

# Connected World II: Where does the Internet come from?

October 2014

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# Research methodology



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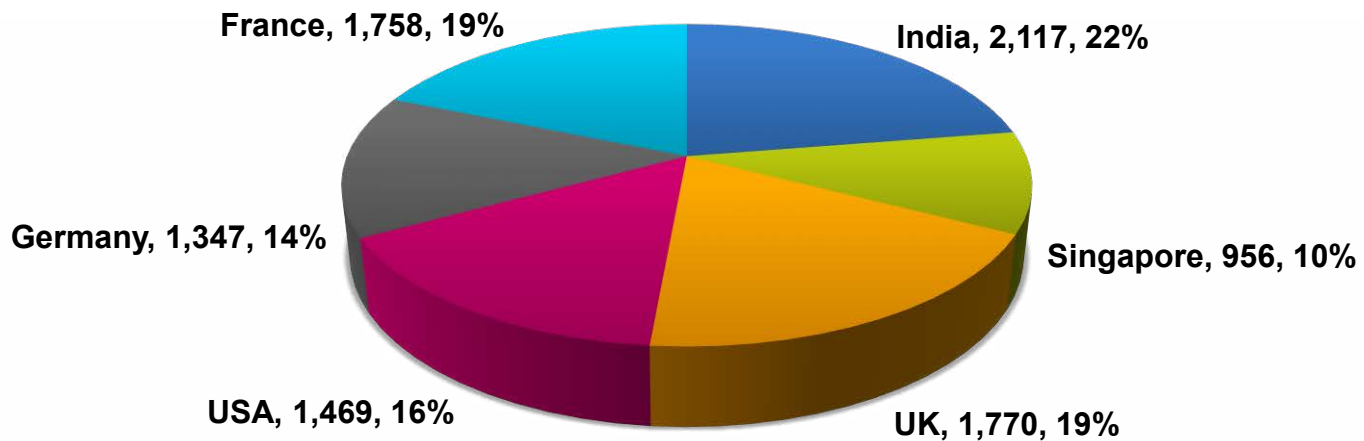
# Research methodology: Connected World II

Tata Communications conducted an online survey wherein a set of 14 closed questions were administered, aimed at capturing the behavioural, technical and philosophical responses with regards to the Internet.

A total of 9,417 respondents across six countries viz India, Singapore, UK, USA, Germany and France participated in the survey. Out of the total number of respondents surveyed, 50 per cent of them are female and 50 per cent male

33 per cent of the respondents are from Asia (India and Singapore), 52 per cent from Europe (UK, France and Germany) and 15 per cent from North America.

The findings were then analysed as an aggregate of the responses and further based on age, gender and location to arrive at the insights.



■ India ■ Singapore ■ UK ■ USA ■ Germany ■ France

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# Survey findings



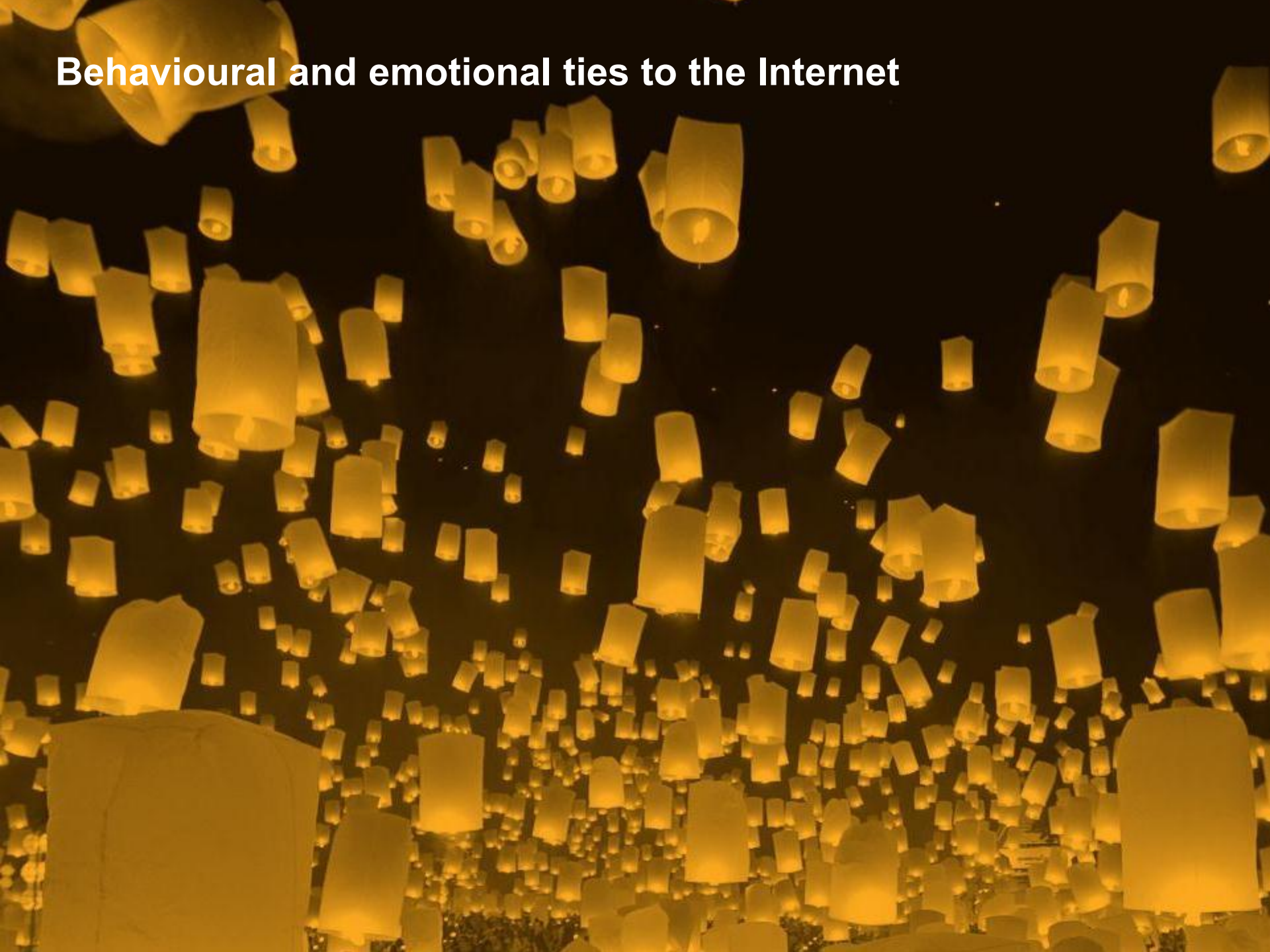
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## Summary of findings

1. Consumers globally have **strong emotional ties** to the Internet and spend a **significant amount of time** using it in their daily lives
2. Absence **does not** make the heart grow fonder when it comes to the Internet – FOMO (fear of missing out) is a global phenomenon ([link to supporting source](#)) and some would even give up intimacy to keep an Internet connection
3. Most consumers still **lack a deeper understanding** of how the Internet really works
4. Expectations for the future of the Internet vary by country but providers are front and center given consumers' increasing familiarity with data management and perception of internet as facilitator of global connections
5. Educating consumers about how the Internet works may lead to **greater appreciation** of its capabilities and increased usage – the mere exposure effect states that something that is familiar can bring comfort with repeat exposure ([link to supporting source](#))

# Behavioural and emotional ties to the Internet



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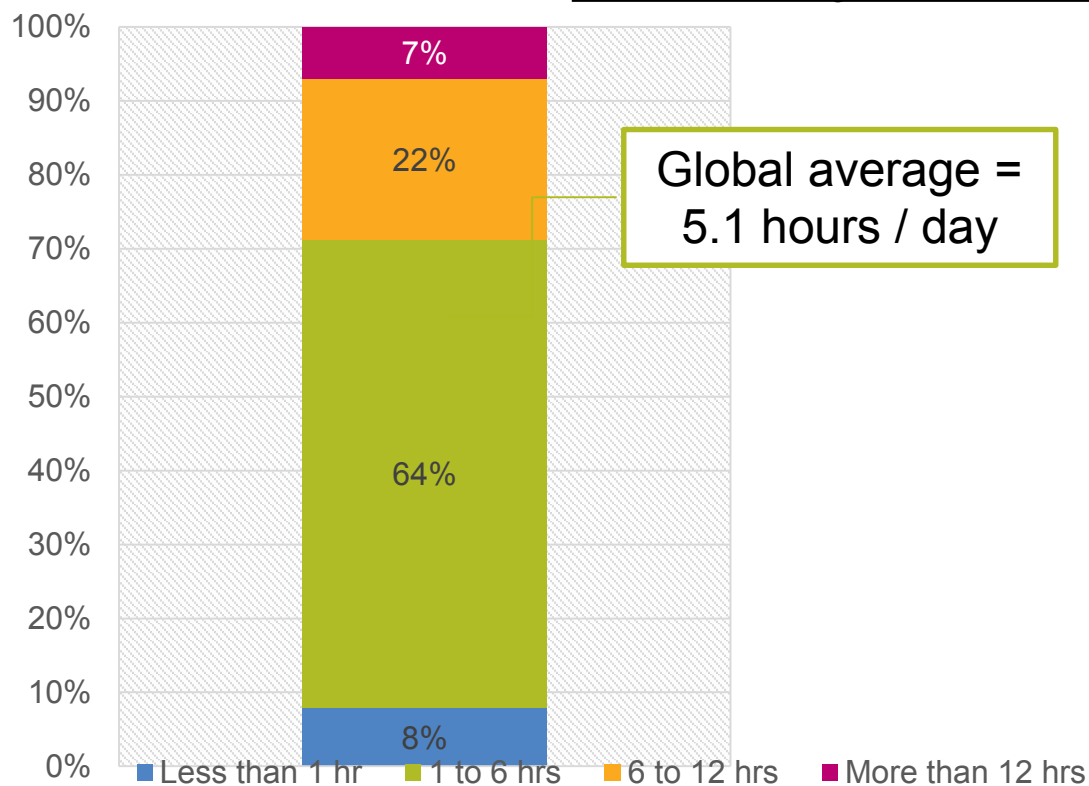


# Amount of active time online drops after age 35, but 92% of people spend at least an hour a day online



- Higher average daily use in Asia

**Hours of daily active internet use**



**Avg. by Geo**



Q. How many hours in a day do you actively use the Internet?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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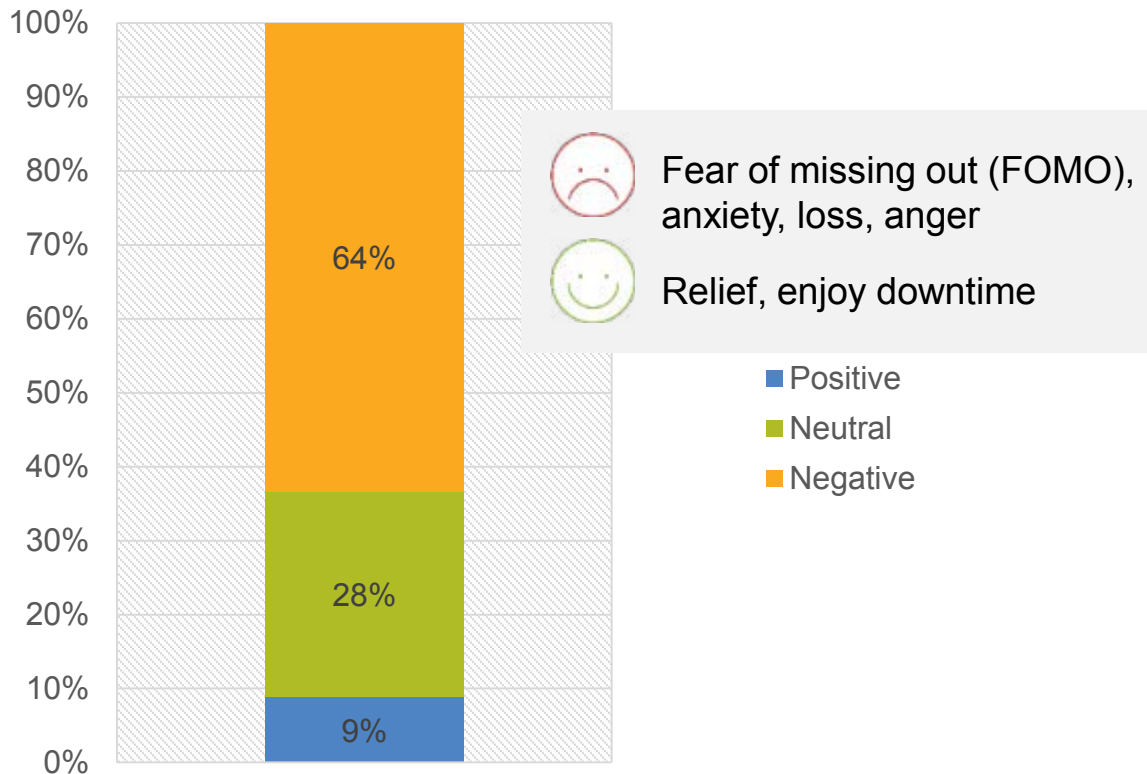


# FOMO (fear of missing out) when not connected to the Internet is a global phenomenon

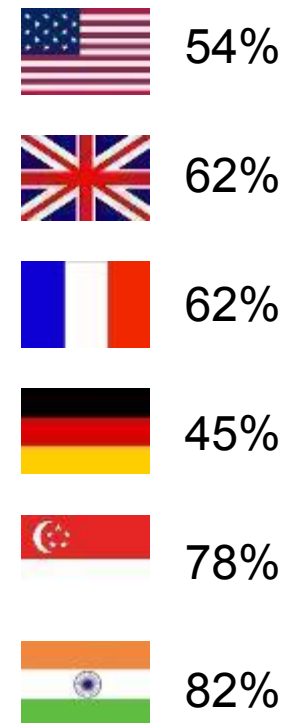


- Negative effect even greater in Asia

## Reaction to no internet access



## % Negative by Geo



Q. How do you feel when your internet connection is down / when you are in a place without internet access / mobile reception?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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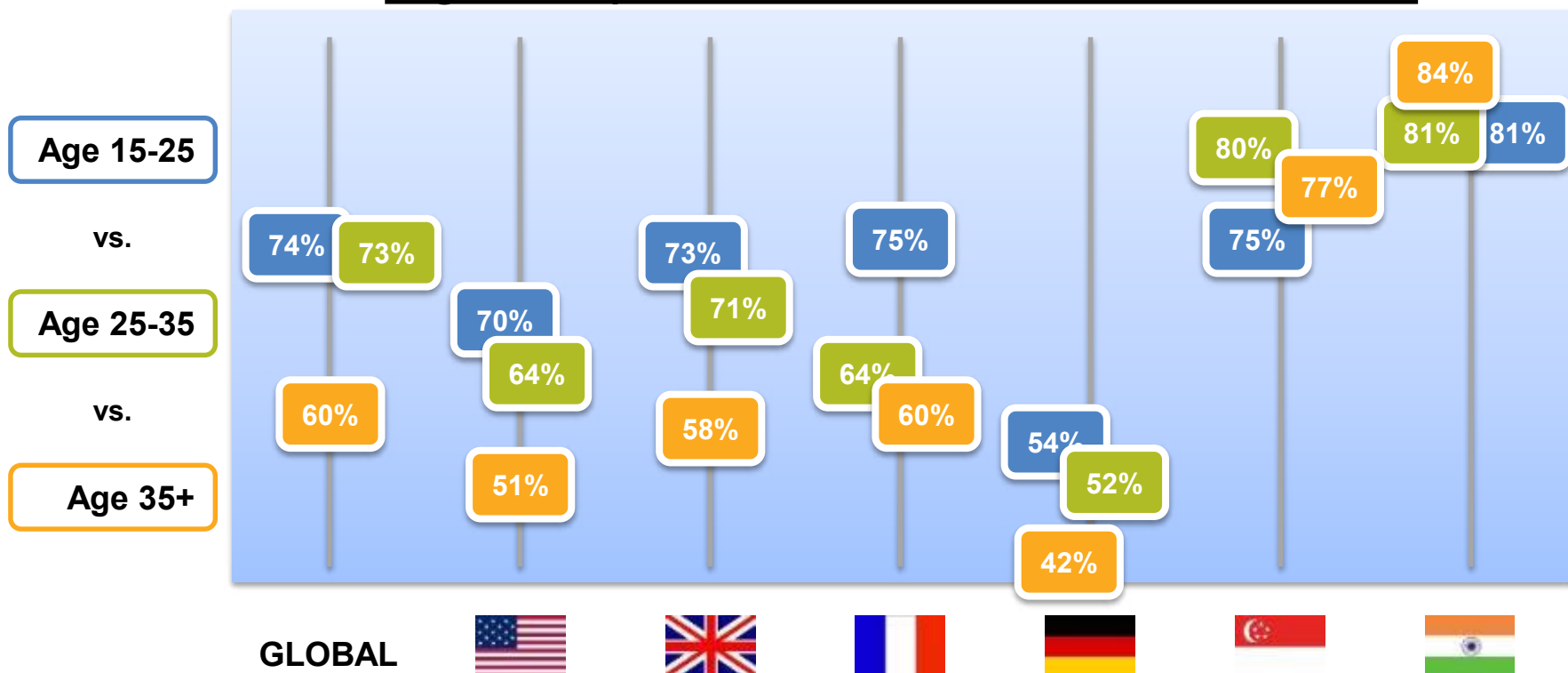
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# Younger users in US and Europe experience more anxiety than older users when not connected

- Strong response consistent across age groups in Asia

## Negative response when no Internet connection available



Q. How do you feel when your internet connection is down / when you are in a place without internet access / mobile reception?

Base: Global (n=1061 / 2178 / 6178), US (n=92 / 200 / 1177), UK (n=160 / 343 / 1267), FR (n=142 / 302 / 1314), GE (n=124 / 208 / 1015), SP (n=165 / 289 / 502), IN (n=378 / 836 / 903)

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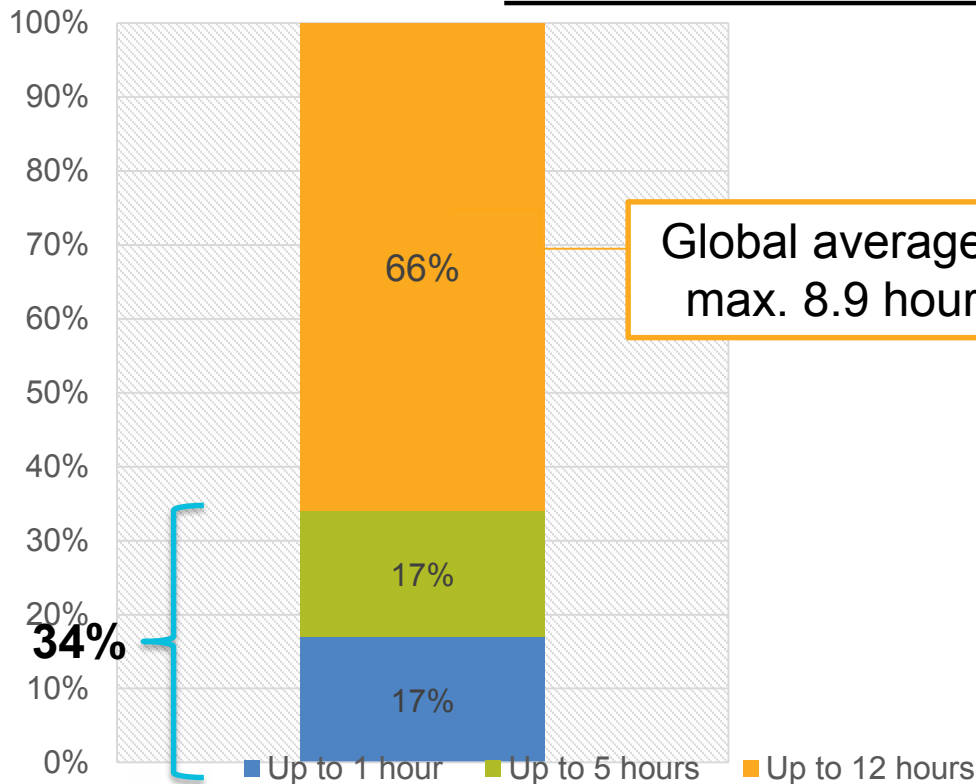
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# A third of internet users say they could not survive more than 5 hours without access to the internet



- Consistent with [academic research](#) on our growing reliance on the constant flow of information through digital media

## Hours could survive without Internet



## Avg. by geo



Q. How long do you think you could survive without using the Internet in your daily life?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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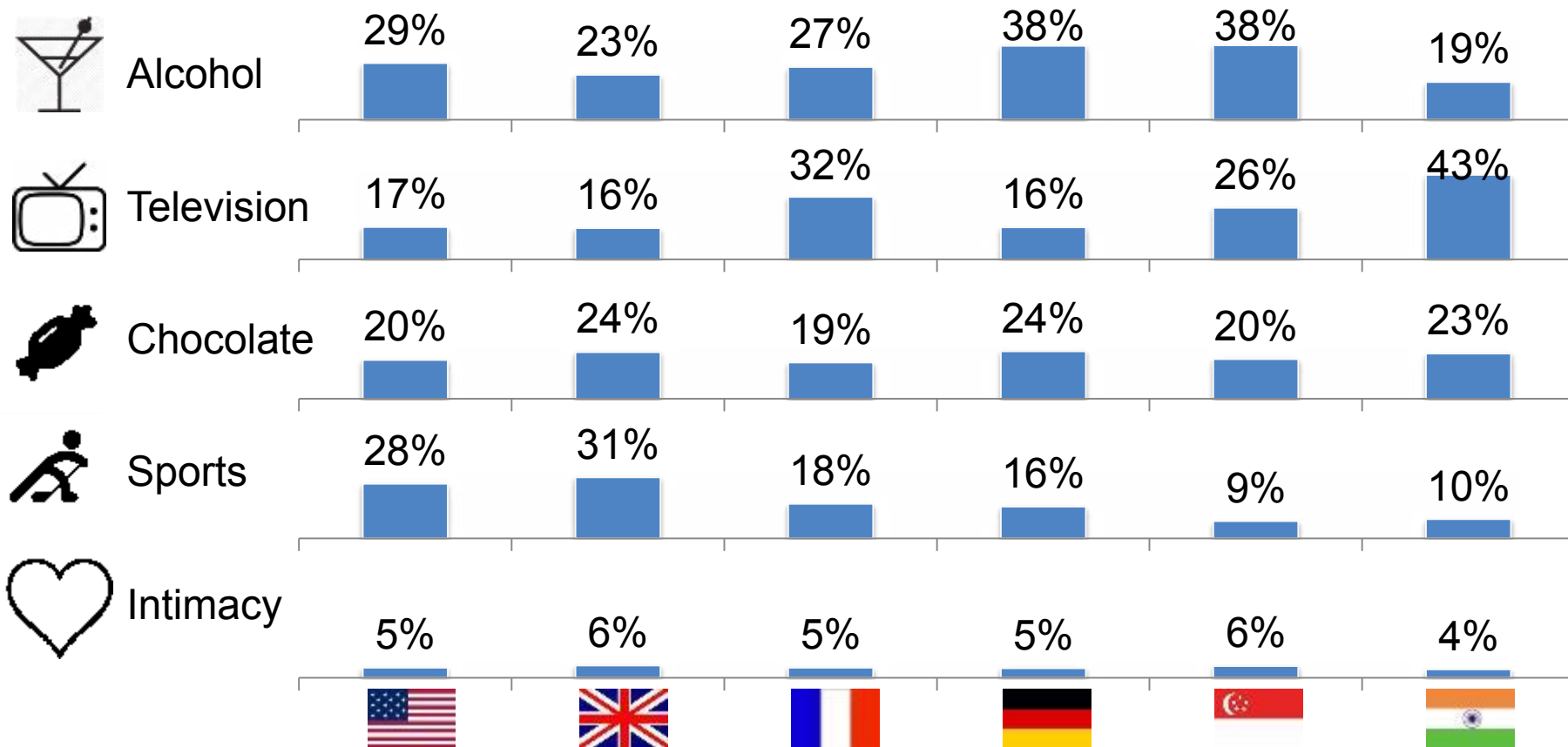
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# Some are willing to trade alcohol, chocolate, TV or sports for internet access – and 5% are even willing to give up intimacy!

## Willing to sacrifice for internet access



Q. If you had to give up one of the following to get internet access, what would it be?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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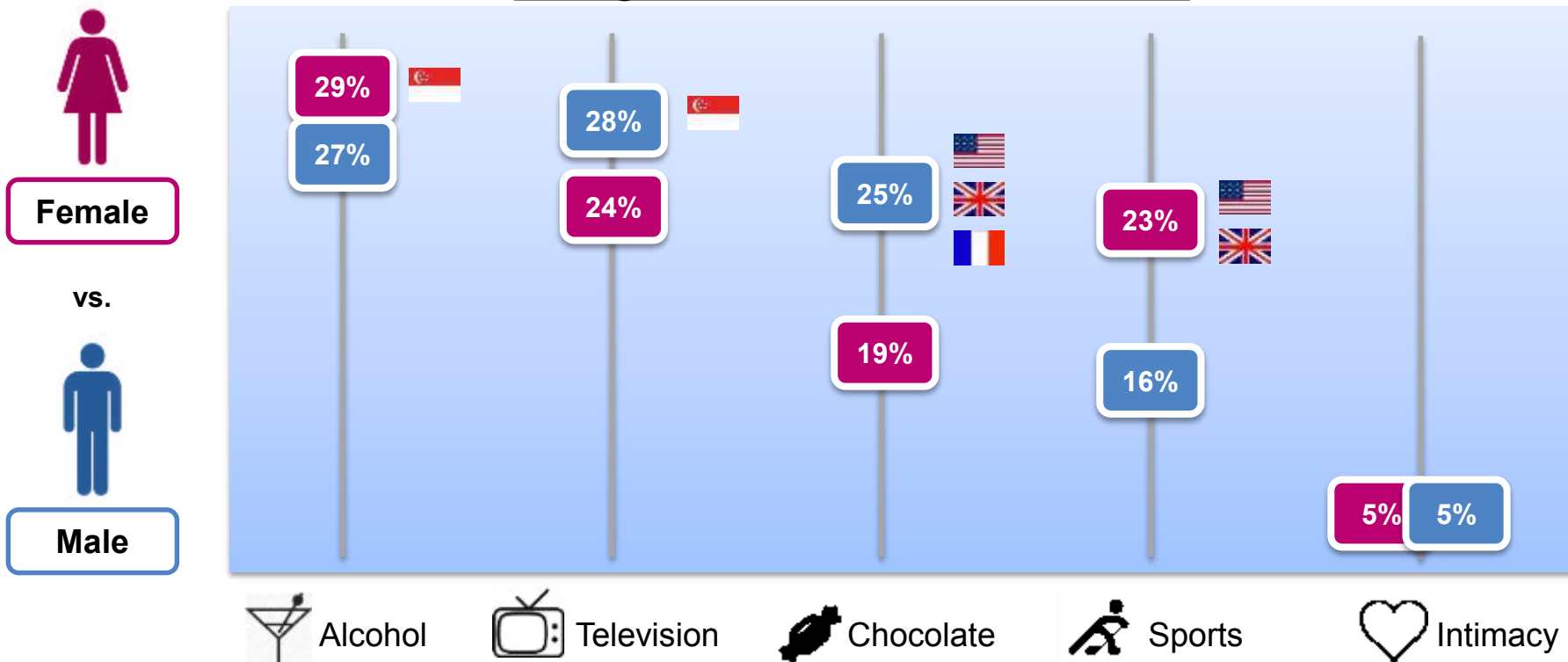
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# Men and women willing to sacrifice different activities to stay online

- Gender gap especially prominent in geos noted below

## Willing to sacrifice for Internet access



Q. If you had to give up one of the following to get internet access, what would it be?

Base: Women (n=4561), Men (n=4603)

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# Consumer understanding of how the Internet works



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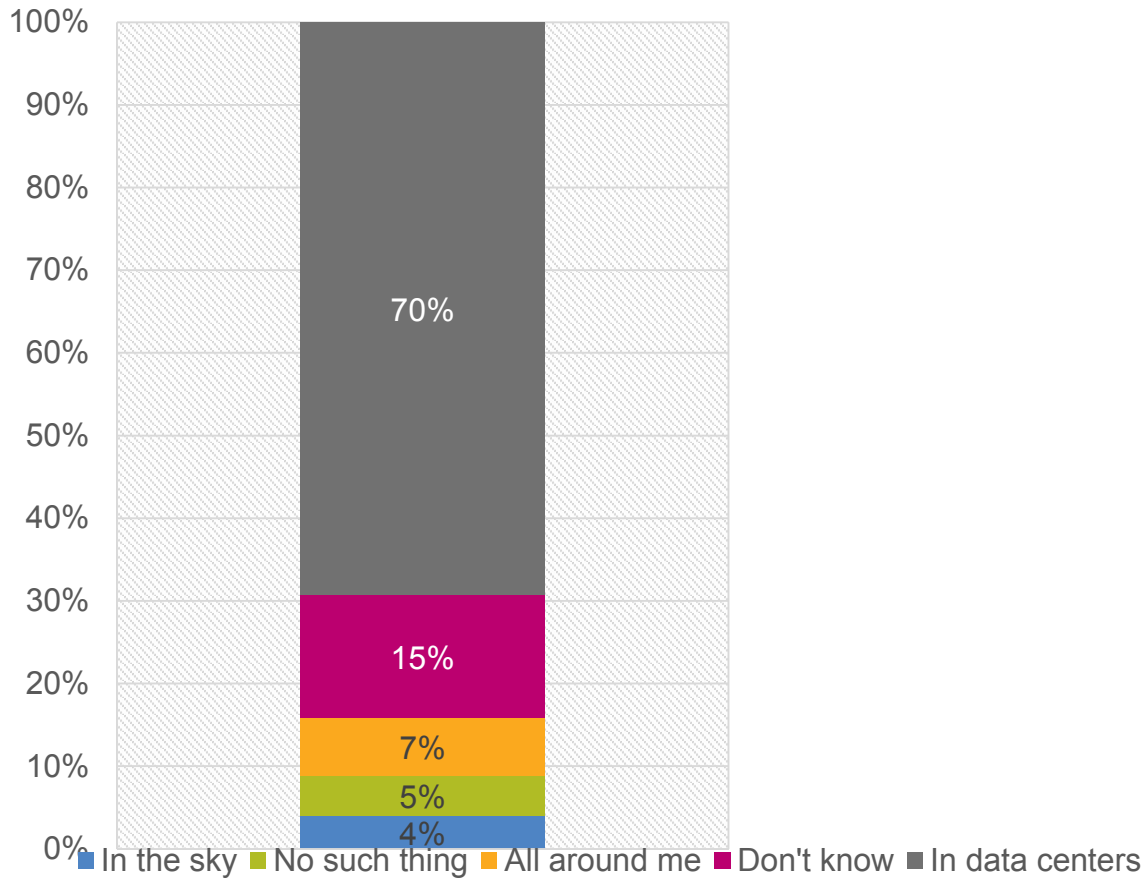
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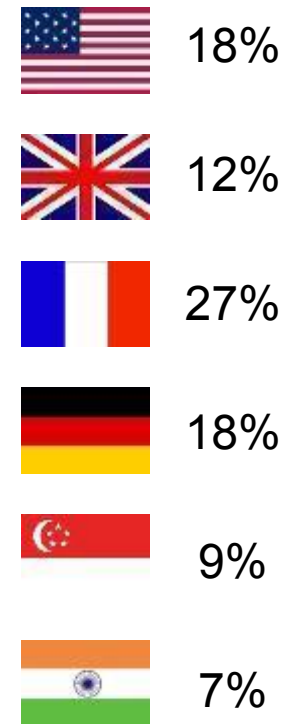
# Consumers have growing awareness of data centers – may lead to higher expectations from providers



## Where is the cloud



## % Don't know by geo



Q. We hear a lot about information being kept in 'the cloud', but where is the cloud?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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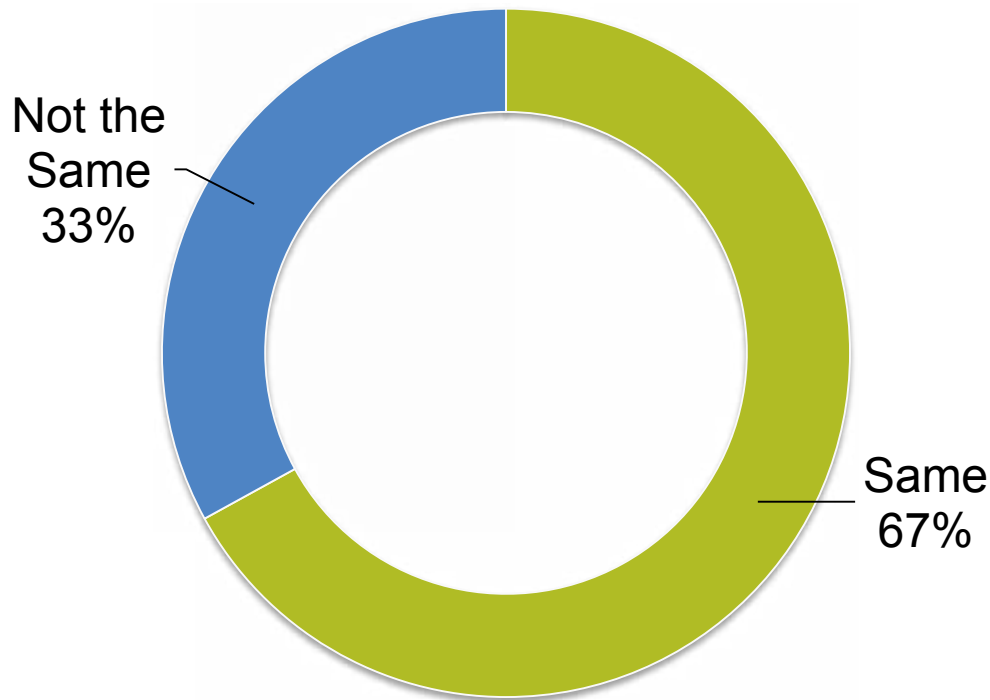
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# ...but most consumers still consider the Internet and the World Wide Web to be one and the same

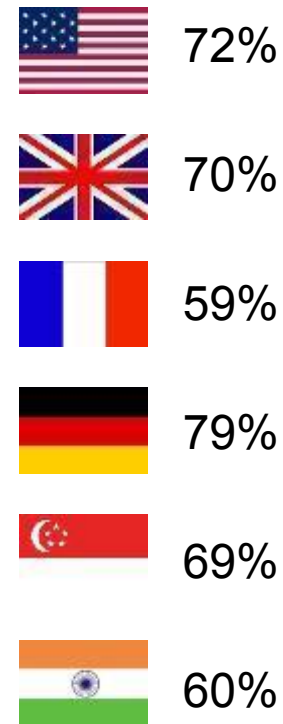


- US, UK, Germany even more likely to (*incorrectly*) use terms interchangeably

## Is the Internet and WWW the same?



## % Agree by geo



Q. Is the Internet and the World Wide Web the same thing?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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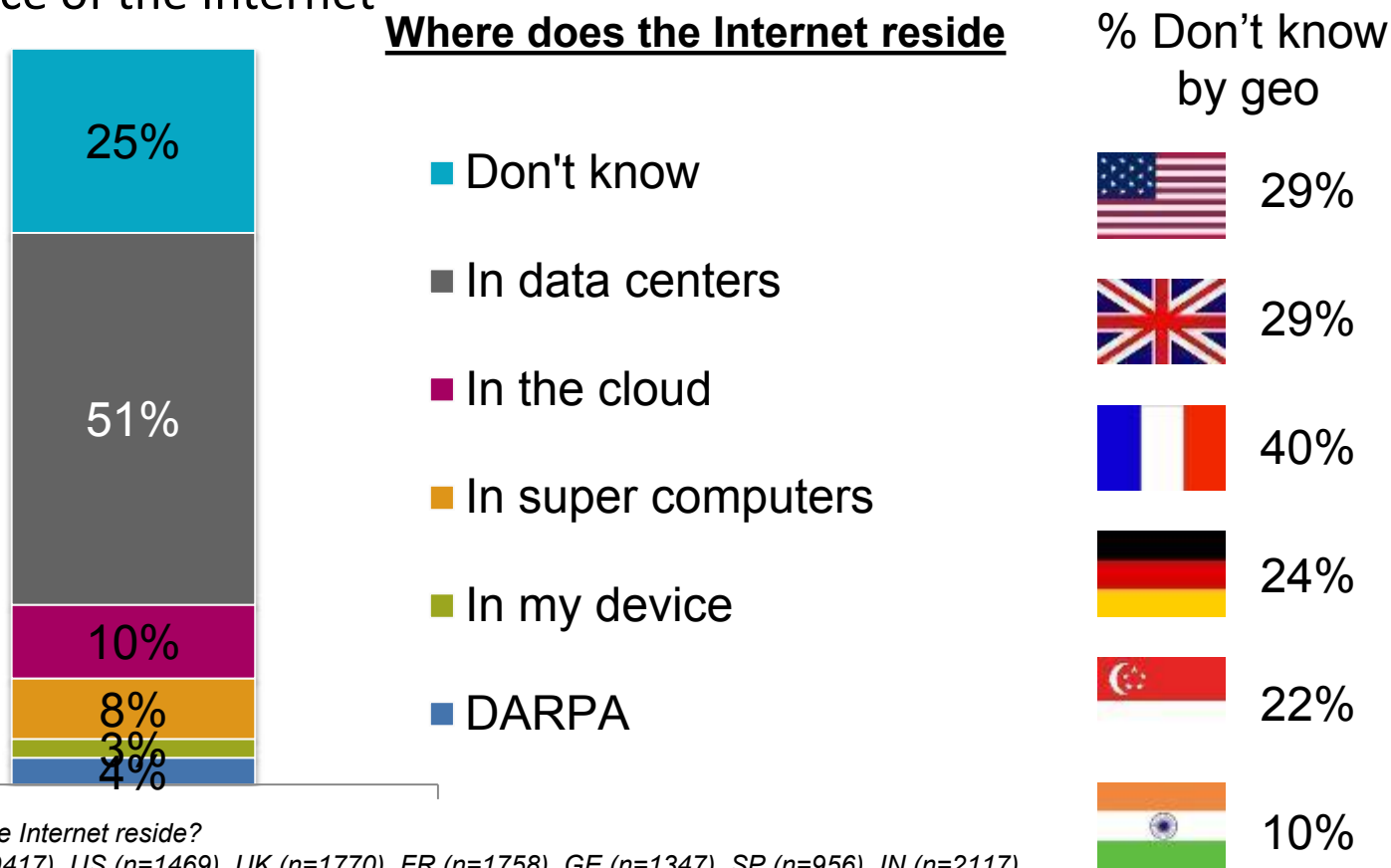
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# 25% of online consumers are unable to make an educated guess where the Internet resides



- Only half accurately identify network connected data centres as the source of the Internet



Q. Where does the Internet reside?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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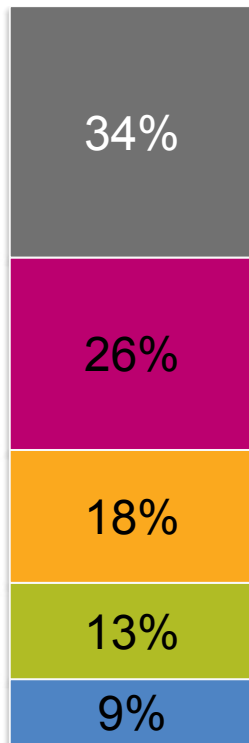
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# 34% of people don't know the fastest mode to get Internet to their device



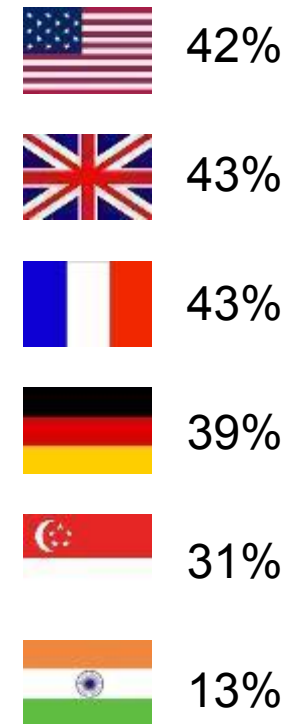
- Asia most likely to hazard a guess and to accurately identify sub-sea cables as speediest option



## Fastest mode of Internet delivery

- Don't know
- Satellites in space
- Sub-sea cables
- Airwaves
- Resides in device

## % Don't know by geo



Q. What is the fastest mode of internet delivery to your device / PC?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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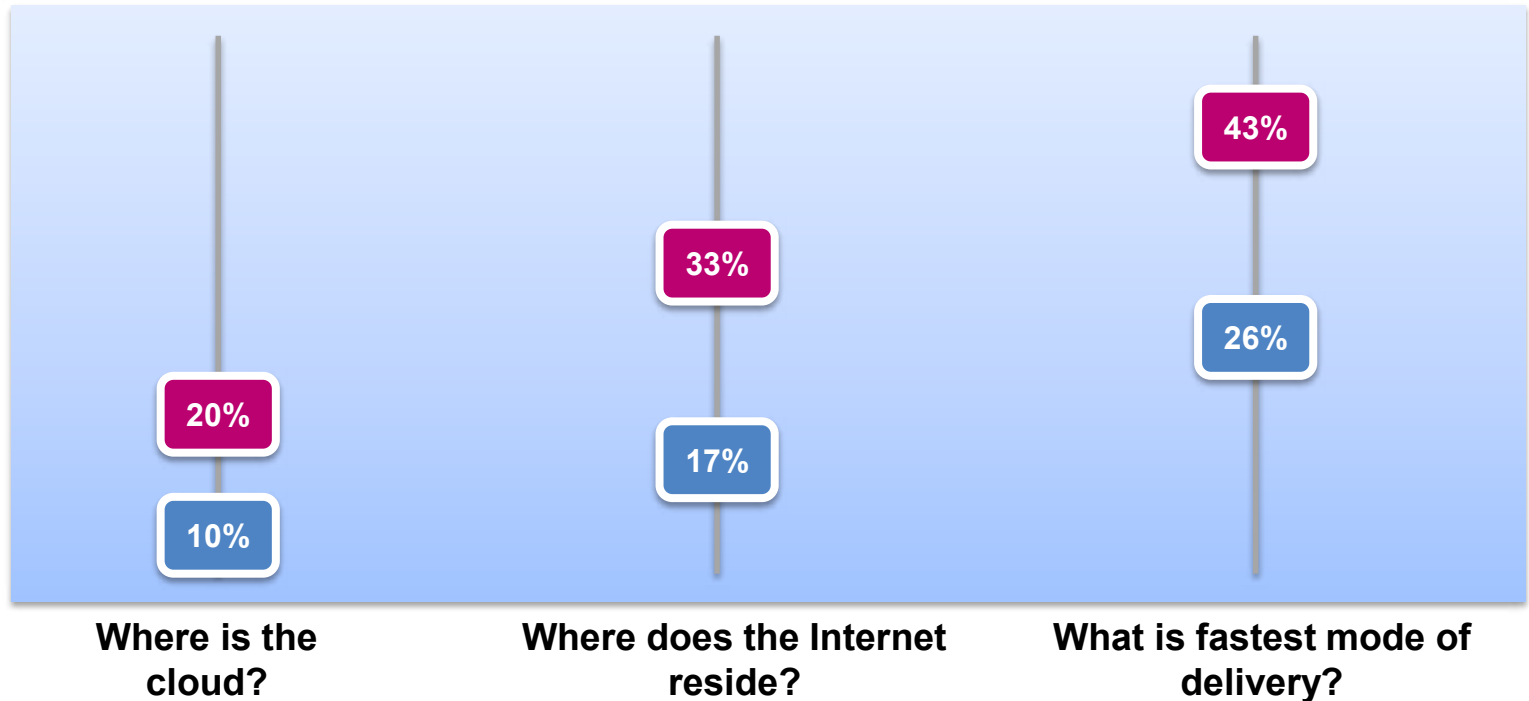
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# Women globally are less confident in their current understanding of how the internet works



- Opportunity to empower women via tech education

## Respond “don’t know” to questions about how Internet works



Q. We hear a lot about information being kept in ‘the cloud’, but where is the cloud?

Q. Where does the Internet reside?

Q. What is the fastest mode of internet delivery to your device / PC?

Base: Women (n=4665), Men (n=4752)

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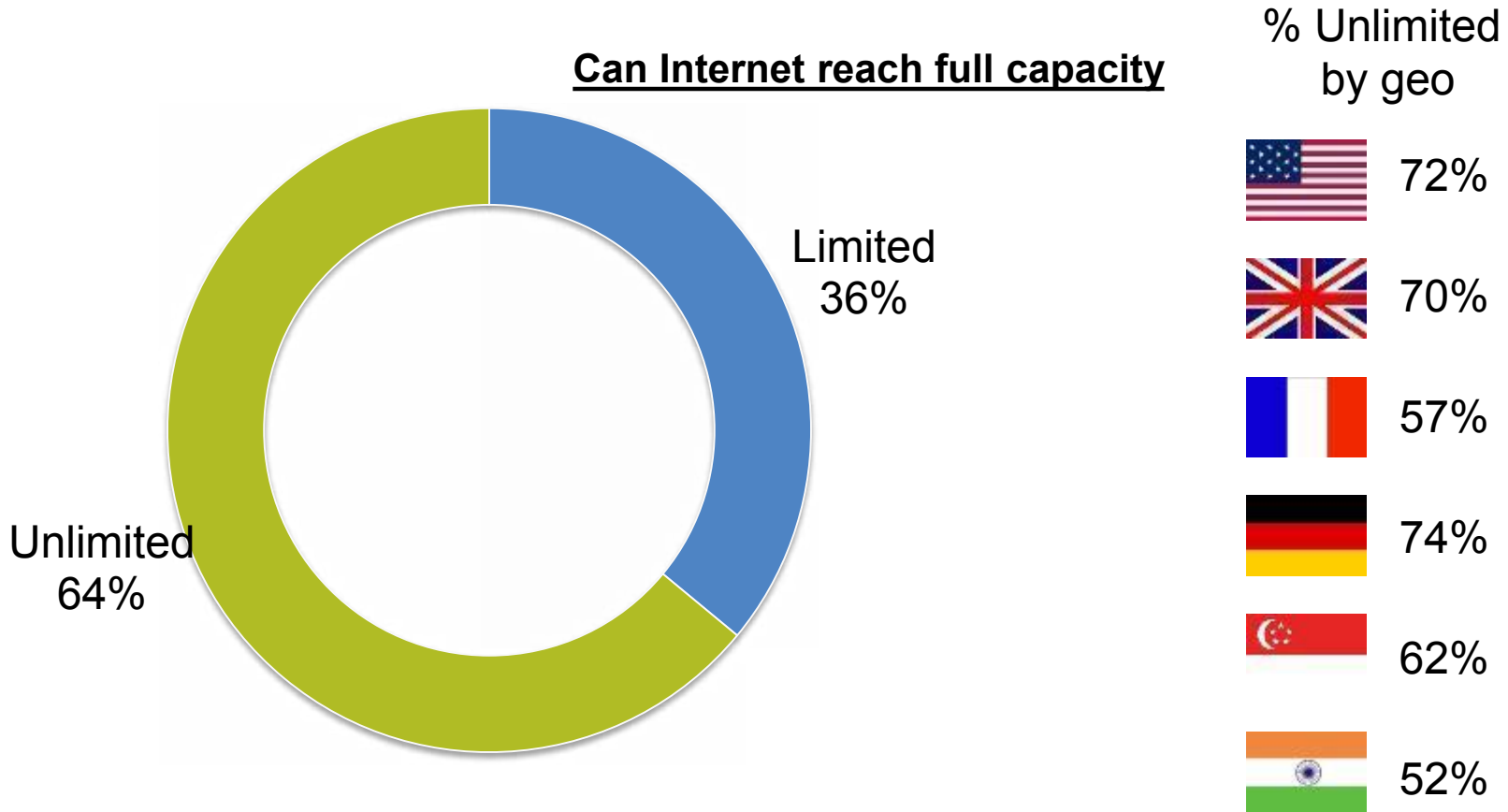
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# Majority of online consumers have a false belief in an Internet of infinite capacity



- India more skeptical about limitless capabilities



Q. Can the Internet ever reach full capacity?

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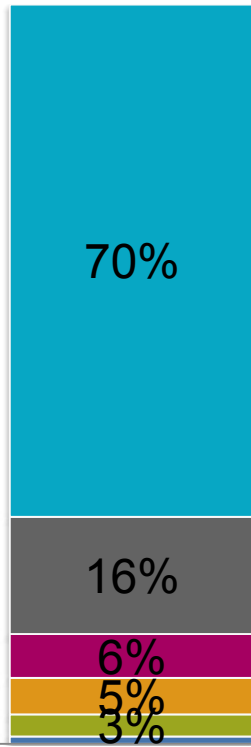
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# Internet users across the globe see it as a shared resource, not controlled by individual countries









- In Asia, 1 in 5 know about geo control, potentially based on experience with local or regional restrictions



## Who owns the Internet

- Everyone
- Each individual country
- USA
- Microsoft
- Google
- India

	% Everyone by geo	% Country controls
	71%	15%
	72%	17%
	71%	13%
	80%	11%
	64%	21%
	61%	21%

Q. Who owns the Internet?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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# Expectations for future of the Internet



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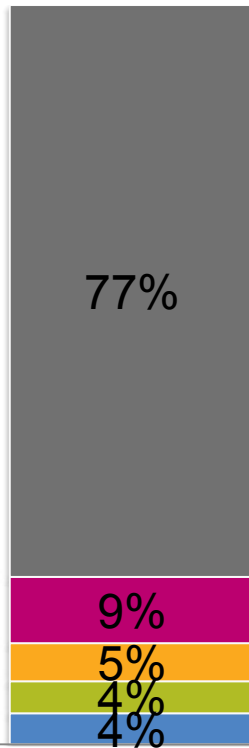
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# Key benefit of internet today is instant connection to others around the globe, putting providers front and center in consumers' mind

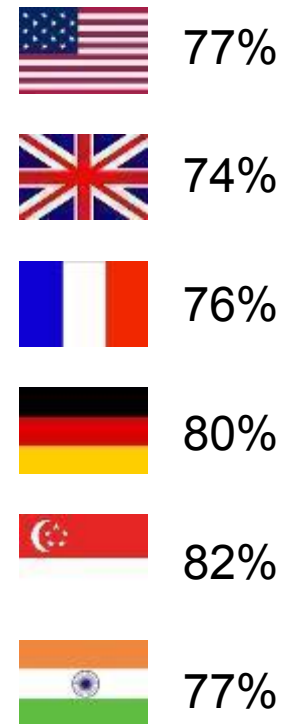


## How Internet benefits society



- Instant global connection
- Democratic channel for expression
- E-Commerce
- Easier shopping
- Social equaliser

## % Global connection by geo



Q. How has the Internet most benefitted society as a whole?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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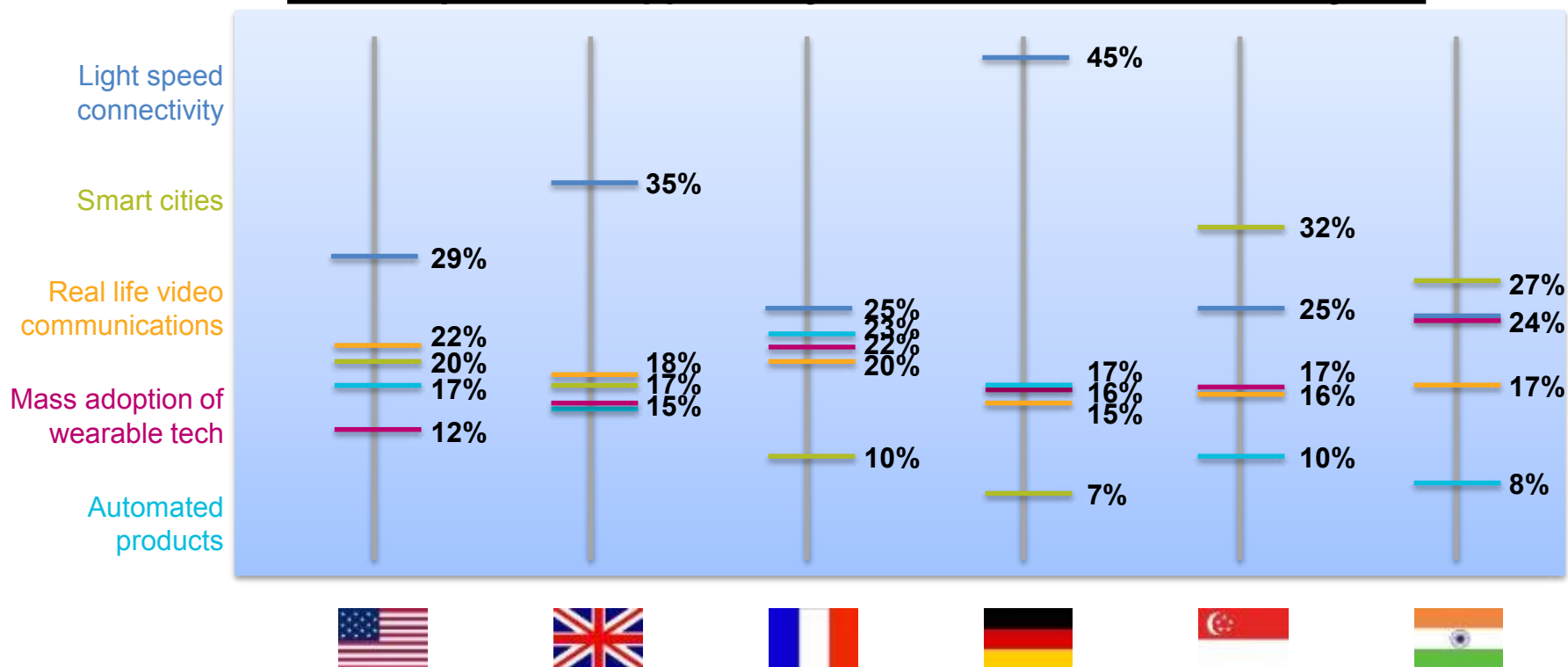
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# People envision the future with light speed connectivity, keeping providers center stage in the years to come

- Each geo expects internet to enable different new opportunities

## Most inspirational opportunity Internet will facilitate in 3-5 years



Q. What is the most inspirational opportunity for change in the next 3-5 years that the Internet will facilitate?

Base: Global (n=9417), US (n=1469), UK (n=1770), FR (n=1758), GE (n=1347), SP (n=956), IN (n=2117)

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# Do consumers really need to understand the way the Internet works to reap its benefits?



- According to the [mere exposure effect](#), **familiarity breeds comfort** with an idea or experience – which in turn may facilitate **more frequent return** to that experience for reassurance
- Increasing **consumers' understanding** of cloud computing and how the Internet really works may lead to **more frequent usage** for routine tasks currently done using other offline resources



## Research implications

The Internet is **critical to our daily lives** today and in the future – and Tata Communications is at the forefront of **enabling internet** connectivity for users around the globe.

Consumers with a **better understanding of the Internet** are likely to have a **greater appreciation for its capabilities** and may find **new ways** to incorporate digital resources into daily activities – resulting in **usage levels even higher** than we see today!

Educating people on **where the Internet resides**, **how the Internet is delivered** and what **cloud computing** really means may also increase **feelings of global community** and **shared experience** that are at the core of our strong emotional ties to the Internet today.

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