



The State of Cross-Device Commerce.

H2 2016 · Southeast Asia

The challenge ahead

Closing the gap across devices

A new paradigm. Personalised marketing starts with understanding cross-device behaviour, allowing marketers to use multiple signals to understand consumers' buying processes and to enhance their overall experience.

A new focus. To reflect an increasingly cross-device, user-centric eCommerce environment, we've changed the title of this report from State of Mobile Commerce to State of Cross-Device Commerce.

What's inside?

4

Key Findings

5

Cross-Device
Commerce Trends

16

Mobile Retail Commerce
Trends in Southeast Asia

20

Global Mobile Retail
Commerce Trends

26

A Look Ahead

28

Appendix

Key findings

Cross-device is here to stay

About two in five online retail transactions involved two or more devices.

Old models fall short

Retailers using conventional device-focused analytics do so at their peril, undervaluing consumer engagement and missing the opportunity to optimise advertising spend.

No vertical is exempt

Cross-device buying is the new norm across all retail categories.

Forget “browse on smartphone, buy on desktop”

As smartphones extend their role from browsing to purchasing, retailers must ensure the user experience is consistent, synchronised and seamless not only for mobile, but across all devices and platforms.

An aerial, high-angle photograph of a large, diverse crowd of people crossing a wide zebra crossing. The people are moving in various directions, creating a sense of busy, organized movement. The background is a blurred city street with other pedestrians and a few bicycles visible. The overall tone is professional and modern.

Cross-Device Commerce Trends.

The new path demands a new view

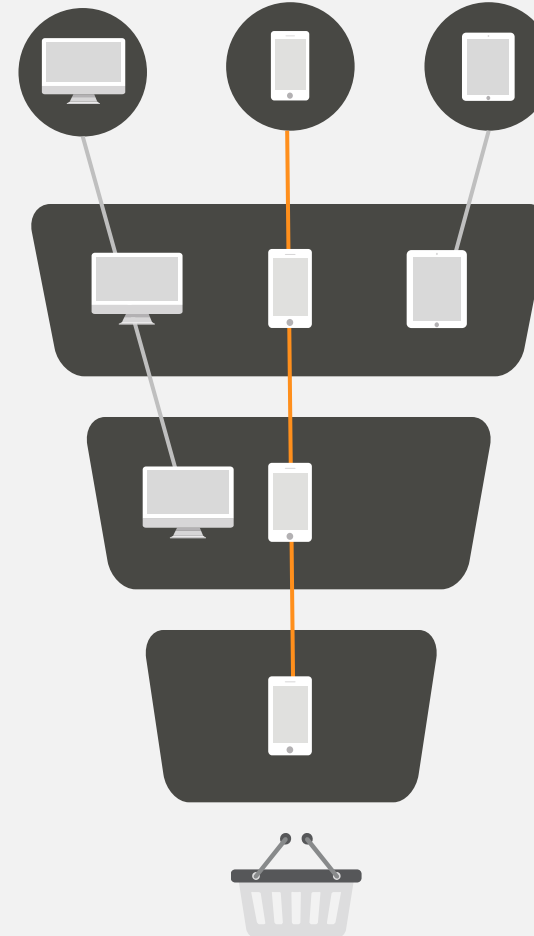
Consumers use multiple devices in the buying journey, from searching and browsing to buying.

Device-centric: Traditional analytics tools look at activities on a single device, providing only a partial and distorted view of a multidevice journey.

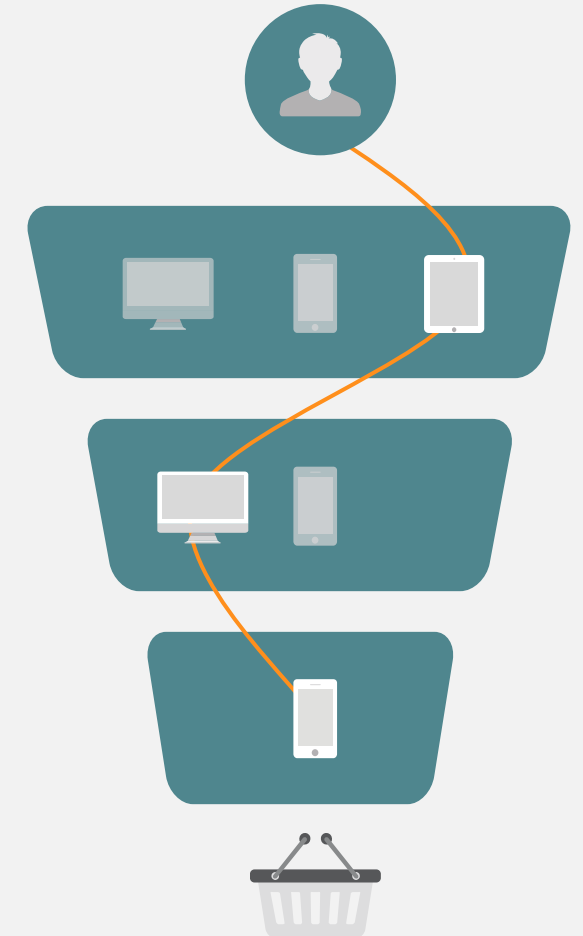
User-centric: Only advanced cross-device measurement can accurately follow the buyer across devices and capture full-journey behaviour and intent.

The Path to Purchase

DEVICE-CENTRIC VIEW



USER-CENTRIC VIEW



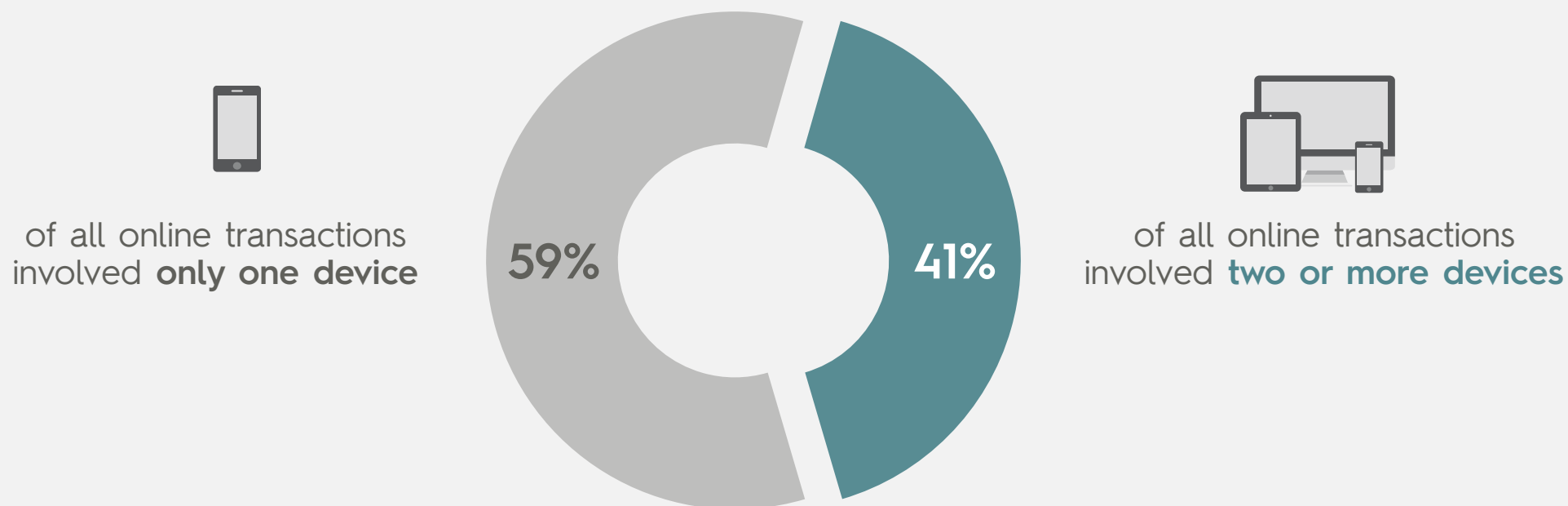
You can't afford to misunderstand 41% of buyers

About two-fifths of all transactions involved two or more devices from the first website visit to the point of purchase.*

Without cross-device measurement, marketers risk miscalculating key metrics and ROI for two in five transactions.

Share of Transactions in Indonesia by Number of Devices Used, Q4 2016

Number of devices used from first website visit to purchase*

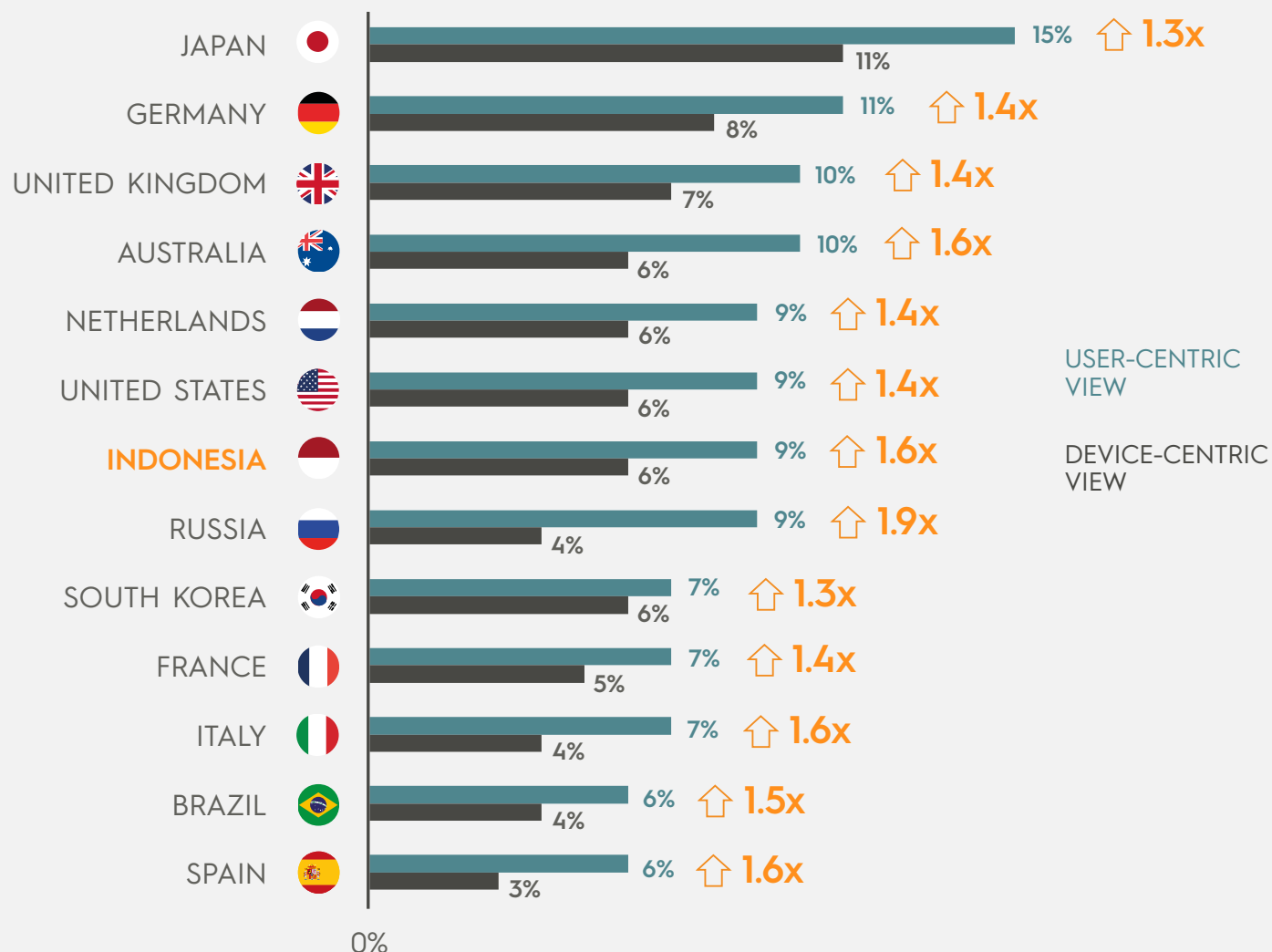


Don't undervalue your users – know how to measure

In Indonesia, a user-centric view through cross-device measurement shows that conversion rates are 1.6 times higher than the conversion rates seen through a device-centric approach.

Without an accurate cross-device measurement, retailers misunderstand, undervalue and ultimately underinvest in users.

Conversion Rate by Country
Device-Centric vs. User-Centric Analysis, Q4 2016



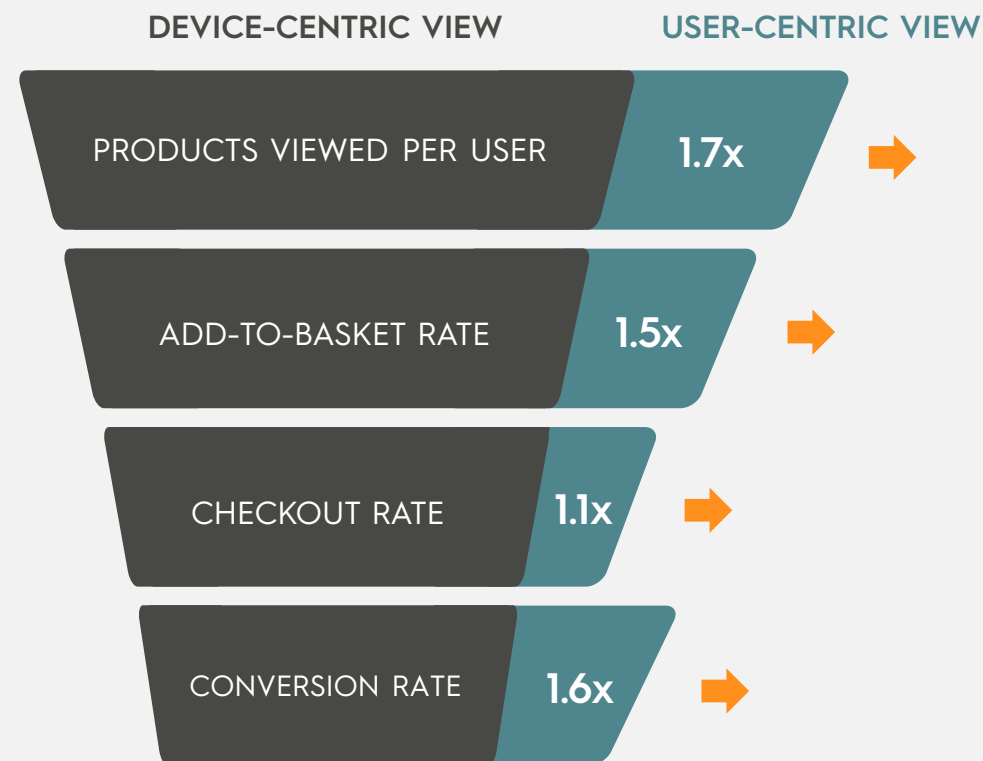
Improve accuracy at every step

Cross-device measurement shows that consumers convert more than previously thought, and that they:

1. view more products than traditional analytics tools suggest
2. are more likely to place items in the shopping cart and complete the transaction

Cross-device measurement helps retailers to accurately identify where bottlenecks lie and optimise consumer experience and marketing spend accordingly.

Retail Conversion Funnel in Indonesia Device-Centric vs. User-Centric Analysis, Q4 2016



Source: Criteo dataset Q4 2016, Indonesia, all categories, excluding apps

Definitions:

Add-to-basket rate = share of product page visitors who added a product to basket

Checkout rate = share of add-to-basket visitors who made a purchase

Conversion rate = share of product page visitors who made a purchase

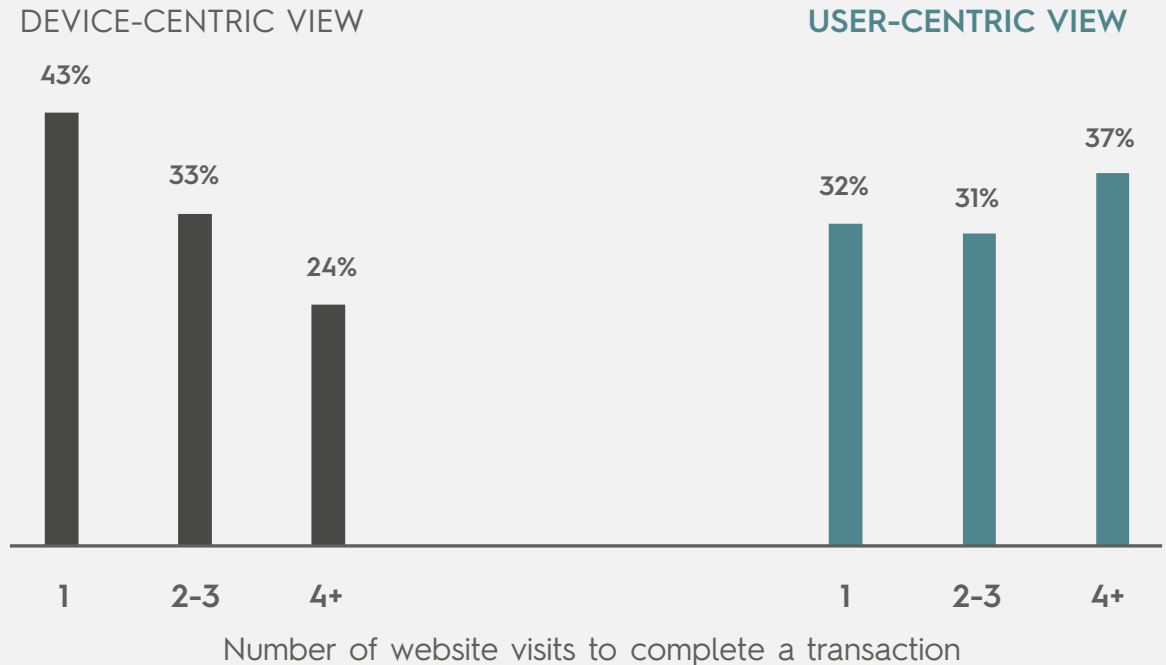
The 41% Difference

Device-centric measurement can be misleading, recording as single-visit purchases what are actually visits by the same user on another device.

Correctly applied cross-device measurement reveals that buyer journeys are 41% longer than partial-view models indicate, enabling marketers to:

- Optimise offers and user experience at every step
- Increase the likelihood of conversion on every visit on any device

US Share of Retail eCommerce Transactions by Number of Visits Device-Centric vs. User-Centric Analysis, Q4 2016

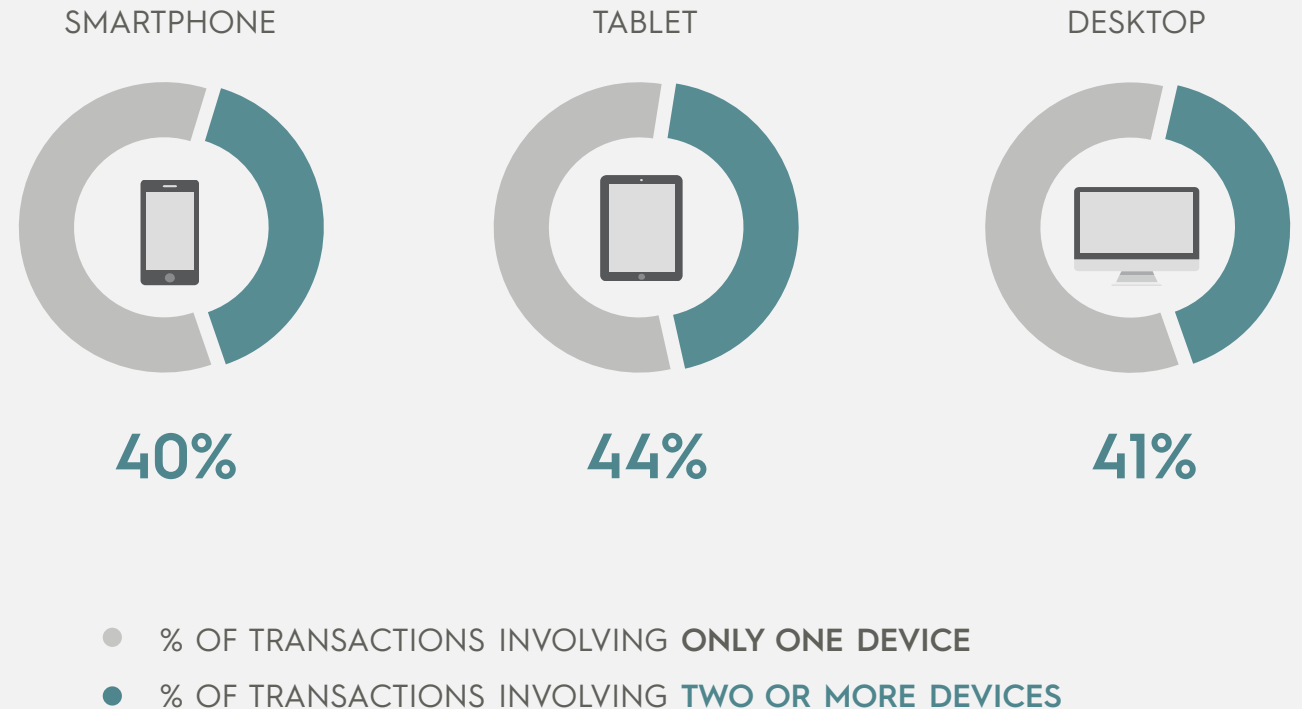


Cross-device shopping conquers all devices

Cross-device buyers are fairly evenly represented across the three purchase devices: desktop, smartphone and tablet.

This fact reinforces the vital need for retailers to offer a seamless user experience across all devices to capture the final purchase wherever it may take place.

Cross-Device* Share of eCommerce Transactions in Indonesia by Device, Q4 2016



Smartphones are present from start to finish

Forget the conventional wisdom “browse on smartphone, buy on desktop.” Consumers now reach for their smartphones for both searching and purchasing.

Twenty-one percent of all cross-device transactions completed on a desktop started on a smartphone, and 37% of those completed on a smartphone started on a desktop. And regardless of purchase device, nearly one in three cross-device transactions starts with a smartphone.

Retailers must ensure a synchronised experience across desktop and mobile.

Devices Used in Path to Purchase in Indonesia, First and Last Touchpoint in Cross-Device Transactions, Q4 2016

FIRST DEVICE USED TO BROWSE



66%



32%



2%

FINAL DEVICE USED TO PURCHASE



ANY DEVICE



21%

of cross-device desktop transactions started on smartphone



37%

of cross-device smartphone transactions started on desktop

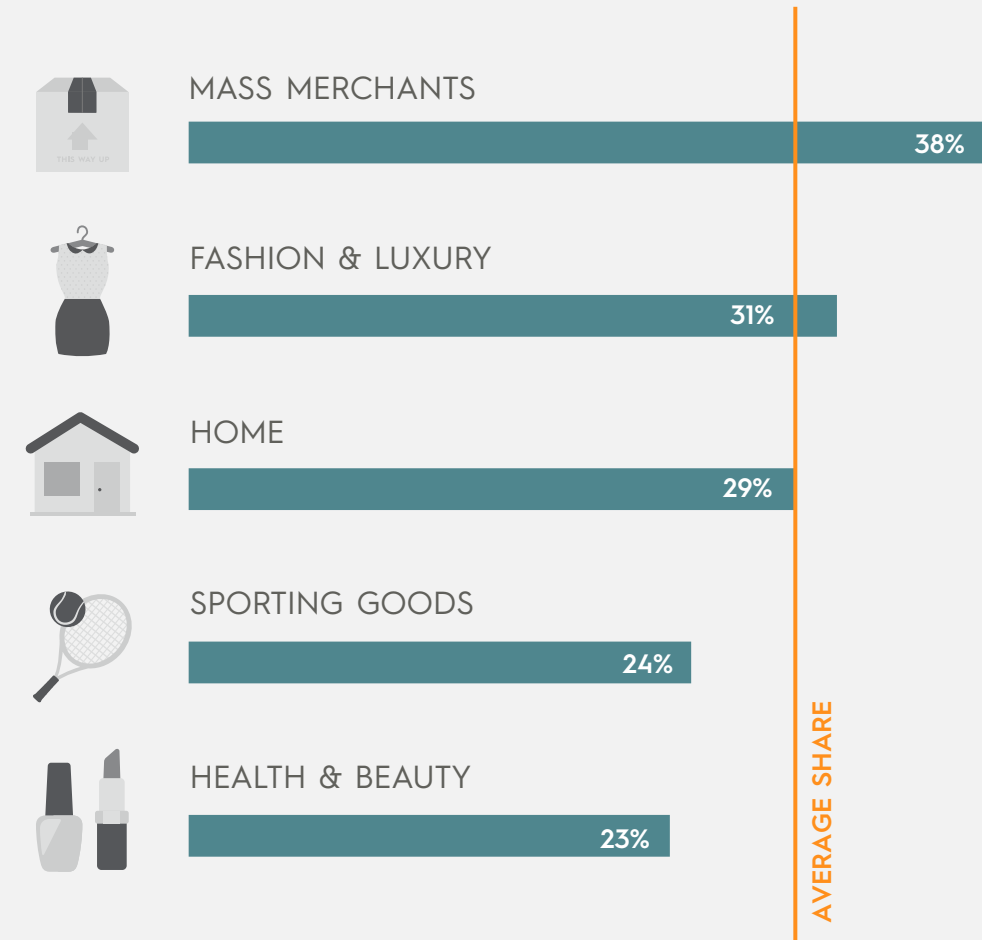


No retail sector is exempt

In the US, cross-device shopping is seen in all retail categories, with at least 23% of transactions involving multiple devices.

All retailers should be implementing cross-device measurement to accurately assess buyer behaviour and intent across devices and maximise ROI.

US Cross-Device Mobile Share of Retail eCommerce Transactions by Subvertical, Q4 2016



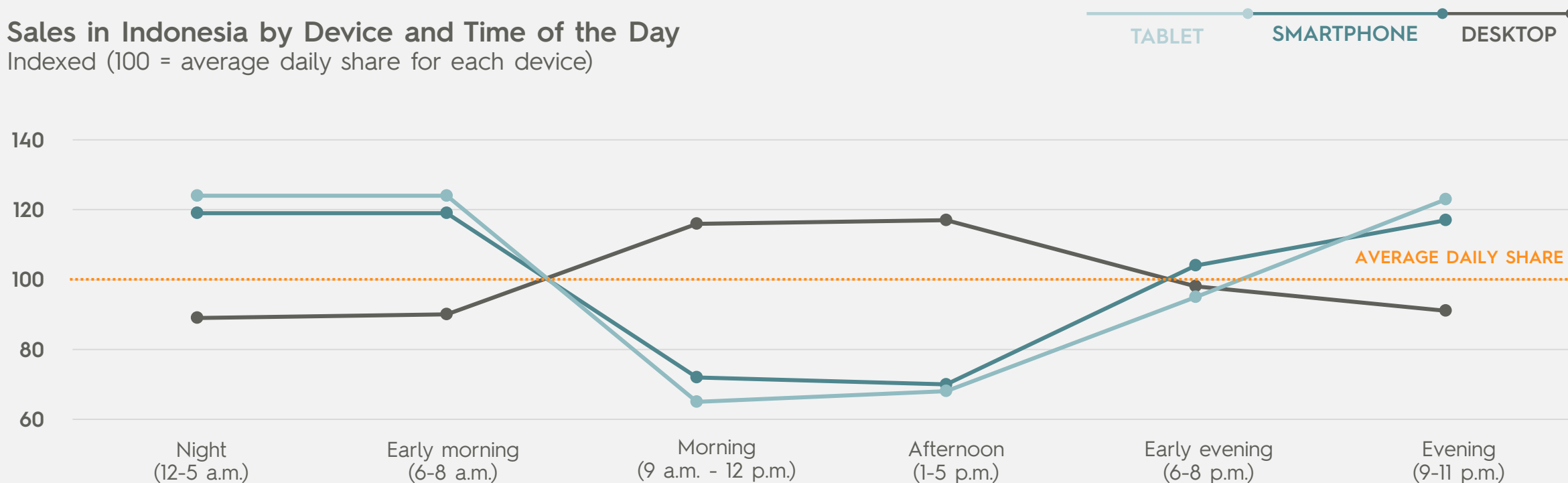
Device preferences vary throughout the day

In Indonesia, desktop purchases peak during work hours, while mobile devices dominate at all other times.

To maximise impact, know your consumers' buying cycle across devices and adapt your campaign strategy to reach them at the right time on the right device.

Sales in Indonesia by Device and Time of the Day

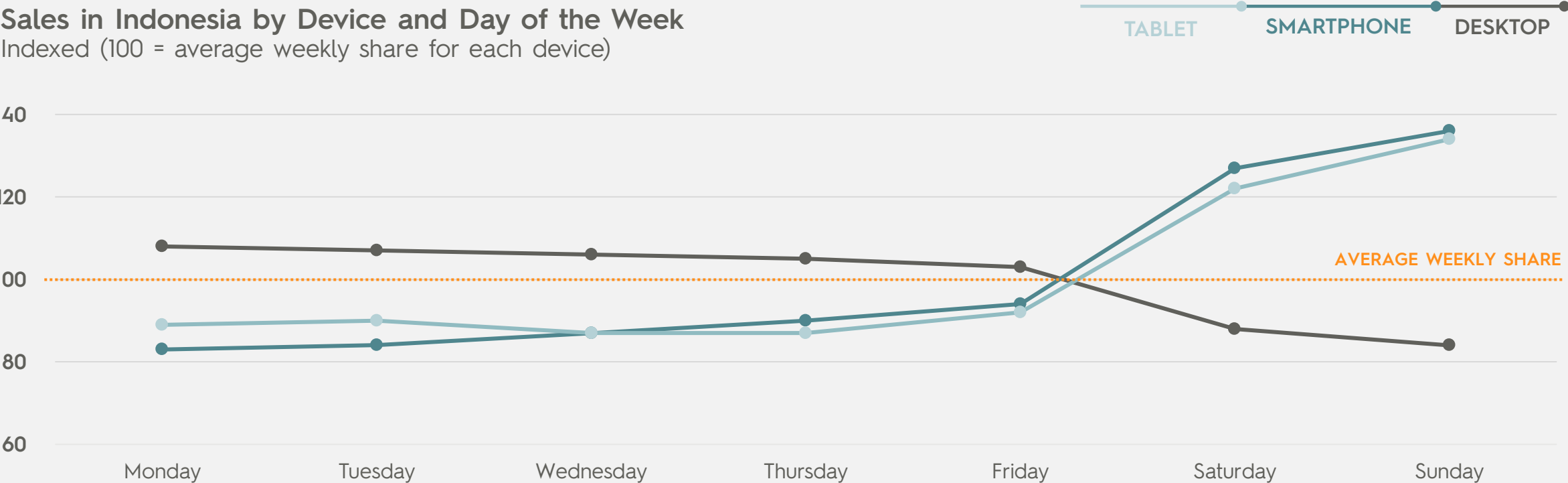
Indexed (100 = average daily share for each device)



Mobile sales peak on weekends

In Indonesia, tablet and smartphone sales soar on Saturdays and Sundays.

Sales in Indonesia by Device and Day of the Week
Indexed (100 = average weekly share for each device)



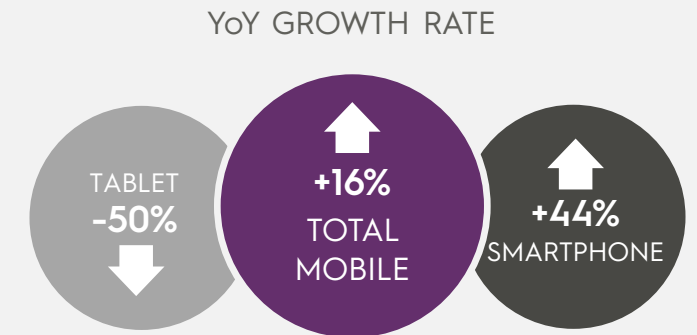
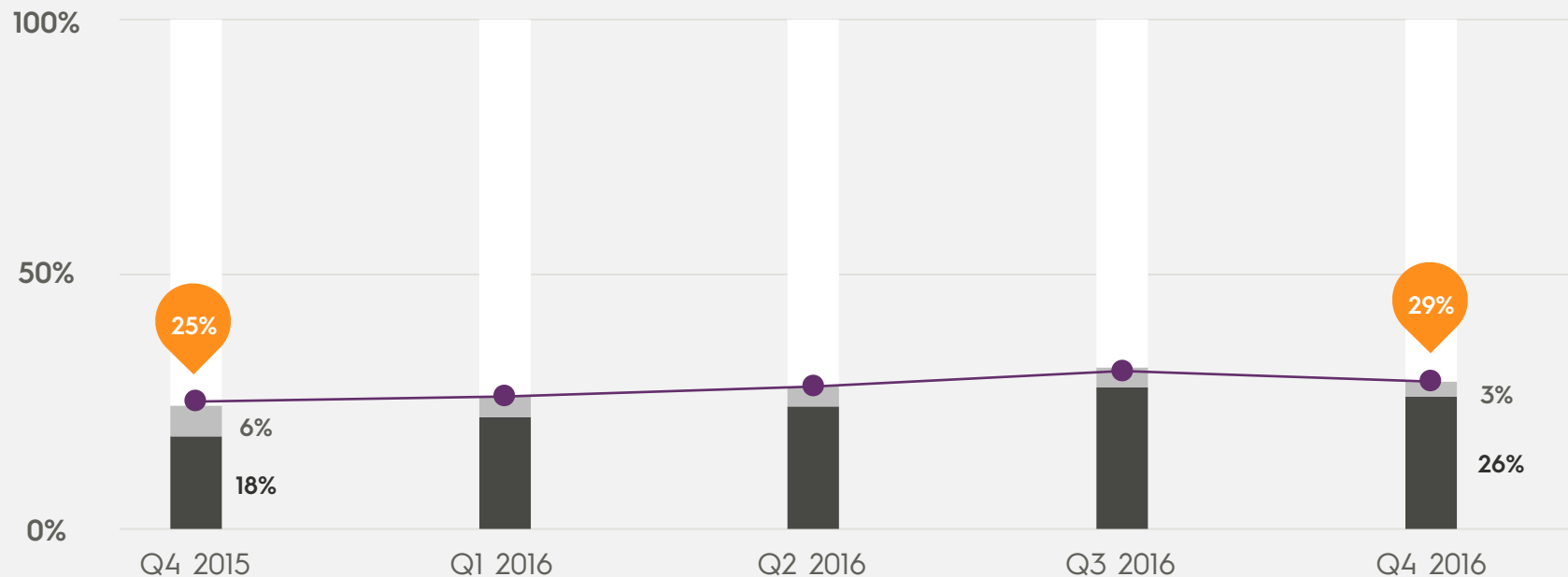
An aerial view of a city street, likely in New York City, showing a dense urban environment with numerous buildings and a street filled with cars. The image is overlaid with a semi-transparent dark purple and brown gradient. The text "Mobile Retail Commerce Trends in Southeast Asia ." is written in white, sans-serif font, positioned in the upper left quadrant. A white horizontal line with a rounded right end extends from the end of the text.

Mobile Retail Commerce Trends in Southeast Asia .

Smartphones grow, tablets slow

In Southeast Asia*, nearly one-third of online purchases is completed on mobile, a year-over-year increase of 16%. Smartphones now account for around a quarter of all online retail sales in Southeast Asia, showing a year-over-year increase of 44%, while tablets continue to decline.

Mobile Share of Retail eCommerce Transactions in Southeast Asia by Device, Q4 2015 to Q4 2016



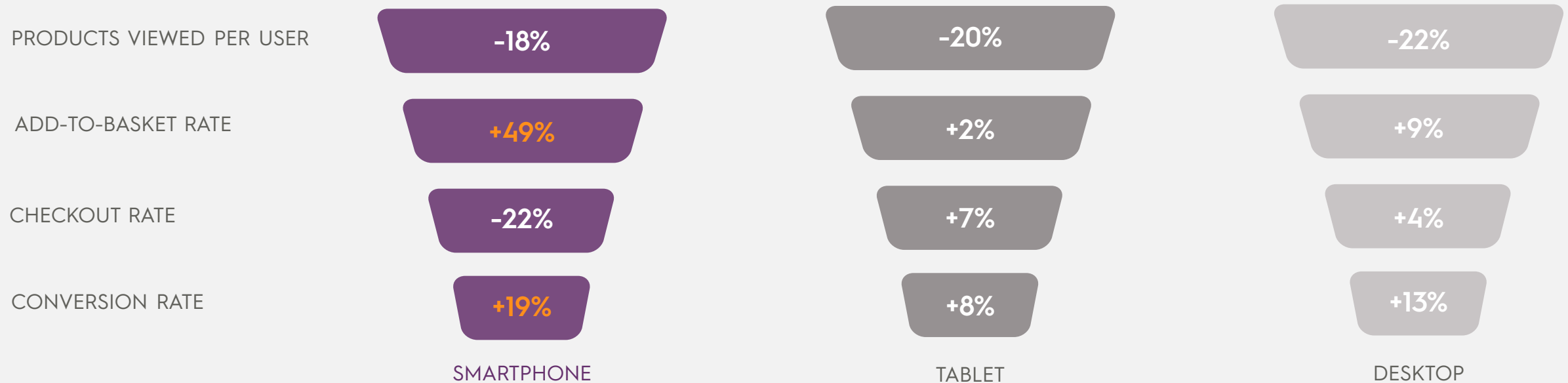
Source: Criteo dataset Q4 2015 to Q4 2016, Southeast Asia, all categories, excluding apps (percentages may not sum up because of rounding)

*Southeast Asia includes India, Indonesia, Malaysia, Pakistan, Philippines, Singapore, Thailand and Vietnam

Smartphones aren't just for browsing

Shoppers can find the products they're looking for faster than ever. On smartphones, add-to-basket and conversion rates increased 49% and 19% year over year, respectively. Streamlining the path from product selection to transaction completion (think one-click ordering and smart autofill) will convert even more shoppers into buyers.

Retail Conversion Funnel in Southeast Asia by Device, Percent Change Q4 2016 vs Q4 2015

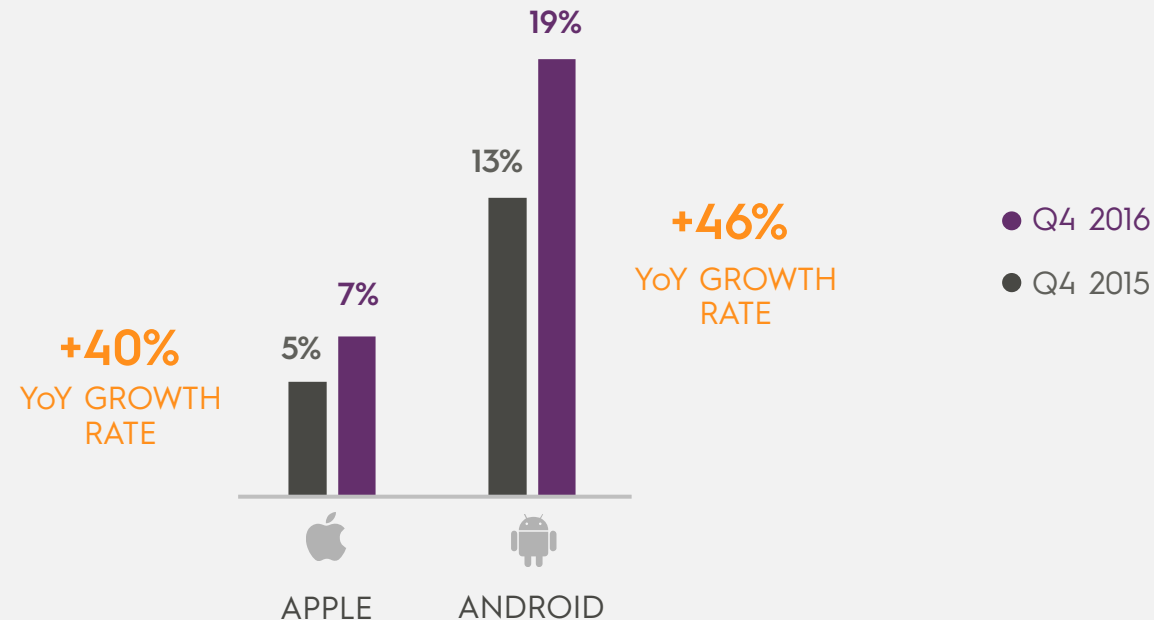


Source: Criteo dataset Q4 2015 and Q4 2016, Southeast Asia, all categories, excluding apps
Definitions: Add-to-basket rate = share of product page visitors who added a product to basket.
Checkout rate = share of add-to-basket visitors who made a purchase. Conversion rate = share of product page visitors who made a purchase

Android pulls ahead

Android-based transactions increased 46% year over year – keeping a strong lead over iPhone in Southeast Asia.

Share of Transactions in Southeast Asia by Smartphone OS,
Q4 2016 vs. Q4 2015



An aerial photograph of a dense urban landscape, likely Tokyo, featuring numerous skyscrapers and buildings. The image is overlaid with a semi-transparent green filter. The title text is positioned on the left side of the image.

Global Mobile Retail Commerce Trends .

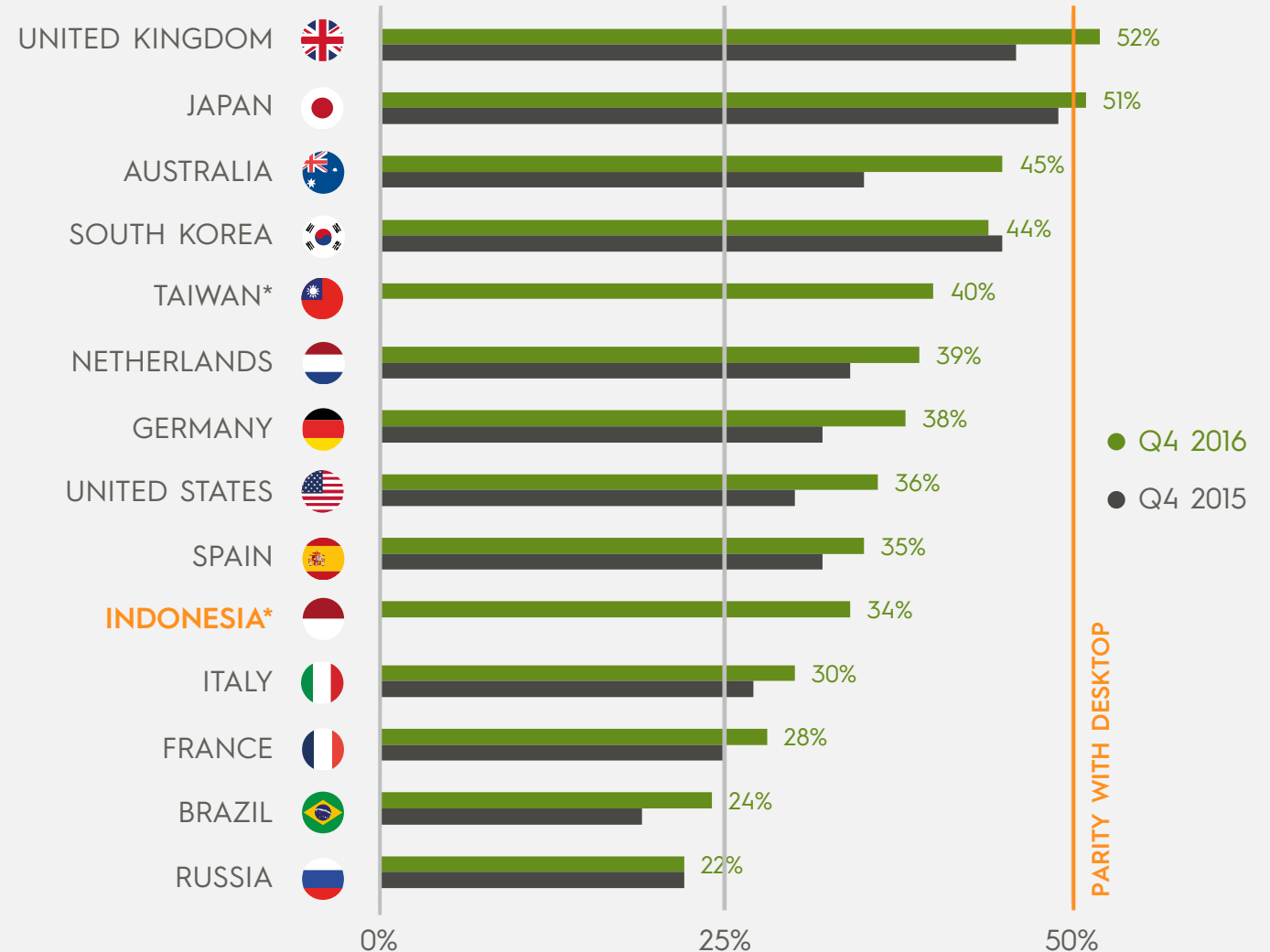
A new world order

The UK leapfrogged Japan to take the top spot in mobile share of transactions, with both countries selling more on mobile than desktop.

Australia took the third spot from South Korea and showed the strongest year-over-year growth.

Countries to watch? Brazil and the US, both with big year-over-year gains.

Mobile Share of Retail eCommerce Transactions
by Country, Q4 2016 vs. Q4 2015

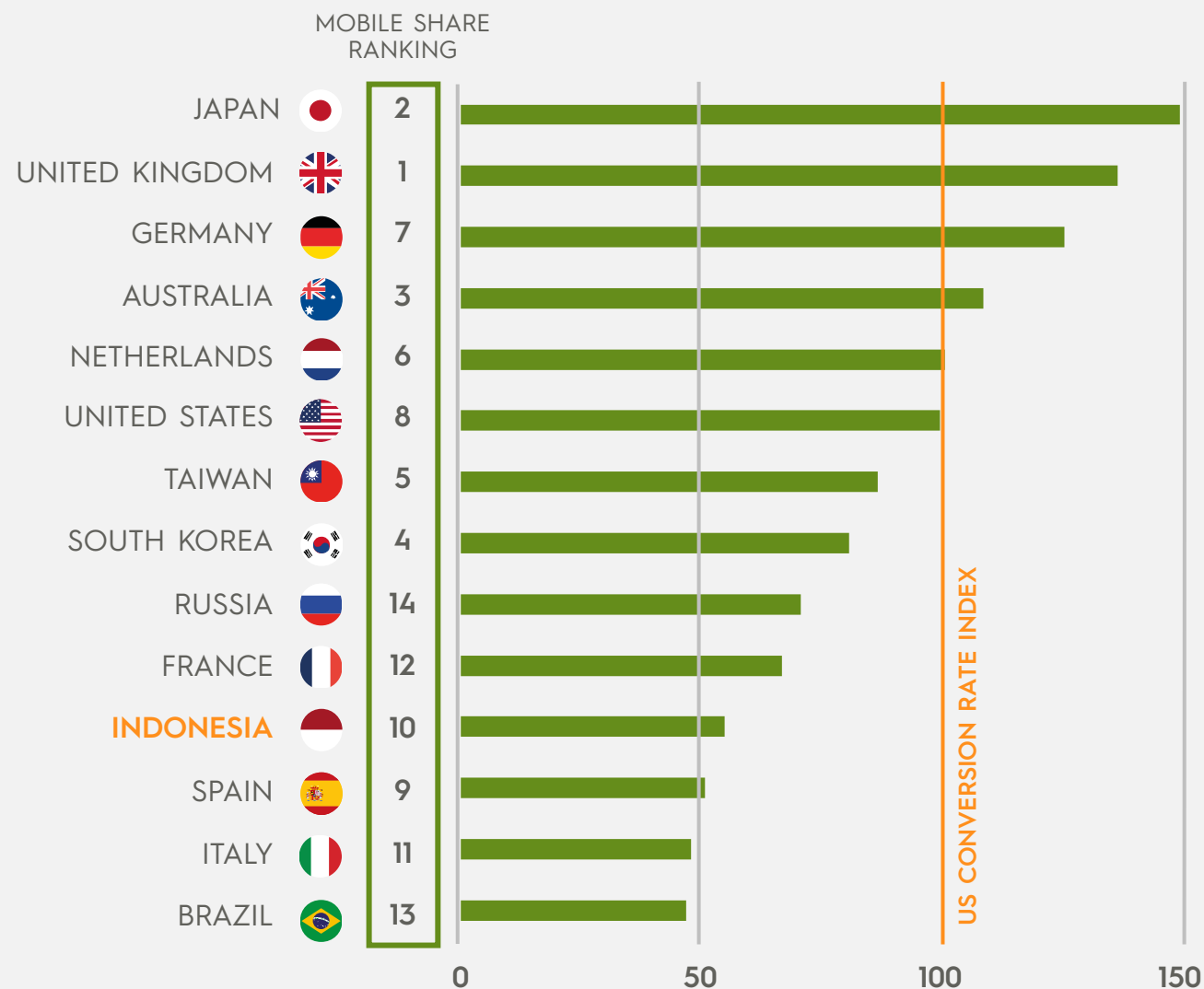


Source: Criteo dataset Q4 2015 and Q4 2016, all categories, excluding apps
* Base too small in Q4 2015

The UK and Japan also lead in mobile conversions

Interestingly, Germany is number seven in mobile share but ranks number three in mobile conversion rate.

Global Retail Mobile Conversion Rate Index, Q4 2016 (vs. the US)



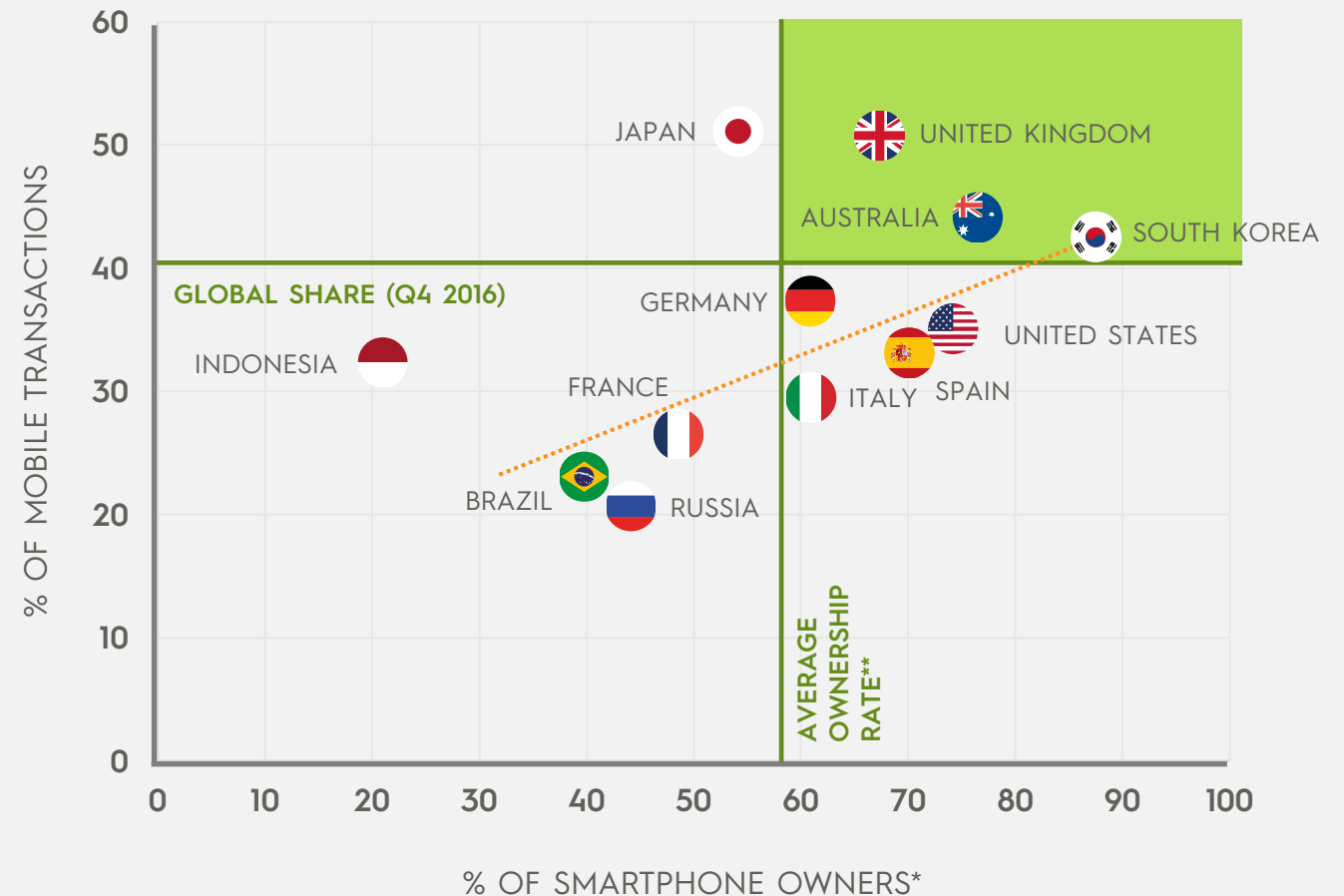
More access equals more buying

Mobile commerce transactions correlate strongly with smartphone ownership for most markets.

This trend is clear in South Korea, Australia and the UK, where ownership rate and transaction share are both high.

Indonesia appears to be an exception to the rule.

Mobile Share of Retail eCommerce Transactions Q4 2016
vs. Smartphone Ownership per Country



Source: Criteo dataset Q4 2016, all categories, excluding apps

*Source: Pew Research Center Spring 2015 Global Attitudes survey. Q71 & Q72 (no data for Taiwan and the Netherlands) and the Ministry of Internal Affairs and Communications Japan

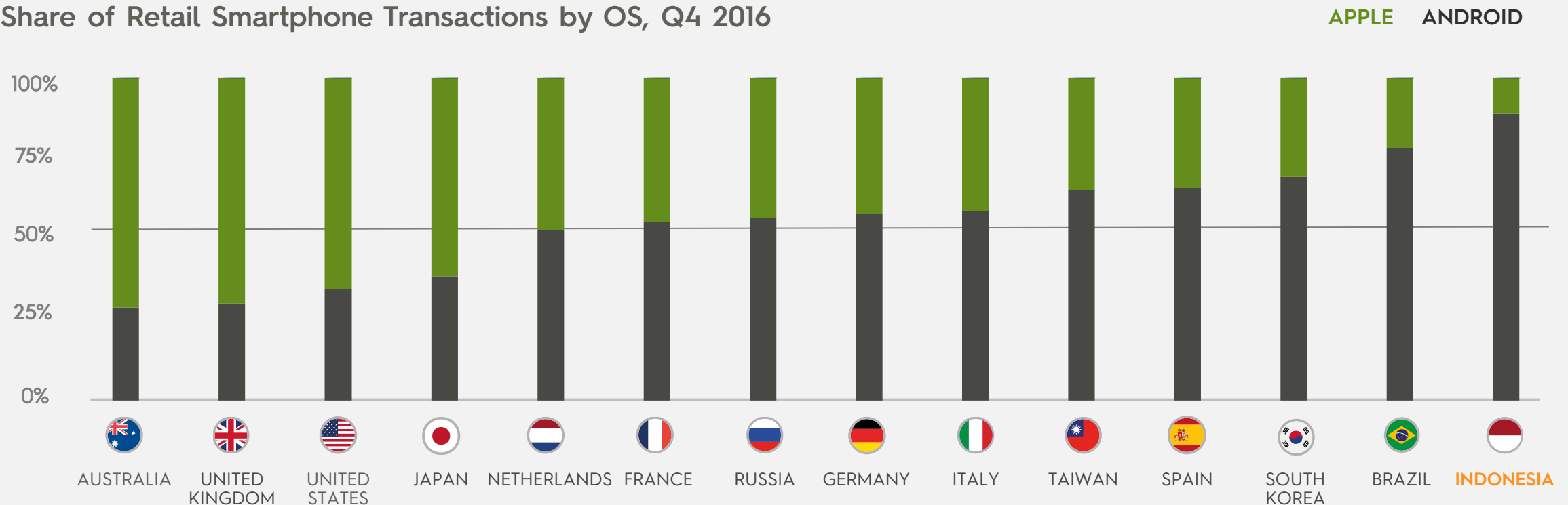
**Average ownership among all countries shown in graph

iPhones dominate in top mobile markets, lag elsewhere

In markets that ranked highest in mobile share of retail eCommerce transactions - Australia, the UK and Japan - around two-thirds of online transactions are made on iPhones.

US consumers also prefer to buy on iPhones. Android devices have a clear lead in all other markets, particularly in Indonesia.

Share of Retail Smartphone Transactions by OS, Q4 2016

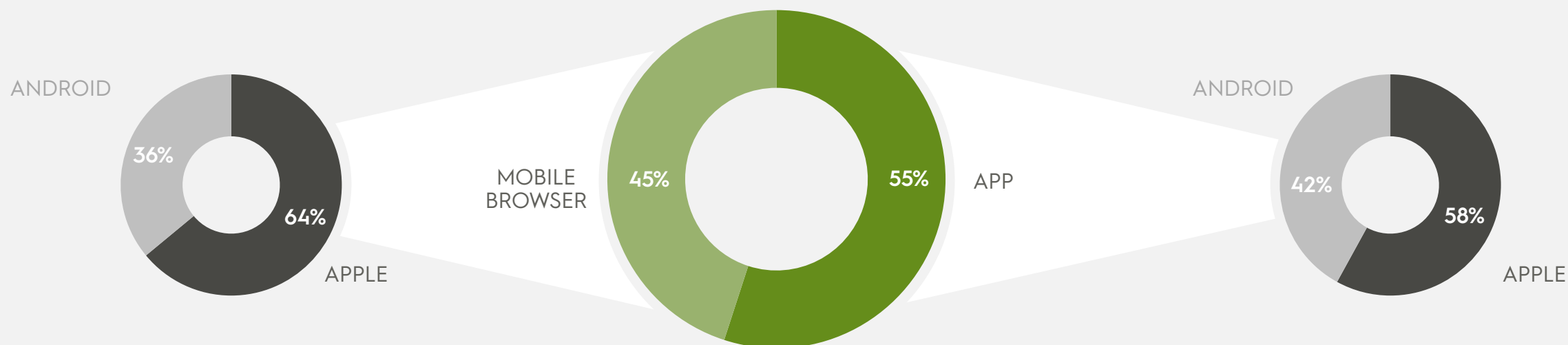


Apps outperform mobile browsers for retailers who invest*

Committed retailers capture more transactions on apps than on mobile browsers.

In both platforms, iOS devices capture the majority of these retailers' transactions.

Global App Share of Retail Mobile Transactions, Q4 2016



A Look Ahead ._____

The cross-device opportunity

Cross-device measurement is non-negotiable.

Retailers who lack a cross-device perspective will have a distorted view on up to 41% of their transactions.

Differentiate your experience.

Retailers that deliver a seamless and personalised user experience across devices will stand out from the crowd.

Be ready for what's next.

The common identifier that enables cross-device tracking is also the link necessary to merge online and offline customer data – the next frontier for retailers.

Appendix .



Methodology

Individual transaction data analysed:

Over **3,300** online retail businesses globally

1.7 billion transactions per year across desktop and mobile sites

\$720 billion in annual sales

How can marketers use this data?

Benchmark your performance on relevant KPIs for your mobile browser, mobile app and cross-device channels

Definition of metrics

METRIC	DEFINITION	FORMULA
SHARE OF TRANSACTIONS	The percentage of transactions that occurs by device, operating system and environment during the total period.	device transactions/total transactions
CONVERSION RATE	The share of product page visitors who have made a purchase within a given time period.	buyers/product page visitors
PRODUCTS VIEWED PER USER	The average number of products viewed by each visitor within a given time period.	total number of products viewed/visitors
ADD-TO-BASKET RATE	The share of product page visitors who have added products to basket within a given time period.	add-to-basket users/product page visitors
CHECKOUT RATE	The share of visitors who have finalised a transaction after having added products to basket.	buyers/add-to-basket users

About Criteo

Criteo (NASDAQ: CRTO) delivers personalised performance marketing on an extensive scale. Measuring return on post-click sales, Criteo makes ROI transparent and easy to measure. Criteo has over 2,500 employees in more than 30 offices across the Americas, EMEA and Asia-Pacific, serving over 14,000 advertisers worldwide with direct relationships with thousands of publishers.

Criteo ads reach over 1.2 billion unique internet users (comScore, January 2016).

This and future reports may be found at www.criteo.com/resources