



The Challenge of Data Leakage  
For Businesses and Employees  
Around the World

PRESENTED TO



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
<b>End Users</b> n=	100	101	104	100	101	101	100	101	100	101
<b>IT Decision Makers</b> 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



# Personal Use Of Company-Issued Computer

- Nearly eight in 10 End Users who use their company-issued computer for personal matters send/receive personal email through a personal email account on a regular basis.
  - Roughly half use their work computer for personal research and online banking.
- In China, End Users who use their company-issued computer for personal matters, conduct a wide variety of personal activities including email, instant messaging and downloading music/videos.

	END USERS										
	Total (n=840)	US (n=68)	BRA (n=96)	UK (n=82)	FRA (n=90)	DEU (n=74)	ITA (n=90)	CHN (n=99)	JPN (n=85)	IND (n=83)	AUS (n=73)
	A	B	C	D	E	F	G	H	I	J	
<b>PERSONAL ACTIVITIES</b>											
Sending/receiving personal Email through a personal email account	78%	75%	85% CEH	73%	77% H	72%	76%	84% H	62%	90% ACDEFHJ	78% H
Research	52%	53% GI	71% ACEFGHIJ	55% GI	62% GI	51% G	57% GI	32%	49% G	36%	51% G
Online banking	48%	47% EH	57% DEH	54% EH	40%	28%	53% EH	49% EH	27%	51% EH	73% ABCDEFGHI
Sending/receiving personal Email through a work email account	42%	29%	39%	50% AH	54% ABEHI	38%	43%	45% A	34%	37%	49% A
Online bill paying	36%	41% H	52% CDEFH	33% H	33% H	26% H	27% H	41% EFH	12%	40% H	53% CDEFH
Internet shopping	36%	41% GH	46% EFH	44% EFH	39% H	26%	26%	44% EFH	20%	35% H	37% H
Instant Messaging	35%	26% H	56% ACDEFHJ	26% H	33% EH	16% H	30% EH	74% ABCDEFHIJ	4%	48% ACDEFHJ	27% H
Music/Video downloads <i>e.g. iTunes</i>	17%	9% E	25% ADEFHJ	13% E	13% E	1%	13% E	37% ACDEFHIJ	9%	23% AEH	12% E
Social Networking <i>e.g. MySpace, Facebook, etc.</i>	15%	13% H	14% H	20% FH	13% H	15% FH	6%	22% FH	2%	27% ABDFH	14% H
Blogging	13%	4%	14%	11%	13%	5%	6%	33% ABCDEFHJ	7%	23% ACDFHJ	8%
Online investing	11%	7%	10%	7%	7%	8%	9%	28% ABCDEFHJ	5%	20% ACDEFHJ	4%
Peer to peer file/picture sharing <i>e.g. Bit Torrent</i>	10%	1%	15% AEH	6%	11% AH	4%	12% AH	24% ACDEFHIJ	2%	12% AH	8%
Chat rooms	9%	3%	8% EH	4%	13% ACEHJ	1%	6%	20% ABCEFHJ	1%	22% ABCEFHJ	3%
Online gambling	3%	1%	5% G	7% G	6% G	3%	4% G	0%	1%	2%	1%
Online pornography	1%	1%	3%	2%	1%	0%	1%	2%	1%	0%	1%
Other	3%	4% F	1%	4%	3%	4%	0%	3%	4%	4%	4%

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

**Q: Please indicate below what types of personal activities you conduct with your work computer/device on a regular basis e.g. at least once per month. (Check all that apply.)**

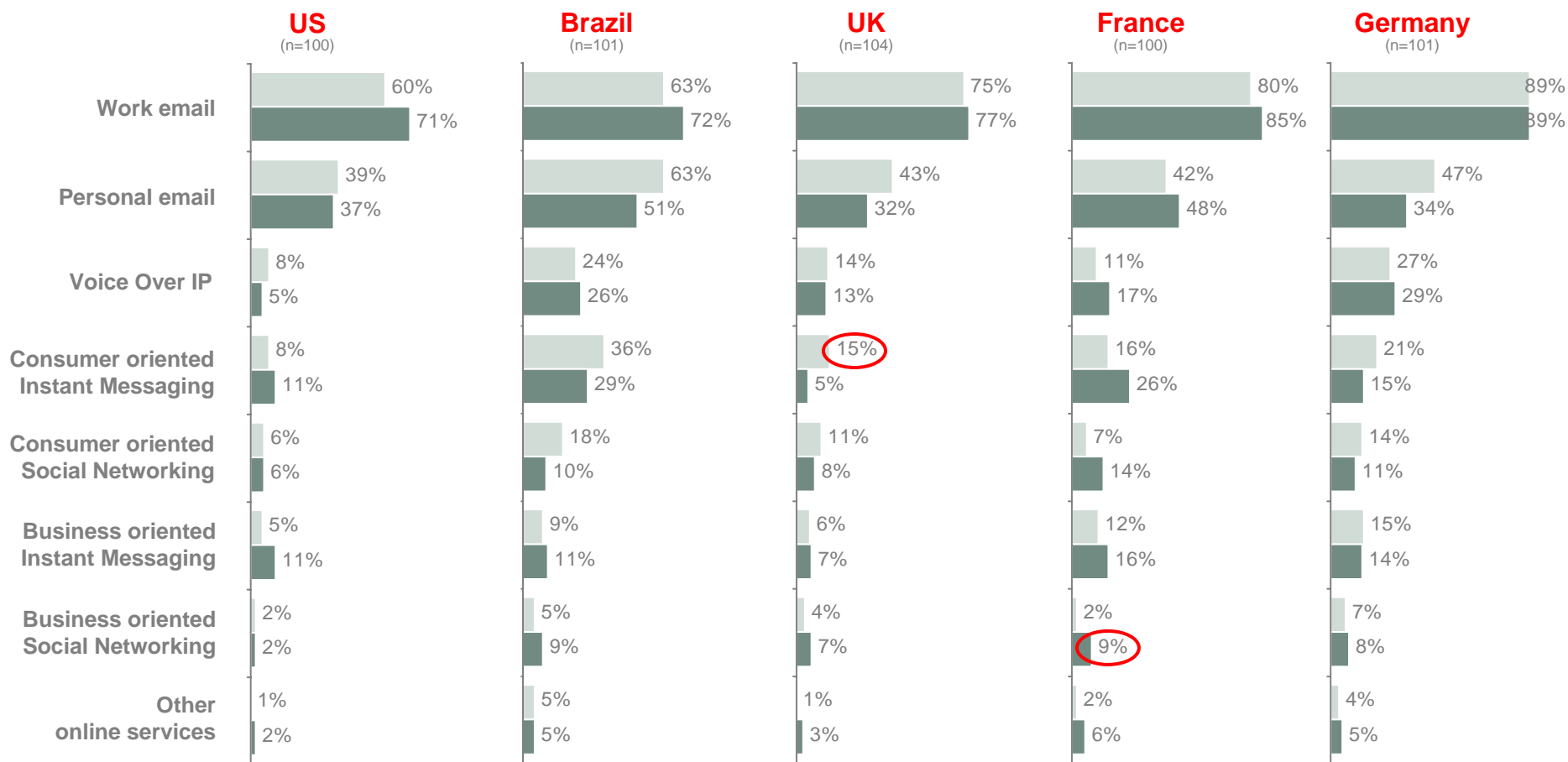


# Used vs. IT-Approved Communication Services

- In the UK, consumer-oriented IM tends to be used by a significantly greater proportion of End Users compared to those who say such services are IT-approved.

## Among End Users

■ Used by Employees ■ Approved by IT Dept



(Continued)

Note:  
 ○ indicates significant differences at 95% confidence level.

Q: What methods do you use to communicate with colleagues and customers while at work? (Check all that apply.)  
 Q: Which of these services are officially approved for employee use by your company's Information Technology (IT) Department? (Check all that apply.)

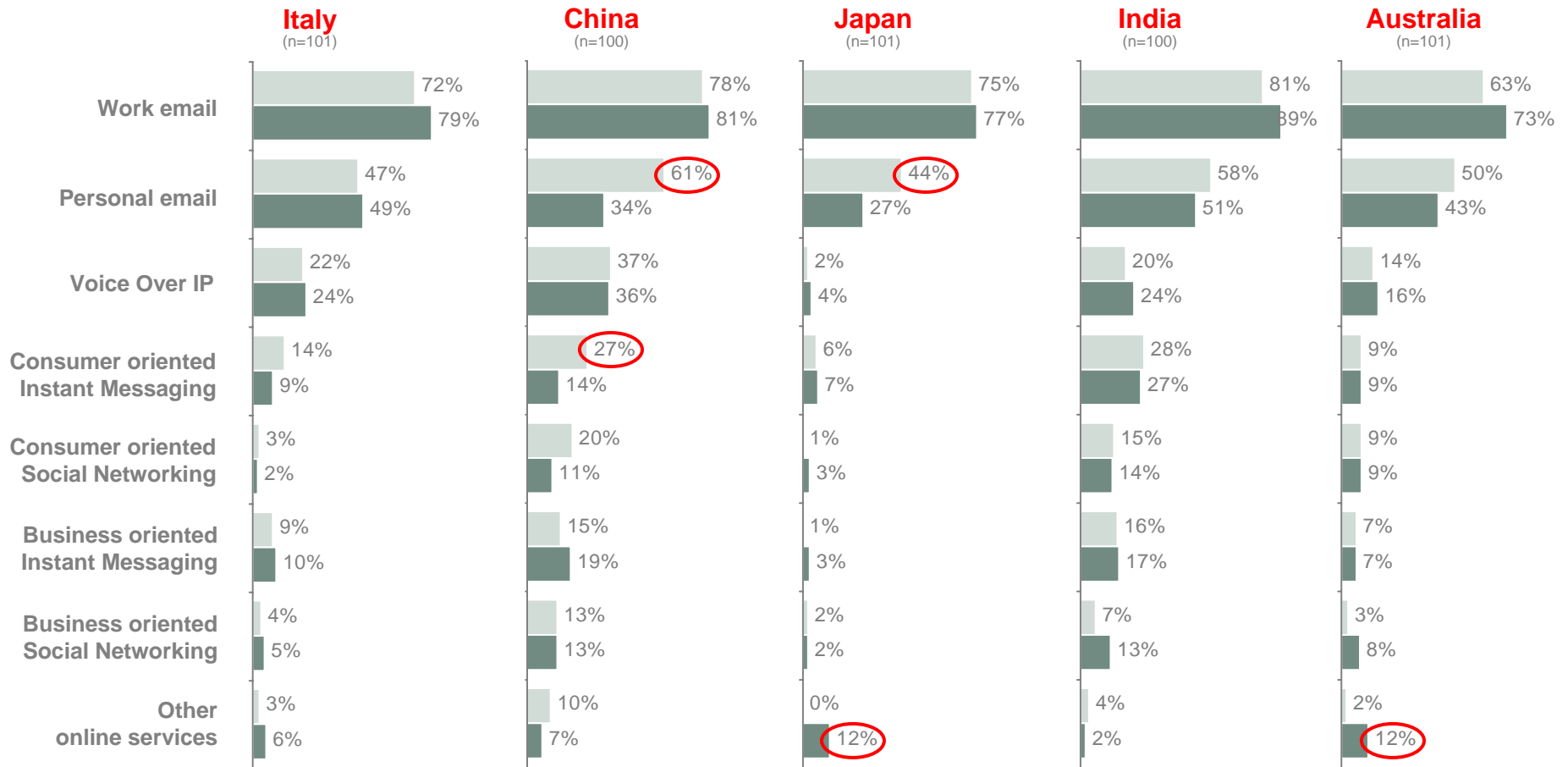


# Used vs. IT-Approved Communication Services

- In China and Japan, significantly more End Users tend to use personal email compared to those who say it has the approval of their company's IT department.

## Among End Users

■ Used by Employees ■ Approved by IT Dept



Note:  
 ○ indicates significant differences at 95% confidence level.

Q: What methods do you use to communicate with colleagues and customers while at work? (Check all that apply.)  
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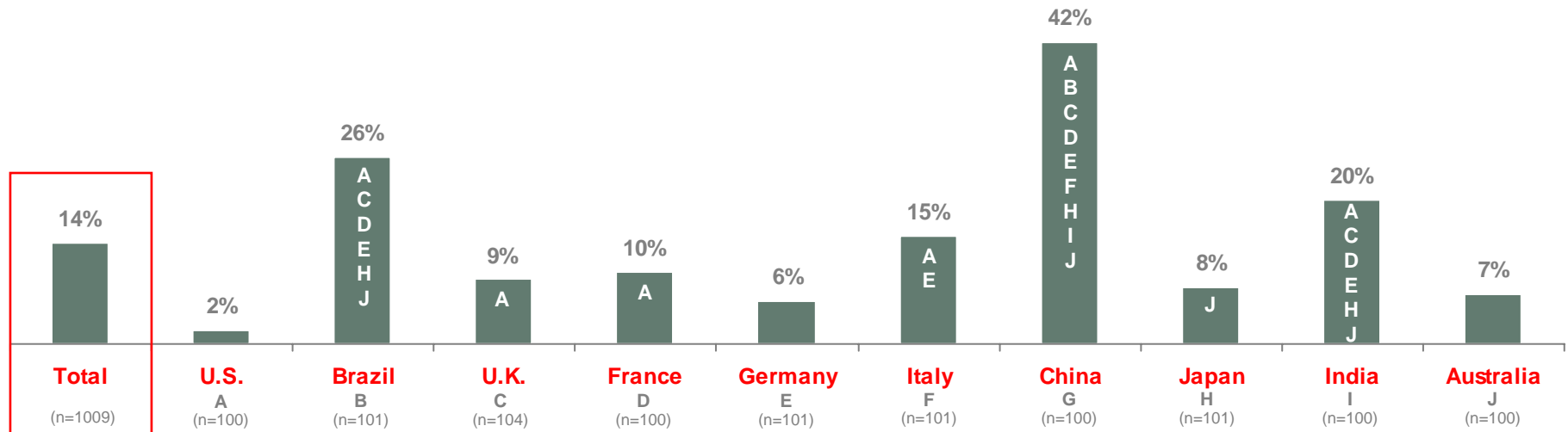


# Altering Security Settings On Company-Issued Computer

- Compared to other countries, a significantly larger proportion of End Users in China, Brazil and India has altered the security settings on their company-issued laptop.

## Among End Users

■ Have changed security settings



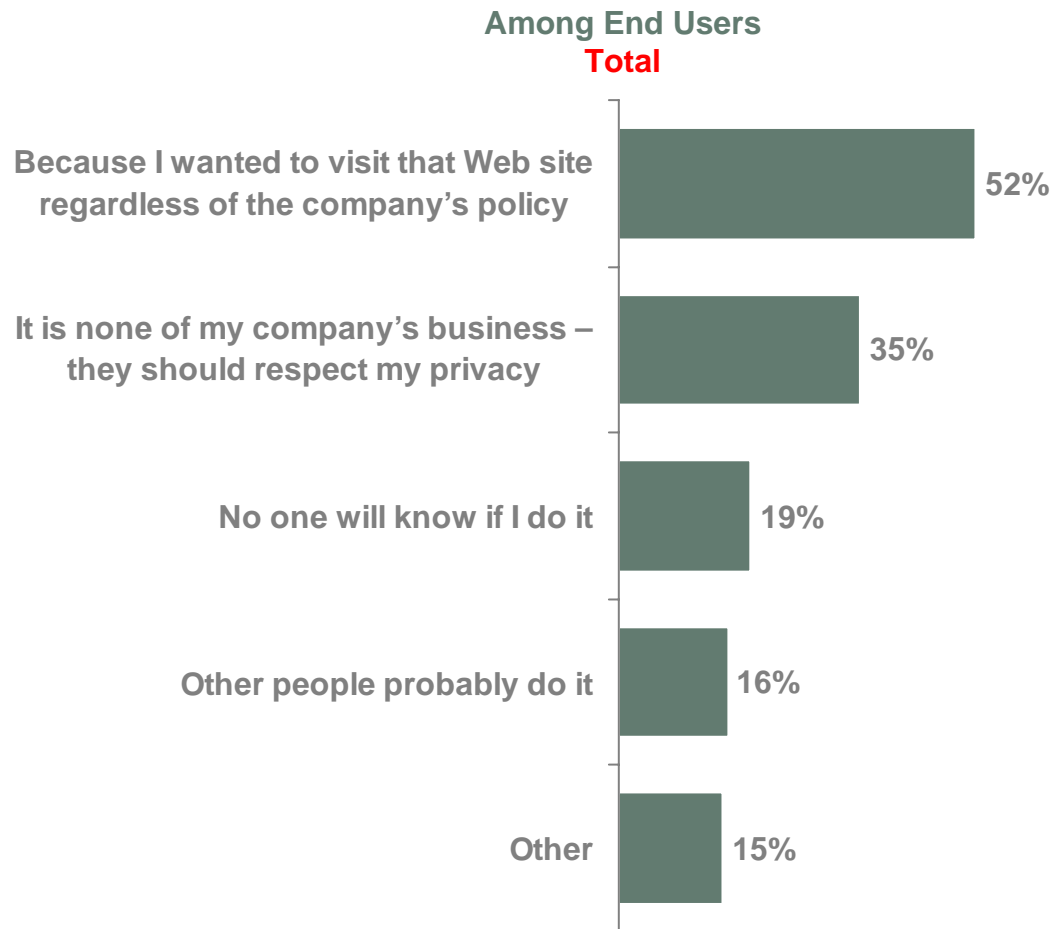
Note:  
Letters A-J indicate significant differences between countries at 95% confidence level.

**Q: Have you ever changed the security settings on your company-issued laptop in order to view Web sites that are otherwise restricted/blocked?**



## Reasons For Altering Security Settings

- More than half of End Users who have changed the security settings on their company-issued laptop to view restricted Web sites did so because they wanted to visit it regardless of their company's policy.
- A considerable proportion (35%) say it is none of their company's business if they have changed the security settings on their computer.

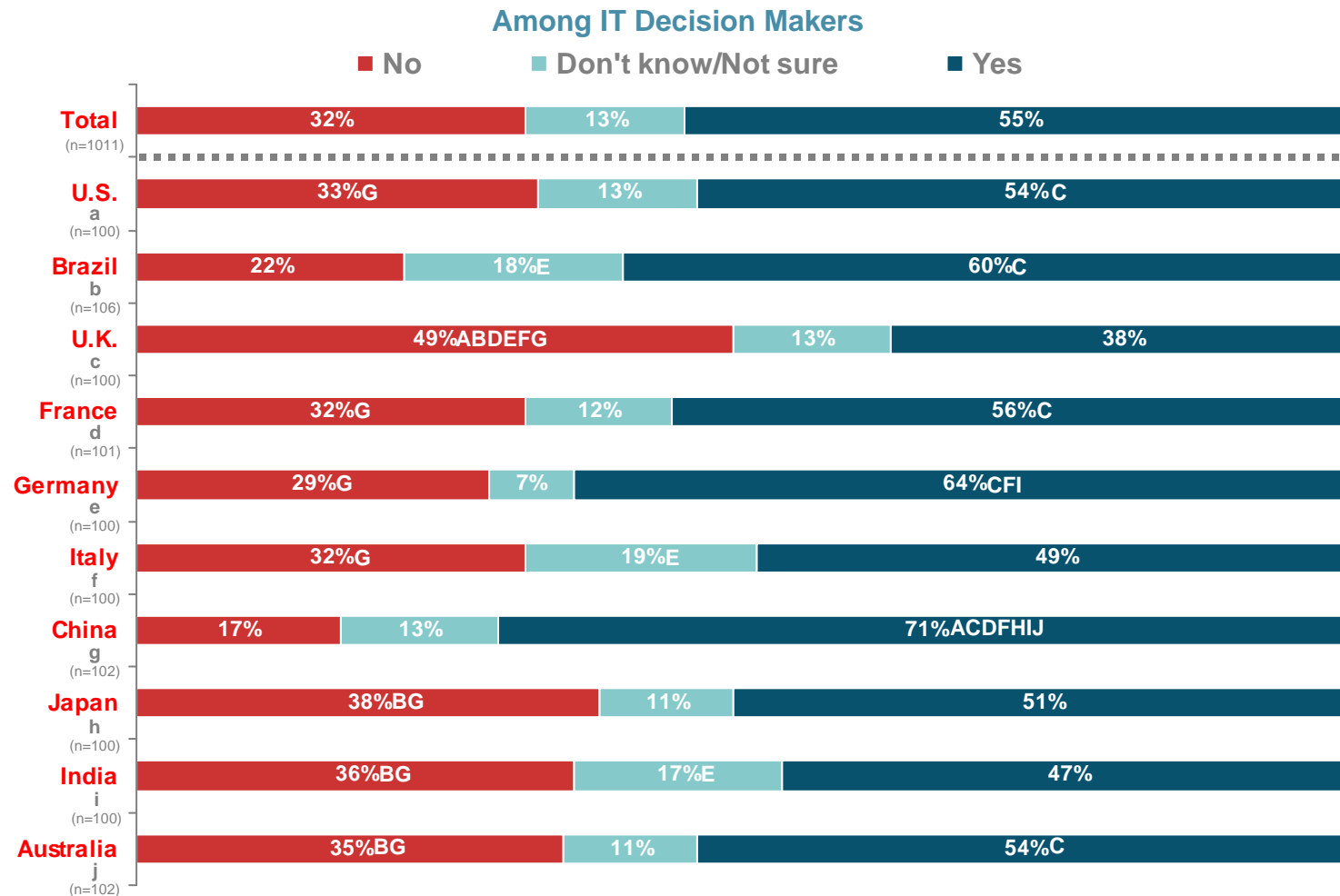






# IT's View: Used vs. IT-Approved Communication Services

- More than half of IT Decision Makers, particularly in China, believe employees are using non IT-approved programs and applications on their company-issued computers



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

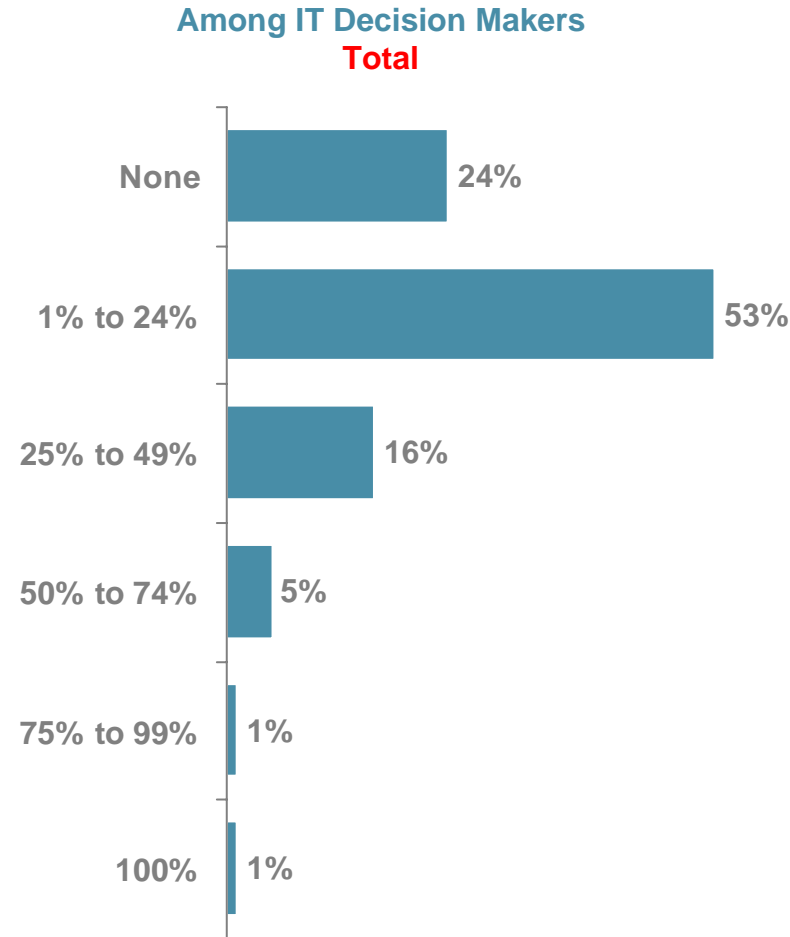
**Q: Do you think your company's employees are using non IT-approved programs and applications on their company-issued computers?**





## Relationship Between Unauthorized Use and Data Loss

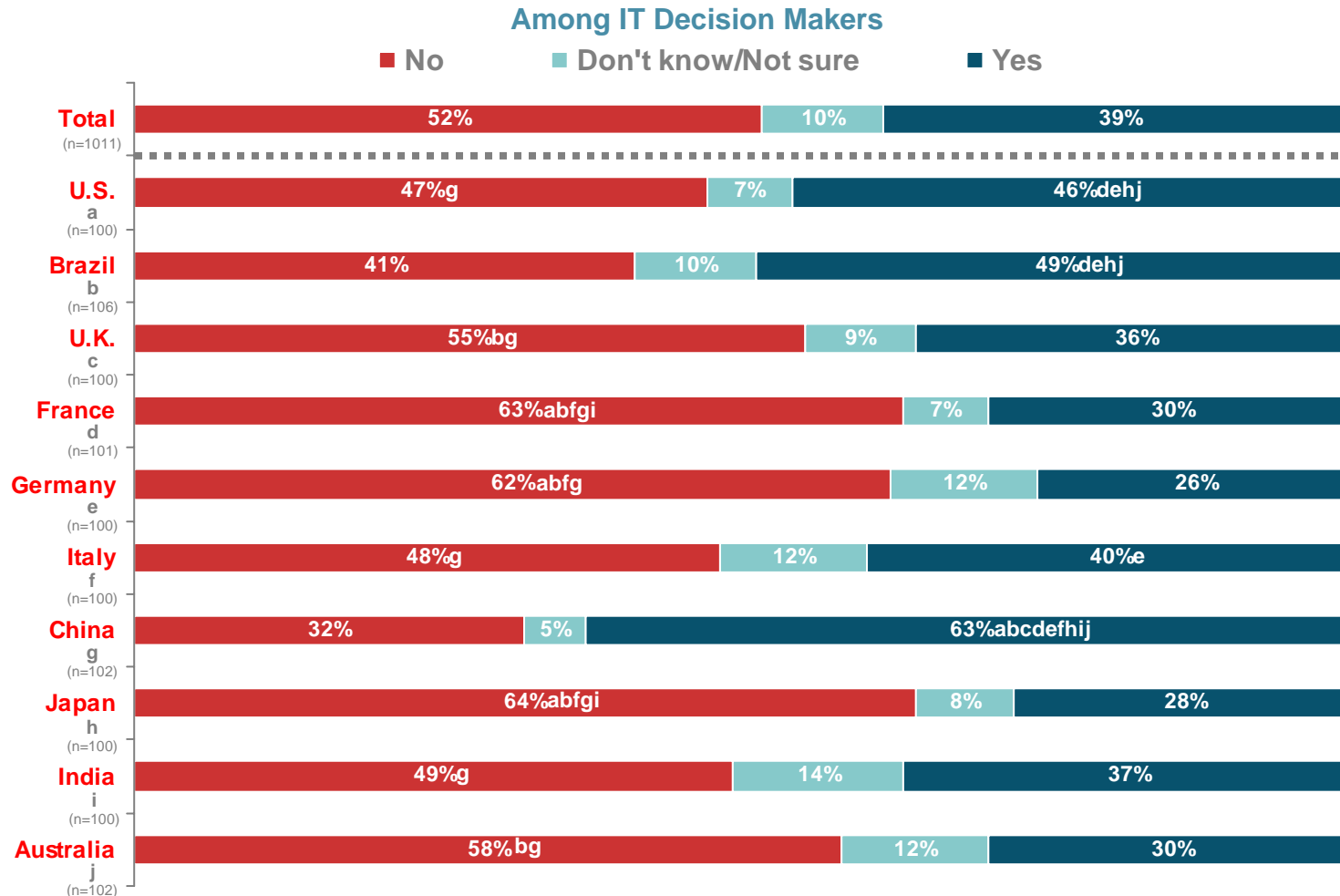
- The majority of IT Decision Makers estimate that employee use of non IT-approved programs and applications contributes to 1% - 24% of data leakage, loss and identity theft.





# Unauthorized Network & Facility Access

- About four in 10 IT Decision Makers have had to deal with an employee gaining access to an unauthorized physical or network area. Compared to other countries, a significantly larger proportion of IT Decision Makers in China have had to deal with an employees for unauthorized access.



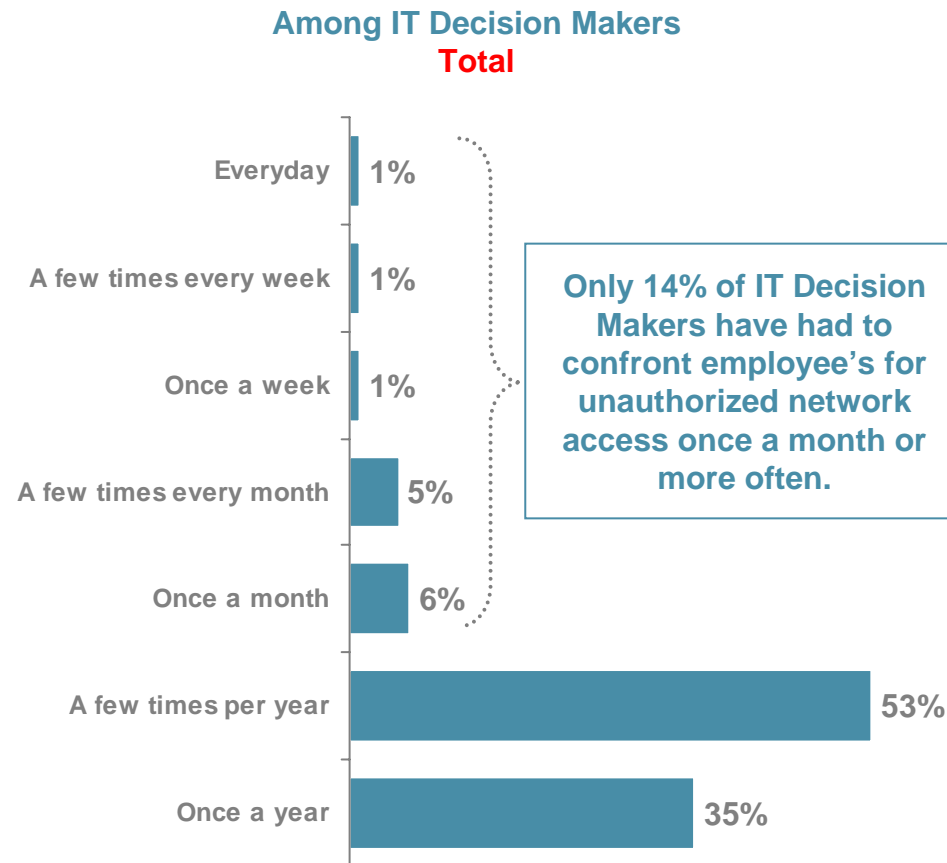
Note:  
Letters a-j indicate significant differences between countries at 95% confidence level.

**Q: Have you or your staff ever dealt with an employee intentionally or unintentionally gaining access to a physical or network area for which they were not authorized?**



# Unauthorized Network & Facility Access

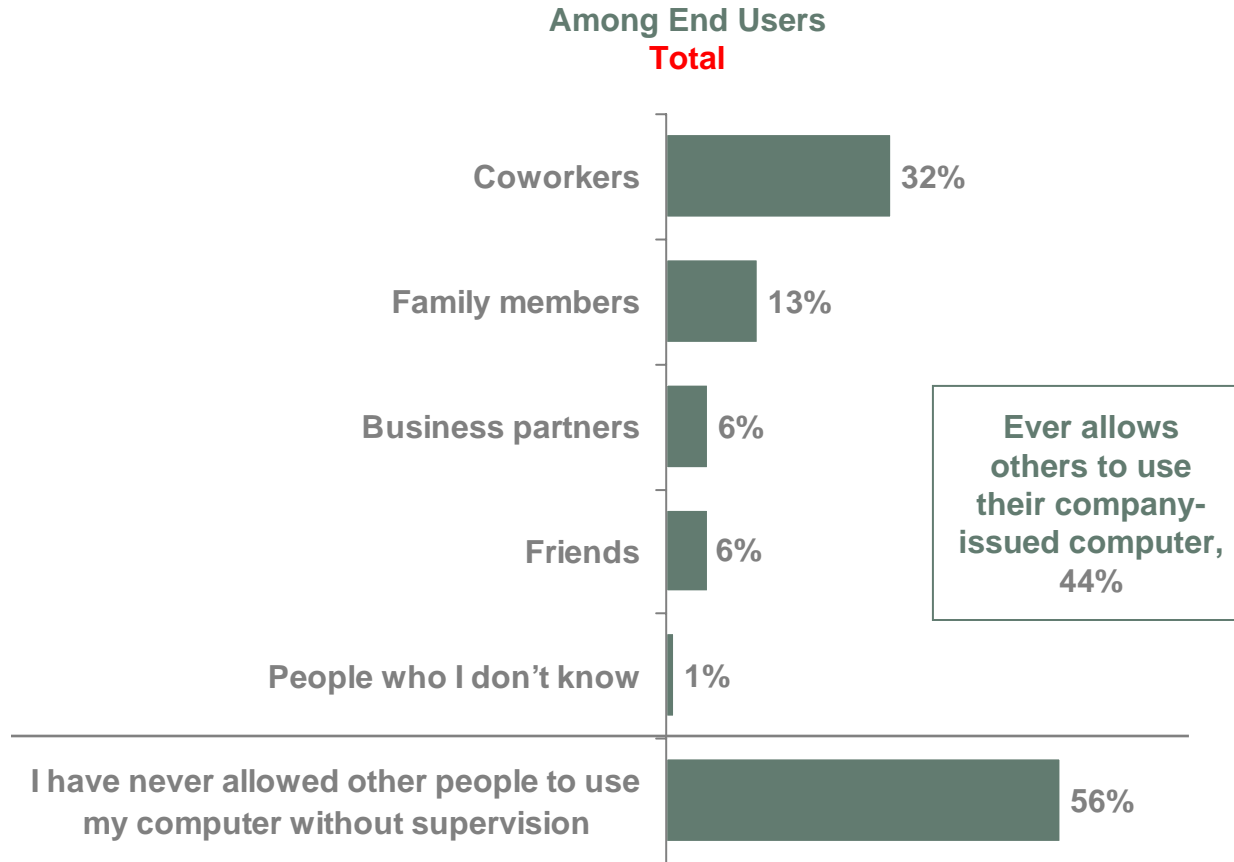
- For IT Decision Makers who have had to deal with employees gaining unauthorized network or facility access, the majority confronts an employee for such behavior only a few times to once a year.





## Sharing Company-Issued Computer With Others

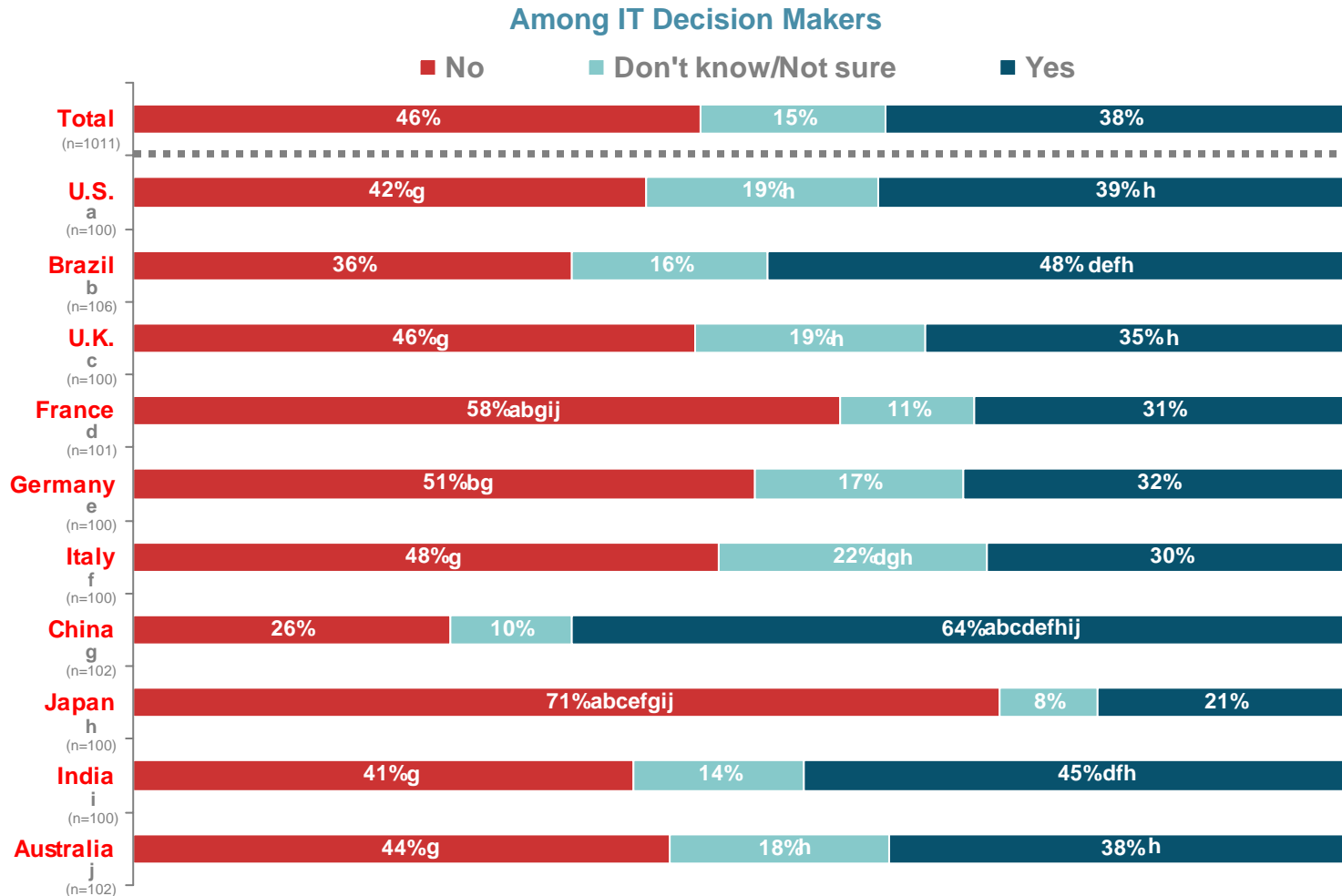
- More than four in 10 End Users has allowed someone else to use their company-issued computer without supervision.





# Sharing Company-Issued Technology With Others

- Nearly four in ten IT Decision Makers believes their company's employees allow others to use their company-issued mobile device or laptop without their supervision.
  - Suspicion of this behavior is highest in China and lowest in Japan.



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

**Q: Do you think that your company's employees allow others to use their company-issued mobile device or laptop without their supervision?**



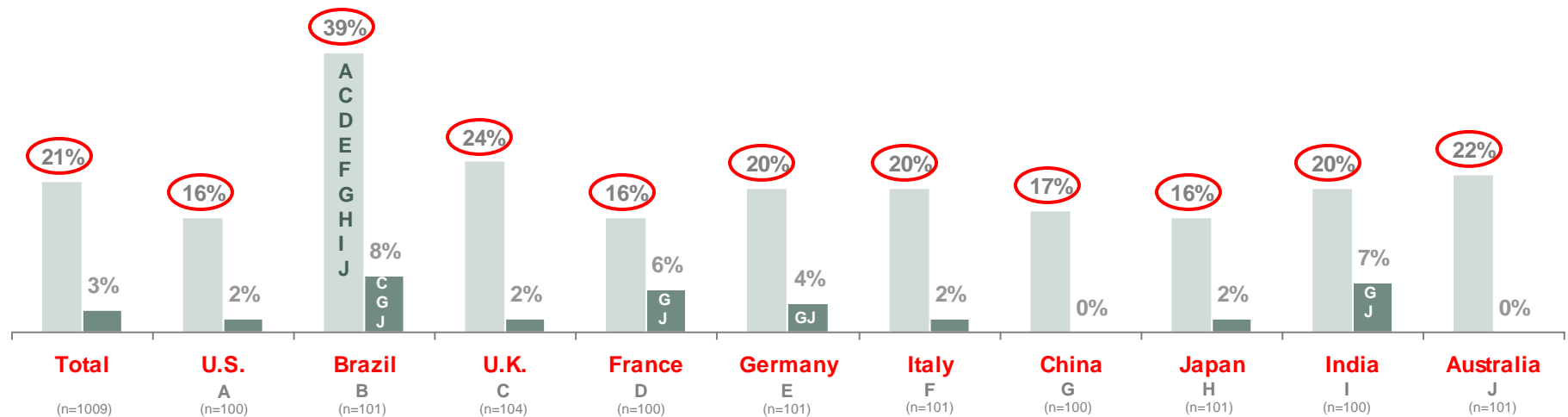
# Sharing Sensitive Information About Work With Others

- End Users are significantly more likely to share sensitive information about their company or job with close friends or family members rather than strangers.
- End Users in Brazil are significantly more likely than anyone else to share sensitive information about their job with close friends, their spouse/significant other, or family members.

## Among End Users

Have Told Sensitive Information To:

■ Close friends/family ■ A stranger



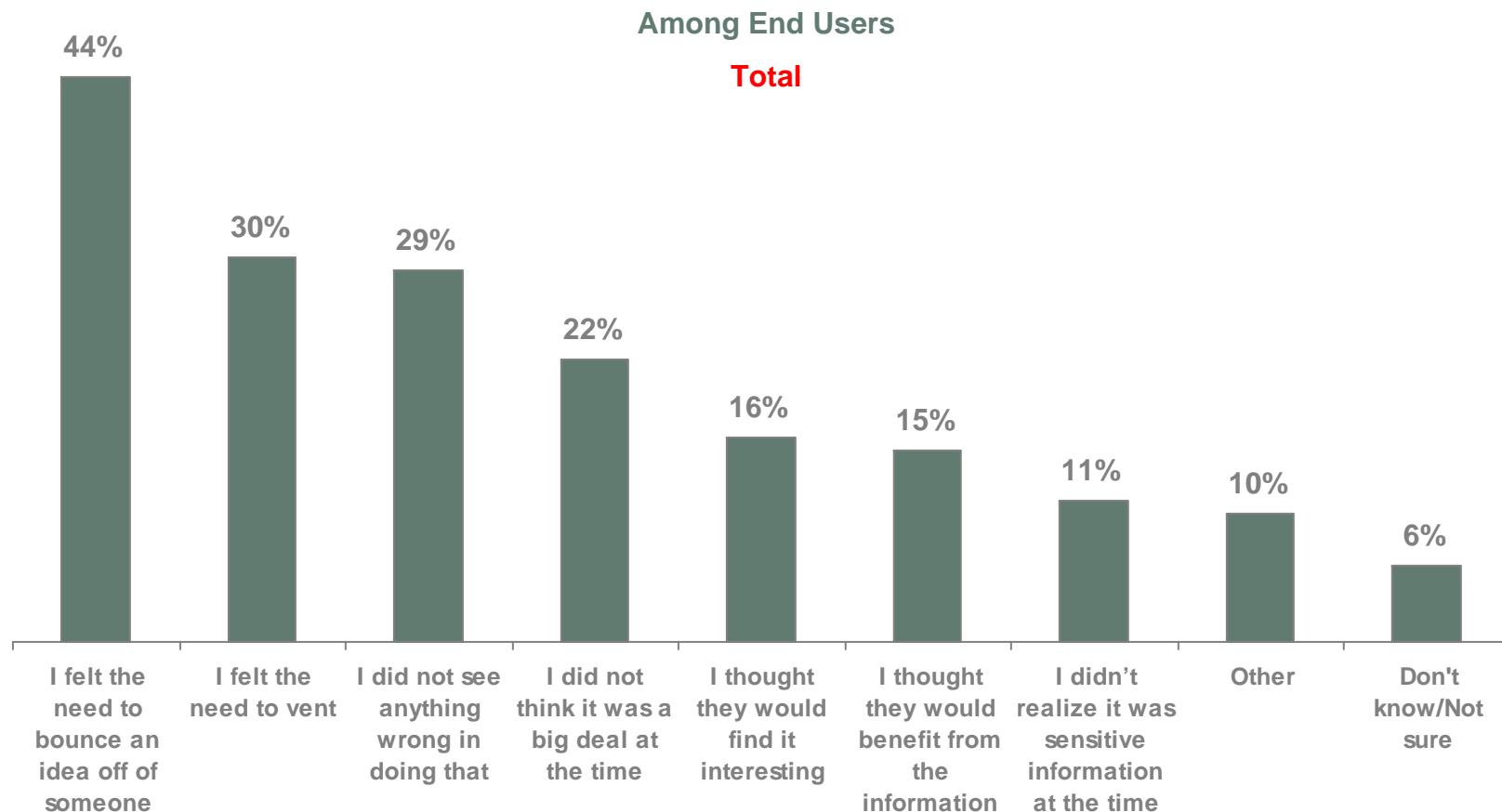
Note:  
 Letters a-j indicate significant differences between countries and   indicates significant differences between close friends/family and strangers at 95% confidence level.

**Q: Have you ever told your close friends, spouse, significant other, or a family member sensitive information about your company or job?**  
**Q: Have you ever told a stranger sensitive information about your company or job?**



# Reasons For Sharing Sensitive Information With Others

- More than four in 10 End Users who have shared sensitive information about their job with others did so because they felt the need to bounce an idea off of someone.
- Three in 10 felt the need to vent and/or did not see anything wrong with sharing the sensitive information.



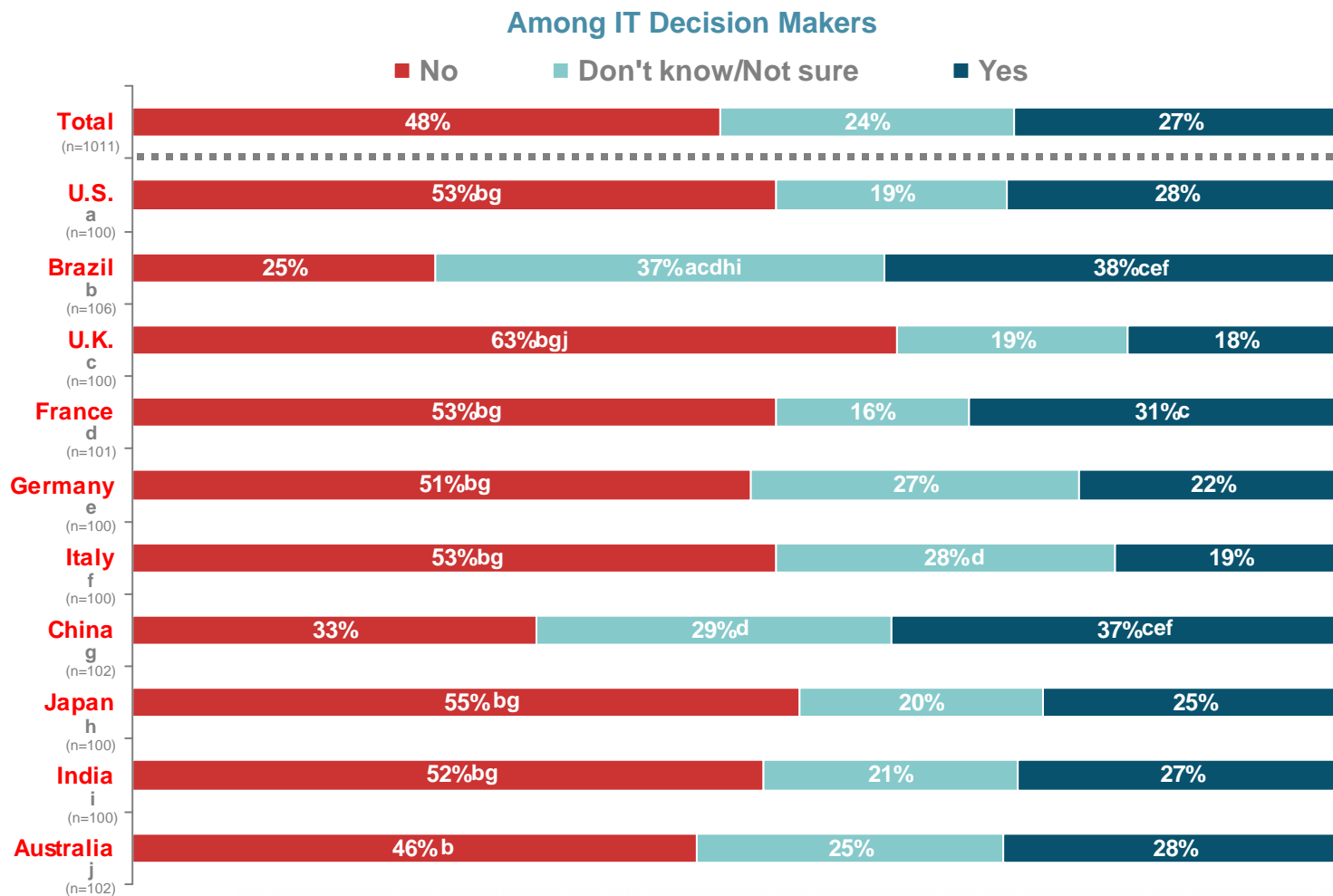
*Q: You indicated earlier that that you have told someone else sensitive information about your job?  
Please tell us why? (Check all that apply.)*





# Sharing Sensitive Information About Work With Others

- More than one in four IT Decision Makers tends to believe their company's employees share corporate data and information with others outside the company.
- The perception that employees share corporate data and information externally is significantly higher among IT Decision Makers in Brazil and China.



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

**Q: Do you think that your company's employees share corporate data and information with others outside the company?**

# Activities That Risk Corporate Security

- Two-thirds of respondents have done one or more activities that threaten corporate security on some level.

- Stepping away from the computer without logging off or shutting it down

Has done at least one risky activity, 67%

and leaving computer on their desk overnight (while logged off and shut down) are the most commonly performed activities that could potentially risk corporate security.

	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
Stepped away from your computer without logging off or shutting it down	37%	46% EI	34% I	45% EI	47% EHI	28% I	40% I	40% I	33% I	13%	50% BEHI
Left your computer on your desk overnight but logged off and shut down	33%	35% BE	21%	33%	40% BEH	21%	36% BE	45% BEHI	24%	30%	45% BEHI
Carried corporate data on portable storage devices outside the office	22%	7% H	26% AEH	22% AH	31% AEH	14% H	27% AEH	41% ABCFEHIJ	1%	25% AEH	24% AH
Stored computer logins/password information on your computer at work	19%	16%	14%	17%	15%	18%	17%	35% ABCDEFHJ	10%	30% ABCDEFH	20% H
Shared computer logins/password with a fellow employee	18%	16%	13%	20% H	19% H	13%	24% BEH	25% BEH	8%	26% BEH	16%
Thrown away corporate paperwork in a garbage can instead of shredding it	18%	9%	15%	10%	26% ACEI	14%	31% ABCEHIJ	35% ABCEHIJ	15%	10%	15%
Stepped away from your computer without using a security cable	15%	12%	10%	22% BEHI	21% BHI	11%	16% HI	26% ABEHI	7%	6%	19% HI
Left your computer on your desk overnight while still logged on	12%	16% EH	10% E	13% E	32% ABCEFGHIJ	0%	12% E	13% E	6% E	9% E	14% E
Sent corporate data to business partners via Instant Messenger	11%	4% H	22% ACDEFHJ	5% H	9% H	9% H	6% H	31% ACDEFHJ	0%	22% ACDEFHJ	5% H
Stored logins/password/account numbers for your personal financial accounts on your computer	10%	7%	8%	9%	5%	6%	13%	28% ABCDEFHJ	7%	9%	6%
Written computer logins/password information down and posted them on your monitor or desk at work	8%	8% H	7% H	10% HJ	8% H	7% H	14% HJ	6%	1%	13% HJ	2%
Written computer logins/password information down and stored them in an unlocked cabinet at work	7%	10% H	4%	8%	5%	8%	10% H	4%	3%	6%	13% BGH
Shared computer logins/password with a non-employee e.g. family, friend, etc.	5%	1%	5%	8% A	5%	4%	3%	14% ABDEFHJ	3%	6%	5%
Left work laptop/PDA in an insecure location e.g. car, restaurant, hotel, etc.	5%	0%	6% A	4% A	11% AH	4% A	5% A	8% AH	1%	6% A	6% A
Written down logins/password/account numbers for your personal financial accounts and posted them on your monitor or desk at work	4%	0%	3%	5% AH	6% AH	3%	5% AH	3%	0%	9% AHJ	2%
Written down logins/password/account numbers for your financial accounts and store them in an unlocked cabinet at work	2%	3%	1%	2%	0%	4% D	3%	1%	1%	5% D	5% D
None of the above	33%	45% DFG	34% DG	33% G	21%	42% DFG	28% G	13%	50% BCDFGIJ	35% DG	32% G

Q: Do you or have you in the past? (Check all that apply.)

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



# Allowing Strangers In The Office

- More than one in five German employees admit to allowing vendors or partners roam offices unsupervised.

		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
<b>Has allowed unauthorized people to enter the office without supervision, 21%</b>	Allowed vendors or partners to roam around your company's office building (e.g. going to the restroom, etc.) without escort	13%	9%	14%	12%	15%	22% AHJ	14%	19% AHJ	7%	16% HJ	7% BF
	Seen an unauthorized person enter your company's office building by tailgating behind another person who unlocked the door with their badge	6%	5%	8%	6%	9% H	6%	5%	10% H	2%	10% H	4%
	Allowed someone to enter your company's office building without company identification or badge	6%	2%	4%	5%	8%	6%	5%	14% ABCFHJ	3%	7%	5%
	Allowed a service or delivery worker to enter your company's office building through an entrance other than the primary one	6%	7% BF	1%	5% F	8% BF	4% F	0%	17% ABCEF HIJ	4%	5%	7%
	None of the above	79%	85% EG	75%	81% G	75%	72%	81% G	66%	91% BCDEF GI	75%	86% DEGI

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

**Q: Have you ever? (Check all that apply.)**



# Taking Security Measures While Working Remotely

- Only half of End Users who work remotely say they continually monitor their surrounding to make sure no-one is looking at their work.
- More than one in four End Users who work remotely, particularly those in Japan, *do not take any special precautions* to ensure security and privacy while working in a public setting.

		END USERS										
		Total (n=610)	US (n=43*) A	BRA (n=69) B	UK (n=51) C	FRA (n=63) D	DEU (n=51) E	ITA (n=65) F	CHN (n=79) G	JPN (n=58) H	IND (n=74) I	AUS (n=57) J
<b>PRIVACY MEASURES</b>												
Takes measures to ensure privacy, 73%	I continually monitor my surroundings to make sure no-one is looking at my work	49%	47%	61% DFGH	55% H	37%	49%	43%	43%	34%	65% DFGH	51%
	I speak softly while on business calls	32%	26% D	45% ADFHJ	35% DH	10%	27% D	23% D	51% ADEFHJ	14%	57% ACDEF HJ	19%
	I use a privacy filter so no one can see my screen	23%	14% H	32% ACEH	10%	24% EH	6%	34% ACEH	28% CEH	2%	39% ACEH	28% CEH
	Other	7%	9%	4%	6%	8%	6%	8%	5%	3%	7%	18% BGH
	I don't take any special precautions to ensure my security and privacy	27%	30% BI	13%	24% I	40% BGIJ	39% BGIJ	26% I	19%	55% ABCFGI J	9%	21%

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

**Q: When working from a remote location in a public setting, what measures do you employ to ensure your security and privacy? (Check all that apply.)**



# Working Remotely From Home

- Nearly half of Total End Users (and more than six in 10 from China and Brazil) who work remotely typically transfer work documents to and from their home computer when working from home.

	END USERS										
	Total (n=610)	US (n=43) A	BRA (n=69) B	UK (n=51) C	FRA (n=63) D	DEU (n=51) E	ITA (n=65) F	CHN (n=79) G	JPN (n=58) H	IND (n=74) I	AUS (n=57) J
I transfer documents to my home computer either through email or a portable storage device then transfer them back to my work computer once completed	46%	30%	61% ACHJ	41%	51% AH	43% H	52% AH	65% ACEHIJ	24%	45% H	35%
Take my company-issued notebook computer home and use that for my work	40%	26%	22%	47% ABH	46% ABH	55% ABFH	31%	54% ABFH	22%	47% ABFH	44% BH
I use my personal cell phone to receive and place business calls	38%	42% EF	35%	37%	32%	22%	23%	61% ABCDE FHJ	40% E	47% EF	32%
I am not able to access my company's network from remote locations so I use corporate Webmail to email documents to coworkers, customers, and prospects	14%	14%	7%	12%	19% B	10%	18%	27% BCEHIJ	10%	11%	7%
I am not able to access my company's network from remote locations so I use personal email to send information to coworkers, customers, and prospects	13%	9%	9%	8%	11%	8%	3%	23% BCEF	16% F	16% F	21% F
Other	5%	12% DFGHI	6%	12% DFGHI	2%	8% F	0%	1%	2%	1%	12% DFGHI
I do not work from home	9%	9% G	10% G	10%	6%	8%	11% G	1%	28% ABCDE FGIJ	7%	5%

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

Q: When you work from home, which of the following do you typically do? (Check all that apply.)



- **Data's Increasing Importance:** Knowledge workers – their tool is data
- **Data landscape:** Lines blurring between personal, work life
- **Drivers:** Collaboration, mobility, Web 2.0, social media, video
- **Scope:** Data loss is not just a network issue – it's verbal, physical, visual, etc.
- **IT security strategy:** People, process, technology
- **IT's Role:** Education, IT-employee relationships, image evolution
- **Where to Begin:** Behavioral understanding first, then tailor education and technology plans