

CONSUMER SURVEY MOBILE PAYMENTS 2021

Supported by: EVINA

EVINA

ABOUT EVINA

Evina offers the most advanced cybersecurity for mobile payments, enabling MNOs, merchants and payment gateways to fight fraud and conquer new markets. Evina's anti-fraud solutions secure over +16 million transactions in more than 70 countries each day, decrease complaint rates, maximize the number of legitimate transactions, and increase revenues.

- DCBprotect is Evina's flagship product that detects and blocks 99.94% of fraudulent attempts on mobile payments.
- TrafficScreener is Evina's newest tool that detects bots the instant they arrive on a mobile player's landing page from a banner, allowing for optimized media buying.
- Eyewitness allows mobile players to replay payment flows and witness fraudulent behavior.

Find out how you can fight fraud and grow your business: <u>evina.com/contact-us/</u>

FOREWORD

The year 2021 is a milestone for the Mobile Ecosystem Forum and Mobile Payment: a real re-discovery of mobile payments is taking place in the industry.

In 2020, a group of our members co-wrote a guide to combat <u>Fraud in</u> <u>Direct Carrier Billing</u> and Mobile Content. What followed was a redemption of DCB for mobile operators and apps creators. Tools and know-how are available to match convenience and security in the market.

This study on smartphone users' attitudes and behaviors proves the potential of mobile payments: users appreciate the speed and convenience of direct carrier billing. Mobile payments are common globally, yet there are still 34% of users that have not used them and only 17% of the users have tried more than one type of payment (content, subscription, and bundles). There is potential to expand the number of users but also the number of service types for existing users.

The poster child for mobile payments is yet again China, this is a market that has embraced mobility to its fullest. Earlier mobile leaders, such as European markets or Japan, are laggards nowadays in mobile payments. For some, it is time to reconsider or re-launch mobile payments.

Better protection against fraud is now showing its impact on consumer responses too. The attacks that harmed mobile content services in the 2000s have mostly been defeated, but new threats are on the rise. However, smartphone users are still concerned – despite the improvements. The industry should remain vigilant. In Brazil, 24% of users are still worried about incorrect charging by mobile operators – possibly the remainder of fraud attacks from the past. In other markets, it is encouraging to see that smartphone users display other concerns, more akin to mature fintech solutions: overspending because of ease of use and theft of identity credentials.

Clearly, Direct Carrier Billing and Mobile Wallets are the exciting edge of fintech. The mobile industry should take notice, the users seem to have done so already.

Lastly, it is a pleasure to welcome <u>Evina</u> as the partner of this report. Evina is a cybersecurity company specialising in mobile payments, a member of MEF and active in our Mobile Payments Working Group. It is thanks to the commitment of companies such as the ones involved in these activities that we can show the entire ecosystem the value and potential of mobile payments. Join the debate at MEF.



DARIO BETTI CEO

ABOUT MEF

Mobile Ecosystem Forum is a not-for-profit global trade body that acts as an impartial and authoritative champion for addressing issues affecting the broadening mobile ecosystem. We provide our members with a global and crosssector platform for networking, collaboration and advancing industry solutions. The goal is to accelerate the growth of a sustainable mobile ecosystem that delivers trusted services worldwide. Established in 2000 and headquartered in the UK, MEF's members are active across Africa, Asia, Europe, Middle East, North and Latin America.

MEF provides a community that offers **Insight** (reports, surveys, market guidance); **Interaction** (events, networking, visibility) and **Impact** (advocacy, code of conducts, industry initiatives).

To join the MEF communities please email info info@mobileecosystemforum.com.

Contact <u>Sam</u> if you'd like to contribute an article.

If you would like to explore the range of MEF Member sponsorship opportunities available at any MEF Connects then please contact <u>Susan</u>.

Follow us on <u>LinkedIn</u>, <u>register</u> for the member area and <u>subscribe</u> to MEF's newsletters to keep up to date with MEF activities throughout the month. DARIO BETTI CEO

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THE MOBILE ECOSYSTEM FORUM OFFERS MARKET DATA TO ITS MEMBERS AND TO THE INDUSTRY TO PROMOTE CONSUMER UNDERSTANDING AND ADVANCING OF LONG TERM SUSTAINABLE PRACTICES AND BUSINESS MODELS

AN EXECUTIVE SUMMARY IS AVAILABLE FOR FREE TO ALL

MEF MEMBERS HAVE GOT ACCESS TO THE FULL REPORT AND THE DATA SET



EXECUTIVE SUMMARY



MOBILE PAYMENTS - SNAPSHOT





MOBILE PAYMENTS: SCOPE

This report provides detailed insight and analysis into the current usage and attitudes towards using the mobile bill as a payment method for additional services. In particular the report looks at using the mobile bill to pay for:

Additional subscription e.g., Netflix, Spotify and other media services	
One-off payments e.g., for app downloads or in- app purchases	
Bundled packages of services provided via the mobile operator	

The analysis also touched on aspects of fraud and security as it relates to payments, as well as concrete examples of actual financial harm caused by overcharging on the mobile bill.

Other MEF reports to look out for in 2021 will cover areas such as Business Messaging, Security, Personal Data and General Smartphone Usage.



GROWTH OPPORTUNITIES IN MOBILE PAYMENTS



Do you pay for the following via your mobile phone bill? (worldwide)

- Globally around 1/3 of mobile users do not yet pay for any additional services via their mobile phone bill.
- Of those who DO pay for services via their phone bill, content subscription services such as Netflix and Spotify are the most used.
- Bundled services are also paid for by just over a quarter of users these bundles are often added in as 'free' or low cost options by operators to help drive subscription and usage.
- One-time payments such as for app downloads are the least used type of payment.



PAYMENT USING MOBILE BILLING FALLS WITH AGE

Do you pay for the following via your mobile phone bill? (by age group, worldwide)



- A bundle of services like these are already included in my mobile phone bill
- None of the above

Globally, paying for services via their mobile bill is a payment channel used by people on the younger end of the spectrum. Usage falls away as age increases, the trend being particularly noticeable in the 45-54 year and 55+ year age groups.

The 55+ year age group provides a real opportunity for growth: only 41% use this method to pay for services today.

Irrespective of the age group, content subscriptions remain the most popular use case for mobile billing with one-time payments being the least popular.

HIGHER INCOME GROUPS PAY FOR MORE SERVICES

Do you pay for the following via your mobile phone bill? (by income group, worldwide)



As income rises, users are more likely to pay for services via their mobile bill. This is especially true for content subscriptions where 28% of lower income group users pay, compared to 40% of higher income group users.

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- None of the above
- A bundle of services like these are already included in my mobile phone bill
- Content subscription services (e.g. Netflix, Spotify)
- Mobile apps that require a one-time payment to download them



Do you pay for the following via your mobile phone bill? (by income group, China)

- None of the above
- A bundle of services like these are already included in my mobile phone bill
- Content subscription services (e.g. Netflix, Spotify)
- Mobile apps that require a one-time payment to download them

Three-quarters of high income users pay for some services via their mobile bill.

Trend of increasing usage of mobile phone billing the more somebody earns, is particularly noticeable in China.

 In China, as well as content subscriptions, high income users are also much more likely to pay for additional services compared to lower income groups.



WHAT DRIVES THE USE OF MOBILE PAYMENTS?



Why do you use mobile phone billing for payments?

The clear main drivers for paying for services via the mobile bill are convenience and speed.

Cost, and even security, are less important factors as to why this payment method is used.



CONVENIENCE IS MORE IMPORTANT TO IOS USERS

42% of iOS users cite Convenience as the major driver of payment via mobile billing, compared to 37% of Android users.

However we can also see that 39% of Android users cite Speed compared to 33% of iOS users.

We can also see that Android users are also more influenced by Cost and Safety than IOS users when it comes to paying via their mobile bill.



Why do you use mobile phone billing for payments?



USERS ARE MOST CONCERNED ABOUT PAYMENT DETAILS BEING STOLEN



Concerns with mobile payments

- My payment details being stolen
- Future payments authorised without my approval
- Subscribing to something without realising
- Spending too much without realising it
- Overbilling incorrect charges on my account
- None of the above

Globally, 30% of mobile users are concerned about payment details being stolen.

- 28% fear that future payments will be authorised without approval
- 27% fear subscribing to something without realising

Only 25% are not worried about any of these security or fraud issues.

ONLY 15% OF USERS HAVE ACTUALLY EXPERIENCED OVERCHARGING

I was incorrectly charged too much by my mobile operator



ROOM FOR IMPROVEMENT IN PERCEPTION OF MOBILE PAYMENT SECURITY

The overall rating for security of mobile payments is 6.1, leaving clear room for improvement. Despite there being notable differences by country in usage or actual experience of harm, the perception of how secure mobile payments are is quite consistent.

Although 24% of users in Brazil have experienced overcharging, their perception of payment security is surprisingly good. Conversely, we can note that while in Japan only 5% of users have experienced overcharging, their mean rating for mobile payment security is the lowest of all these countries.



Security of mobile phone payments





HOW IS MOBILE BILLING USED FOR PAYMENTS?

MOBILE PAYMENTS FOR THE MASS MARKET

5 key points on mobile payments

1		Growth opportunity in mobile payments 34% of mobile users do not yet pay for
		additional services via their mobile bill.
	2	China leads in usage of mobile payments
		Only 14% of Chinese users do not use this payment method today.
R		Mobile payments dominated by younger users
		Payment via the mobile bill falls with age. 60% of the over 55s do not pay via this method.
		High income users pay for more services
	4	37% of high income groups pay for additional subscription services via their mobile bill.
5		Male user make more mobile payments – except in China
J		In China female users are leading the way, 61% of them paying for media subscription services via their mobile bill.

GROWTH OPPORTUNITY IN MOBILE PAYMENTS



Do you pay for the following via your mobile phone bill? (worldwide)

- Globally around one-third of mobile users do not yet pay for any additional services via their mobile phone bill.
- Of those who DO pay for services via their phone bill, content subscription services such as Netflix and Spotify are the most used.
- Bundled services are also paid for by just over a quarter of users these bundles are often added in as 'free' or low cost options by operators to help drive subscription and usage.
- One-time payments such as for app downloads are the least use case.

CHINA LEADS IN PAYMENTS VIA MOBILE BILLING

• By country, Chinese users are the most comfortable paying for services via their mobile bill, while Japan and Germany offer the most headroom for growth.





- A bundle of services like these are already included in my mobile phone bill
- Content subscription services (e.g. Netflix, Spotify)
- Mobile apps that require a one-time payment to download them

BUNDLED PAYMENTS ARE ESPECIALLY WELL USED IN CHINA

• Amongst those countries that use mobile billing the most, purchase of bundled services and content subscriptions are both very popular in China.



Do you pay for the following via your mobile phone bill?

- None of the above
- A bundle of services like these are already included in my mobile phone bill
- Content subscription services (e.g. Netflix, Spotify)
- Mobile apps that require a one-time payment to download them

Unlike other countries, in India (and also South Africa) we see greater use of one-time payments.

Brazilian and Spanish markets are characterised by exceptionally high usage of mobile phone billing to pay for content subscription services.



PAYMENT VIA MOBILE BILL FALLS WITH AGE



Do you pay for the following via your mobile phone bill? (by age group, worldwide)

A bundle of services like these dre dire

None of the above

Globally, paying for services via the mobile bill is something done by younger people. Usage of this method markedly falls away as age increases, the trend especially noticeable in the 45-54 year and 55+ year age groups.

The 55+ year age groups offers significant growth opportunity: in this age group only 41% use this method to pay for services.

Content subscriptions remain the most popular type of service across all these age groups, and one-time payments the least popular service.



BUT THERE IS STRONG PAYMENT USAGE ACROSS ALL AGE GROUPS IN CHINA

Do you pay for the following via your mobile phone bill? (by age group, China)



Mobile apps that require a one-time payment to download them

- Content subscription services (e.g. Netflix, Spotify)
- A bundle of services like these are already included in my mobile phone bill
- None of the above

In contrast with the rest of the world, if we just look at China, we can see much higher uptake across all age ranges but the uptake in the 55+ age group is notably higher than the rest of the world.

There is particularly high usage of this payment method in the 25 – 34 age group.

We can see that service bundles are slightly ahead of content subscriptions in all age groups except the 16 - 24 year group.

FEMALE USERS IN CHINA PAY VIA THEIR MOBILE BILL



Worldwide, male users are slightly ahead in paying for services. Male users make use of one-time payments more than female users

None of the above

A bundle of services like these are already included in my mobile phone bill

Content subscription services (e.g. Netflix, Spotify)

Mobile apps that require a one-time payment to download them



Do you pay for the following via your mobile phone bill? (by gender, China)

> In China however, we see that female users pay for services via their phone bill much more so than male users. Female users pay for bundles and content subscriptions much more so than male users.

None of the above

A bundle of services like these are already included in my mobile phone bill

Content subscription services (e.g. Netflix, Spotify)

Mobile apps that require a one-time payment to download them

HIGHER INCOME GROUPS PAY FOR MORE SERVICES

Do you pay for the following via your mobile phone bill? (by income group, worldwide)



As income rises, users are more likely to pay for services via their mobile bill. This is especially true for content subscriptions where 28% of lower income group users pay, compared to 40% of higher income group users.

- None of the above
- A bundle of services like these are already included in my mobile phone bill
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Do you pay for the following via your mobile

- None of the above
- A bundle of services like these are already included in my mobile phone bill
- Content subscription services (e.g. Netflix, Spotify)
- Mobile apps that require a one-time payment to download them

Three-quarters of high income group users pay for some services via their mobile bill.

The trend of increasing usage of the mobile phone bill to pay for services in line with higher incomes is especially clear in China.

In China, as well as content subscriptions, high income users are also much more likely to pay for additional services compared to lower income groups.



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CONVENIENCE DRIVES PAYMENT USAGE

5 key points on payment motivations

1		Convenience and transaction speed drive usage of mobile payments 39% of users cite convenience, and 37% cite speed, as drivers of mobile payments.
	2	China leads the way with citing convenience as the main driver of mobile payments
		63% of users in China cite Convenience as a driver for mobile payments.
Q		Female users cite convenience and speed as reasons to use mobile payments
J		By contrast, more male users than female cite cost as a motivation to use mobile payments.
	Λ	Low mobile engagement users are much more ambivalent
	-	27% of low engagement users cite convenience, compared to 53% of high engagement users.
5		iOS users lead with convenience
U		While iOS users see convenience as the main driver of mobile payments, Android users see the speed (of transaction) as the principal driver.



WHAT DRIVES USE OF MOBILE PAYMENTS?



Why do you use mobile phone billing for payments?

The clear main drivers for paying for services via the mobile bill are convenience and speed.

Cost, and even security, are less important as drivers of this payment method.

CONVENIENCE DRIVES PAYMENT USAGE IN CHINA



Why do you use mobile phone billing for payments?



FEMALE USERS LIKE THE CONVENIENCE AND SPEED OF MOBILE PAYMENTS



Why do you use mobile phone billing for payments?

Female users like the convenience and speed of mobile billing compared to male users.

Male users like the cost benefits and safety aspects more so than female users.



Why do you use mobile phone billing for payments?

If we analyse by the level of mobile engagement, we can clearly see that users with above average mobile engagement respond well to convenience and speed of mobile bill payment.



CONVENIENCE IS MORE IMPORTANT TO IOS USERS

42% of iOS users cite Convenience as the major driver of payment via mobile billing, compared to 37% of android users.

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We can also see that Android users are also more influenced by Cost and Safety than iOS users when it comes to paying via their mobile bill.



Why do you use mobile phone billing for payments?





PAYMENT FRAUD

USERS ARE CONCERNED ABOUT PAYMENT FRAUD

5 key points on payment fraud

1		Users are most concerned about payment details being stolen
		Globally, 30% of mobile users are concerned about payment details being stolen
	2	High mobile engagement corresponds to higher concern about fraud
		Users with a higher level of mobile engagement are much more concerned with all aspects of fraud and security
R		15% of users overall have experienced overcharging
		24% of users in Brazil and 22% in South Africa lead with experience of being overcharged.
	4	Room for improvement in perception of mobile payment security
		The global mean score of is 6.1 out of 10 in perception of payment security
5		Higher income and higher engagement users lead the way for perception of security
		Low-income groups rate mobile payment security at 5.8 compared to higher income groups at 6.4.

USERS ARE MOST CONCERNED ABOUT PAYMENT DETAILS BEING STOLEN



Globally, 30% of mobile users are concerned about payment details being stolen.

- 28% fear that future payments will be authorised without approval
- 27% fear subscribing to something without realising

Only 25% are not worried about any of these security or fraud issues.



CONCERNS ABOUT PAYMENT FRAUD VARY BY COUNTRY



- ■None of the above
- Spending too much without realising it
- Future payments authorised without approval
- Overbilling incorrect charges on my account
- Subscribing to something without realising
- My payment details being stolen

PAYMENT FRAUD IS OF MOST CONCERN TO HIGH INCOME GROUPS



Concerns with mobile payments by Income group

All income groups are concerned about payment details being stolen, but higher income users are generally more concerned about payment fraud. Only 19% of high income users have no concerns about these issues.

High income users make more use of payment via mobile billing than low income groups and these users are especially concerned about:

- Payment details being stolen
- Accidentally subscribing to services

HIGH MOBILE ENGAGEMENT CORRESPONDS TO HIGHER CONCERN ABOUT FRAUD



Concerns with mobile payments by mobile engagement

Users with a higher level of mobile engagement are much more concerned with all these aspects of fraud and security. They also make more use of payment via mobile billing.

Low engagement users have less concern about these types of fraud but make less use of this payment method.

ONLY 15% OF USERS HAVE ACTUALLY EXPERIENCED OVERCHARGING

I was incorrectly charged too much by my mobile operator



Overall, only 15% of users have experienced harm in the form of overcharging by the mobile operator.

However, there are significant differences by country.

We can see that 24% of users in Brazil report overcharging and 22% in South Africa.

By contrast, only 5% of users in Japan report experience of overcharging.

ROOM FOR IMPROVEMENT IN PERCEPTION OF MOBILE PAYMENT SECURITY.

The overall rating for security of mobile payments is 6.1, leaving clear room for improvement. Despite there being notable differences by country in usage or actual experience of harm, the perception of how secure mobile payments are is quite consistent.

Although 24% of users in Brazil have experienced overcharging, their perception of payment security is surprisingly good. Conversely, we can note that while in Japan only 5% of users have experienced overcharging, their mean rating for mobile payment security is the lowest of all these countries.



Security of mobile phone payments

HIGHER INCOME AND HIGHER ENGAGEMENT USERS LEAD THE WAY FOR PERCEPTION OF PAYMENT SECURITY



Security of mobile phone payments by income group

Low income groups rate mobile payment security at 5.8 compared to higher income groups at 6.4.

Higher income groups make more use of payment via mobile billing and also have a higher experience of actual harm.

Yet their rating of security is better than lower income groups who make fewer payments and have a lower experience of harm.

In a similar way to income, high engagement users rate mobile payment security better than low engagement users, despite being more concerned about fraud.

Security of mobile phone payments by mobile engagement





METHODOLOGY

ABOUT THE STUDY

MEF's 7th Annual Smartphone Study was carried out in November and December 2020 . On behalf of MEF, On Device Research surveyed 6,500 smartphone users, 650 in each of 10 markets .

This year the question sets were simplified and some questions added regarding the impact of COVID-19.



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Consultant: Phil Todd



MORE FOR MEF MEMBERS

Full survey data sets are available for downloading



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