

▲ Higher than TOTAL  
▼ Lower than TOTAL

at 95% c.i.  
FI12. Keeping in mind the predictions about the data center of the future you just read about, which of the following challenges do you believe will be most difficult for organizations to overcome?

	TOTAL	MANUFACTURING	GOVERNMENT	RETAIL	BANKING & FINANCIAL	TRANSPORT & LOGISTICS	EDUCATION	HEALTH-CARE	OTHER
Security	43	53 ▲	41	34 ▼	43	41	44	41	44
IT Skill Sets	33	31	36	35	27 ▼	33	30	36	38
Complexity	30	33	29	28	30	26	27	31	35
Ongoing Cost	30	32	29	22 ▼	23 ▼	33	30	31	36
Reliability Concerns	28	34	24	25	28	27	30	28	27
Legacy Systems	27	28	28	23	26	26	25	29	30
Loss of Control	25	25	28	24	24	23	21	28	26
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Data Center Management	24	26	25	25	21	23	25	20	25
Initial Set-Up Cost	24	23	26	25	23	24	26	21	21
Change Management	24	25	22	25	23	19	26	22	26
Quantifying Return on Investment	22	23	19	22	22	20	23	28 ▲	20
Fear of Staff Obsolescence	22	23	25	22	20	17	24	20	26
Governance	22	23	26	22	21	22	21	21	21
Loss of Flexibility	22	21	23	23	21	21	26	22	18
Resources	21	18	22	19	24	19	21	24	21
Vendor Management	21	20	18	17	21	21	23	22	22
Vendor Selection	20	24	21	21	20	19	20	24	15
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Availability Concerns	20	18	17	22	19	19	27 ▲	24	17
Managing SLAs (Service Level Agreements)	20	21	21	20	20	15	18	19	22
Disengaging from Vendors	18	16	18	18	20	17	21	18	15
Making a Good Business Case	17	16	18	20	15	13	20	21	15
None	1	0	1	2	0	1	3	2	1

Base:

2040

257

256

242

257

261

257

251

259

A bright sun is positioned in the upper center of the frame, casting a strong glow across the sky. The sky is a deep blue, filled with wispy, white clouds that are more densely packed near the horizon. The overall scene is bright and clear, suggesting a sunny day.

Thank You.

# METHODOLOGY



Online Survey

TARGET COUNTRIES N=



Fielded  
June 11 - July 31, 2015



Average Completion Time:  
30 minutes



8 Countries  
8 Verticals

-  US
-  MEXICO
-  BRAZIL
-  UK
-  GERMANY
-  CHINA
-  INDIA
-  AUSTRALIA

TOTAL

2041

253

231

257

253

259

262

262

264

## TARGET INDUSTRIES



MANUFACTURING



GOVERNMENT



RETAIL



BANKING & FINANCIAL SERVICES



TRANSPORTATION & LOGISTICS



EDUCATION



HEALTHCARE



OTHER

TOTAL	MANUFACTURING	GOVERNMENT	RETAIL	BANKING & FINANCIAL SERVICES	TRANSPORTATION & LOGISTICS	EDUCATION	HEALTHCARE	OTHER
2041	257	256	242	257	261	258	251	259
253	29	32	32	33	31	32	33	31
231	33	33	14	31	33	33	22	32
257	33	32	33	29	33	31	33	33
253	32	30	31	33	32	31	32	32
259	33	30	33	32	33	33	32	33
262	32	33	33	33	33	33	33	32
262	32	33	33	33	33	32	33	33
264	33	33	33	33	33	33	33	33


Note: Retail and Healthcare in Mexico (cells in red above) fell short of target levels and are included in roll-ups but not reported out separately.



# QUALIFICATION CRITERIA


**1** Screening for sensitive employment

Represents one of the targeted industry verticals **2**

**3** Organization has 1,000+ employees (US)  
OR 500+ employees (rest of world) 

Employed full-time directly by the company **4** 

**WORKS IN:**  
✓ IT  
*or*  
✓ DEV/OPS  
*or*  
✓ IT SECURITY

**AS:**  
✓ EXECUTIVE  
*or*  
✓ DIRECTOR  
*or*  
✓ MANAGER **5** 

**6** Has influence/responsibility in data center management

Company has at least 2 physical data centers **7**

**MUST:**  
✓ be financial decision-maker  
*or*  
✓ be part of committee that makes decisions  
*or*  
✓ make recommendations

**FOR AT LEAST 3:**  
✓ data center networking  
✓ data center computing/services  
✓ server virtualization  
✓ data center storage

✓ data center security  
✓ private cloud development, implementation and/or maintenance **8** 

# SAMPLING FRAME

Artificially Manipulated *not representative of industry mix within country*

We forced equal representation of the 8 verticals...

...and focused on large organizations:

**1,000+** employees in US

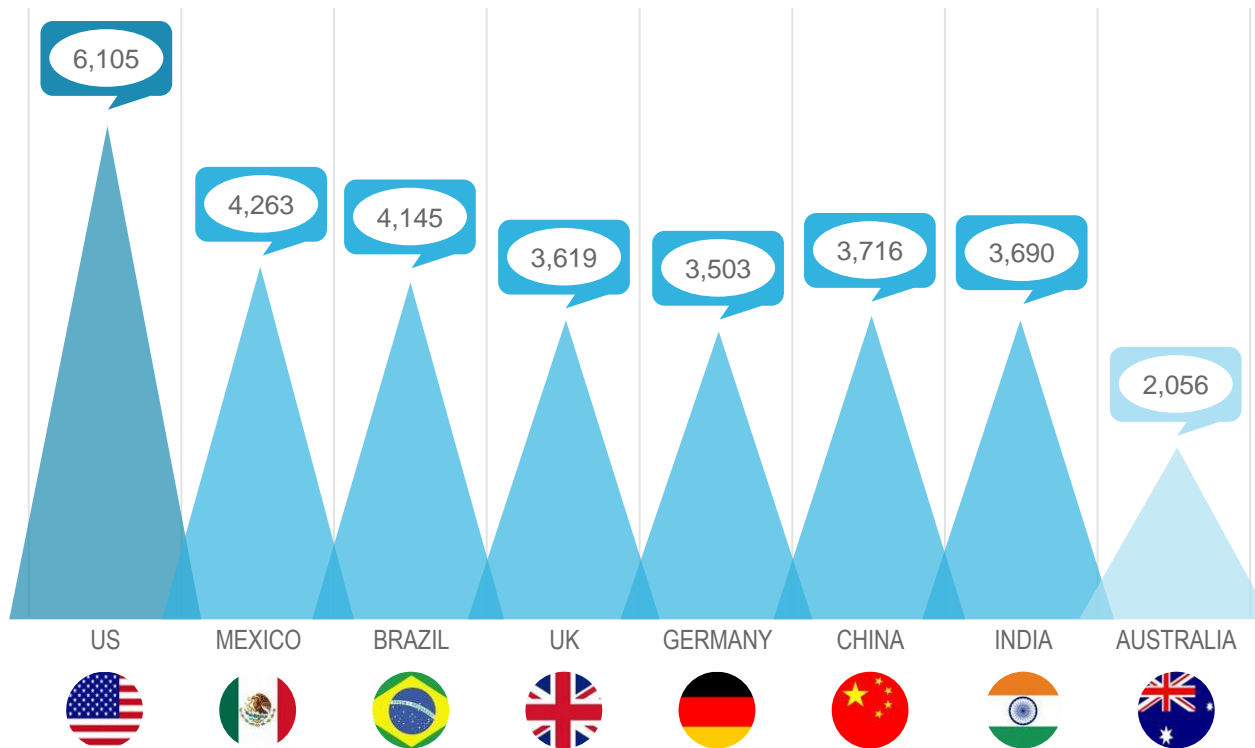
**500+** employees in all other countries

Multinational Corporations

Over-representation of large, multi-national corporations in emerging markets



# SIZE OF ORGANIZATION AVERAGE NUMBER OF EMPLOYEES

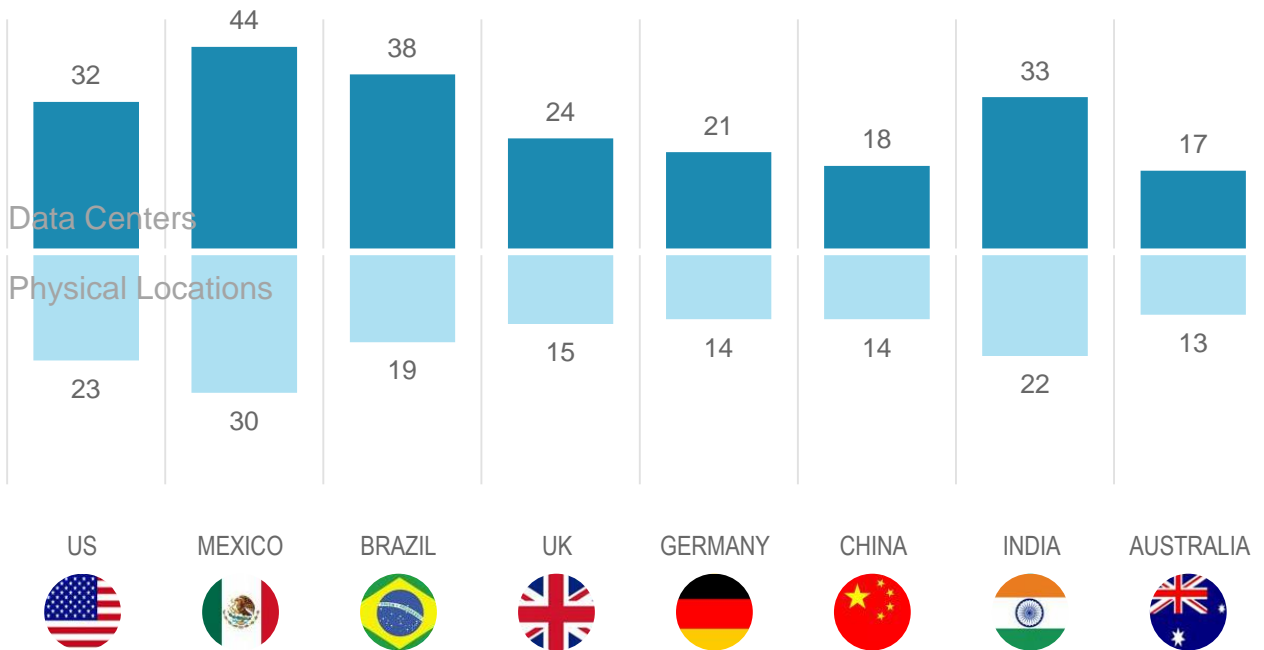


Note: Averages calculated using means of ranges, so numbers shown are lower than actual because responses of 10,000+ were capped at 10,000 for purposes of estimation.

Companies in the United States have the greatest number of employees, by far (a result of its more rigorous requirement of 1,000+), while Australian companies are the smallest by a wide margin.

The other 6 countries average approximately 4,000 employees, with Mexico and Brazil pulling slightly ahead of the others.

# SIZE OF ORGANIZATION AVERAGE NUMBER OF PHYSICAL LOCATIONS AND DATA CENTERS







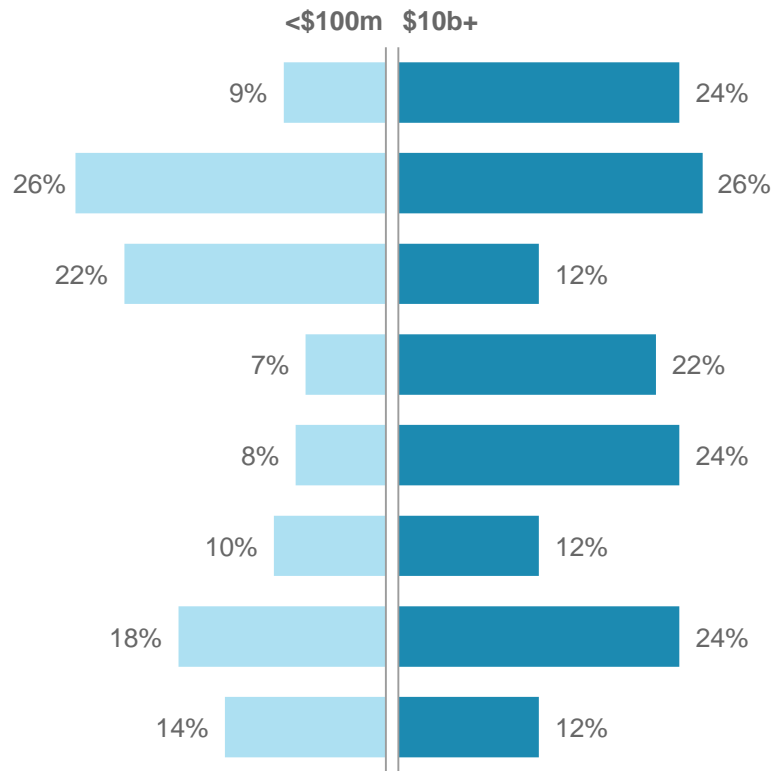
Mexico leads the rest of the world on both number of physical locations and number of data centers.

The US and India also have more data centers and physical locations than average, and while Brazil boasts the second-greatest number of data centers, its number of physical locations is at the global average.

Note: Averages calculated using means of ranges, so numbers shown are lower than actual because responses of 100+ data centers and 50+ locations were capped at 100 and 50, respectively, for purposes of estimation.

# SIZE OF ORGANIZATION REVENUE

	AVERAGE
 US	<b>\$10.7b</b>
 MEXICO	<b>\$10.7b</b>
 BRAZIL	<b>\$5.2b</b>
 UK	<b>\$10.2b</b>
 GERMANY	<b>\$9.7b</b>
 CHINA	<b>\$5.6b</b>
 INDIA	<b>\$10.7b</b>
 AUSTRALIA	<b>\$5.9b</b>



Companies in the US, Mexico and India have the highest revenue, on average, but note that Mexico - and to a somewhat lesser degree, India - have a balance of very large and very small players.

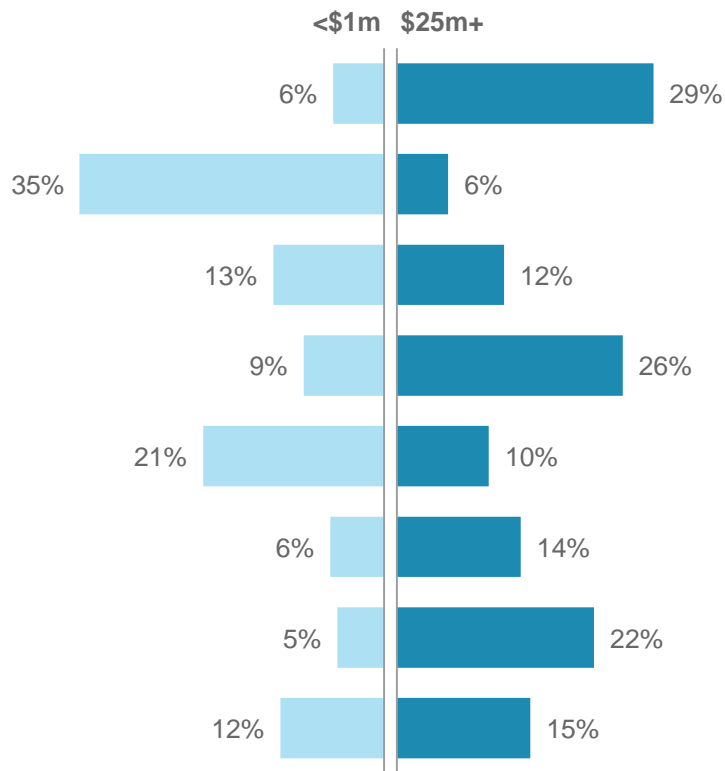
- In fact, it is their higher percentage of \$50b+ companies that drives their averages up to parity with the US.

Companies in Brazil represent the lowest revenues, while companies in China are also lower revenue, due to their concentration in the mid-sized range.

Note: Averages calculated using means of ranges, so numbers shown are lower than actual because responses of \$50b+ were capped at \$50b for purposes of estimation.

# SIZE OF ORGANIZATION IT BUDGET

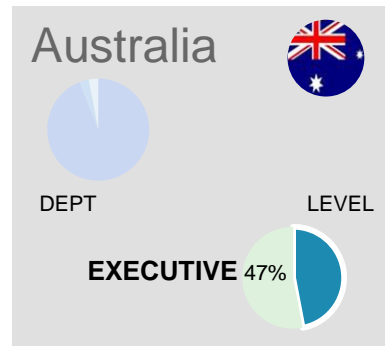
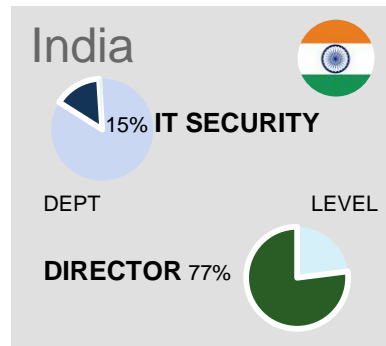
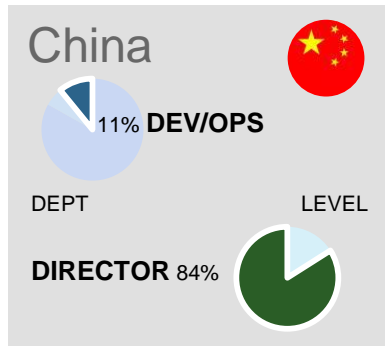
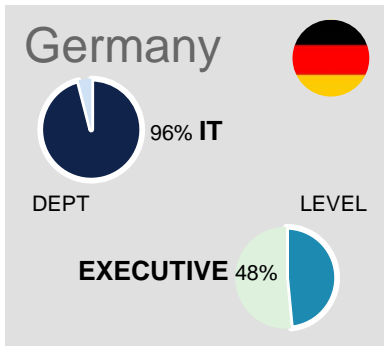
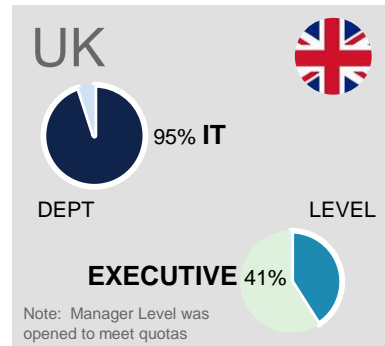
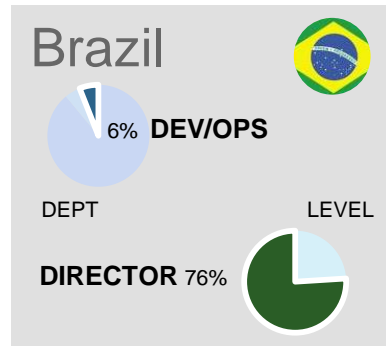
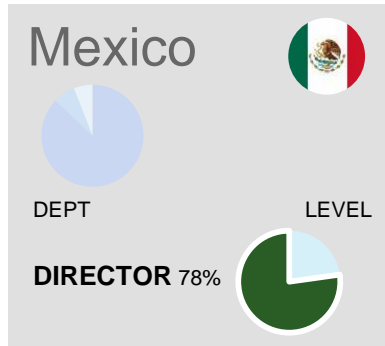
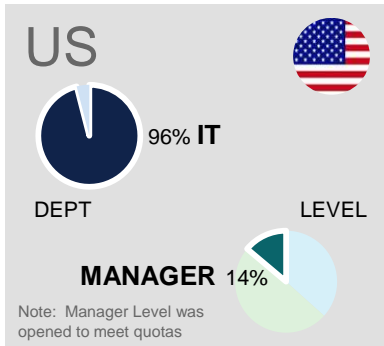
	AVERAGE
 US	<b>\$19.7m</b>
 MEXICO	<b>\$6.5m</b>
 BRAZIL	<b>\$11.1m</b>
 UK	<b>\$16.8m</b>
 GERMANY	<b>\$10.0m</b>
 CHINA	<b>\$11.9m</b>
 INDIA	<b>\$17.0m</b>
 AUSTRALIA	<b>\$11.8m</b>



Companies in the United States have the greatest IT budgets by a wide margin, followed by India and the UK.

Even though Mexico boasts very high revenues, on average, its IT budgets do not keep pace, as they average about half that of other countries.

Note: Averages calculated using means of ranges, so numbers shown are lower than actual because responses of \$50m+ were capped at \$50m for purposes of estimation.

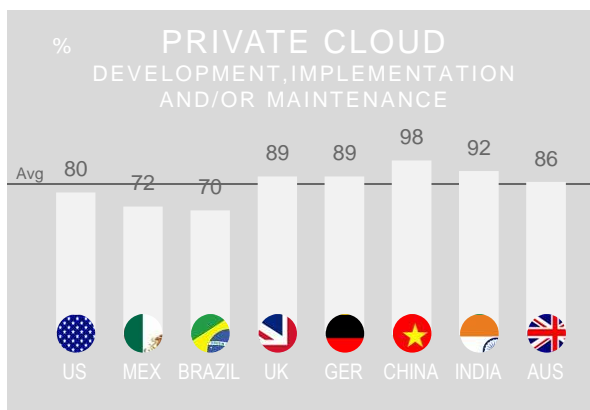
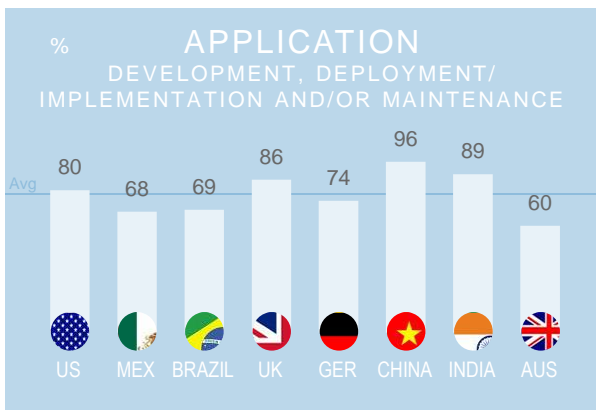
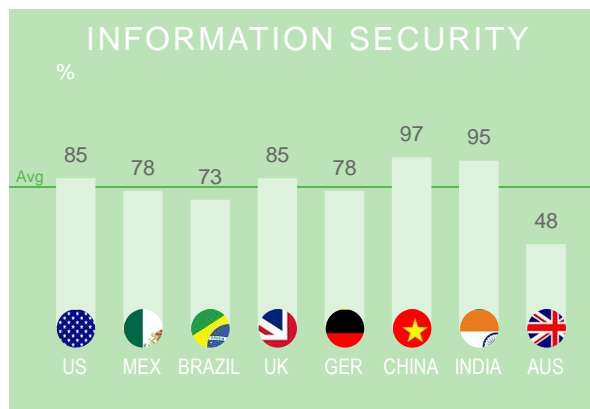
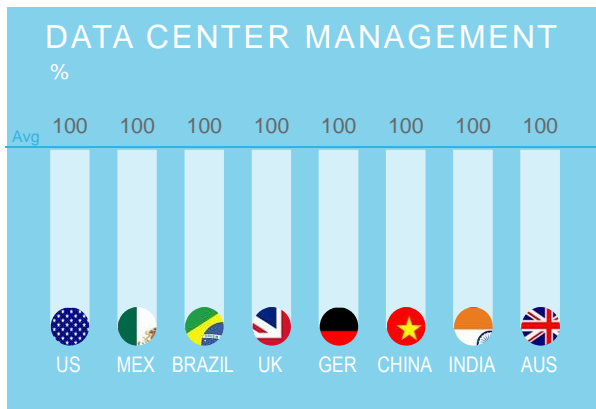


Respondents in India are more likely to be in IT Security, while Brazil – and especially China – skew Dev/Ops. The Executive/Director split should also be noted, as those in the UK, Germany, and Australia are more likely to be Executives, while those in Mexico, Brazil, China, and India are more likely to be Directors.

Note: Only significantly higher differences from Total at 95% c.i. are called out



# AREAS OF INVOLVEMENT/RESPONSIBILITY

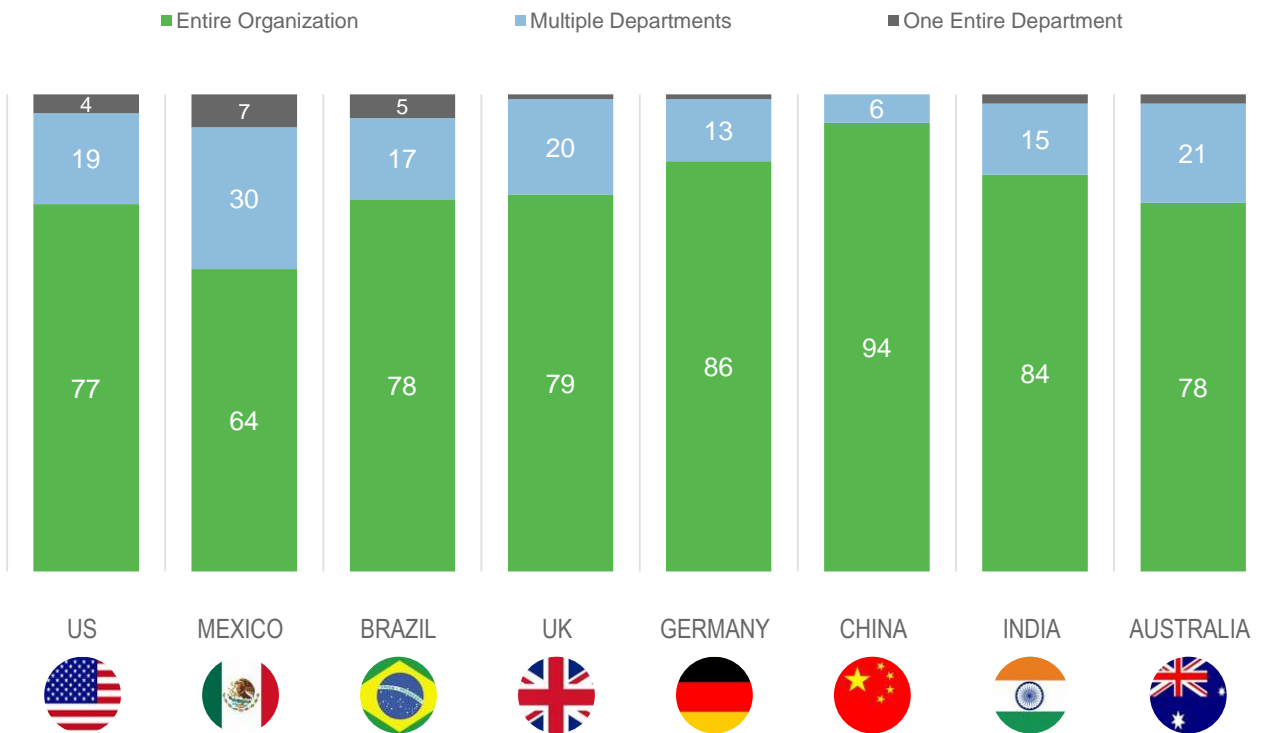


All study participants are involved in Data Center Management, required for participation.

Those in both China and India are very likely also to be involved in Information Security, Applications and Private Cloud, while Mexicans, and especially Brazilians, have lesser involvement in all three.

Fewer than half of Australians deal with Information Security, a huge gap vs. the other players, and they are also light on Applications.

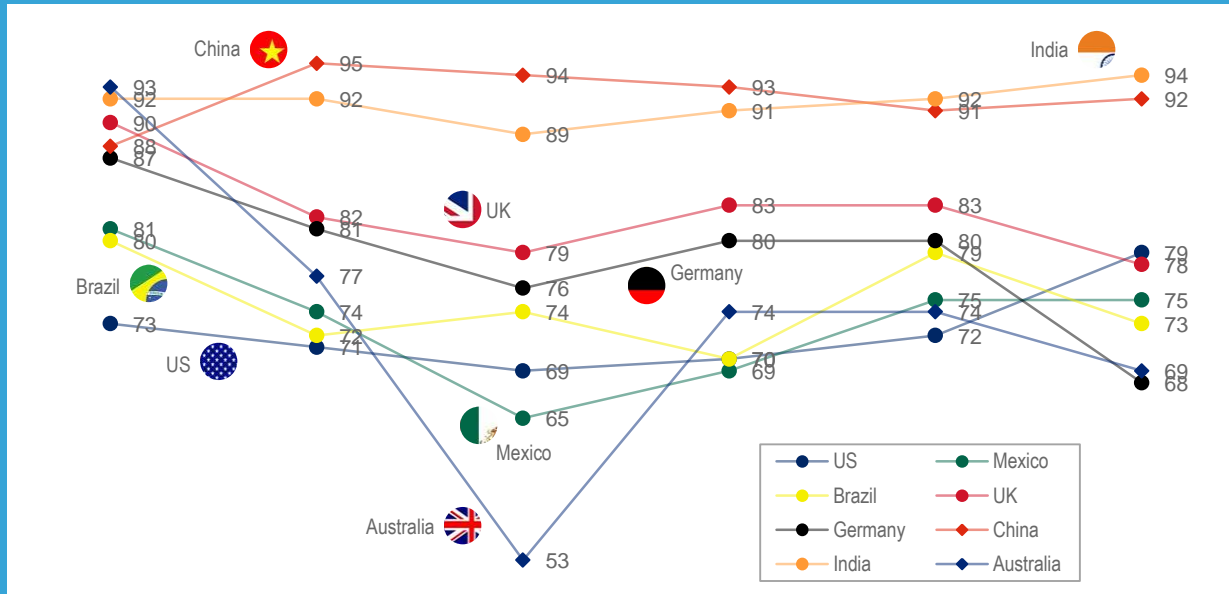
# SCOPE OF DECISION-MAKING



Participants in China are the most likely to have decision-making responsibility for the entire organization, followed by Germany and India.

Those representing Mexico are the most likely to have their influence limited to departmental levels.

# % FINAL DECISION-MAKER



All participants play a role in decision-making for all components of the data center, and the majority are, in fact, final decision-makers.

Even though participants in China and India are largely Directors, nearly all are final decision makers in all areas.

Server Virtualization decisions are the most likely to be made by committee, especially true in Australia and Mexico.

Data Center Networking	Data Center Computing/Servers	Server Virtualization	Data Center Storage	Data Center Security	Private Cloud Development, Implementation and/or Maintenance
------------------------	-------------------------------	-----------------------	---------------------	----------------------	--