



Data Leakage Worldwide: The Insider Threat and the Cost of Data Loss

PRESENTED TO

CISCO SYSTEMS



AUGUST 2008



Research Objectives

Cisco contracted Insight Express to execute an international survey with a focus on the following objectives:

- Explore employee use of company devices, including communication services and devices used, personal activities conducted and the extent to which technology and information is shared.
- Assess IT's perception of employee use of non-IT approved programs and applications, concern for security issues and actions taken to prevent or uncover potential security breaches.
- Understand whether workers are concerned with security as well as how much they perceive themselves exposing their company-issued technology devices to risk.

Timing and Sample Qualifications

- This report discusses the findings for 1009 End Users and 1011 IT Decision Makers who completed the online survey between July 16 – August 4, 2008.
- The survey was translated into local languages and fielded in the following 10 countries:

REGION	THE AMERICAS		EUROPE				ASIA-PACIFIC			
Country Abbreviation	US US	Brazil BRA	UK UK	France FRA	Germany DEU	Italy ITA	China CHN	Japan JPN	India IND	Australia AUS
End Users n=	100	101	104	100	101	101	100	101	100	101
IT Decision Makers n=	100	106	100	101	100	100	102	100	100	102

- Respondents were screened to meet the following criteria:
 - a. Adults (22+)
 - b. Employed
 - c. Does not work for a company in the Market Research or nonprofit Industry
 - d. Aware of approximately how many people their company employs at all locations worldwide
 - e. End Users: Is a non-IT professional
 - f. IT Decision Makers: Have some influence in purchasing and policy decisions



Lost Or Stolen Company-Issued Technology

- About one in 10 End Users have lost or had stolen a company-issued computer, mobile device or portable storage device (with corporate data on it) in the past year.

	END USERS										
	Total	US	BRA	UK	FRA	DEU	ITA	CHN	JPN	IND	AUS
	(n=1009)	(n=100)	(n=101)	(n=104)	(n=100)	(n=101)	(n=101)	(n=100)	(n=101)	(n=100)	(n=101)
	A	B	C	D	E	F	G	H	I	J	
Lost your company issued mobile wireless device outside of work	3%	0%	5% AC	0%	4% AC	2%	3%	7% AC	2%	7% AC	3%
Had your company issued mobile wireless device stolen outside of work	3%	0%	8% ACH	2%	4% AH	2%	3%	2%	0%	6% AH	2%
Lost your company issued Notebook/Laptop PC or other mobile wireless device outside of work	2%	0%	0%	1%	1%	2%	4% ABHJ	4% ABHJ	0%	5% ABHJ	0%
Lost a portable storage device with corporate data on it	2%	1%	2%	0%	3%	0%	2%	7% ACEHI	0%	1%	4% CEH
Lost your company issued Notebook/Laptop PC while at work	1%	0%	2%	0%	2%	2%	1%	2%	0%	3%	0%
Lost your company issued mobile wireless device while at work	1%	0%	1%	1%	0%	1%	4% ADH	3%	0%	4% ADH	1%
Had your company issued Notebook/Laptop PC or other mobile wireless device stolen outside of work	1%	0%	1%	1%	1%	0%	2%	2%	1%	3%	1%
Had your company issued Notebook/Laptop PC stolen while at work	1%	0%	2%	0%	3%	0%	1%	2%	0%	2%	1%
Had your company issued mobile wireless device stolen while at work	1%	0%	2%	0%	1%	0%	0%	2%	0%	3%	2%
None of the above	91%	99% BDFGIJ	83%	95% BDFI	87%	96% BDFGI	86%	88%	98% BDFGIJ	85%	89%

Have lost or had company-issued technology stolen, 9%

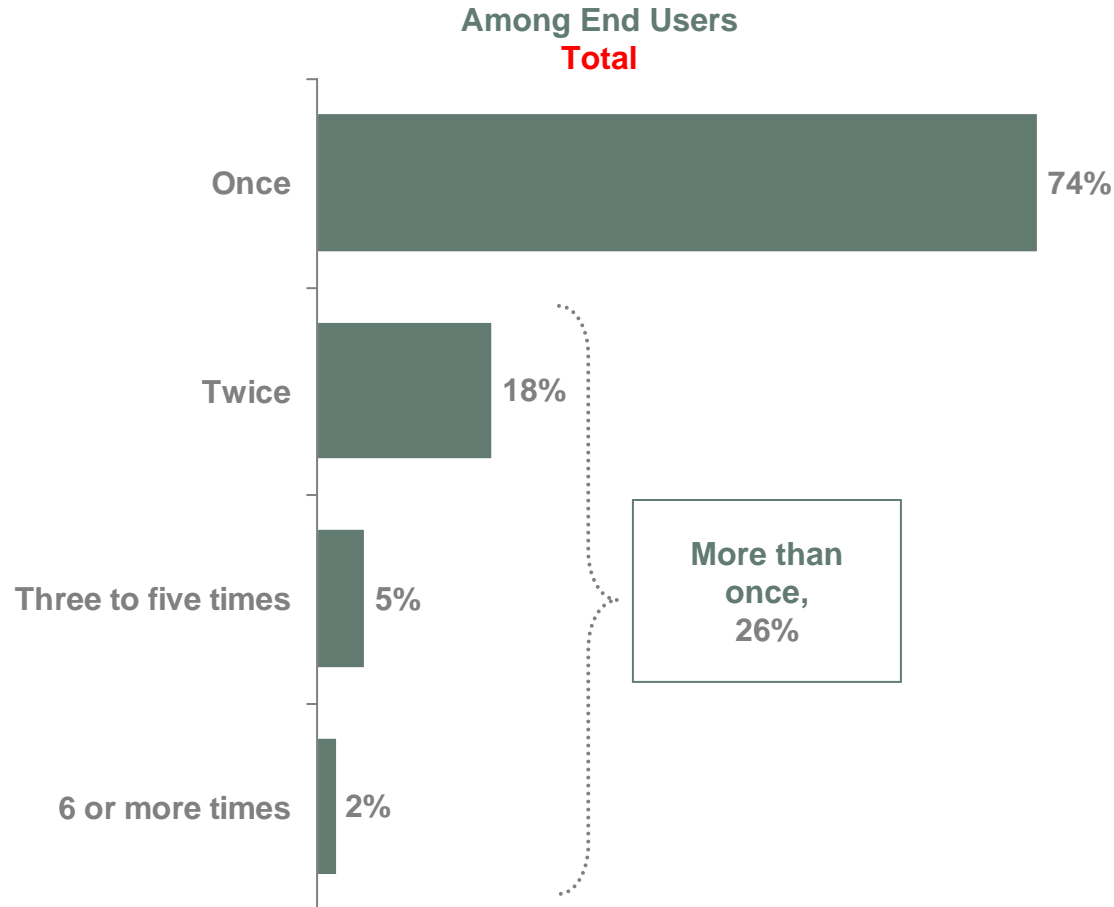
Note:
Letters A-J indicate significant differences between countries at 95% confidence level.

Have you ever? (Check all that apply.)



Frequency Of Losing Or Having A Company-Issued Device Stolen

- One of four End Users who have either lost or had a company-issued device stolen in the past year have had it happen more than once.

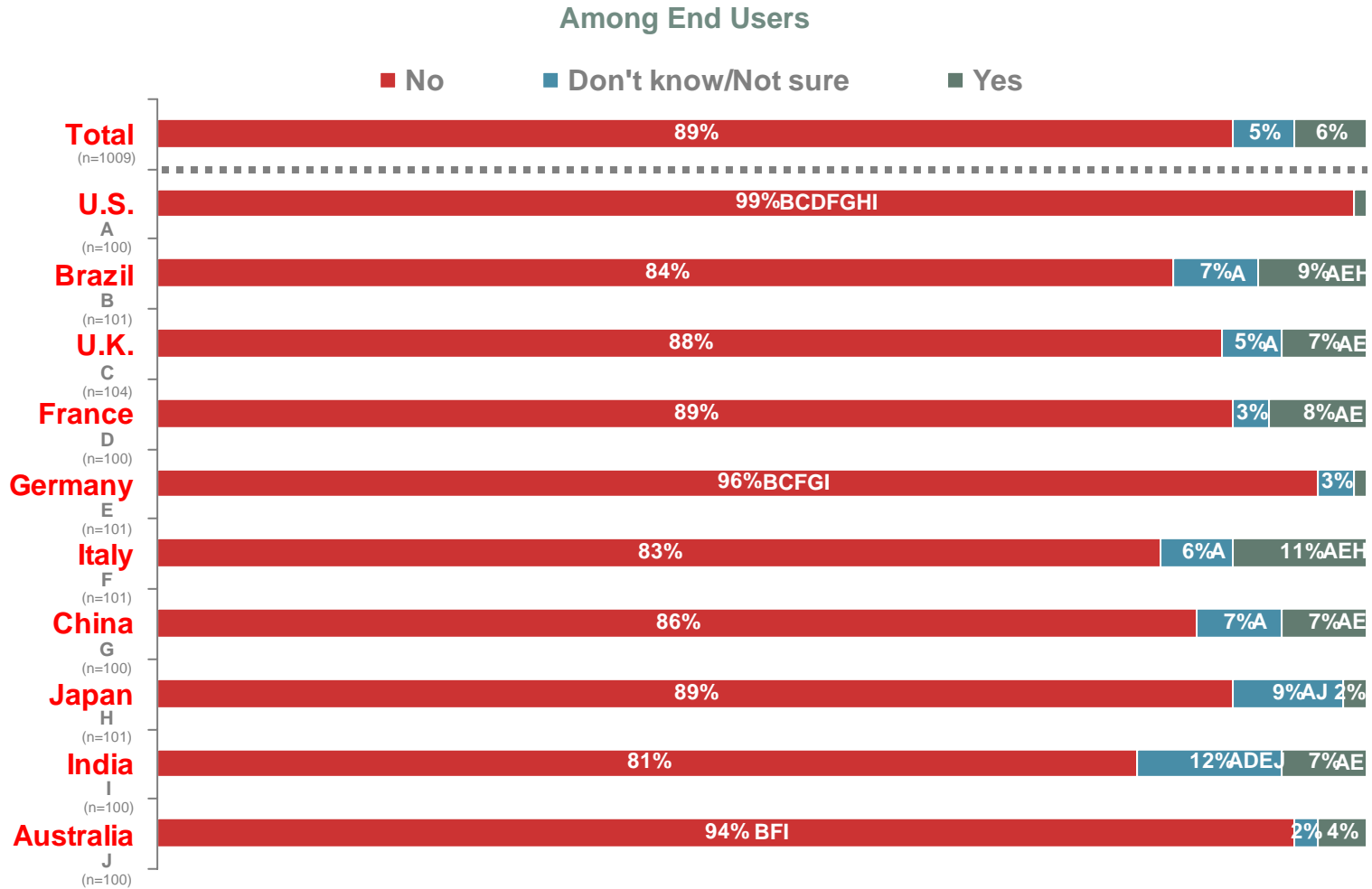


How many times have you lost or had stolen any company issued device in the past year?



Keeping Company-Issued Resources From Past Jobs

- Very few End Users have kept company-issued resources from a previous job, particularly in the U.S.



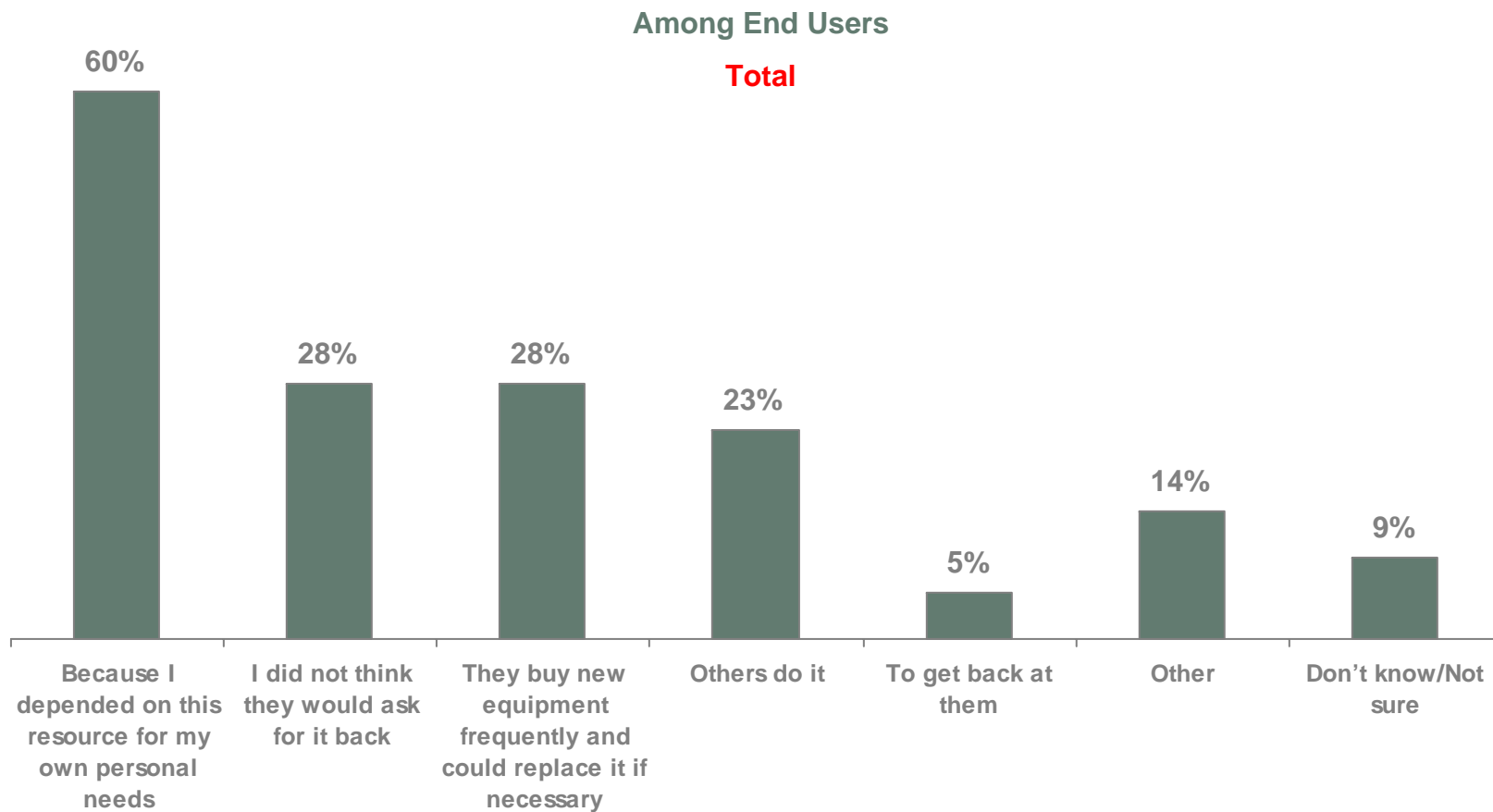
Note:
Letters A-J indicate significant differences between countries at 95% confidence level.

Thinking back to when you left your previous job, did you either purposefully or accidentally keep company issued resources such as personal computers, cellular telephones, smart phones, or PDAs with corporate data on them?



Reasons For Keeping Company-Issued Resources

- Six in 10 End Users who have kept a company-issued resource from a previous job did so because they depended on it for their own personal needs.



Theft Or Illegal Access Of Company Data & Other Resources

- One in 10 End Users have stolen technology, accessed someone else's computer and stolen information, and sold it or known of coworkers who have committed such offenses.

	END USERS											
	Total	US	BRA	UK	FRA	DEU	ITA	CHN	JPN	IND	AUS	
	(n=1009)	(n=100)	(n=101)	(n=104)	(n=100)	(n=101)	(n=101)	(n=100)	(n=101)	(n=100)	(n=101)	
	A	B	C	D	E	F	G	H	I	J		
Have accessed, stolen or sold corporate data or resources OR know someone else who has, 11%	Known someone at work who has accessed someone else's computer to look for unauthorized personal or corporate information	6%	3%	7% H	4% H	14% ACEFH	4% H	3%	8% H	0%	10% AFH	6% H
	Accessed someone else's computer to look for unauthorized personal or corporate information	5%	1%	7% AHJ	3%	12% ACEHIJ	2%	5% J	11% ACEHJ	1%	4% J	0%
	Known someone at work who has stolen computers or other equipment containing corporate data from your company	3%	1%	3%	2%	4% HJ	2%	8% ACHJ	3%	0%	6% HJ	0%
	Known someone at work who has sold corporate data to another party for profit	3%	0%	5% A	1%	3%	3%	1%	5% A	3%	4% A	1%
	Stolen computers or other equipment containing corporate data from your company	1%	0%	0%	0%	1%	0%	2%	0%	0%	3%	0%
	Sold corporate data to another party for profit	1%	0%	2%	0%	0%	2%	2%	0%	1%	2%	0%
None of the above	89%	96% BDFGI	85%	93% DGI	79%	93% DGI	87%	82%	96% BDFGI	84%	94% BDGI	

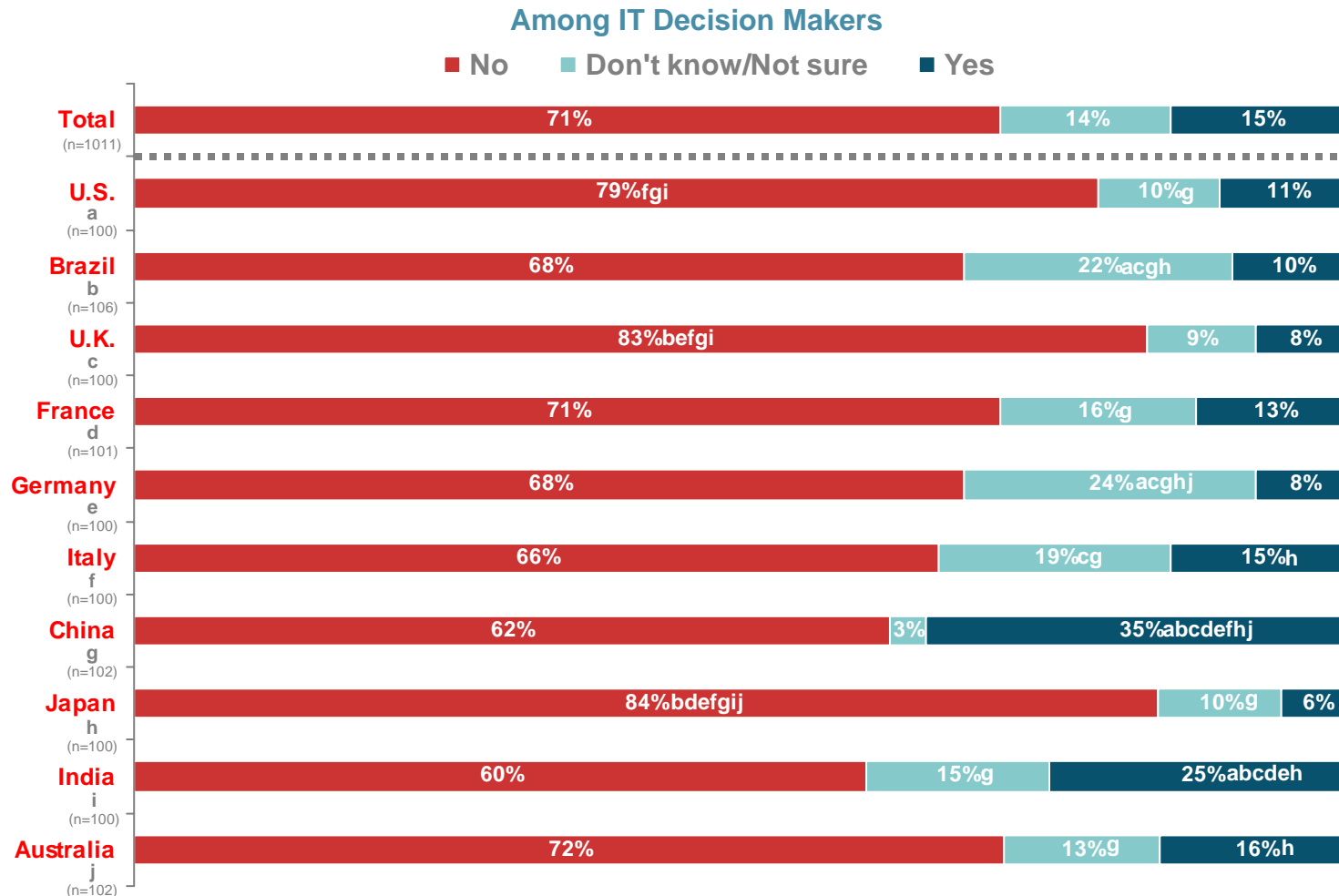
Note:
Letters A-J indicate significant differences between countries at 95% confidence level.

Have you ever? (Check all that apply.)



Theft Of Old Company Data

- More than 1 in 10 IT Decision Makers say their company has suffered a security breach that included the theft of old company data.
 - This is significantly prevalent in China and India.



Note:
Letters a-j indicate significant differences between countries at 95% confidence level.

Has your company ever suffered a security breach that included the theft of old company data?



Top Concerns For Leaked Or Stolen Corporate Data

- IT Decision Makers, particularly those in Germany, tend to be most concerned that leaked or stolen corporate data is a result of employee negligence.
- A significantly large proportion of IT Decision Makers in China are mainly concerned about outside threats e.g. hackers infiltrating their network.

	IT DECISION MAKERS										
	Total (n=1011)	us (n=100)	bra (n=106)	uk (n=100)	fra (n=101)	deu (n=100)	ita (n=100)	chn (n=102)	jpn (n=100)	ind (n=100)	aus (n=102)
		a	b	c	d	e	f	g	h	i	j
Inside threat: Negligent employees	39%	29%	40%	32%	49% acg	55% abcfgj	38%	27%	47% acg	35%	37%
Outside threat: Hackers infiltrating our network and stealing data	30%	35% eh	31% e	26%	28%	17%	36% eh	43% cdehj	22%	34% e	26%
Inside threat: Disgruntled employees	20%	24% df	23% d	21%	11%	16%	13%	26% dfi	24% df	15%	26% dfi
Other	2%	3%	2%	7% fgh	2%	2%	1%	0%	0%	2%	3%
Don't know/Not sure	9%	9%	5%	14% bg	11% g	10% g	12% g	3%	7%	14% bg	7%

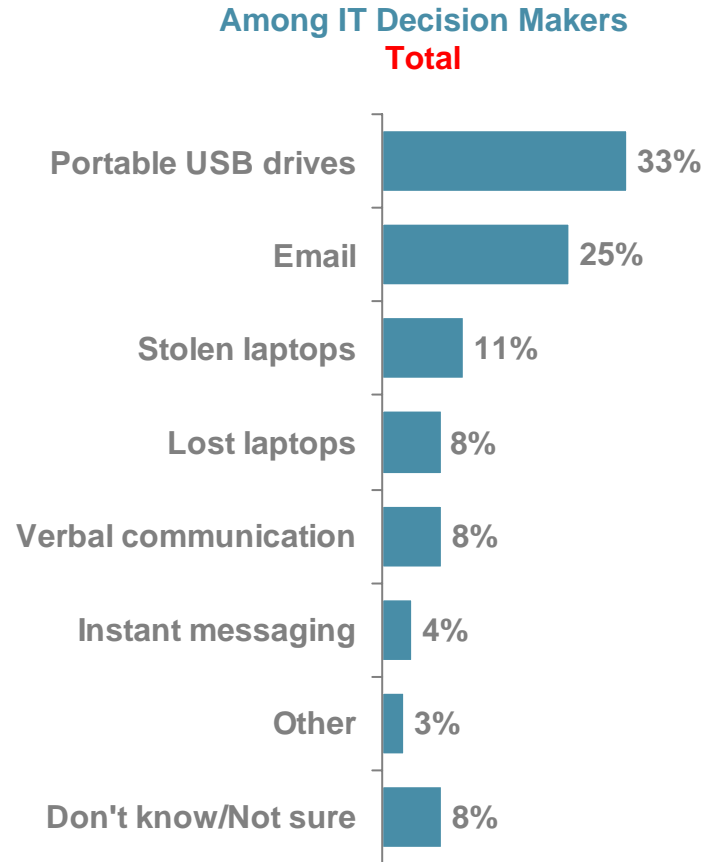
Note:
Letters a-j indicate significant differences between countries at 95% confidence level.

What is your top concern with regard to employees leaking or stealing corporate data?



#1 Concern Over How Corporate Data Is Leaked Or Stolen

- IT Decision Makers tend to be most concerned about portable USB drives and email as routes for leaked or stolen corporate data.



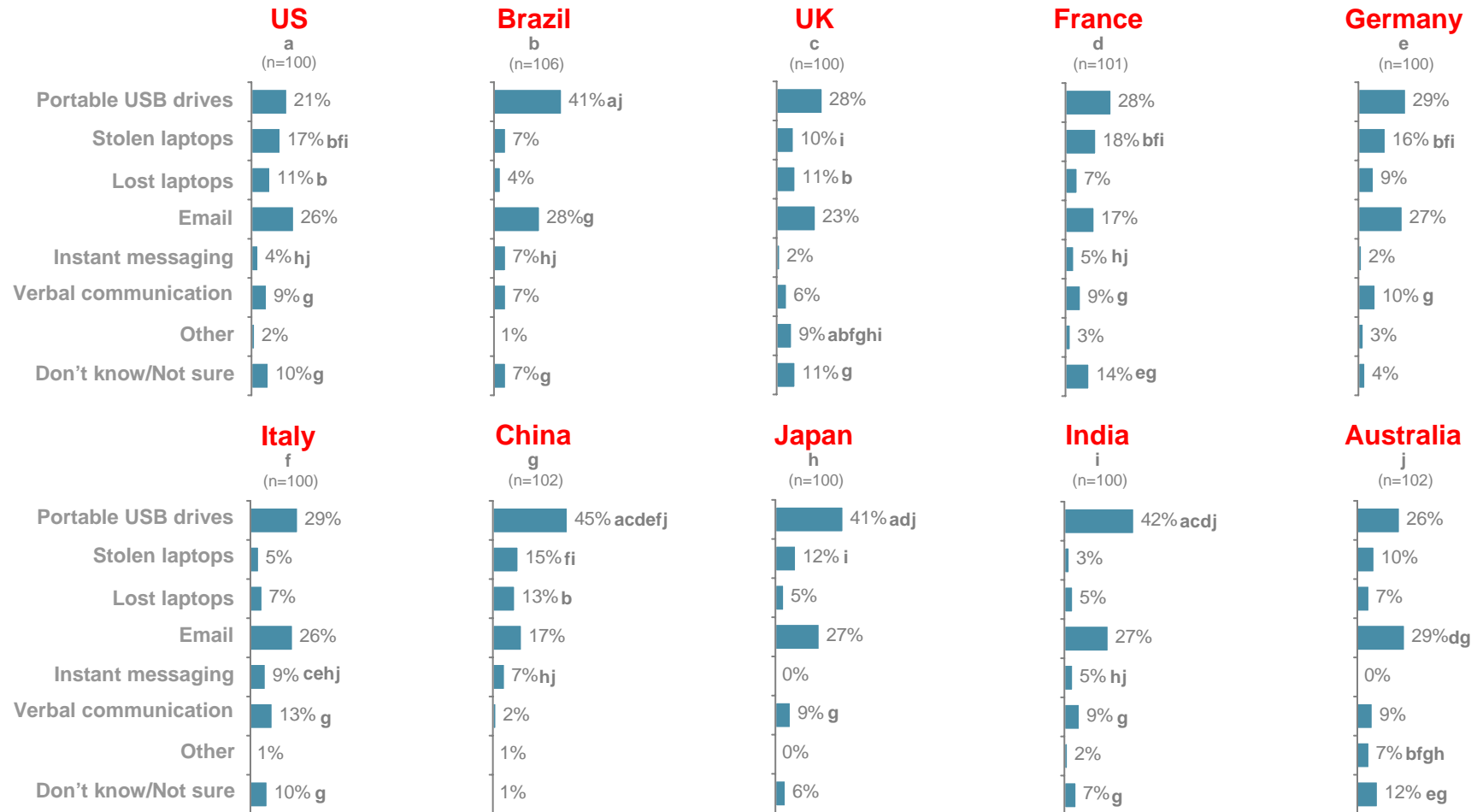


#1 Concern Over How Corporate Data Is Leaked Or Stolen



- IT Decision Makers in China and India tend to be more concerned about data leaked or stolen through portable USB drives than through any other means.

Among IT Decision Makers



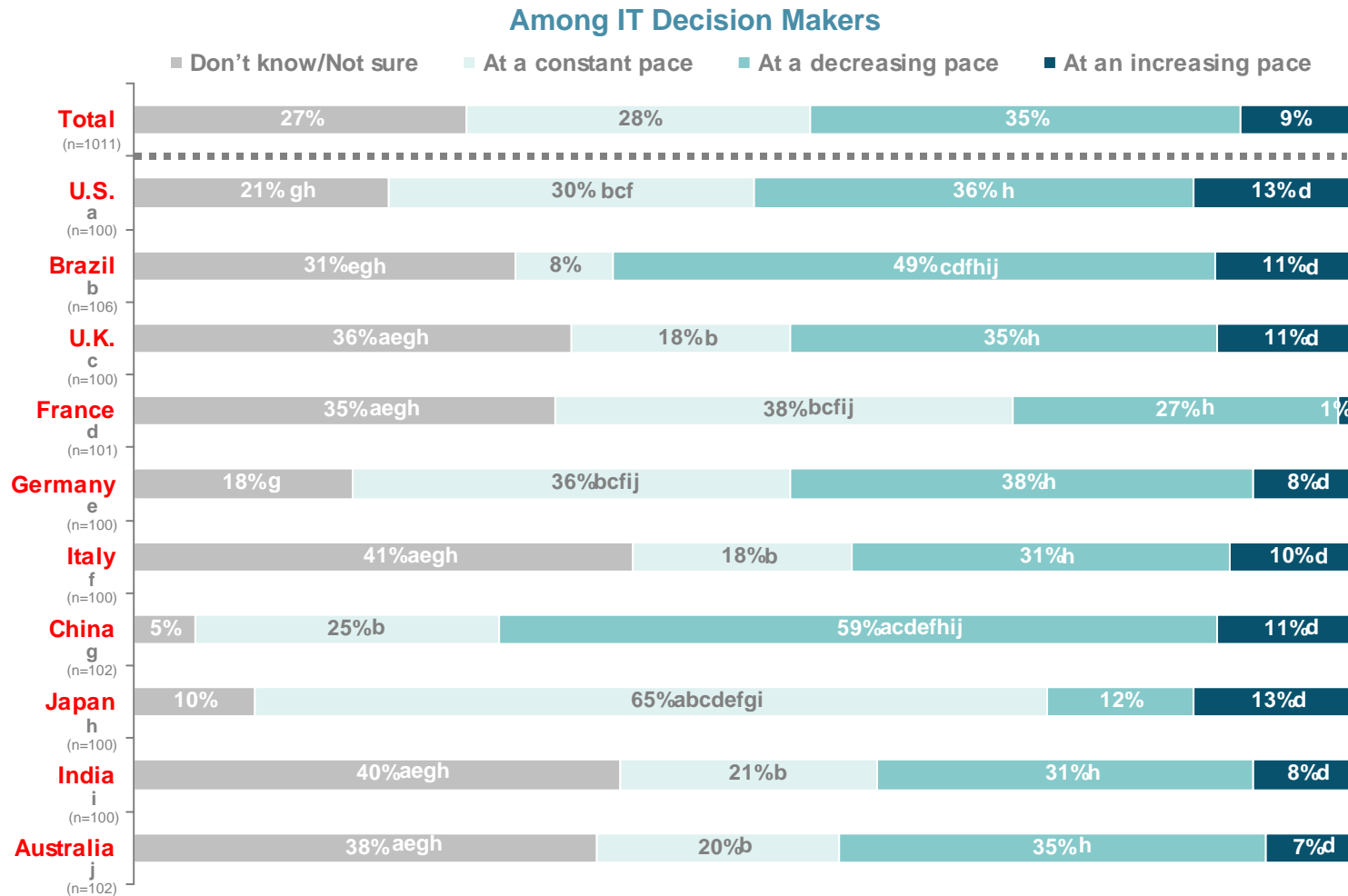
Note:
Letters a-j indicate significant differences between countries at 95% confidence level.

What is your top concern with regard to how corporate data is leaked or stolen from your company?



Change In Loss Of Data Due To Security Breaches

- About one in 10 IT Decision Makers say their company has lost data due to security breaches at an increasing pace over the past five years. At least one in three reported that it's increasing or staying at a constant pace.
- Compared to other countries, a significantly larger proportion of IT Decision Makers in China say their company has lost data at a decreasing pace.



Note:
Letters a-j indicate significant differences between countries at 95% confidence level.

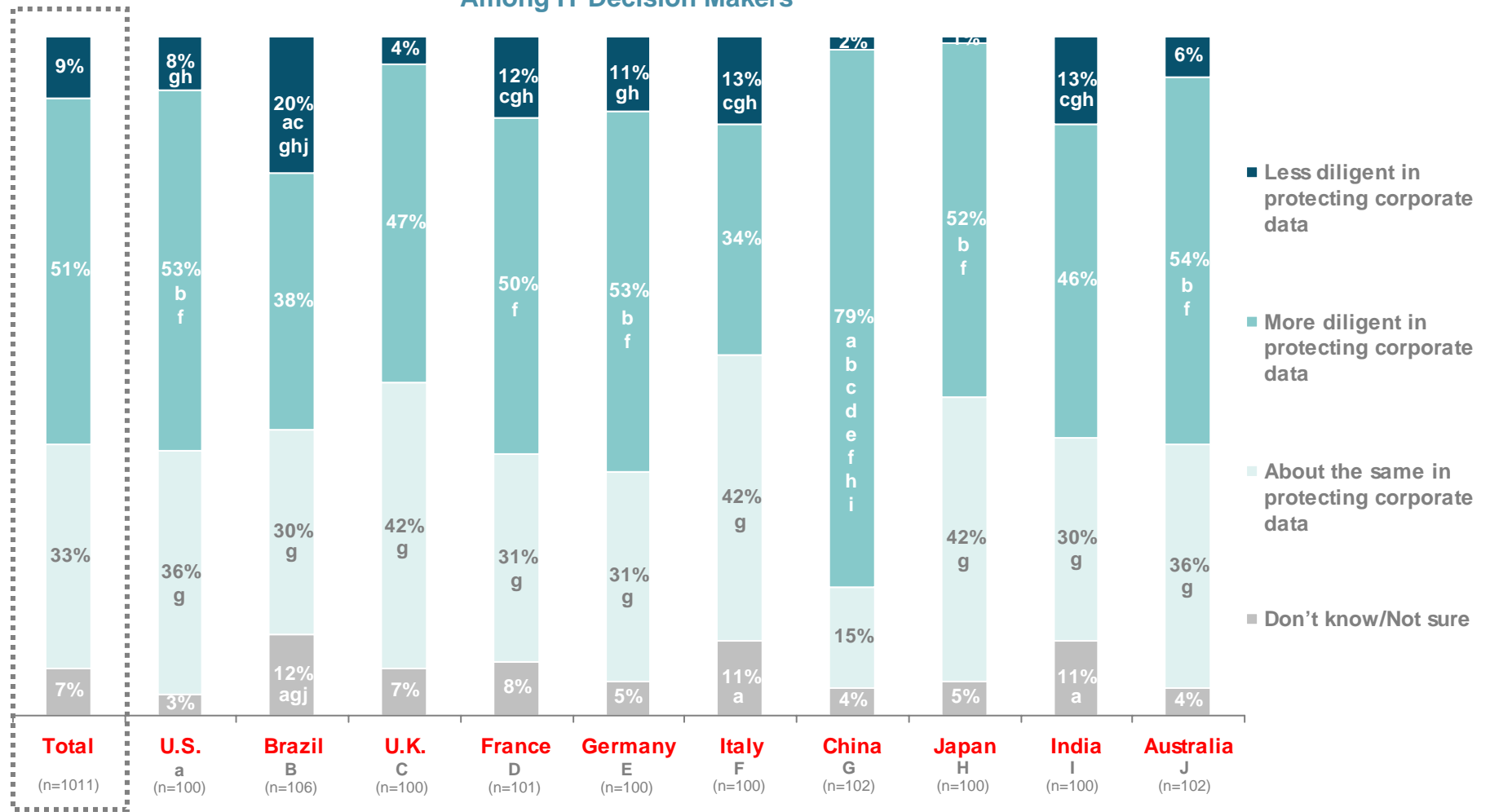
Over the past five years, do you feel that your company has lost data due to security breaches?



Diligence In Protecting Corporate Data

- Half of the total sample of IT Decision Makers (driven by a significantly large proportion in China) say their employees have been more diligent in protecting corporate data over the past few years.
- In Brazil, one in five IT Decision Makers say their employees have been less diligent in this matter.

Among IT Decision Makers



Note:
Letters a-j indicate significant differences between countries at 95% confidence level.

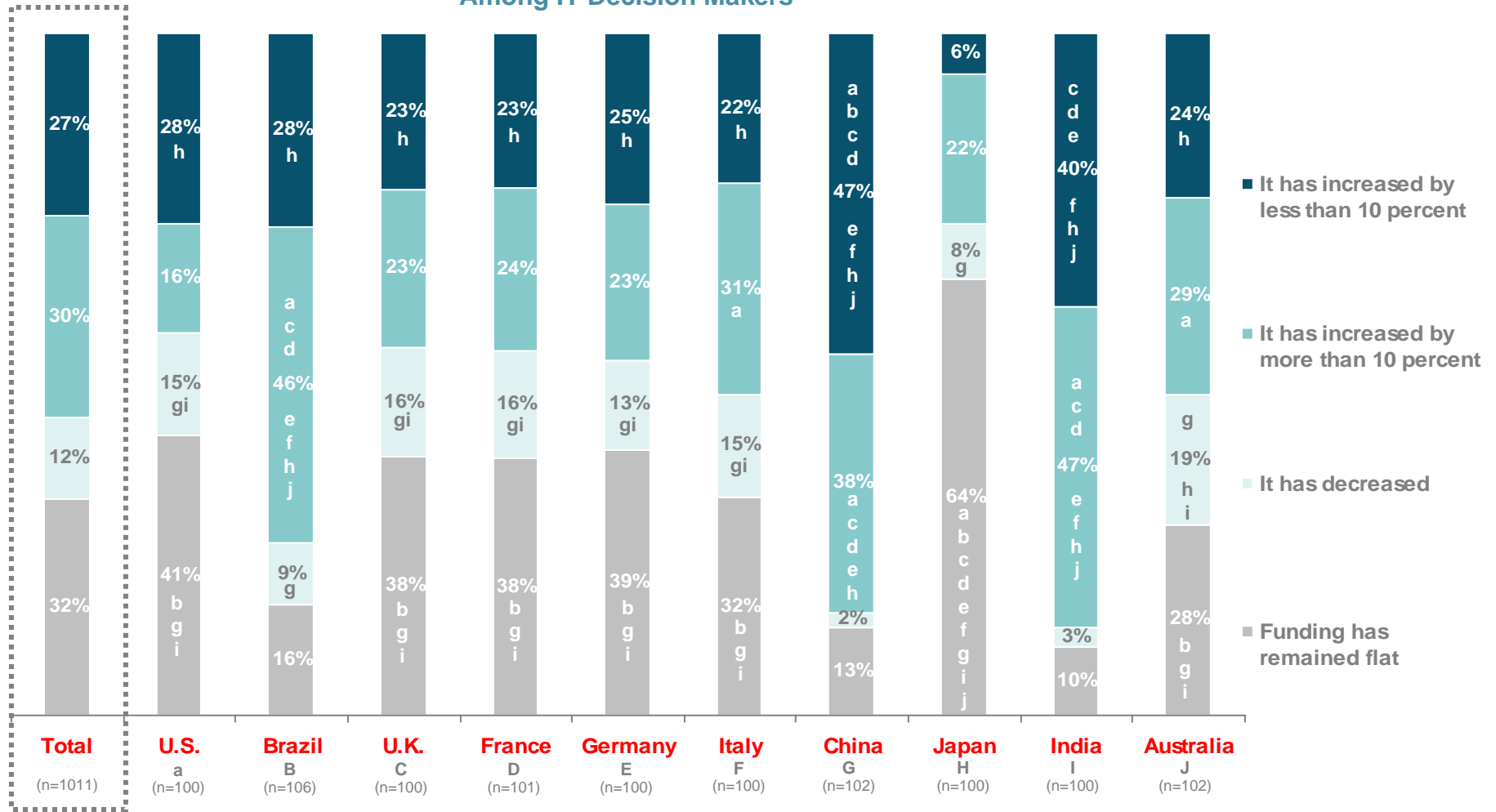
Over the past few years, do you feel that your employees have been?



Changes In Corporate IT Budget

- More than half of IT Decision Makers say their company's current year IT budget has increased since last year.
 - In Brazil and India, more than four in ten IT Decision Makers say their budget has increased by more than 10%.

Among IT Decision Makers



Note:
Letters a-j indicate significant differences between countries at 95% confidence level.

Q80: How does your company's current year IT budget compare to last year?



Reasons For Corporate IT Budget Increases

- Nearly six in 10 IT Decision Makers (driven largely by China, Germany and India) whose budget has increased when compared to last year say their company is growing and their need to support more employees has led to the extra expenditure.

	IT DECISION MAKERS										
	Total (n=573)	us (n=44*) a	bra (n=79) b	uk (n=46*) c	fra (n=47*) d	deu (n=48*) e	ita (n=53) f	chn (n=87) g	jpn (n=28*) h	ind (n=87) i	aus (n=54) j
Company is growing and we need to support more employees	58%	68% df	56% df	65% df	32%	71% df	21%	75% bdfj	39%	71% bdfj	52% df
Change management need <i>(e.g. new system platform rollout)</i>	48%	39%	53% cj	33%	55% cj	44%	47%	67% acefij	43%	46%	35%
Merger and acquisitions necessitated an increase	29%	32%	30%	26%	23%	29%	26%	38%	21%	29%	26%
Legislative or regulatory response	27%	23%	13%	15%	40% bcj	29% bj	34% bcj	37% bcj	43%	26% b	13%
Other	3%	7%	5%	9% defi	0%	0%	0%	2%	4%	1%	6%
Don't know/Not sure	3%	0%	1%	4%	6% g	4%	6% g	0%	4%	3%	6% g

Note:
Letters a-j indicate significant differences between countries at 95% confidence level.
*Caution, small n

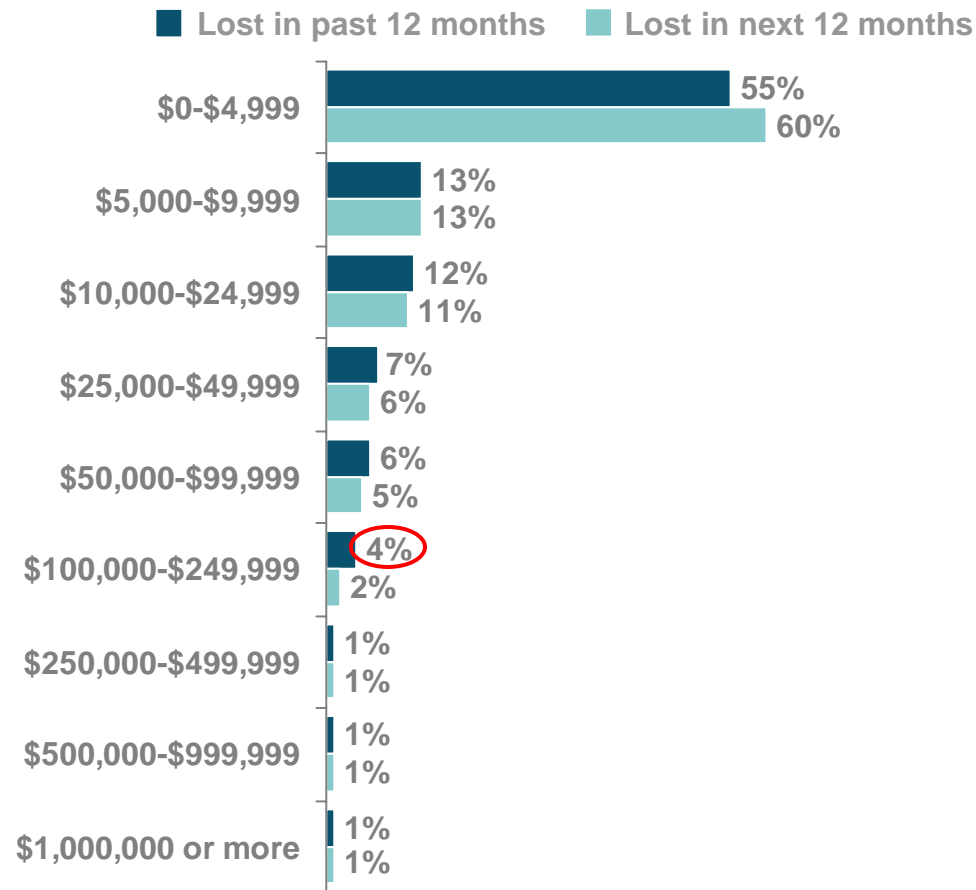
**You had previously indicated that your IT budget has increased when compared to last year. Why is that?
(Check all that apply.)**



Estimated Loss From Stolen Or Misplaced Technology

- IT Decision Makers estimate their company's annual loss from stolen or misplaced devices to be less than \$5,000 and they do not expect that it will change significantly in the next year.

Among IT Decision Makers



Total IT Decision Makers, n=1011

Note:

○ indicates significant differences at 95% confidence level.

Over the past year, how much money do you estimate your company has lost from stolen or misplaced devices (personal computers, cellular phones, PDAs, etc.)?

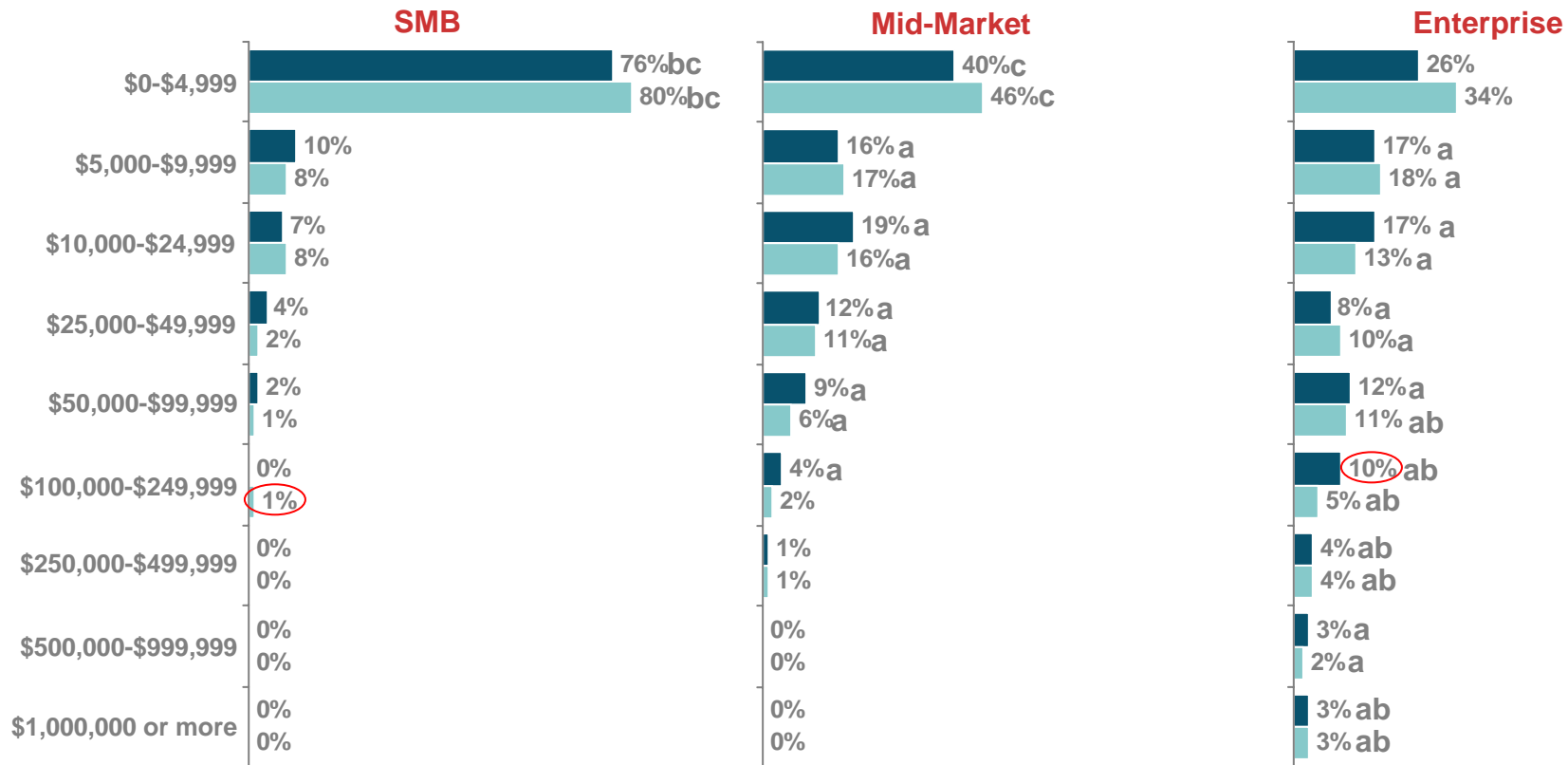
In the next 12 months, how much money do you estimate your company will lose from stolen or misplaced devices (personal computers, cellular phones, PDAs, thumb drives, etc.)?

Estimated Loss From Stolen Or Misplaced Technology

- Compared to SMBs, IT Decision Makers from Mid-Market and Enterprise companies estimate larger ranges of financial losses from stolen or misplaced devices.

Among IT Decision Makers

■ Lost in past 12 months ■ Lost in next 12 months



Total SMB, n=518
 Total Mid-Market, n=231
 Total Enterprise, n=262
 Note:

Letters a-c indicate significant differences between organization sizes and 1% indicates significant differences between past 12 months and next 12 months at 95% confidence level.

Over the past year, how much money do you estimate your company has lost from stolen or misplaced devices (personal computers, cellular phones, PDAs, etc.)?
 In the next 12 months, how much money do you estimate your company will lose from stolen or misplaced devices (personal computers, cellular phones, PDAs, thumb drives, etc.)?

Estimated Loss Of Productivity Related To Stolen Or Misplaced Technology

- Compared to SMBs, IT Decision Makers from Mid-Market and Enterprise companies estimate larger ranges of financial losses in terms of productivity, employee downtime, IT resource/personal support, etc. as a result of stolen or misplaced devices.

	IT DECISION MAKERS		
	SMB	Mid-Market	Enterprise
	a	b	c
\$0-\$4,999	72% bc	33%	26%
\$5,000-\$9,999	13%	21% ac	11%
\$10,000-\$24,999	7%	17% a	17% a
\$25,000-\$49,999	4%	11% a	9% a
\$50,000-\$99,999	2%	8% a	14% a
\$100,000-\$249,999	1%	6% a	12% ab
\$250,000-\$499,999	0%	2%	5% a
\$500,000-\$999,999	0%	1%	2% a
\$1,000,000 or more	0%	0%	5% ab

Total SMB, n=518

Total Mid-Market, n=231

Total Enterprise, n=262

Note:

Letters a-c indicate significant differences between countries at 95% confidence level.

Over the past year, how much money do you estimate your company has lost in terms of productivity, employee downtime, IT resource/personnel support, etc. as a result of these stolen or misplaced devices?



JOB FUNCTION	END USERS										
	Total (n=1009)	US (n=100) A	BRA (n=101) B	UK (n=104) C	FRA (n=100) D	DEU (n=101) E	ITA (n=101) F	CHN (n=100) G	JPN (n=101) H	IND (n=100) I	AUS (n=101) J
Customer Service	15%	16% DH	23% DFHI	22% DFHI	7%	22% DFHI	11% H	16% DH	2%	10% H	20% DH
Finance	9%	10%	6%	10%	6%	9%	11%	12%	9%	9%	5%
Human Resources	4%	2%	6%	3%	5%	3%	7%	3%	4%	3%	3%
Manufacturing	7%	6%	2%	5%	8%	8%	8%	5%	10% B	11% B	5%
Marketing/Sales	9%	4%	13% ACD	4%	4%	11%	12% ACD	16% ACDJ	11%	13% ACD	7%
Operations	7%	6%	7%	12% G	7%	5%	5%	3%	10% G	6%	9%
Purchasing/Procurement	3%	3%	4% H	4% H	6% H	5% H	1%	4% H	0%	5% H	2%
Research & Development	6%	2%	4%	5%	12% ABJ	9% AJ	7%	7%	8%	5%	2%
Software Engineering	4%	1%	2%	6%	4%	7% AJ	4%	5%	2%	11% ABHJ	1%
Hardware Engineering	1%	0%	1%	0%	5% ACEFHJ	0%	0%	1%	0%	3%	0%
Senior Management	10%	5%	5%	3%	7%	3%	4%	20% ABCDEF	29% ABCDEFI J	12% CEF	15% ABCEF
Training	3%	1%	5%	2%	4% I	1%	8% ACEI	3%	2%	0%	2%
Other	22%	44% BCDEFG HIJ	23% GI	26% GHI	25% GHI	18% G	23% GI	5%	14% G	12%	30% EGHI

Note:
Letters A-J indicate significant differences
between countries at 95% confidence level.

	END USERS											IT DECISION MAKERS										
	Total (n=1009)	US (n=100)	BRA (n=101)	UK (n=104)	FRA (n=100)	DEU (n=101)	ITA (n=101)	CHN (n=100)	JPN (n=101)	IND (n=100)	AUS (n=101)	Total (n=1011)	us (n=100)	bra (n=106)	uk (n=100)	fra (n=101)	deu (n=100)	ita (n=100)	chn (n=102)	jpn (n=100)	ind (n=100)	aus (n=102)
INDUSTRY	A	B	C	D	E	F	G	H	I	J	a	b	c	d	e	f	g	h	i	j		
Business Consulting	2%	2%	6% IJ	2%	2%	1%	5% IJ	1%	1%	0%	0%	3%	7% h	4%	3%	3%	2%	5%	2%	1%	3%	2%
IT Consulting	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12%	1%	19% aegh	22% aegh	13% a	7% a	13% a	6%	5%	15% agh	23% aegh	
Construction	6%	4%	5%	9% G	12% AGIJ	6%	7% G	1%	11% G	4%	4%	3%	4%	2%	3%	3%	1%	5%	7% f	3%	4%	
Education	8%	15% EH	12% EH	8%	7%	2%	10% EH	9% E	3%	8%	9% E	5%	2%	4%	10% ahi	5% i	6% i	5% i	9% ai	3%	0%	6%
Entertainment	1%	0%	2%	1%	3%	0%	1%	0%	2%	1%	4% AEG	1%	3%	3%	1%	0%	1%	2%	0%	2%	0%	
Finance, Banking, Accounting	9%	8%	10% EHJ	8%	5%	3%	5%	33% ABCDE FHIJ	3% IJ	8%	3%	5%	11% bcdeh	4%	2%	3%	2%	4%	6%	1%	7% h	6%
Government (Public Admin)	5%	5%	11% GHJ	4%	5%	9% H	5%	3%	2%	5%	3%	4%	1%	7% ah	4% h	5% h	5% h	10% ahi	7% ah	0%	2%	4% h
Government (Military)	1%	1%	1%	1%	3%	1%	1%	0%	1%	0%	0%	1%	0%	2%	1%	5% aghj	1%	2%	0%	0%	1%	0%
Health/Medical/Pharmaceutical	7%	11%	7%	14% DGHI	5%	8%	8%	4%	5%	4%	8%	4%	5%	7%	6%	3%	7%	4%	2%	2%	4%	3%
Hospitality	2%	2%	0%	3%	2%	6% BGI	2%	0%	1%	0%	6% BGI	1%	2%	1%	1%	0%	0%	0%	0%	3%	0%	0%
Insurance/Real Estate/Legal	3%	3%	0%	1%	1%	4% B	2%	8% BCD	6% B	7% BCD	2%	2%	4% b	0%	2%	1%	6% b	1%	2%	4% b	1%	3%
Internet, Computer, or Communications Software	2%	0%	1%	2%	6% AHJ	2%	2%	3%	0%	4% AHJ	0%	9%	4%	8% c	1%	18% abcef	4%	7% c	11% c	10% c	13% ace	11% c
Internet, Computer, or Communications Hardware	1%	0%	3%	0%	3%	1%	1%	1%	0%	1%	0%	3%	1%	8% acj	1%	6%	2%	4%	3%	2%	5%	1%
Manufacturing	13%	9%	4%	11%	8%	7%	9%	20% ABDEF J	25% ABCDE FJ	27% ABCDE FJ	7%	13%	16% bf	2%	9% b	9% b	11% b	7%	29% abcdefij	18% bf	16% bf	9% b
Media/Marketing/Advertising	2%	1%	4% FHI	1%	2%	5% FHI	0%	1%	0%	0%	2%	2%	2%	7% cfgi	1%	2%	4% fg	0%	0%	2%	1%	3%
Retailer (Non-Computer)	6%	9% GI	4%	10% GI	3%	7% I	4%	2%	6%	1%	14% BDFGI	4%	9% bdi	2%	7% d	0%	4% d	4% d	3%	6% d	2%	5% d
Shipping/Handling/Importing & Exporting/Trucking	1%	0%	1%	2%	1%	2%	0%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	
Software Development	3%	0%	2%	2%	1%	3%	1%	2%	3%	11% ABCDE FGHIJ	3%	5%	2%	2%	3%	6%	5%	5%	4%	6%	8% b	5%
Travel	1%	1%	1%	0%	1%	1%	5% CGH	0%	0%	1%	3%	1%	1%	1%	3%	0%	1%	3%	2%	1%	0%	0%
Transportation	2%	3%	1%	5% F	2%	3%	0%	2%	4% F	1%	4% F	3%	5% h	1%	7% bh	2%	6%	3%	2%	0%	3%	2%
Utilities	2%	0%	2%	0%	8% ACHIJ	3%	3%	2%	1%	0%	1%	2%	2%	6% j	1%	3%	4% j	1%	1%	2%	1%	0%
Other General Industry	4%	1%	4%	2%	4%	3%	8% ACI	4%	4%	1%	7% AI	2%	5% di	1%	2%	0%	5% di	4% di	2%	2%	0%	2%
Other Service Businesses	8%	10% GJ	11% GJ	6%	6%	15% CDGIJ	9% G	1%	20% CDFGI J	4%	3%	7%	3%	9% g	4%	6%	8% g	9% g	1%	22% abcdefgij	4%	4%
Other	10%	15% GH	9% GH	11% GH	10% GH	9% GH	13% GH	1%	2%	11% GH	17% GH	6%	10% gh	4%	6%	8% g	7% g	7% g	1%	3%	8% g	8% g

Note:
Letters A-J & a-j indicate significant differences between countries and **○** indicates significant differences between End Users and IT Pros at 95% confidence level.



JOB TITLE	IT DECISION MAKERS										
	Total (n=1011)	us (n=100)	bra (n=106)	uk (n=100)	fra (n=101)	deu (n=100)	ita (n=100)	chn (n=102)	jpn (n=100)	ind (n=100)	aus (n=102)
	a	b	c	d	e	f	g	h	i	j	
CIO, CSO, CISO	7%	10% bgj	2%	4%	5%	10% bgj	21% abcdeghij	2%	10% bgj	4%	1%
CEO, CFO,CTO, COO, or other non-IT C-level executive	10%	17% bdfj	5%	8%	7%	8%	7%	13% b	21% bcdefij	9%	6%
VP of IT	4%	7% bdfj	1%	6% bij	1%	2%	2%	5% ij	15% bcdefgij	0%	0%
Director of IT	10%	14% bdi	5% d	7% d	0%	18% bcdfhi	6% d	30% abcdehij	8% d	5% d	11% d
Network Manager / IT Manager	20%	18%	16%	25% ef	29% befg	11%	10%	17%	21% f	27% ef	25% ef
IT Administrator	13%	0%	19% acfh	6% a	20% acfh	28% acfghij	9% a	14% a	6% a	16% ach	13% a
IT Consultant	12%	3%	17% agh	14% agh	19% aghi	12% agh	18% aghi	0%	3%	8% g	23% aeghi
Head of a department other than IT <i>(such as finance, operations, etc.)</i>	12%	16% de	21% defj	11%	7%	5%	8%	18% def	11%	13%	10%
Other	12%	15% egh	15% egh	19% egh	13% g	6%	19% egh	2%	5%	18% egh	13% g

Note:
Letters A-J indicate significant differences
between countries at 95% confidence level.