

PayPal Mobile Research 2014/2015

GLOBAL SNAPSHOT

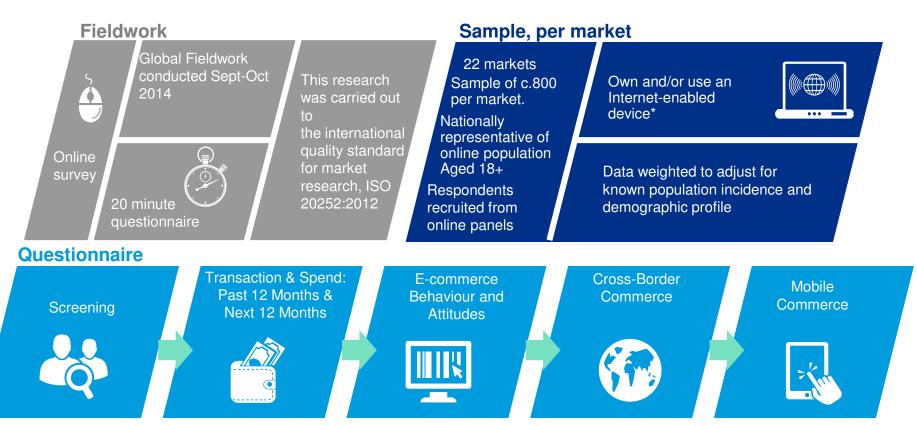
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Research Methodology

This study was conducted across 22 markets and 17,500+ consumers globally.





GLOBAL MOBILE SNAPSHOT

UK, France, Germany, Austria, Switzerland, Italy, Spain, Netherlands, Sweden, Norway, Denmark, Poland, Turkey, Russia, Israel, UAE, USA, Canada, Brazil, Mexico, China, Australia

Thought-starters for story development...

- We are entering the era of 'mobile-first' and are at a juncture where mobile shopping is established but where there is still plenty of room to grow and for merchants to seize on this opportunity.
- Mobile movers: Mobile commerce is fueling ecommerce. And the younger demographic, 18-34yr olds, account for ~59% (multi-country average) of mobile shoppers. This highlights the importance of catering to these 'mobile movers'.
- App vs browser: Smartphone users gravitate towards using apps vs a browser for mobile shopping. Therefore, merchants should look into developing or integrating with relevant apps as part of their mobile strategy.
- Digital vs physical: PayPal is a prominent payment method used by mobile shoppers, which indicates the importance for merchants to consider accepting digital payments for mobile transactions.
- Smartphone activities: Nascent features, such as tapping smartphone to pay, or ordering ahead are rarely done today but are on people's radar for tomorrow. In the meantime, merchants should ensure that their product and business information, including reviews are readily available and optimized for mobile access.

Summary of findings: Mobile global study

- 1. Market penetration: As we enter the 'mobile-first' era, there is still plenty of room for growth, with 33% of total online shoppers (multi-country average) using a smartphone to buy online with this incidence varying significantly by country (for instance 17% in Netherlands vs 53% in Turkey).
- 2. Market opportunity: Mobile commerce is expected to grow strongly over the next few years (2013-2016), with a multi-country (22 countries surveyed) average CAGR of 42% fueling ecommerce, which is estimated to grow at 13% CAGR.
- **3. Mobile demographics:** Currently a large proportion of smartphone shoppers are aged 18-34yrs (59% vs 44% of total online shoppers, multi-country average), highlighting the importance of catering to this demographic.
- **Top pain points:** Having no need or seeing no advantage over other ways to shop are key barriers, along with needing more assurance about security. Indicates an opportunity to re-think how we can provide relevant use cases.
- **Top current activities**: Searching for product information, business details or product reviews are the top ways people are currently using their smartphone for shopping. Certain features are more likely to be used in particular countries e.g. sending money via smartphone is more prevalent in Denmark, Russia, Turkey and China. Accessing stored details such as loyalty cards is done by a quarter of Israeli smartphone users. Using an app to notify a store of one's presence is used by a fifth of Turkish smartphone users.
- **6. Potential activities of interest**: Nascent features, such as tapping smartphone to pay, or ordering ahead are rarely done today but are on people's radar for tomorrow.
- 7. App vs browser: Incidence of shopping via an app is higher than via a browser on smartphones in most countries. Consumer preference reflects this behavior and is driven by the convenience afforded by app-based shopping. Some benefits of using apps over-index by country: Instant confirmation of payment is of interest in Mexico, as is having a reminder to apply offers/discounts/coupons in China; and keeping track of digital receipts in Israel.
- **8. PayPal is a prominent mobile payment brand**: Highlights the importance for merchants to accept digital payments vs physical methods such as cards as part of their mobile strategy.

Incidence of buying online via a mobile phone varies by country

Indicates 'headroom' for further growth in this category, especially in mature markets. China, UAE and Turkey have high incidence of smartphone shopping among online shopper population.

% online shoppers who have bought via a smartphone in past 12 months



Mobile commerce fueling e-commerce growth

This underscores the importance for merchants to be mobile optimized and ready for increased consumer spending via mobile.

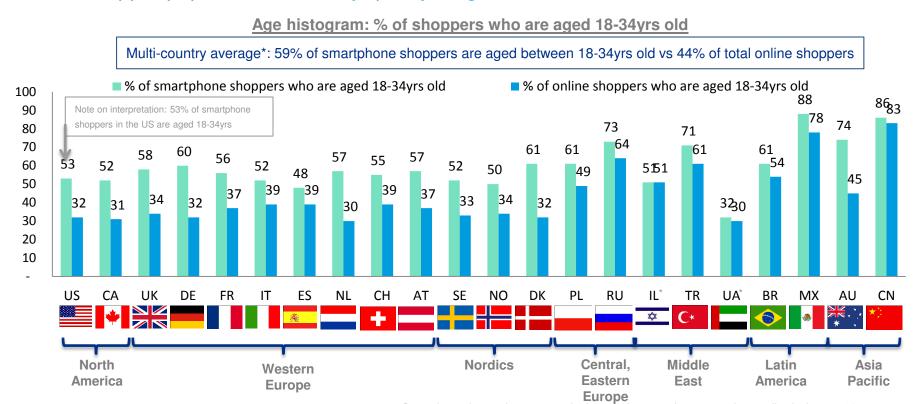
Estimated Compound Annual Growth Rate (CAGR) 2013-2016

Multi-country average*: Mobile commerce expected to grow at 42%, while e-commerce to grow at 13% (CAGR). ■ Mobile commerce CAGR Online commerce CAGR 60 52 52 46 50 40 30 20 10 RU North **Nordics** Central. Middle Latin Asia Western **America** Eastern East **America Pacific** Europe Europe



Smartphone shoppers tend to be younger than online shoppers...

..especially in mature markets, but with the exception of some emerging markets where the online shopper population is already quite young.

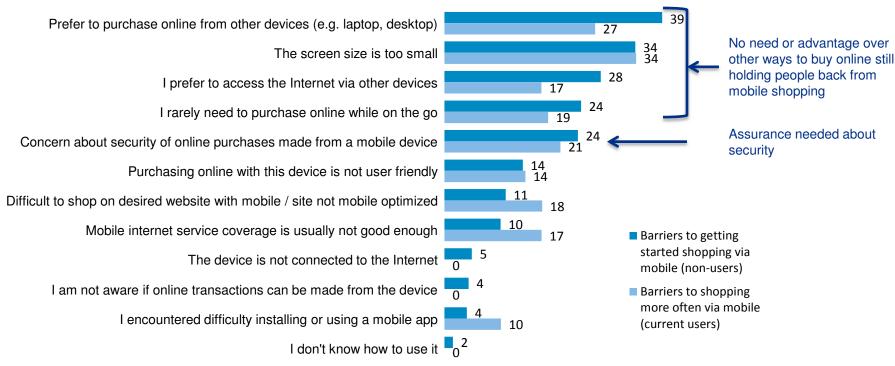




What barriers need to be addressed to help people shop mobile?

Convincing smartphone users about relevant use-cases and assuring them about security could help drive mobile shopping.

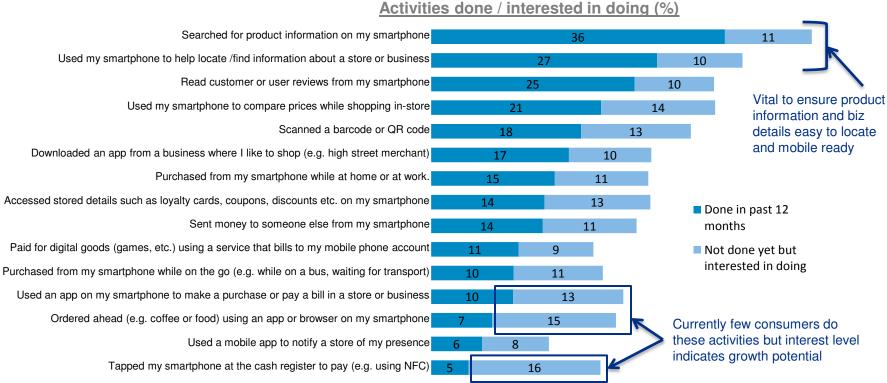
Main Barriers to shopping via mobile, or shopping more often (%)



Base: Smartphone owners/users who have not shopped on smartphone in past 12 months n=5826 / Past 12m smartphone shoppers n=4086 Q. You have told us that you do not currently use this device to shop online. What are the main reasons why not? Please select up to three answers. / Which, if any, of the following reasons prevent you from using this device to shop online more often? Please select up to three answers.

Which activities are currently popular and which are poised to grow?

Use cases include finding product or business information. Nascent features, such as tapping smartphone to pay, could see an increase in interest.



Base: Smartphone owners/users n=12941Q. Thinking generally about shopping online using a smartphone, which of the following have you done in the past year? (Please select all that apply). Thinking about the activities that you have not yet done using a smartphone, which of the following are you interested in doing in the future, assuming all these options were available to you? (Please select all that apply).

Self-stated participation in smartphone activities by country

Sending money via smartphone is more prevalent in the Denmark, Russia, Turkey and China. Using an app to notify a store of one's presence is used by a fifth of Turkish smartphone users. Accessing stored details such as loyalty cards is done by a quarter of Israeli smartphone users.

Smartphone activities done in past 12 months(%)

%	Global	US	CA	UK	DE	FR	ΙT	ES	NL	СН	AT	SE	NO	DK	PL	RU	IL	TR	UA	BR	MX	AU	CN
Searched for product information on my smartphone	36	33	25	24	30	20	36	37	25	33	36	32	23	26	37	48	54	46	41	38	49	30	49
Used my smartphone to help locate /find information about a store or busines:	1 2/	27	20	18	19	15	30	30	16	24	23	22	25	22	30	24	53	30	35	30	43	27	27
Read customer or user reviews from my smartphone	25	27	18	19	23	15	28	25	14	17	22	18	15	14	27	32	29	40	32	30	31	23	38
Used my smartphone to compare prices while shopping in-store	21	21	13	16	15	10	19	17	11	9	14	13	14	16	22	25	37	30	33	28	30	21	32
Scanned a barcode or QR code	18	19	12	13	21	14	15	21	12	18	18	10	14	19	21	23	24	16	18	10	29	12	36
Downloaded an app from a business where I like to shop (e.g. high street merchant	1 1/	16	11	13	14	10	16	15	10	17	18	17	14	10	16	17	27	23	22	18	30	13	14
Purchased from my smartphone while at home or at work	. 15	12	9	16	14	10	16	12	6	9	9	9	11	10	15	20	16	26	24	13	21	14	33
Accessed stored details such as loyalty cards, coupons, discounted etc. on my smartphone	1 14	16	10	9	7	10	13	12	6	13	13	13	12	8	20	12	26	14	19	11	16	11	25
Sent money to someone else from my smartphone	14	8	8	12	6	4	9	6	19	5	6	18	12	27	13	26	6	21	15	9	16	15	37
Paid for digital goods (games, etc.) using a service that bills to my mobile phone accoun		9	5	10	10	5	12	10	4	9	7	8	12	8	11	17	7	15	14	9	19	8	22
Purchased from my smartphone while on the go (e.g. while on a bus, waiting for transport		9	5	12	12	5	10	9	3	9	7	6	9	7	9	11	11	16	14	7	10	11	24
Used an app on my smartphone to make a purchase or pay a bill ir a store or busines.	1 10	8	7	8	9	4	6	7	6	8	7	6	8	8	8	12	13	12	17	12	16	8	25
Ordered ahead (e.g. coffee or food) using an app or browser on my smartphone	/	9	3	6	6	4	4	7	3	4	4	2	3	3	7	13	10	15	8	7	12	7	23
Used a mobile app to notify a store of my presence	6	6	1	5	4	4	6	5	2	3	4	3	5	3	4	7	4	20	14	7	11	6	9
Tapped my smartphone at the cash register to pay (e.g. using NFC	5	5	2	3	5	3	5	3	2	3	3	4	3	2	8	4	3	9	9	5	5	4	9

Smartphone activities consumers don't do, but are interested in starting

Interest in future activities is generally higher among emerging markets. In most countries, tapping smartphone at cash register is one of the top activities consumers are interesting in doing in the future. Ordering ahead is also appealing to some mobile users, especially in Mexico and Israel.

Smartphone activities interested in doing in future, but not done yet (%)

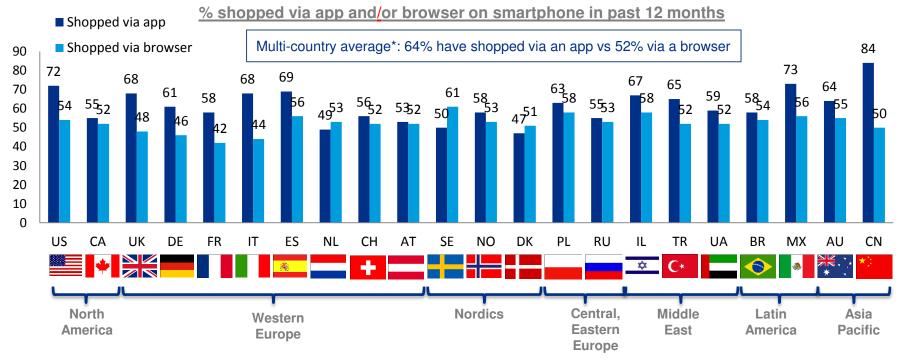
% of smartphone owners/users	Global	US	CA	UK	DE	FR	IT	ES	NL	СН	AT	SE	NO	DK	PL	RU	IL	TR	UA	BR	MX	AU	CN
Searched for product information on my smartphone	11	10	9	7	13	10	7	9	9	8	11	10	8	9	13	12	11	13	13	13	12	9	15
Used my smartphone to help locate /find information about a store or business	10	8	10	8	10	8	10	10	4	8	9	9	10	7	12	11	7	15	15	11	15	10	19
Read customer or user reviews from my smartphone	10	10	10	9	8	6	10	8	5	9	10	7	9	9	10	11	10	14	11	10	12	7	16
Used my smartphone to compare prices while shopping in-store	14	14	17	11	11	9	13	12	9	10	11	11	13	12	16	19	15	15	16	14	19	14	22
Scanned a barcode or QR code	13	12	11	11	12	10	12	11	8	12	12	10	12	11	13	21	11	18	16	16	23	14	16
Downloaded an app from a business where I like to shop (e.g. high street merchant	10	9	8	6	10	5	9	9	5	8	9	8	6	11	10	11	8	17	15	14	16	9	15
Purchased from my smartphone while at home or at work	11	9	7	7	9	6	10	10	5	8	7	7	7	10	15	19	14	16	18	16	22	9	16
Accessed stored details such as loyalty cards, coupons, discounts etc. on my smartphone	1 13	11	10	12	10	7	12	10	8	13	12	12	10	13	10	19	11	16	18	14	17	14	21
Sent money to someone else from my smartphone	11	10	7	9	5	6	9	11	5	10	7	9	11	10	12	17	11	16	21	15	24	8	14
Paid for digital goods (games, etc.) using a service that bills to my mobile phone account	1 9	7	6	6	7	4	10	9	3	7	7	6	5	9	8	13	11	11	13	10	20	9	15
Purchased from my smartphone while on the go (e.g. while on a bus, waiting for transport	1 11	9	8	9	9	5	12	10	4	7	8	5	6	12	14	14	11	17	21	11	20	9	14
Used an app on my smartphone to make a purchase or pay a bill in a store or business	1 13	10	7	11	9	6	15	14	6	11	8	9	13	14	12	19	17	16	20	16	22	11	23
Ordered ahead (e.g. coffee or food) using an app or browser on my smartphone	15	15	14	9	12	7	17	13	7	11	11	10	13	16	15	22	24	19	18	16	25	14	19
Used a mobile app to notify a store of my presence	8	6	5	6	7	4	8	6	2	6	5	2	3	11	6	12	7	11	15	11	19	8	16
Tapped my smartphone at the cash register to pay (e.g. using NFC)	16	14	10	10	13	10	20	17	10	16	13	10	16	19	20	25	19	19	16	16	20	14	22

Base: Smartphone owners/users n=12898 Q. Thinking about the activities that you have not yet done using a smartphone, which of the following are you interested in doing in the future, assuming all these options were available to you? (Please select all that apply).



Incidence of shopping via an app is higher than via a browser on smartphones in most countries

Not only should merchants have a site that works on a mobile browser, but they should also be thinking about an app strategy.



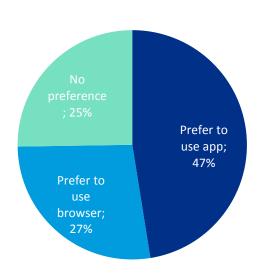


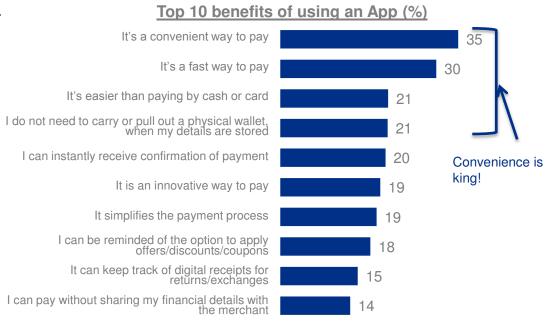
Q39a/b. Thinking again about shopping online using your mobile device, which of the following ways have you made a purchase in the past 12 months? Base: Those who have shopped on smartphone in past 12 months. Multi-country average not weighted by country size. Multiple answers mean %s add to more than 100%.

Preference tends toward apps, among those who shopped via both app and browser from their smartphone

Development of and integration with mobile apps could be key to unlocking m-commerce growth.

Preference for shopping via app or browser on smartphone (among those who've used both)





Q39b. And which do you prefer to use when purchasing through your mobile device? Base: n=1078 - those who have used both app and browser in past 12 months to make purchases on a smartphone. Multi-country average, not weighted for country size.

Q39c. Which, if any, of the following would you consider to be the benefits of using a mobile application (App) as a way to pay online or in stores or restaurants? Base: Smartphone/Tablet owners/users n = 13823. Multi-country average, not weighted for country size.



Perceived benefits of using an app by country

Instant confirmation of payment is of interest in Mexico, as is having a reminder to apply offers/discounts/coupons in China; and keeping track of digital receipts in Israel.

Benefits of using an App (%)

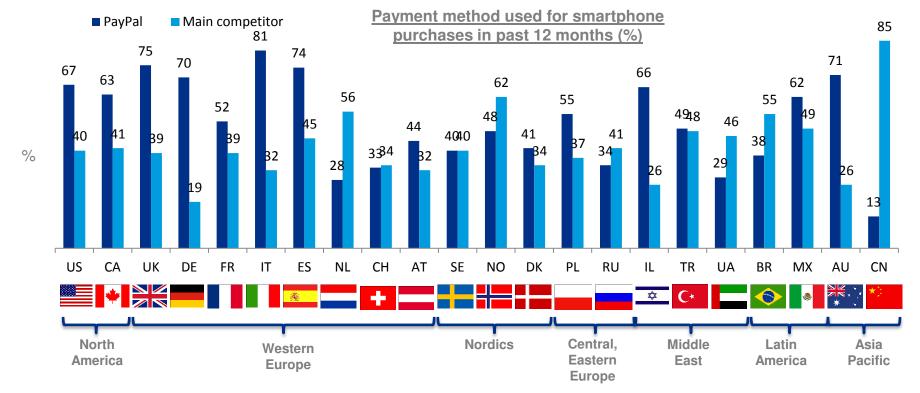
% of smartphone owners/users	Global	US	C_{Δ}	ПК	DE	FR	IT	FS	NII	СН	ΔΤ	SF	NO	DΚ	DI	RII	ш	TR	ΠΔ	RR	MX	AU	CN
It's a convenient way to par		36	27	27	30	21	43	13	21	28	27	21	29	24	46	49	38	52	46	43	42	32	65
It's a fast way to pa		24	25	25	23	20	29	36	20	22	17	15	20	30	39	37	33	48	39	35	51	27	47
It's easier than paying by cash or care		17	14	17	16	9	19	19	10	15	9	16	13	20	21	21	23	35	34	30	38	19	41
I do not need to carry or pull out a physical wallet, when my		1 - ′			10	,	13	13		13		10	13					33	J .	30	30	13	
details are stored		19	18	15	16	11	18	24	11	15	14	16	20	6	26	21	35	30	32	24	38	22	21
I can instantly receive confirmation of paymen	1	16	17	14	10	10	19	20	0	12	11	12	10	17	21	25	20	21	30	26	37	18	34
, , ,		16	14	14	10	1.0	19	20	10	12	11	11	10	17	21	10	25	21	20	20	27	17	25
It is an innovative way to pa	_	1		13	14	10	20	21	10	13	11	10	12	12	22	27	25 17	32	30	21	33		
It simplifies the payment proces		14	13	12	13	10	21	22	8	13	11	10	12	13	25	27	17	30	28	24	33	17	35
I can be reminded of the option to apply		1.0	4.0	40	4-		4-		_		4.0	4.0	4.0	4.0	22	4-	25	2-	22	40	22	4.0	20
offers/discounts/coupon	18	16	16	13	15	11	17	14	/	14	16	16	16	12	22	17	25	25	23	19	22	16	30
It can keep track of digital receipts for returns/exchange	15	16	15	11	9	8	16	9	7	13	10	13	15	16	20	13	26	18	23	16	17	18	19
I can pay without sharing my financial details with the merchan	t 14	14	15	12	13	11	14	16	7	11	9	12	11	9	13	17	15	17	20	15	21	14	11
I can get the same loyalty benefits online as I do in-store a	t																						
businesses where I like to shop		9	13	8	7	7	10	6	3	8	7	8	8	6	9	8	13	14	17	12	11	10	14
I can store and choose from a range of payment options via		1																					
digital walle		8	11	8	8	4	9	11	3	7	7	6	9	4	9	10	10	16	15	11	16	8	14
Integrated with other features (e.g. discover new stores		Ť																			_0		
products		5	6	6	7	3	6	8	3	4	5	5	6	4	7	6	11	11	12	9	11	7	14
It is a safe way to pa		7	7	6	4	5	7	6	5	5	3	3	4	5	6	6	4	14	12	11	11	7	11

Q39c. Which, if any, of the following would you consider to be the benefits of using a mobile application (App) as a way to pay online or in stores or restaurants? Base: Smartphone/Tablet owners/users n =13823. Multi-country average, not weighted by country size.



PayPal is a prominent mobile payment brand in most countries

Highlights the importance for merchants to accept digital payments as part of their mobile strategy.





Appendix

Market Sizing Estimate and Forecast: Methodology

Estimating and forecasting online and mobile sales for the period 2013 to 2016

INPUTS

To build the forecast we look at relationships between key macroeconomic indicators.

- Total and online population development (Source: The World Bank).
- GDP per capita development (Source: The World Bank).
- Total and online retail sales (Source: OECD and PWC economic forecasts).

SURVEY DATA

We use the survey data to add purchase behaviour (penetration and average spend per head) to understand the size and projection of future category spend.

- > Category online purchase penetration
- Average category spend
- Smartphone penetration
- Tablet penetration

MODELING

From these inputs, we model category sales growth, changes to the online/mobile population, and growth in online/mobile spend for those populations to forecast total online and mobile spending. We assume that the current rates of adoption amongst non-users continues and as the level of adoption reaches the upper limits we reach saturation.

- · Total online spend includes mobile spend. Mobile spend includes spend on both smartphones and tablets.
- Estimations/forecast based on the following meta categories: Groceries, Food, drink & Alcohol; Health & Beauty; Clothing, Footwear & Accessories; Event tickets; Travel & transportation; Household goods; Leisure, Hobbies & Outdoors; Baby/Children's Supplies; Entertainment; and Consumer Electronics.

