MEF
MOBILE ECOSYSTEM FORUM

Enterprise Survey - Personal Data and Identity 2021
SMS OTP as a verification tool

Introduction

We are pleased to introduce MEF's short insight report on SMS One Time Password (OTP) as a verification tool for enterprises. The content is taken from MEF's first survey that specifically looks at Enterprise Personal Data, Identification, Verification and Authentication researched in 2021.

We have spoken to senior individuals in 450 enterprises of varying sizes in nine key geographical markets. These enterprises represent key sectors interested in personal data, identification, verification and authentication, including financial services, fintech, payments, e-commerce and healthcare.

Our goals with these surveys are to increase knowledge around current enterprise usage, and their plans for the future - segmented by sector, geography and enterprise size. We seek to clarify enterprise attitudes towards the challenges they are facing and to identify opportunities for suppliers.

Over two thirds of enterprises use just cellular verses landline for identification, verification and authentication. Although usage of cellular for authentication is widely seen as important, all sectors highlight SMS OTP concerns on security and user experience. We can also note that the Payment sector raises concerns about user experience above security. Analysis by company size shows little variation from the global data.

SMS OTP is widely used in the USA, UK and France. The greatest growth opportunity appears to lie in Indonesia, South Africa, Spain and India. Enterprises with no plans at present may well be open to supplier discussions..

The full survey and associated data tables are available to MEF members. For more details on becoming a MEF member, please contact us.

KEY TAKEAWAYS ON SMS OTP AS A VERIFICATION TOOL

1 Globally, almost 2/3 of enterprises only use cellular for identifying, verifying and authenticating customers.

2 93% of enterprise worldwide use SMS OTP for some aspect of verification.

3 All methods for identification, verification or authentication are seen as more or less equally important, irrespective of level of usage.

4 Most sectors highlight SMS OTP concerns on security and user experience.

5 The greatest growth opportunity appears to lie in Indonesia, South Africa, Spain and India.

DEFINITIONS USED

The survey explicitly included the following definitions to guide respondents when answering the survey questions.

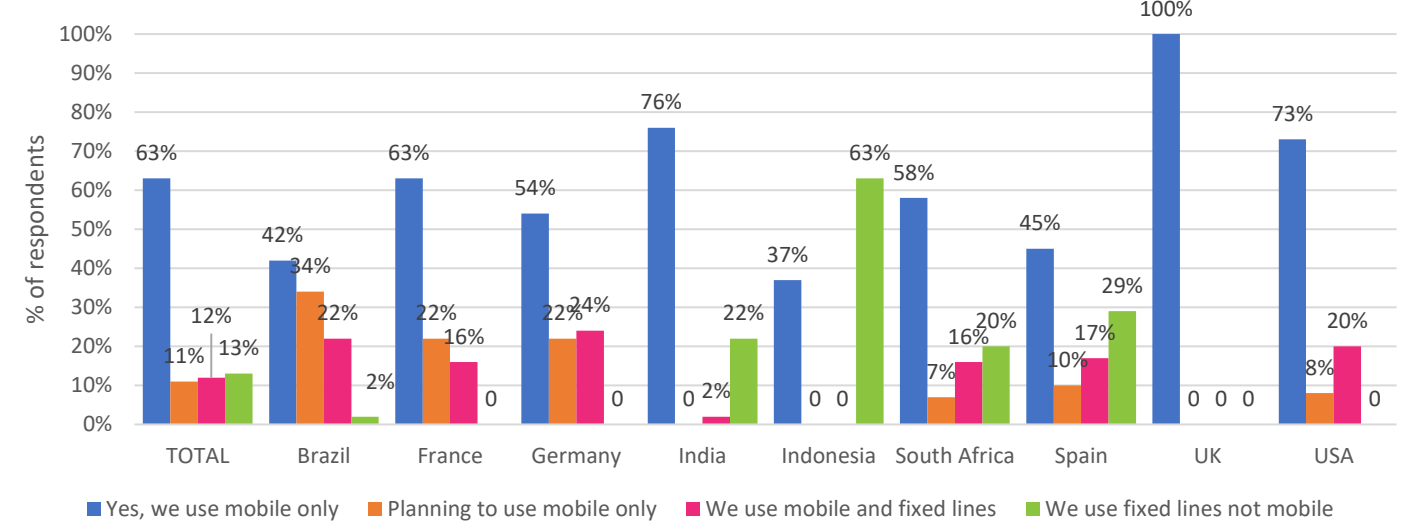**Identification** is when you can identify a user even if they have not given you any information

Verification is when you can corroborate information provided by the user with other identity data that the company trusts

Authentication is identifying a repeat user either by what the user has (e.g. SIM, phone, cookie) or is (e.g. biometric)

THE MAJORITY OF ENTERPRISES USE JUST CELLULAR FOR IDENTITY, VERIFICATION OR AUTHENTICATION

Globally, almost 2/3 of enterprises only use cellular for identifying, verifying and authenticating customers. Only in Indonesia do we see this trend reversed into usage of landlines, though Spanish enterprises show a tendency to landlines as well.

Do you use mobile phone numbers or cellular phones as part of your identity verification and authentication approach?

■ Yes, we use mobile only ■ Planning to use mobile only ■ We use mobile and fixed lines ■ We use fixed lines not mobile

Similarly, all named sectors also favor using cellular for identifying, verifying and authenticating customers, though this peaks in payments and e-commerce.

Do you use mobile phone numbers or cellular phones as part of your identity verification and authentication approach?

Note: small samples in Dating and Gaming

■ Yes, we use mobile only ■ Planning to use mobile only ■ We use mobile and fixed lines ■ We use fixed lines not mobile
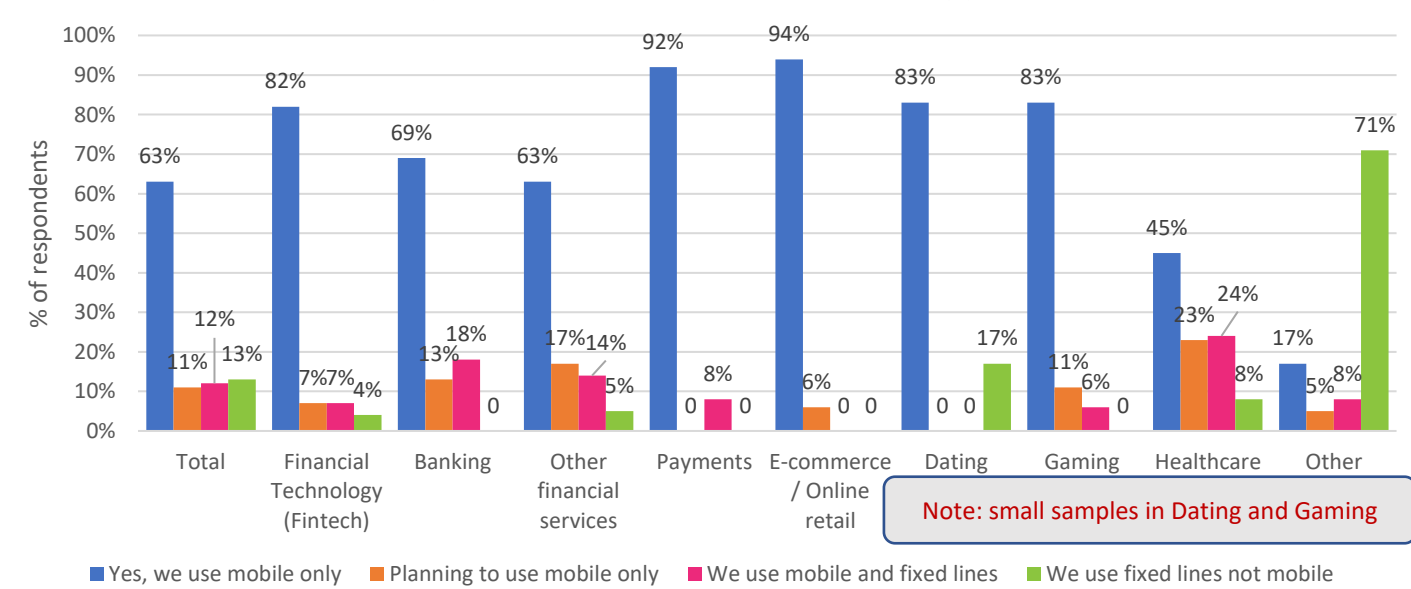
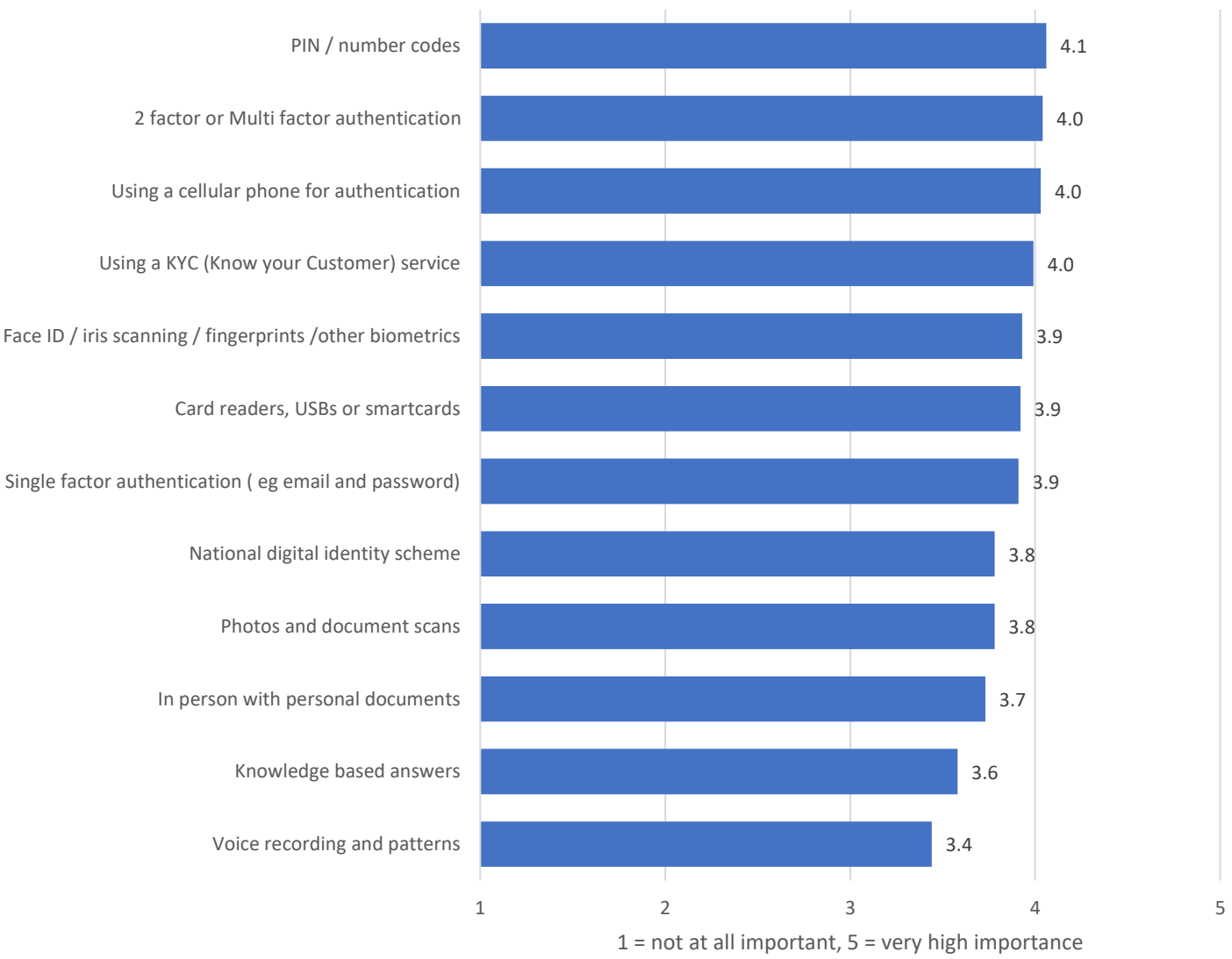# MULTIFACTOR AUTHENTICATION RANKS HIGH IN IMPORTANCE TO THE ENTERPRISE

Although Single Factor Authentication, and KYC were the most widely used methods for identification, verification or authentication ALL the top 7 or so methods are seen as more or less equally important.

The important point to make is that although actual usage of cellular for authentication is lower than other methods, it is seen as just as important. This importance is consistent by country and by sector, suggesting there is still a fairly uniform opportunity for growth, and supplier conversations can focus on perceived value of this method.

If you use any of the following methods, how important are they to your business - Global

Method	Score
PIN / number codes	4.1
2 factor or Multi factor authentication	4.0
Using a cellular phone for authentication	4.0
Using a KYC (Know your Customer) service	4.0
Face ID / iris scanning / fingerprints /other biometrics	3.9
Card readers, USBs or smartcards	3.9
Single factor authentication (eg email and password)	3.9
National digital identity scheme	3.8
Photos and document scans	3.8
In person with personal documents	3.7
Knowledge based answers	3.6
Voice recording and patterns	3.4

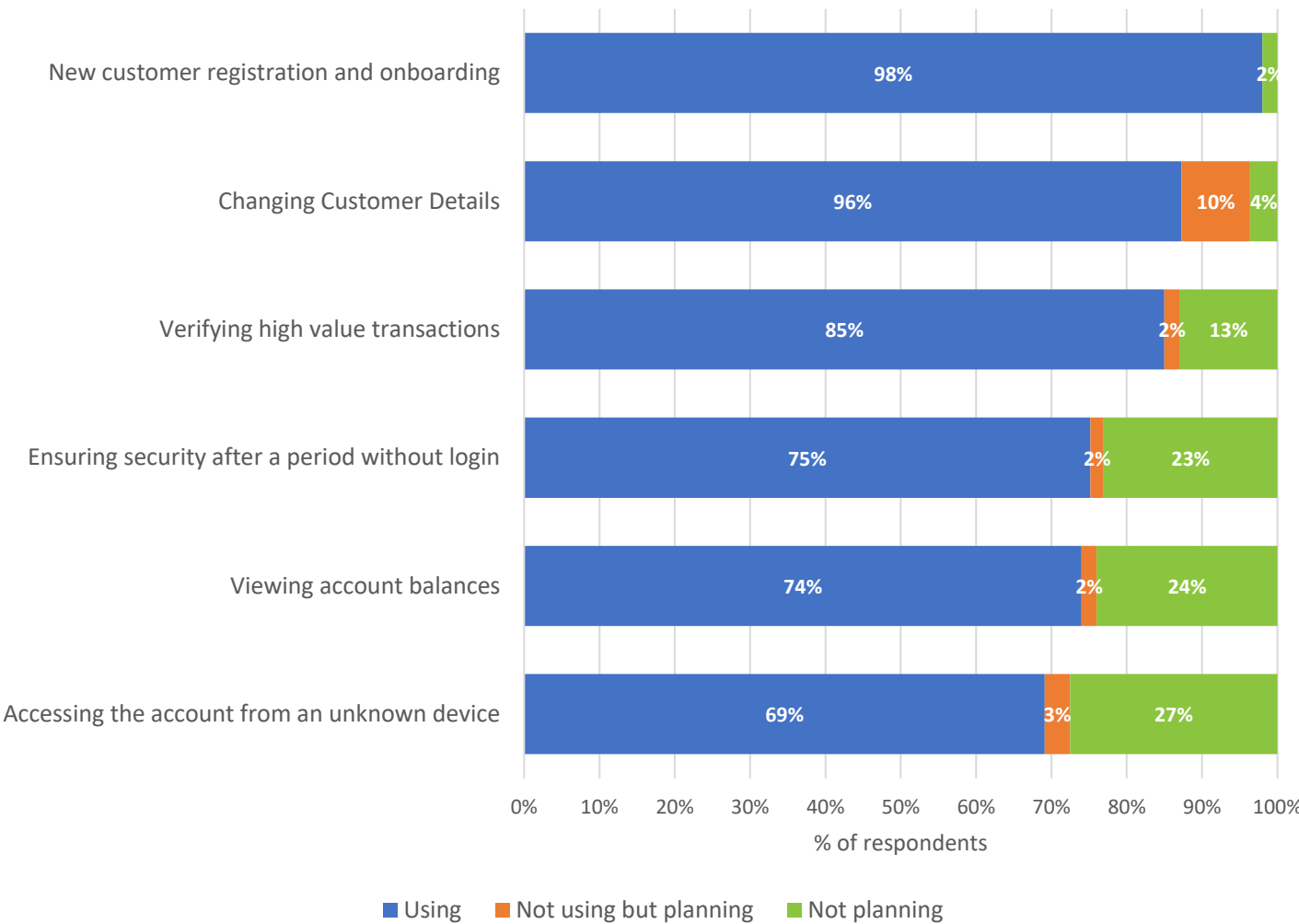1 = not at all important, 5 = very high importance

AUTHENTICATION IS USED TO SPECIFICALLY SUPPORT NEW CUSTOMER REGISTRATION

Authentication is widely used to support new customer registration, but less so for services such as viewing account balances or accessing an account from an unknown device.

In fact, we are seeing how organisations use authentication across the customer journey.

We should note however that enterprises currently not planning to use authentication does not mean they never will, and they represent an opportunity for discussion by suppliers around capabilities and use cases.

Are you using, or planning to use, these Authentication for these services - Global

Service	Using	Not using but planning	Not planning
New customer registration and onboarding	98%		2%
Changing Customer Details	96%	10%	4%
Verifying high value transactions	85%	2%	13%
Ensuring security after a period without login	75%	2%	23%
Viewing account balances	74%	2%	24%
Accessing the account from an unknown device	69%	3%	27%

% of respondents

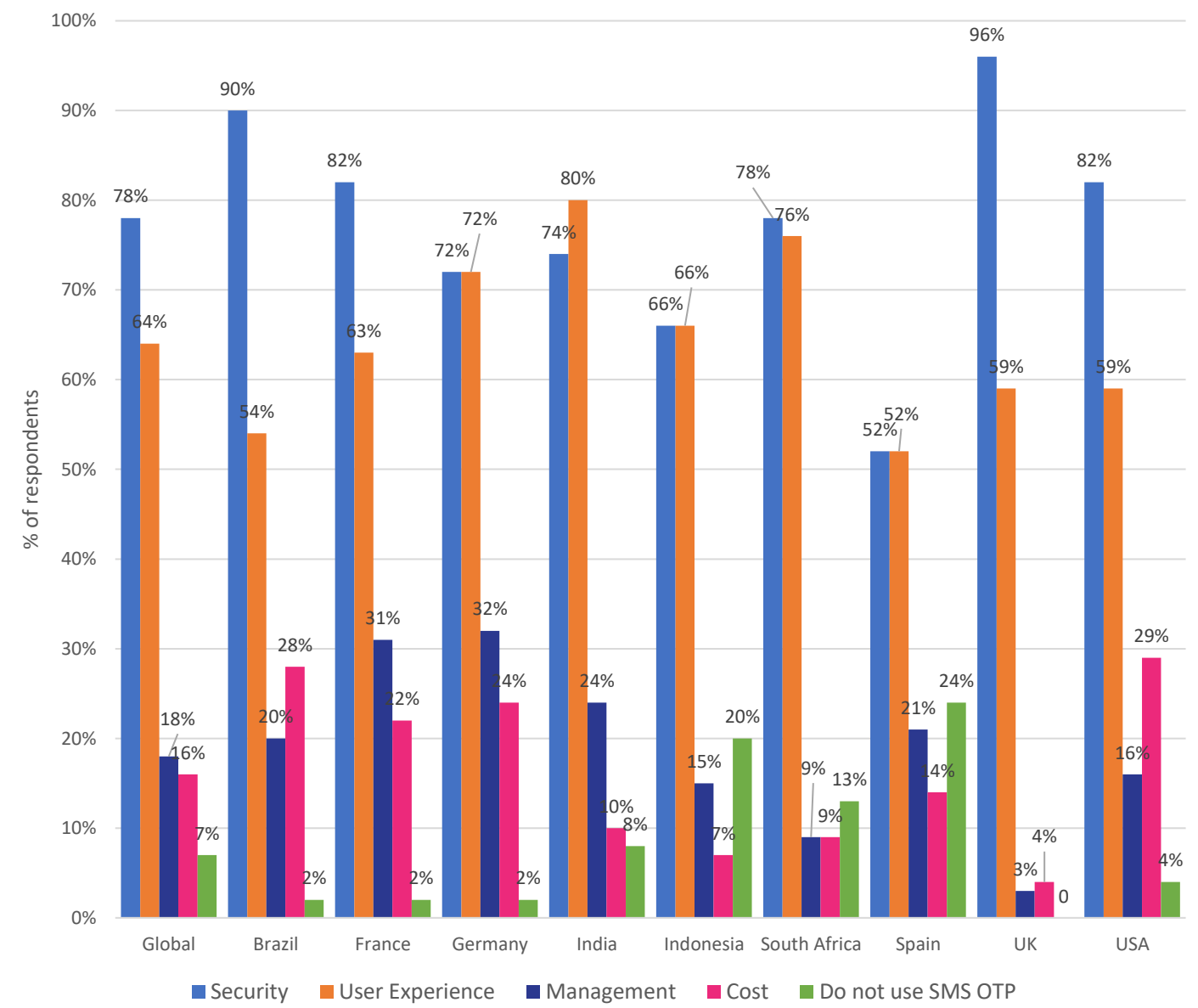■ Using ■ Not using but planning ■ Not planning

SPANISH ENTERPRISES ARE LEAST CONCERNED ABOUT SMS OTP

Some 93% of enterprise worldwide use SMS OTP for some aspect of verification, although there are some variation by country regarding SMS OTP though the top two concerns remain the same.

Spanish enterprises would appear to be less concerned about SMS OTP than those in other countries.

We can also see that SMS OTP user experience is a greater concern in Germany, India, Indonesia, Spain and S Africa compared to the global figures.

What concerns do enterprises have around the use of SMS OTP?

Legend: Security | User Experience | Management | Cost | Do not use SMS OTP

Country	Security	User Experience	Management	Cost	Do not use SMS OTP
Global	78%	64%	18%	16%	7%
Brazil	90%	54%	20%	28%	2%
France	82%	63%	31%	22%	2%
Germany	72%	72%	32%	24%	2%
India	74%	80%	24%	10%	8%
Indonesia	66%	66%	15%	7%	20%
South Africa	78%	76%	9%	9%	13%
Spain	52%	52%	21%	14%	24%
UK	96%	59%	3%	4%	0
USA	82%	59%	16%	29%	4%

% of respondents

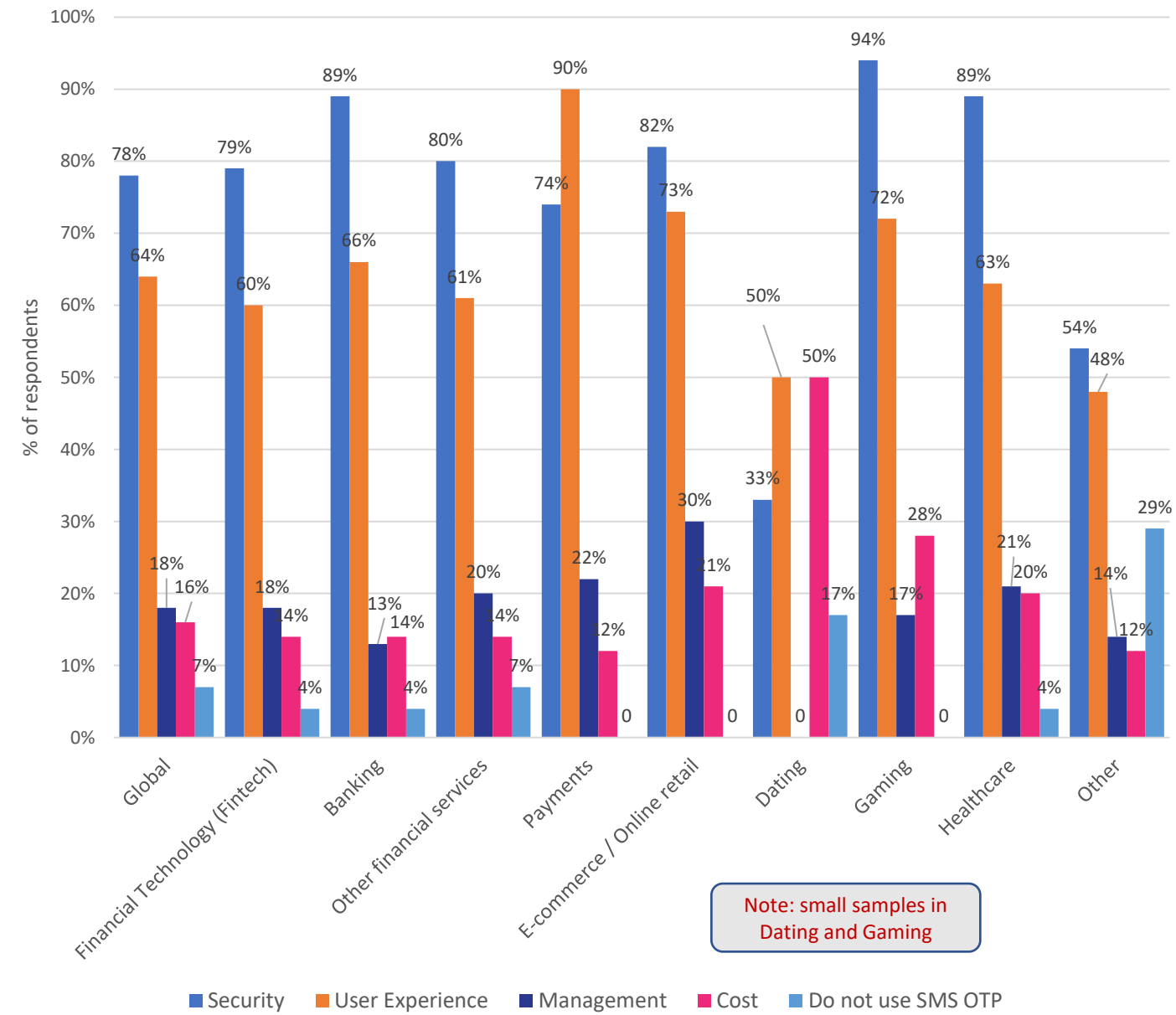# SMS OTP CONCERNS CENTRE AROUND SECURITY AND USER EXPERIENCE

Usage of SMS OTP is strongest in Finance, Banking, Payments and e-commerce.

Although usage of cellular for authentication is widely seen as important, all sectors highlight SMS OTP concerns on security and user experience (except for the dating sector).

We can also note that the Payment sector raises concerns about user experience above security.

Analysis by company size shows little variation from the global data.

What concerns do enterprises have around the use of SMS OTP?

Note: small samples in Dating and Gaming

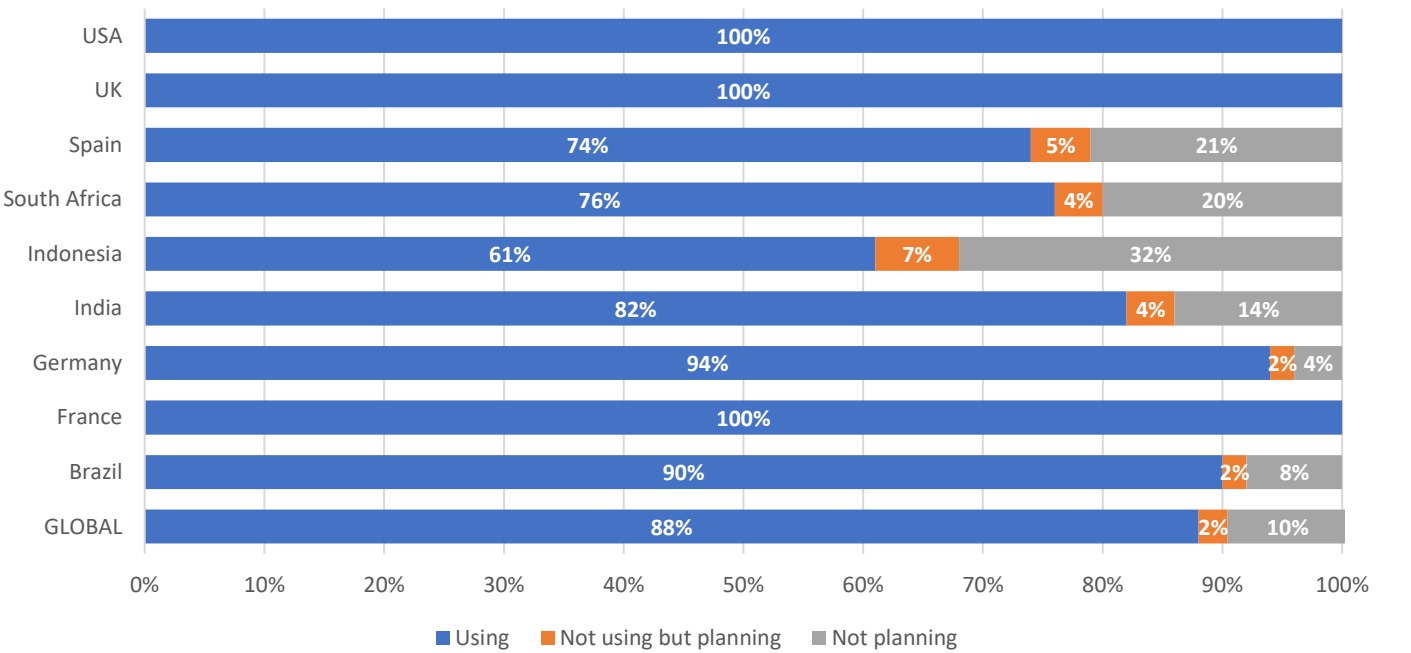■ Security ■ User Experience ■ Management ■ Cost ■ Do not use SMS OTP

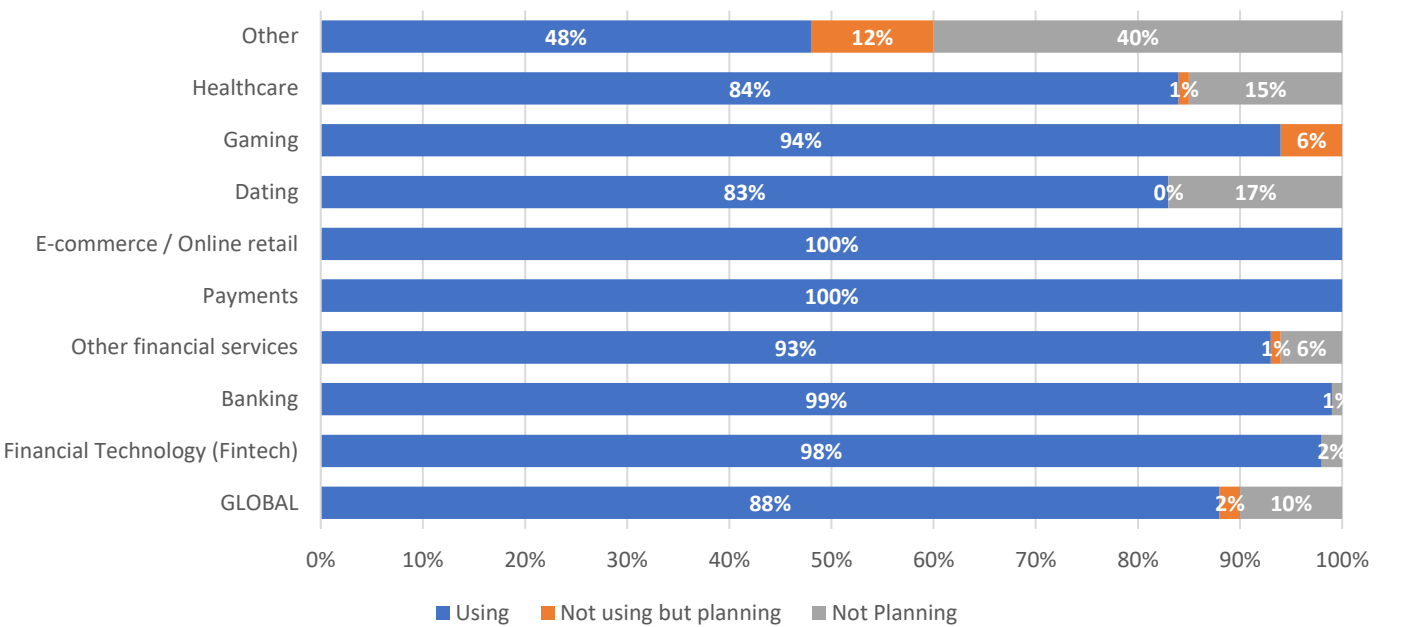# THERE IS SELECTIVE OPPORTUNITY FOR GROWTH FOR SMS OTP

SMS OTP is widely used in the USA, UK and France. But the greatest growth opportunity appears to lie in Indonesia, South Africa, Spain and India.

It is also worth noting that enterprises with no plans at the moment may well be open to supplier discussions. By that argument, the major sector opportunities lie within Healthcare and Dating.

SMS OTP by market

Market	Using	Not using but planning	Not planning
USA	100%		
UK	100%		
Spain	74%	5%	21%
South Africa	76%	4%	20%
Indonesia	61%	7%	32%
India	82%	4%	14%
Germany	94%	2%	4%
France	100%		
Brazil	90%	2%	8%
GLOBAL	88%	2%	10%

■ Using   ■ Not using but planning   ■ Not planning

SMS OTP by Sector

Sector	Using	Not using but planning	Not Planning
Other	48%	12%	40%
Healthcare	84%	1%	15%
Gaming	94%	6%	
Dating	83%	0%	17%
E-commerce / Online retail	100%		
Payments	100%		
Other financial services	93%	1%	6%
Banking	99%		1%
Financial Technology (Fintech)	98%		2%
GLOBAL	88%	2%	10%

■ Using   ■ Not using but planning   ■ Not Planning

SURVEY SAMPLE AND METHODOLOGY

This report is based on a comprehensive online survey of over 450 enterprises segmented as shown below

Global survey covering 9 key countries - Brazil, France, Spain, Germany, UK, South Africa, Indonesia, India, USA. 30 - 70 enterprises per country.

Enterprise size segments by employees: 251 – 1000, 1001 – 5000,5001 – 10000, 10001 – 25000, 25000+. All with responsibility for PD&I.

Cross sector focus on core segments – Financial Technology (Fintech) Banking, Other financial services, Payments, E-commerce / Online retail, Dating, Gaming. Healthcare. Other (15%).

Target respondent - Chief Marketing Officer, Head of Product, Head of Customer Experience (CX) or User Experience (UX), Head of Strategy, Head of Fraud / Fraud Prevention, Head of Know your Customer (KYC), Head of Identity / authentication.

Methodology - online survey designed by MEF, managed by an external agency, with MEF and Boku data analysis and reporting.

Full report and survey data sets are available for downloading

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