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2011 KPMG Mobile Payments Outlook

The opportunity is rich:
the greatest gains will come
from cross-industry partnerships

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Foreword

July 2011

We are pleased to present KPMG's 2011 Mobile Payments Outlook. This is the first year that KPMG has conducted this global survey of nearly 1,000 executives in the financial services, technology, telecommunications, and retail industries. The objective of this publication is to identify adoption barriers and opportunities, as well as provide insight into the forces shaping the mobile payments market.

While the majority of the business leaders surveyed believe consumers are currently concerned about security and privacy when using mobile devices, they believe other factors are more compelling attributes of a successful mobile payment strategy. Specifically, 81 percent believe convenience/accessibility is the highest attribute, followed by simplicity/ease of use, at 73 percent.

At the same time, business leaders the world over view security as the main challenge to developing mobile payments strategies.

Economic development plays a crucial role, whereas geographic location does not. The mobile payments opportunity in developed economies is very different from developing markets, not because of geography, but because of the extent to which money is electronic. In the US, where card issuers, processors, and payment networks compete for a percentage of transaction flows, mobile payments must satisfy the need for greater convenience. In cash economies like Kenya, mobile payments enable access to financial transactions and commerce. There are interesting synergies between mobile payments business opportunities identified in this publication and KPMG's 2010 Consumer and Convergence survey, which highlighted the importance of the

consumers' relationships with mobile service providers to win business. Although the demand for mobile services is increasing around the world and the market opportunities are expanding quickly, the consumer business landscape remains fiercely competitive.

Our survey, and accompanying market analysis, reflects the complex environment that mobile payments represent. While key players in the mobile payments ecosystem aim to secure their leadership through market share and innovation, we also believe alliances and co-opetition – between financial services companies, operators, technology companies and retailers – is a key path to succeed in this dynamic market.

As developed and emerging economies take hold of the opportunities in this evolving market, regulation and taxation will also play an important role. We look forward to sharing our expertise and insight with you as mobile commerce transforms business models and creates new markets.

Sincerely,

Gary Matuszak
Global Chair
**Technology, Communications
& Entertainment**



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Executive summary

The use of mobile phones as a payment alternative to cash, checks or credit cards looks set to increase significantly. In order to assess the mobile payments market, KPMG conducted a global online survey of 970 companies between the period of September 2010 and February 2011.

Mobile payments are evolving rapidly and changing the way consumers and businesses operate. As technology and telecommunications companies roll out mobile payment applications and services, mobile strategies are beginning to transform existing business models in a number of sectors such as banking and retail.

The nature of mobile payments' transformative effect depends significantly on a country's state of economic development and the existing payments infrastructure. In emerging economies, mobile payments will accelerate the pace, scale, and reach of commerce by enabling electronic transactions and displacing cash. In developed economies, mobile payments will transform the chain of commerce beyond payments, but in order to do so, will have to reach a level of convenience and availability on par with today's alternatives. In every market providers will need to overcome potential security concerns. Mobile payment business opportunities are complex due to an abundance of new and existing players from multiple industries, but the stakes are high: billions of dollars in transactions.

This survey reveals that the payments model is evolving and mobile is enabling a business transformation for services firms, telecom providers, technology vendors, and retailers across the globe. Companies across these industries share a common outlook regarding many aspects of mobile payments. Specifically:

Mobile payments will matter.

The majority of companies surveyed — 58 percent — have a mobile payments strategy in place today, and half of those are already offering a mobile payments service. Telecom providers are the most likely to have a strategy in place, followed closely by financial service companies.

Mobile payments are preparing to go mainstream. Nearly one in five respondents say that mobile payments are very important today. But the majority — 54 percent — believes that, while mobile payments will be reasonably important in the future, today they are in their infancy. Most companies we surveyed assess that it will take two to four years for mobile payments to move into the mainstream in their primary region of business. KPMG believes that exploding smartphone growth, new applications, and economic opportunities will grow mobile payments at a much faster rate than our respondents anticipate.

Mobile payments will take multiple forms. We asked respondents to assess five forms of mobile payment — m-wallet, m-banking, contactless card systems, online payment systems, and carrier billing. Respondents identified m-banking and online payment systems (such as PayPal, Boku, Obopay) as either mainstream today or likely to gain traction. While KPMG believes that these forms of mobile payment will all gain some traction, our view is that m-wallets is one of the most exciting and promising payment opportunities. M-wallets provides the momentum to move beyond payments to participate in the entire chain of mobile commerce — from brand awareness to consideration, followed by after-sales loyalty and care.

Convenience and availability will drive success. Whether assessing the supply or demand side for mobile payments, respondents agreed that these two factors are the key advantages. Respondents recognize that convenience and availability are critical requirements in changing consumer behavior.

Security is the prime impediment.

No surprise, certainly, that security is critical where customers' money is at stake.

However, we believe that convenience, availability, and ease of use are fundamental to the success of an activity as basic and widely adopted as payment. Consumers will not adopt new payment solutions if they have to wonder whether they can use the solution each time they encounter a new merchant. Companies participating in the mobile payments ecosystem may overestimate their ability to make mobile payments as convenient, ubiquitous, and easy to use as current solutions. In doing so, they risk failing to deliver on the promise of mobile payments.

The mobile payments ecosystem will be rich and dynamic. Irrespective of which industry the respondent's business is in, they believe that many other industries will play an important role. Financial services firms and credit card companies will be the most influential, followed closely by telecom operators. While companies deem technology companies and retailers less influential, new business models driven by these sectors are changing the game at a fast pace.

Market insights

Mobile payments represent distinctly different opportunities across the globe. In every market, mobile payments stand to take the place of cash. In developed economies, cash displacement means a battle for the fees associated with transactions versus free of direct interchange costs. In developing economies that rely predominately on cash, replacing cash with electronic payments initiated by mobile phones and carried over mobile networks will have a transformative effect on economies as a whole — including governments.

Developing nations have two trigger points for adopting mobile payments, each pertinent to a distinct segment of the population. For those consumers who have access to financial services in the form of bank accounts, remittance facilities, and credit or debit cards — typically those living in urban environments — the trigger is *convenience*. Among this segment mobile phone ownership is practically a given.

For those outside the reach of financial services — the unbanked, typically rural or semi-urban residents — the trigger is *accessibility*, introducing them to financial service capabilities previously beyond their reach. With mobile phone prices and attendant network costs continuing to decline, penetration among this population too is racing to become the default.

The advantages of mobile payments for consumers, telecom providers, technology vendors, financial services firms, retailers, and governments are not theoretical. All these parties are reaping the benefits of mobile payment offerings today, across many regions, or planting the seeds for future growth.

- In India today mobile phone connections outnumber bank accounts by more than a factor of three: 800 million mobile phone connections and 250 million bank accounts. A high point for nation-wide interconnected mobile payments is the National Payment Council of India's (NPCI) launching of the Interbank Mobile Payment Service (IMPS). IMPS allows a person to pay/remittance money to a merchant or an individual in real-time using a mobile phone number and a mobile phone identifier. ⁱ "Mobile payments not only reduce cost of service, but also open a huge market for participants. Further, payment interactions deepen understanding of customer behavior – a recipe for success." says Kunal Pande, Director, KPMG in India.
- Mobile payments are bringing disparate players together in collaboration. In India, a number of partnerships between mobile companies and banks are launching mobile payment services, such as Bharti Airtel with State Bank of India, and Vodafone with ICICI Bank.
- M-PESA, the mobile money service launched in March 2007 by Safaricom in Kenya in partnership with Vodafone, reported more than 9.5 million subscribers using the service to make more than Sh405 billion worth of person-to-person transfers as of March 2010. In May 2010 Equity Bank enabled its customers to link their bank accounts to their M-PESA accounts and directly deposit funds into their bank accounts using M-PESA. ⁱⁱ MTN Uganda attracted 16 percent of its customers to its mobile money service in its initial 13 months, and reports that approximately 60 percent of its transfers are to 'unbanked' customers in rural areas. ⁱⁱⁱ
- Technology vendors targeting the mobile payments space are attracting significant investment and sky-high valuations. New entrants such as Square enable merchants, using a simple card swipe device, to accept credit and debit payments on iPhones and iPads. Recent investments in Square by Kleiner Perkins place the company's value at \$1.6 billion — a more than sixfold increase in valuation since a January financing round led by Sequoia Capital. ^{iv} Beyond technology innovation, players in the mobile payments ecosystem are all trying to position themselves in a very fluid environment. "The war for the ownership of the mobile payments customer is just heating up among financial institutions, handset makers, wireless carriers and alternate payments providers like PayPal" says Sanjaya Krishna, Advisory Principal and US Digital Services Leader.
- US operators Verizon Wireless, AT&T, and T-Mobile have joined with Discover to form a joint venture targeting the mobile payments space. This joint venture opens the possibility for the carriers to enter the financial services world as card issuers, and to participate via the joint venture in revenue from payment processing. In contrast, competitor Sprint has allied itself with an amalgam of new entrants and legacy financial services firms to bring NFC-powered mobile payments to its customers: Google supplies the Google Wallet software that today can hold MasterCard's issued by Citi, and FirstData provides the infrastructure for securely delivering payment credentials to Google's Wallet.



Featured interview

KPMG – Sanjaya Krishna, *US Digital Services Leader*
PAYPAL – Laura Chambers, *Senior Director, PayPal Mobile*

KPMG: *When do you think it will be mainstream for consumers to pay via mobile?*

Ms. Laura Chambers, PAYPAL: It's mainstream already. We have seen tremendous growth over the past few years: three years ago we did about \$25 million of payment volume via mobile. Two years ago that was \$141 million, last year was \$750 million, and this year we expect to do over \$3 billion. That growth is coming from broader adoption in the consumer base, and it's moving very quickly into a mainstream consumer audience doing mobile payments. Increasing smartphone penetration is one driver, but also people trying it out and becoming familiar and comfortable with the process.

KPMG: *What do you think the market size might be five years from now?*

PAYPAL: Mobile payments are addressing several different areas. The first we call remote payments, and is a substitute for existing eCommerce. We expect that mobile will command at least 10% of eCommerce payments. The second market is in the blurring of lines between online and offline payments, which mobile is driving. There's an \$8 trillion market in offline payments that mobile payments is only just starting to tap into, and we see tremendous growth potential in that area.

KPMG: *What are some examples of the kind of offline payments that you think mobile is going to command?*

PAYPAL: I would categorize it into three areas. One is the traditional retail point of sale, the second is mobile point of sale, and the third is unattended point of sale.

Retail point of sale — when you walk into a store and pay at that store's register — is the bulk of the payment volume today. But it's also quite challenging and complex because it requires significant integration and change in consumer behavior. We're very excited about that market, despite the challenges, and offline merchants are excited about working with PayPal to bring consumers more payment choices at the point of sale.

Mobile point of sale is for a merchant that doesn't necessarily have a fixed point of sale terminal, such as at a trade show, or a services company that goes out and meets with their customers. They want the mobile phone to be their point of sale device; we see tremendous opportunity in that market as well.

Unattended point of sale might be in transit, or in vending machines. While interesting, the challenge with this market is that it's segmented among the different vending machines, the different practices, and all these different places. It will be a challenge to gain broad penetration.

KPMG: *For instance, might Square be an example of one of those technologies?*

PAYPAL: Yes. We also see where the consumer wants to use her phone as a point of sale terminal. For example, while in a store, a consumer sees a product she likes but wants to get the best price, so she opens up an app, scans the product's bar code, checks prices and availability for both local and online



merchants, and then chooses between instant gratification at a premium at the store and saving some money by buying online but waiting to have it delivered.

KPMG: *What is your opinion on technology solutions like NFC — will this be required for increasing adoption of the mobile phone as a payment device?*

PAYPAL: There are some great, seamless experiences that NFC can drive. People that are familiar with NFC are more comfortable with it in small transactions such as transit, or in cases that don't even involve payment. But some people are less comfortable with NFC for larger transaction sizes and broader payment applications because of the implementation and integration challenges, as well as the requisite changes in consumer behavior.

But fundamentally it's just a technology. We've already seen on the credit card side that NFC is not driving changes in consumer behavior: I understand that 12% of credit cards in the U.S. have NFC, but it's used for less than .01% of transactions. Consumers are used to swiping credit cards at the point of sale and a tap isn't that much easier than a swipe —in fact it's less easy because it requires new learning and behavior for consumers. NFC is interesting, but in payments the winning solution will need to address the end-to-end consumer experience and the value across that experience in order to incent consumers to change their behavior.

KPMG: *Our research shows security and privacy are potential inhibitors to mobile payments. How does PayPal assure its customers about the security and privacy of the mobile payments they make using PayPal?*

PAYPAL: When consumers begin transacting on the Web they're concerned, confused, and unsure about it, and as they move into mobile payments they have the same fears. People are worried that if someone steals their phone they might be able to use their credit card or access all of their financial information. There's a lot of misunderstanding, confusion, and concern about payments.

PayPal works as a digital wallet in the cloud. You never have to share your credit card information with a retailer, and nothing is ever stored on your phone. There's a spectrum of consumer attitudes in this area: some will opt for convenience and a one-click checkout, while others focus on security and prefer to enter their password for each transaction. Rather than trying to second-guess our customers, we find it best to give them that choice. The most important thing is to provide a safe platform and give people choice so that it suits their lifestyle and needs.

Survey methodology and demographics

In order to assess the attitude and maturity of global companies with respect to mobile payments, KPMG conducted a global online survey of 970 companies between the period of September, 2010 and February, 2011.

Survey focus topics

- Mobile payments business impact
- Adoption of mobile payments technologies, applications and services
- Opportunities and barriers in driving mobile payment strategies
- Key players in the mobile payments ecosystem

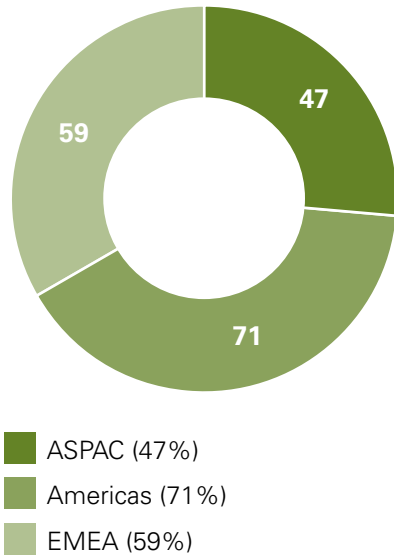
The scope of this survey encompassed financial activities that go beyond payment for goods or services, for example mobile banking, and therefore may fall more generally under the topic 'mobile commerce'. However, the survey instrument made specific ongoing reference to 'mobile payments' and therefore we have opted to retain this terminology throughout this report in the interest of consistency.

The survey respondents represented a range of geographies and industries (see Figure 1).

These companies not only spanned multiple industries, they represented the majority of the types of players who have a stake in the mobile payments ecosystem (see Figure 2). Incumbent payment players were represented in the form of banks and other financial institutions, payment processors, and card services providers. A variety of technology providers — both hardware and software — participated, as did retailers and advertisers. Telecom service providers represented the largest single industry segment of respondents at 19 percent (note that the industry segments shown in Figure 1 combine companies in sub segments — for example, Financial Services includes banks and payment processors). Note that not all respondents answered every survey question.^v Total values include responses from those who did not provide some of the demographic information, for example region, therefore 'total' percentages may appear inconsistent with the individual regional percentages.

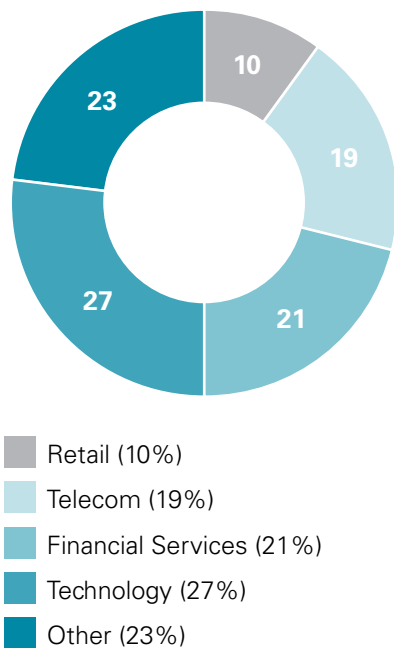
Figure 1

Survey respondents came from a variety of geographies and industries



Base: 519 global companies that specified a region

(Multiple responses allowed)



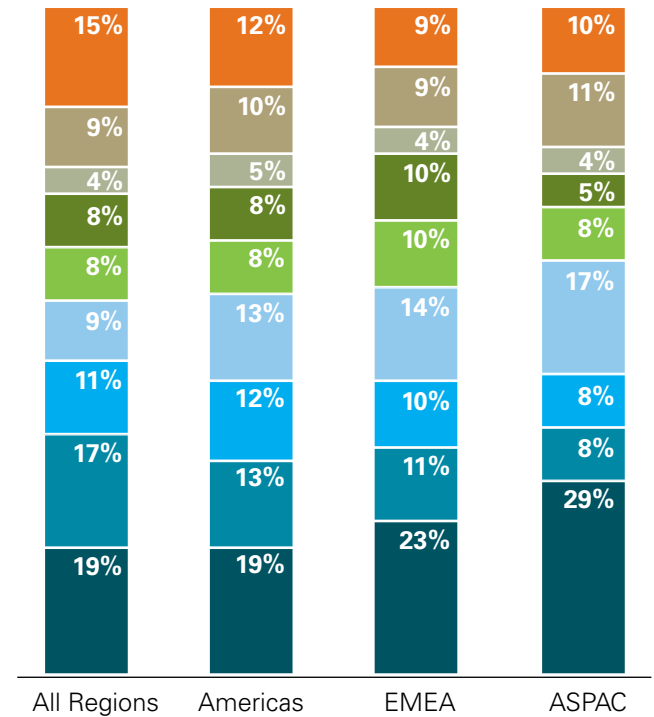
Base: 970 global companies

Figure 2

Survey respondents play in a variety of components of mobile payments

“In what capacity – if at all – does your business have an interest in mobile payments?”

(Values may not sum to 100% due to rounding)



- Telecoms service provider
- Bank or other financial institution
- Merchant/ Retailer/ Consumer Goods
- Equipment/ technology vendor
- Software vendor
- Payments processor or card services provider
- Advertiser / Marketing company
- Other
- Not at all

Base: 951 global companies

Key findings

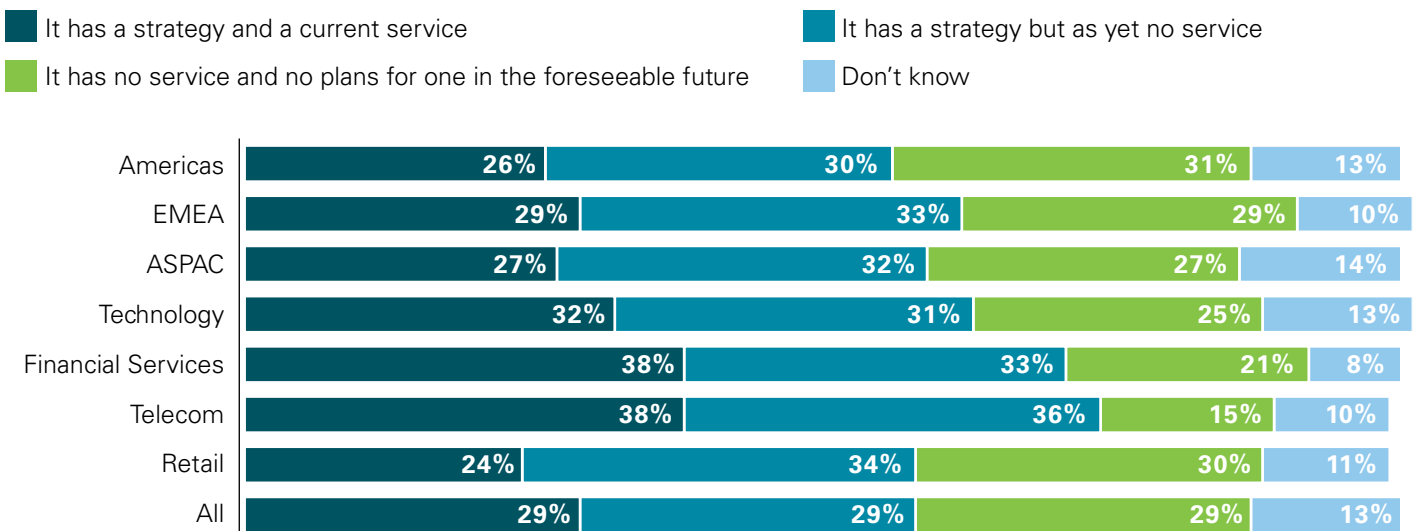
Companies see market opportunity, but little urgency

Overall, the companies in our survey are divided into two groups: those who believe that mobile payments will play an important role in their business and demand strategic focus today, and those who as yet have no plans to deploy a mobile payments service. Yet, even this latter group are convinced that mobile payments will be important for their business. There is more unanimity across companies regarding the timing for mobile payments moving into the mainstream. Specifically:

Nearly six in ten companies have a mobile payments strategy today. Companies with a mobile payment strategy — 58 percent of respondents — outnumber those without by two to one (see Figure 3). Among those with a strategy, half say that they also have a service in the market today. While these numbers show little variation by region, telecom and financial services firms are more likely to be active in the market with retailers the least likely to offer a mobile payments service. KPMG believes that retailers have a rich opportunity in this area and should move more aggressively to incorporate mobile payments into their customers' complete commerce experience.

Figure 3 Nearly 6 in 10 companies have a mobile payments strategy but only half of those offer a service

“Does your company currently offer a mobile payments service or have a mobile payments strategy?”



Base: 933 global companies (Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

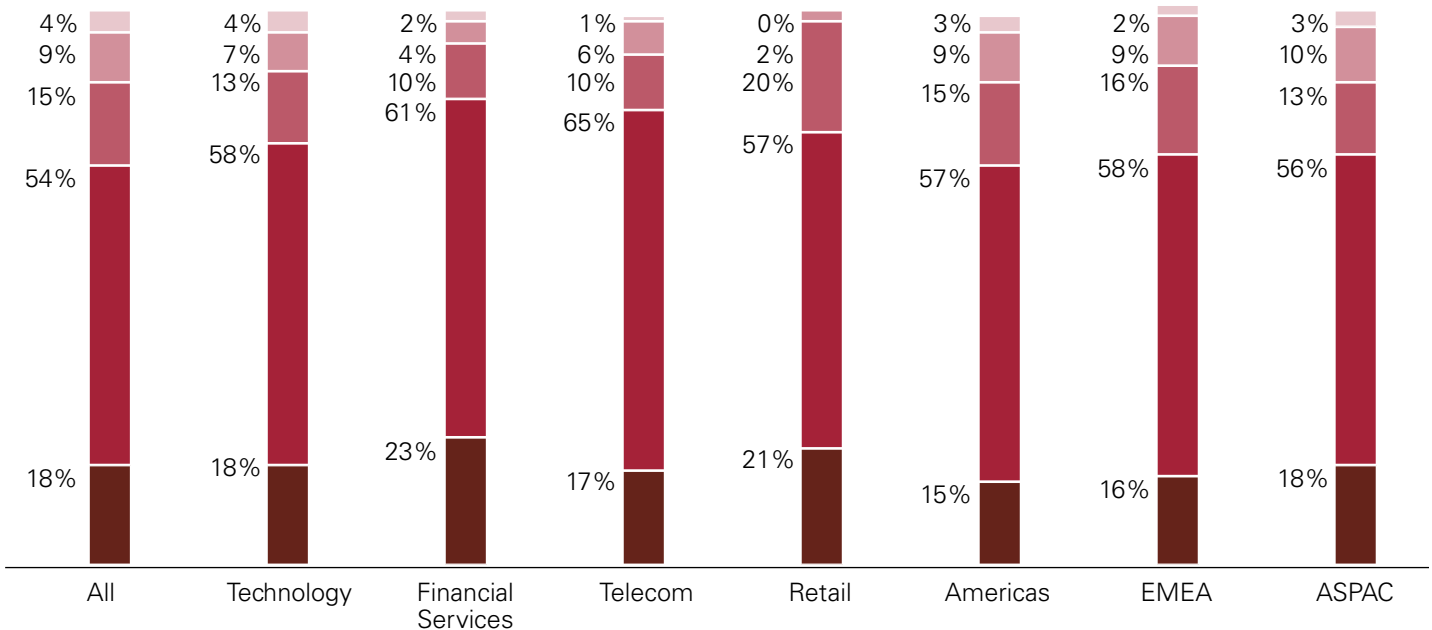
Most believe mobile payments will be important to their company...eventually. More than 70 percent of the companies we surveyed say that mobile payments are either very important today or will be important in the future, while only 9 percent see no impact from mobile payments in the foreseeable future (see Figure 4). But even among those who say mobile payments will be important, the vast majority say that the market is in its infancy — likely accounting for the significant subset of companies who have no mobile payments service in their plans today. Little surprise that financial services firms are the most likely to identify the service as a main activity or key enabler for their business today.

The majority see a time window of between 2 and 4 years. Less than 10 percent of respondents say that mobile payments are mainstream today, uniformly across all regions (see Figure 5). Nearly three-quarters of companies expect solutions to move into the mainstream within two to four years, and are evenly divided between those expecting adoption to happen in the first half of that time window and those seeing a longer delay. Somewhat surprisingly, financial services firms are more conservative in their estimates than are those in telecom, retail, and technology.

Figure 4 More than 70% of companies say mobile payments are important, but most say they are in their infancy

“How important do you think mobile payments is, or will be, for your company?”

- Very Important, it's already our main activity or a key enabler
- Reasonably important in the future, but it's in its infancy
- Not that important, unlikely to impact my company much in the next three years
- Not important at all, it will have no impact on my company for the foreseeable future
- Don't know

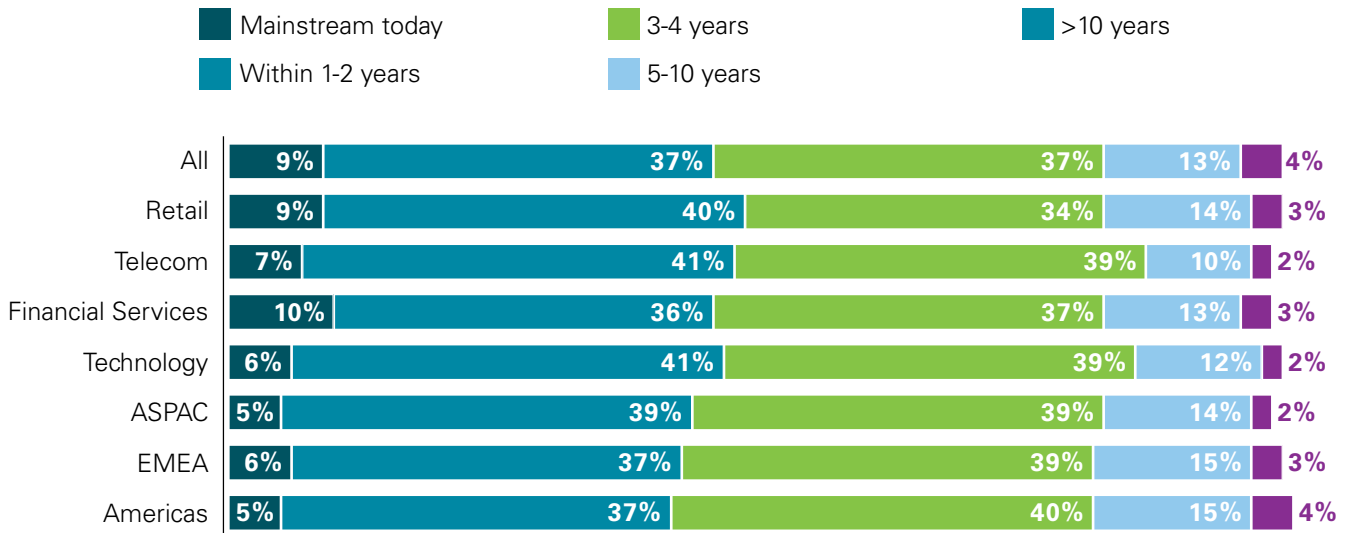


Base: 868 global companies (Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

Figure 5 Almost 75% say mobile payments will take 2 to 4 years to go mainstream

“When will mobile payments become mainstream in your country/region?”



Base: 860 global companies (Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey



Surveying the range of mobile payment services

Just as commerce is varied in its scenarios and payment solutions, mobile commerce has many meanings and mobile payments can take many forms. We asked companies to assess some of the most prevalent mobile payment solutions in order to rate their respective prospects.

We probed respondents about the prospects for success for five mobile payment methods, which were described in the survey as:

M-wallet (mobile wallet): account and transaction info is stored on a SIM card;

M-banking (mobile banking): direct access to the subscriber’s bank services and information via the mobile device;

Contactless card systems: a short-range high frequency wireless communication technology which enables the exchange of data between devices;

Specialist online payment systems: for example, Google checkout or PayPal;

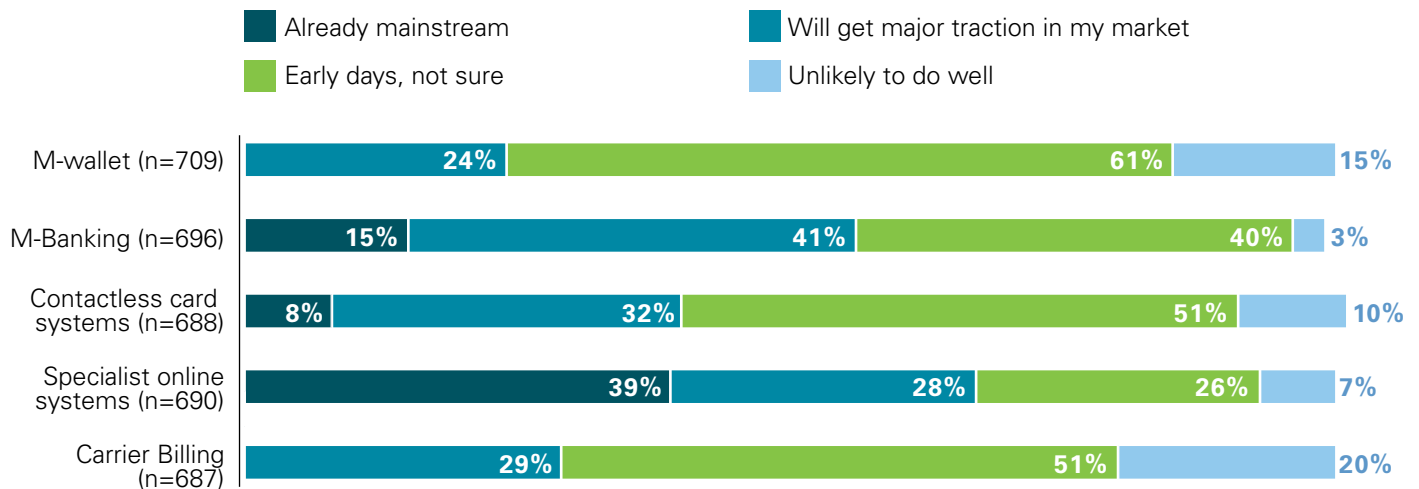
Carrier billing: for example, purchases are billed on the subscriber’s mobile phone bill.

Despite significant regional differences in availability and consumer adoption of these solutions today, opinions across geographies were remarkably consistent, while variation across industries was in some cases more pronounced. In particular:

Only m-banking and online systems are seen as gaining traction. For the remaining solutions, respondents were most likely to say that it was still too early to predict whether or not the solution would be adopted widely (see Figure 6). More companies deem online payment systems such as PayPal as mainstream as any other solution. Technology companies and retailers, and those in the Americas, hold this opinion to a greater extent overall — most likely owing to the fact that these systems were launched in the US and have been widely embraced by US consumers and merchants (see Figure 10). In contrast, respondents across industries and geographies view m-banking virtually identically (see Figure 8).

Figure 6 Companies are uncertain about every payment solution’s prospects

“What are the prospects for success for this mobile payment method in your country/region?”



(Values may not sum to 100% due to rounding)

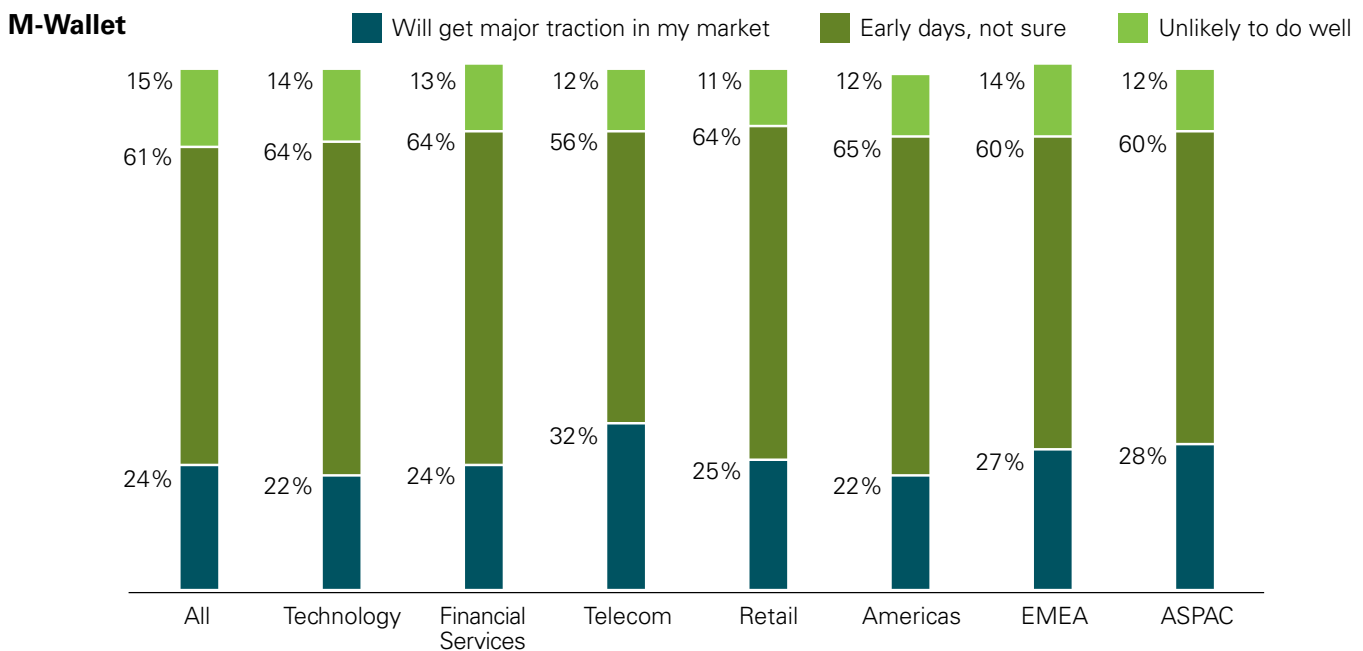
Source: KPMG 2011 Mobile Payments Global Survey



Telecom providers favor m-wallet and their own billing systems. Nearly one-third of telecom providers say that m-wallet will gain traction in their region, a response rate one-third greater than the full complement of survey respondents (see Figure 7). And their expectations for carrier billing are inflated by a similar ratio (see Figure 11). Small wonder — these are the two forms of mobile payment that deliver the greatest value to operators and those on which carriers around the globe are primarily focused.

Retailers are least keen on contactless card systems. While retailers are just as likely as the full set of respondents to deem these systems mainstream today, they are more than 10% less likely to say that contactless card systems will gain traction in their market. They may be thinking about their budget, since many are already in the throes of upgrading their point of sale systems to support new solutions such as MasterCard’s PayPass or Visa’s payWave.

Figure 7 Telecom providers are most bullish on m-wallet

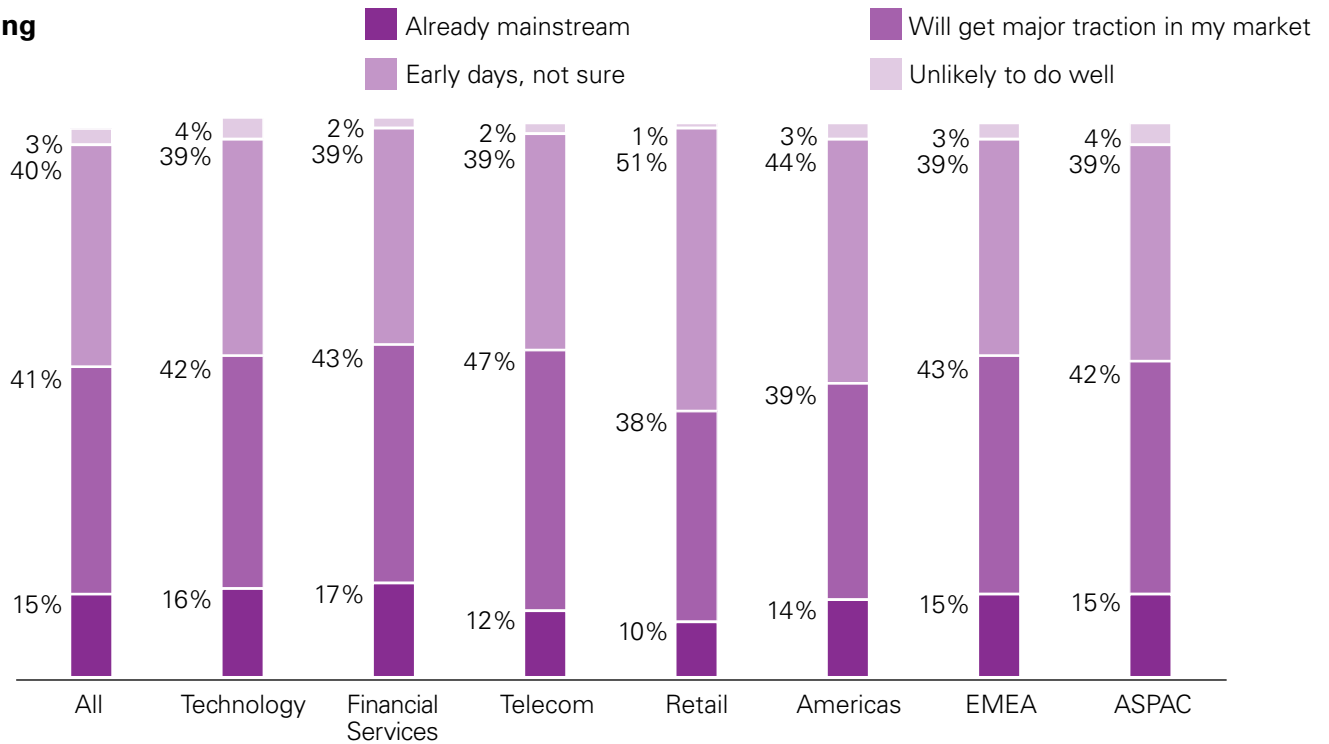


Base: 709 global companies (Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

Figure 8 Retailers are least confident in m-banking

M-Banking

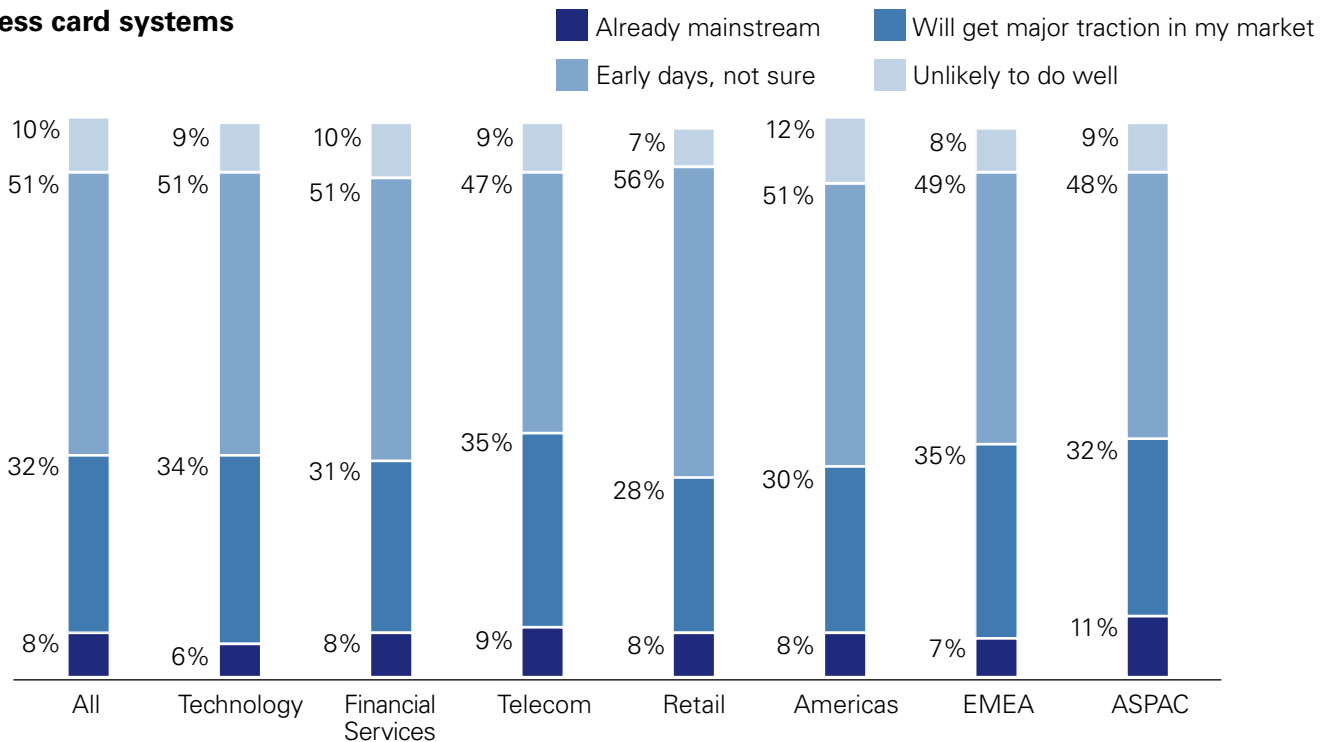


Base: 696 global companies (Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

Figure 9 Uncertainty is most pronounced for contactless card systems

Contactless card systems

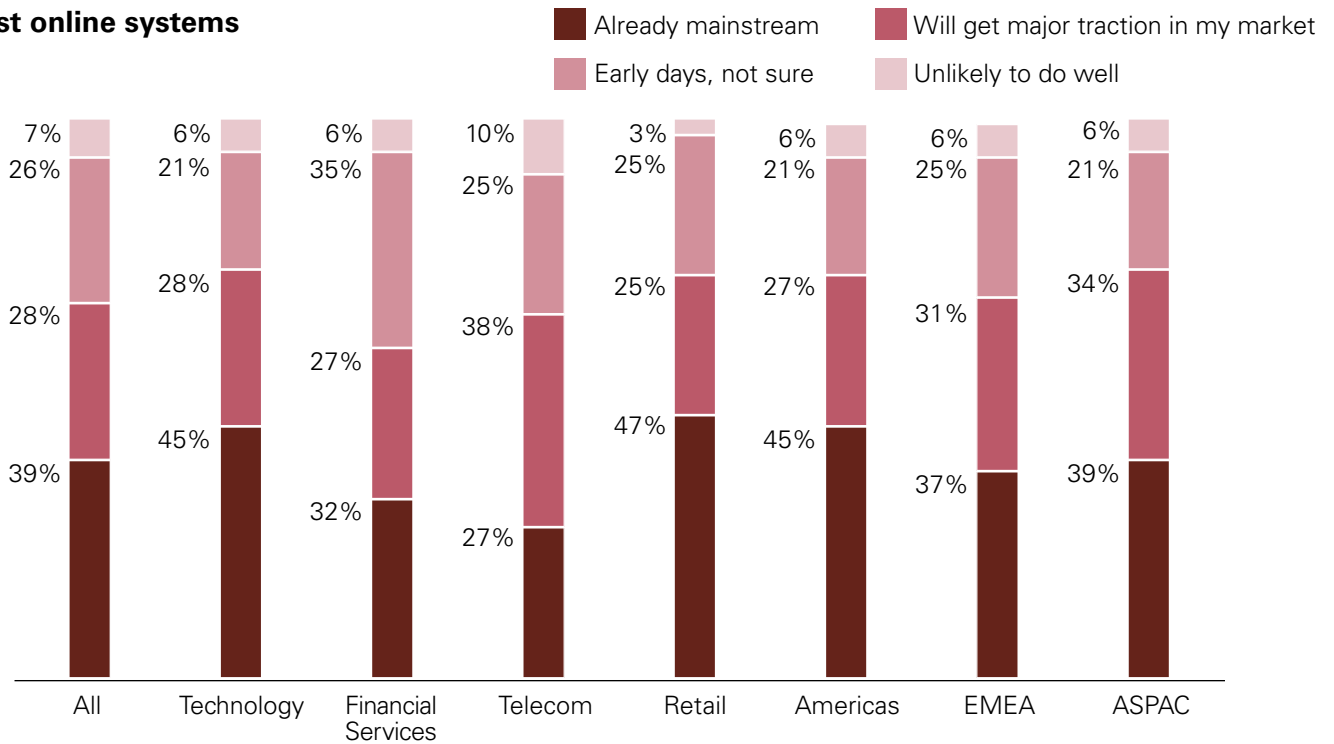


Base: 688 global companies (Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

Figure 10 Tech firms are most bullish about online payment systems

Specialist online systems

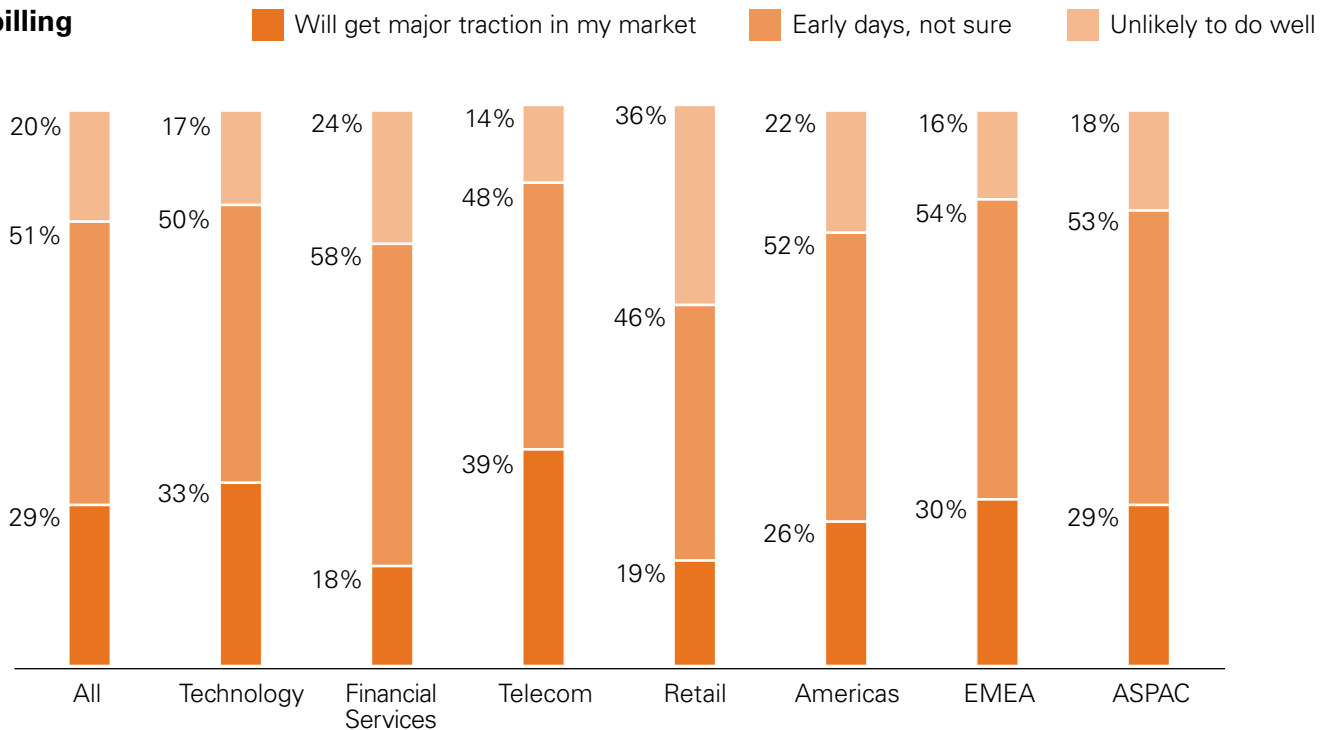


Base: 690 global companies (Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

Figure 11 Telecom providers — no surprise — see the best prospects for carrier billing

Carrier billing



Base: 687 global companies (Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

Convenience will foster growth, security will impede adoption

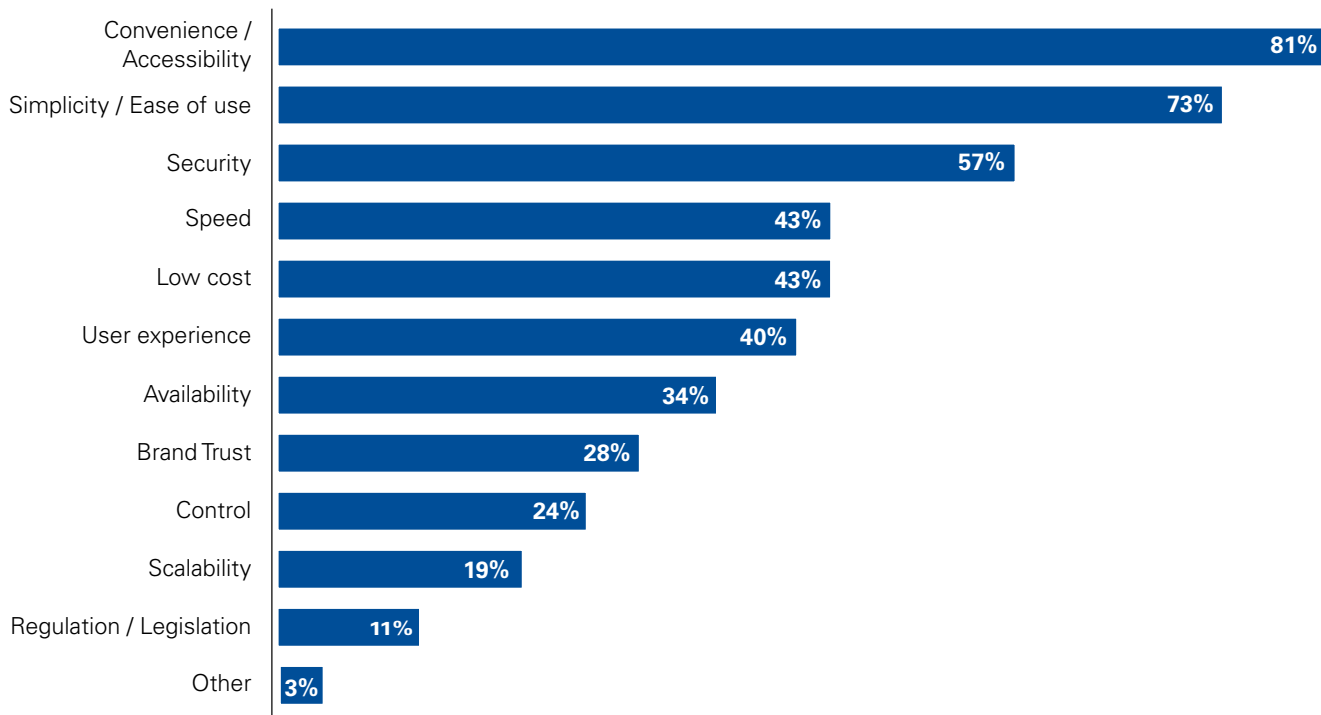
Irrespective of whether respondents were assessing mobile payment players or consumers, they expressed broad agreement about convenience and accessibility as the key ingredients to success and security as the impediment to broad adoption. Their view on the supply side is:

Convenience and accessibility are the most important elements. More than four in five respondents said that convenience and accessibility are compelling attributes of a mobile payments strategy (see Figure 12). Companies recognize that any new solution must be at least as convenient as any existing payment solution in consumers’ hands today, and must eventually be as broadly accepted as extant solutions. Surprisingly, only 28 percent said that brand trust would be a compelling factor — and that number only rose to 30 percent for financial institutions, who have invested so heavily in their brands to secure customers’ trust.

Security is the overwhelming challenge for vendors. Here there was no doubt: 71 percent of respondents said that security is the main challenge as companies develop their mobile payments strategy (see Figure 13). While vendors must assure consumers that their transactions and payment information are held and transferred safely in any transaction, the percentage of respondents that cite complexity and availability as challenges suggests overconfidence in the benefits that mobile payments will bring. Previous attempts at new payment solutions such as smart cards in the US prove that these are critical contributors to the success of a new payment solution.

Figure 12
Convenience and simplicity top the list for driving adoption

“What are the compelling attributes of a successful mobile payment strategy in terms of driving customer adoption?”



Base: 451 global companies (Multiple responses accepted)

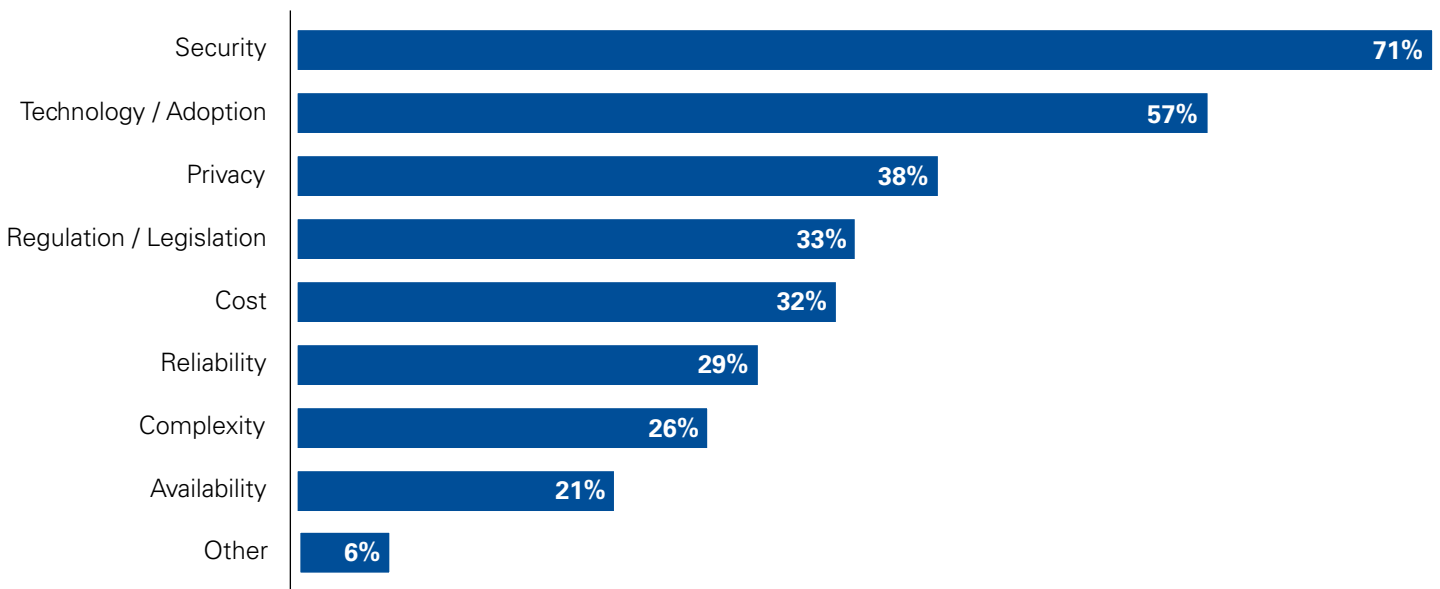
Source: KPMG 2011 Mobile Payments Global Survey



Figure 13

Companies believe they must overcome security concerns to succeed in mobile payments

“What in your opinion are the main challenges companies face as they develop mobile payment strategies?”



Base: 446 global companies (Multiple responses accepted)

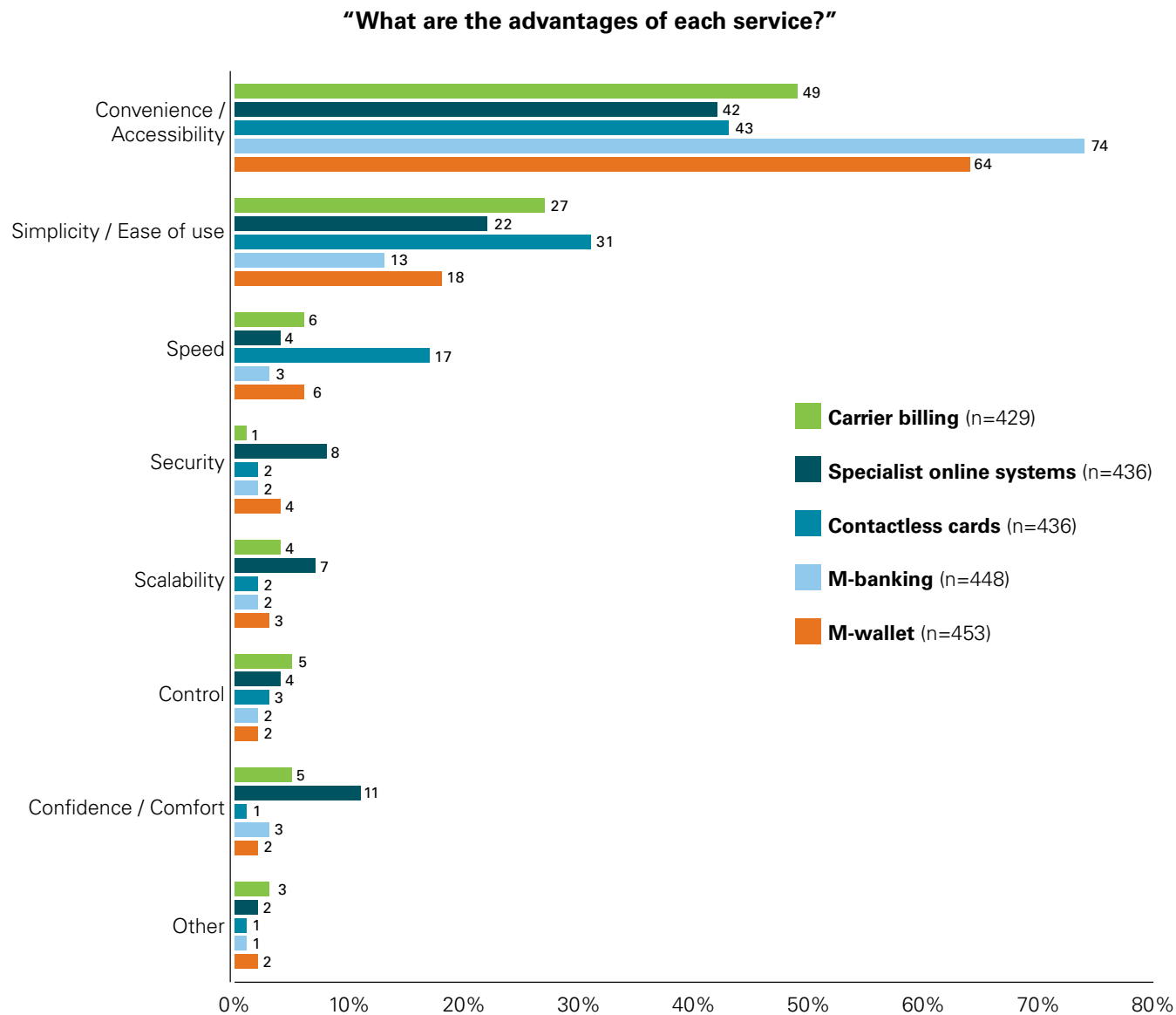
Source: KPMG 2011 Mobile Payments Global Survey

Respondents' view of the demand side, as noted above, by and large mirrors their view of the supply side — convenience and ease of use are the primary benefits and security is the greatest impediment. However, across the range of mobile payment solutions we asked about, opinion is far less uniform:

Convenience and accessibility are by far the greatest advantages for m-banking and m-wallet. While these two attributes were cited most frequently for every type of mobile payment, they vastly outstripped other advantages in frequency for m-banking and m-wallet (see Figure 14). Aside from simplicity and ease of use, far fewer than 10 percent of respondents identified any other advantage for these two solutions.

Security is the greatest inhibitor, especially for m-banking. As with the supply side, more respondents cite security as a disadvantage for every payment type (see Figure 15). But more point to this concern for m-banking than any other solution — most likely because m-banking has the potential to expose customers' direct deposit accounts which don't have the same limited exposure of a credit card.

Figure 14 For all mobile payment solutions, convenience and ease of use are the prime advantages



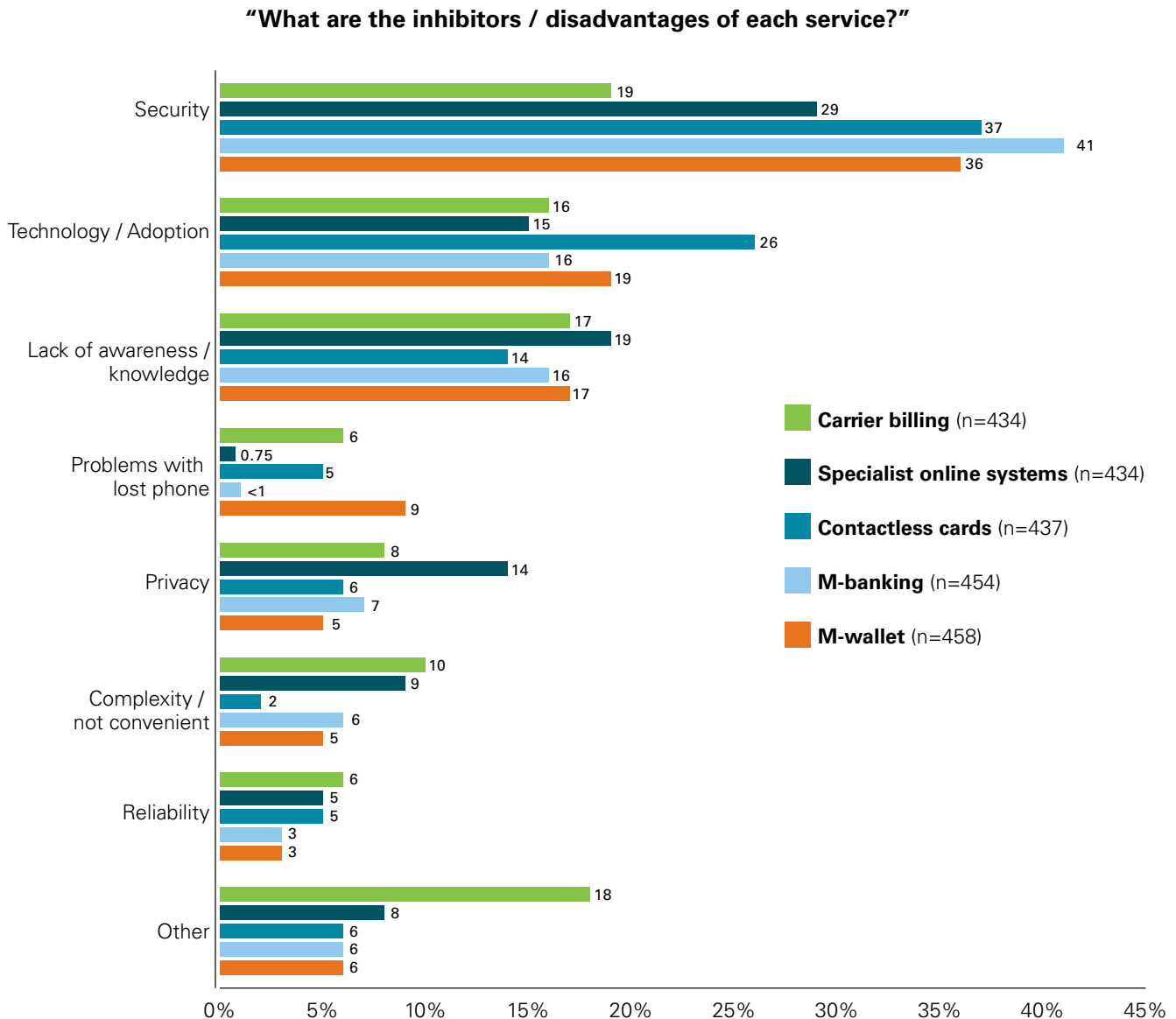
(Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

Beyond convenience and accessibility, mobile payments offer few advantages. Few respondents think that attributes like speed and control offer any meaningful advantage to consumers. Apparently vendors' claims that contactless solutions such as NFC offer superior security are not compelling.

There is the least agreement regarding carrier billing. Among all the payment solutions we asked about, carrier billing had the most varied responses. Almost half as many companies saw security as an inhibitor for carrier billing as did for contactless cards, yet the same percentage identified lack of awareness — for a system widely used globally for a variety of digital content purchases as well as charity donations — as did for m-wallet, a solution yet to move beyond the trial phase in many geographies.

Figure 15 Security is the greatest inhibitor, especially for m-banking and m-wallet



(Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

Handicapping the market participants

Finally, we asked companies about which industries would play an influential role as mobile payments roll out. While opinion was generally consistent about the most influential types of companies, the responses show that mobile payments will require cooperation and interoperability among many partners in order to gain traction. Specifically, we found that:

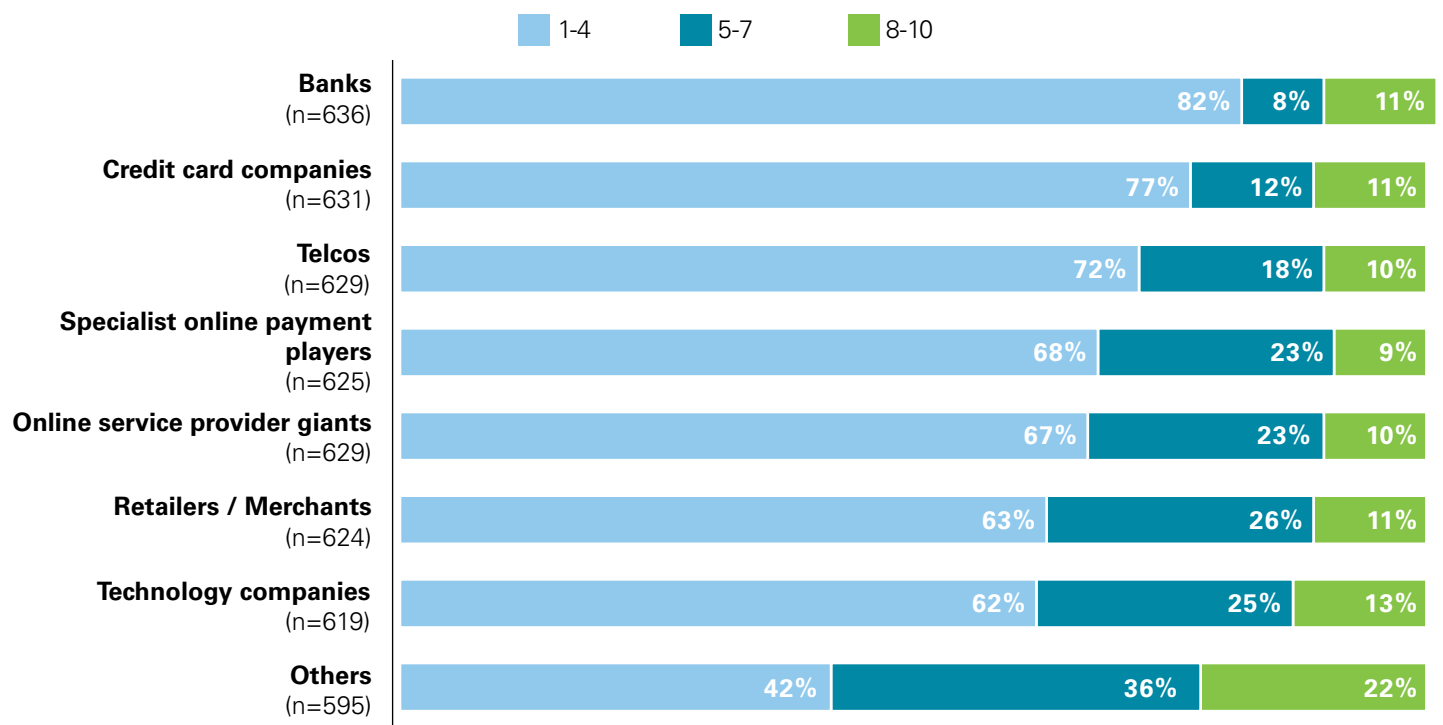
Respondents believe that banks and credit card companies will be most important. More than four in five respondents said that banks would play the most important role in mobile payments, and 77 percent identified credit card companies such as Visa and MasterCard (see Figure 16). This is realistic since these are the companies who dominate today's payment landscape. Given the key role of operators as both network and device enablers, one can easily understand the 72 percent that said telcos would play an important role.

Retailers and technology companies are seen as least important. We believe that respondents see retailers as more followers than leaders — highly influential from the standpoint of driving usage, but more typically awaiting a mass of enabled consumers before moving to adopt a new solution. And technology companies must convince the banks, credit card companies, and telcos of the viability of their solution, or will act as implementers once these leaders decide on the right technology solution.

Figure 16 Existing providers are most often cited as key role players in mobile payments

What categories of players are going to have the most important roles in mobile payments?

(10 point scale, 1=MOST important and 10=LEAST important)



(Values may not sum to 100% due to rounding)

Source: KPMG 2011 Mobile Payments Global Survey

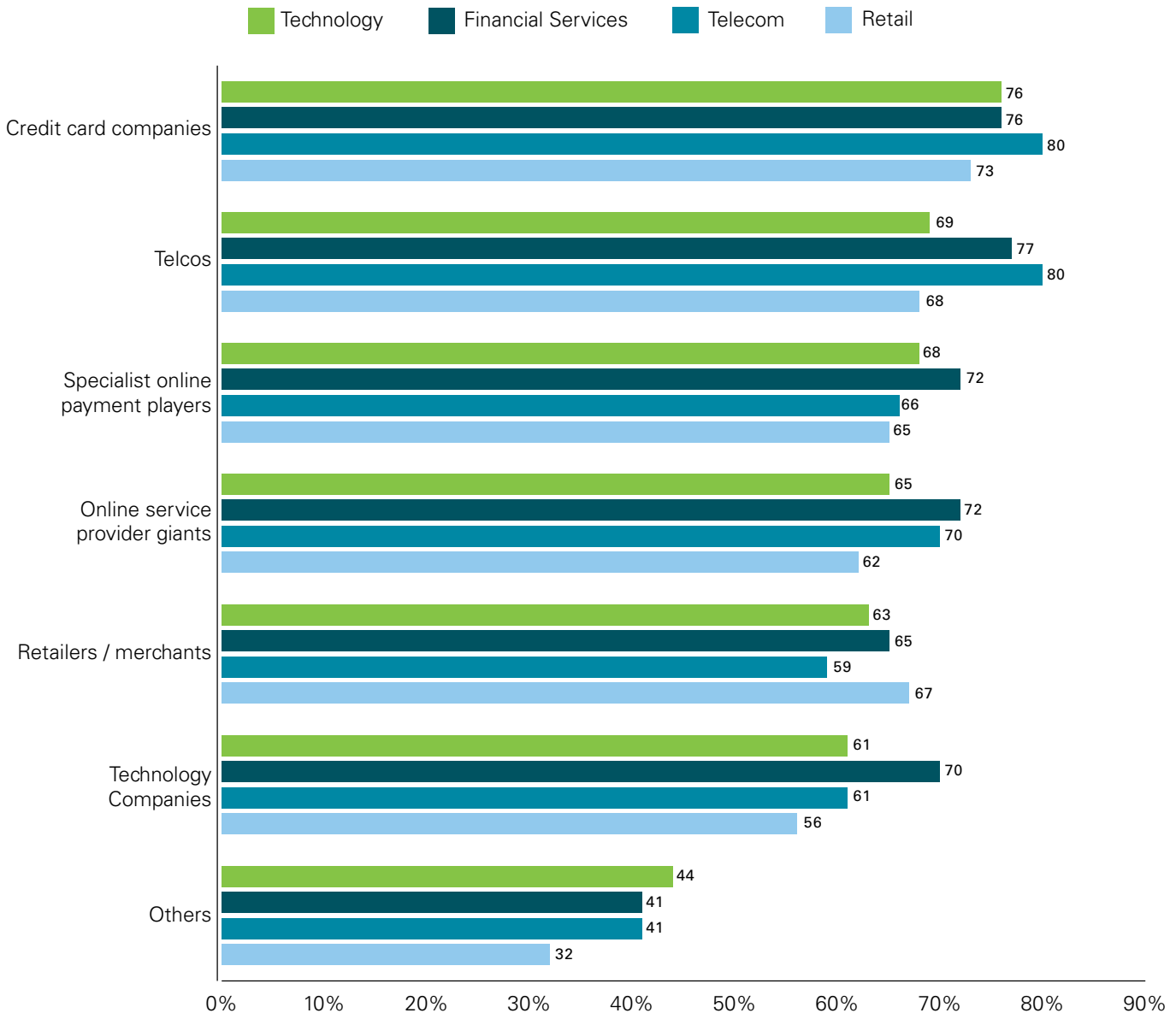
Each industry reflects its own bias. While companies generally agree on which industries will have the greatest influence on mobile payments' success, each industry has a bias of its own. For example, financial services firms identify banks as the most important, but almost uniformly also rate the relative importance of every other industry more highly than do others. Telecom providers recognize the influence of financial services, but rate their own influence more highly than do others.

All have a role to play. The fact that a majority of respondents identified every named industry category as having an important influence on the success of mobile payments shows that no single company or industry will dominate this market. Indeed, emerging models of cooperation such as that among AT&T, Verizon Wireless, and T-Mobile with Discover Financial Services to create the ISIS joint venture are more likely to breed success than will go-it-alone efforts.

Figure 17 Each industry's view of their role reflects their bias

What categories of players are going to have the most important roles in mobile payments?

(Those answering 1-4 on a 10 point scale, 1=MOST important and 10=LEAST important)



Source: KPMG 2011 Mobile Payments Global Survey

Conclusion

Both certainty and uncertainty prevail

Our research reveals that companies across a diverse range of industries and regions are casting an enthusiastic eye toward the opportunities that mobile payments will afford in the future. The majority of these companies have already established the strategy that they believe will allow them to capitalize on these opportunities. Yet this commitment to future opportunity is tinged with uncertainty regarding:

Timing. Companies are uniform in their opinion that the mobile payments market is nascent, but opinions vary on how quickly the market will move into the mainstream.

Form. The answer to “when will mobile payments be widespread?” seems like a certainty in contrast to describing “the form that mobile payments will take.”

Opportunities vary by industry and region

One surprising result of our survey is the extent of agreement across both industries and geographies. As stated above, this speaks to the consensus regarding mobile payments as an opportunity for players across the value chain of commerce. However, while the companies we surveyed may give the same answers, we believe that each is seeing the opportunities differently, and that a meaningful distinction will emerge across regions. Specifically:

Economic development matters where geographic

location does not. The mobile payments opportunity in the US has little to do with the corresponding prospect in a country like Kenya, not because of geography but because of the extent to which money is electronic. In the US, where card issuers, processors, and payment networks compete for a percentage of transaction flows, mobile payments must satisfy an as-yet-unproven need: greater convenience. In cash economies like Kenya, mobile payments reduce friction in the economy, enable remote payments, increase savings, and improve efficiency — not just for payment providers and the other participants in the flow of commerce, but also to the government.

Upstarts see gold everywhere. Technology innovators such as Zong focused initially on enabling mobile payments in the virtual world via partners like Facebook, but see the opportunity to migrate to the physical world on the very near horizon.^{vi} Google’s Wallet solution promises convenience and simplicity for consumers. More importantly, it connects its Offers solution, tying the Wallet into the entirety of the commerce experience — including promotions and loyalty solutions. With mobile payments, PayPal sees a clear path to extend its services beyond the online world. While it’s hard to consider behemoths like Vodafone and Orange as upstarts, mobile payments certainly casts them in that role — at least, in the physical world.

While incumbents play offense and defense. In developed markets alternative mobile payment solutions such as PayPal represent a highly disruptive threat to the incumbent financial services players. If consumers embrace PayPal transactions at the point of sale via a mobile wallet, funded directly through a bank account and transferred via ACH, the result would be disastrous not only for credit card networks like MasterCard, but also its issuers and merchant acquiring banks. Not only in lost revenue from existing transactions, but also the revenue these companies hope to gain in displacing cash. As a defense, Visa is building its own Wallet software, initially targeted toward online transactions (and PayPal) but clearly aimed at mobile in the future. At the same time, the company is moving aggressively to establish its presence in developing markets where its share of transactions is low: in June 2011 Visa announced its acquisition of Fundamo, the platform behind mobile payments solutions in more than 40 countries including those in Africa, Asia, and the Middle East.

Partnerships and co-opetition will be key to success.

Our survey respondents’ responses reflect the complex environment that mobile payments represents. The collision between gargantuan financial services and telecom entities is already potentially earth-shaking, but the introduction of technology providers such as Google, Apple, and Qualcomm into the market reflects the significant opportunity that mobile payments represent. While each of these players aims to secure the greatest influence and attendant market share in the space, co-opetition is the most likely path to success. Partnerships such as Google has struck with Sprint, Citi, MasterCard, and FirstData are emblematic of what it will take to succeed and establish dominance.

ⁱ Please see <http://www.npci.org.in/aboutimps.aspx> for more details.

ⁱⁱ http://www.safaricom.co.ke/fileadmin/M-PESA/Documents/Press_release/M-KESHO-phone-banking-services.pdf

ⁱⁱⁱ MTN presentation at Mobile Money Rio

^{iv} <http://dealbook.nytimes.com/2011/06/29/unprofitable-square-valued-at-1-6-billion/>

^v The number of respondents for any question is indicated by the “base” or “n-size” in the figure showing data from that question

^{vi} <http://allthingsd.com/20110214/zong-sees-mobile-payments-coming-for-physical-goods-sooner-than-you-think/>



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