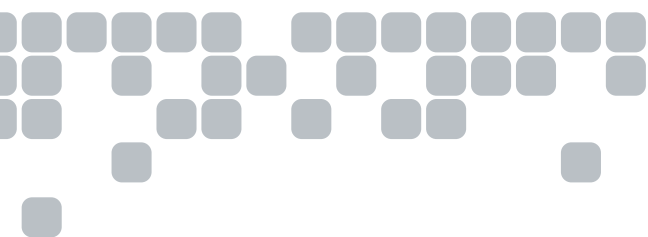




2016 U.K. Consumer Payment Study





“Without tradition, [payment] is a flock of sheep without a shepherd. Without innovation, it is a corpse.”

*– Winston Churchill**

**Well, he said “art,” but you get the idea.*

Welcome

TSYS® is pleased to present the results of its second annual U.K. Consumer Payment Study. This year the report compares key consumer payment topics with those of the previous year. Moreover, we also address some new topics that are currently being discussed in the industry - such as peer-to-peer payments (P2P), m-payments and virtual currencies. We believe that this new information on popular industry topics makes the report an informative tool that will contribute to industry discussion.

In this edition of the survey, we focus on the following key questions:

- From an end-user perspective, what has changed from last year in relation to instalments, account control options and banking security services?
- Do consumers use contactless payments? If so, what are their impressions?
- What is the level of consumer awareness on emerging payment topics like virtual currencies, P2P and m-payments?

The study examines consumer trends in order to predict future consumer behaviour changes in terms of payment technology. Furthermore, it attempts to reach conclusions regarding the end-user’s perception of emerging payment trends.

We hope you enjoy our 2016 U.K. consumer payment study and its interactive contents. Visit us at www.tsys.com for more information, including access to additional research.



Morgan Beard
Strategic Marketing Director

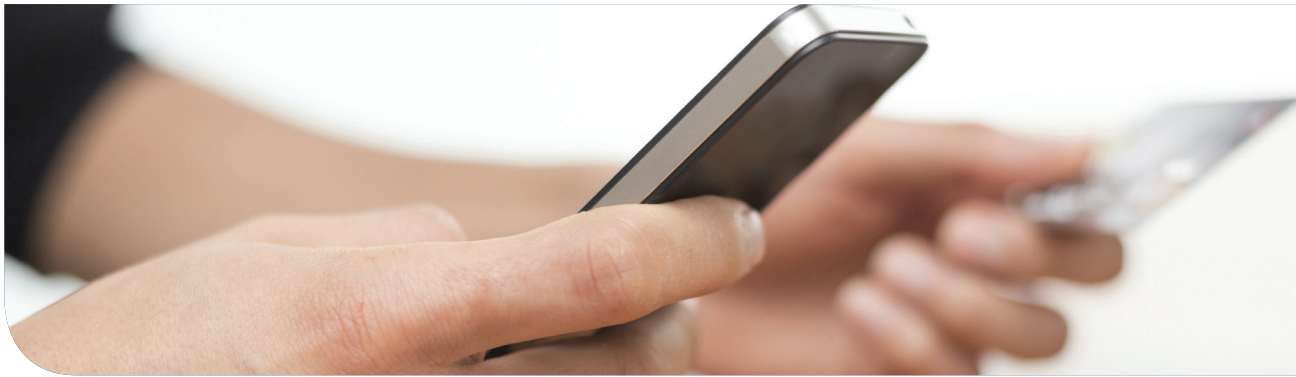


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I. INTRODUCTION

The payment sector plays a crucial role in the European banking environment. It has been calculated that a quarter (£99 billion) of the total European banking revenue for 2016 will come from retail payments¹. With the advent of new payment methods such as m-payments, P2P and the rapidly developing trend of contactless payments, the payment scenario is set to radically change in the coming years. The *Financial Times*² reports that the number of cash transactions made in Britain has recently dropped by 4 percent, due to an increase in the use of digital services and alternative payment methods.

After a slow start, contactless payments have broken through into the mainstream. According to RBR³, at the end of 2014, the number of contactless cards issued in Europe totalled 223 million. This represents an increase of 60 percent in comparison to 2013. Looking ahead, RBR forecasts a 20 percent CAGR through 2020 for contactless cards issued. In 2015 the U.K. eclipsed 78.3 million issued contactless cards, with contactless card usage having increased by 238 percent over the previous year⁴.

The U.K. was one of the first European countries to actively embrace m-payments with the launch of Apple Pay in July 2015. Our 2015 market research on m-payments⁵ shows that the behaviour of U.K. consumers is likely to change over the next few years. Moreover, regulators have faulted the dominance of the banks in the payments environment as a likely inhibitor to innovation, and they believe that it negatively impacts customer outcomes and experiences. The new regulatory framework intends to foster an environment in which non-bank disruptors in the FinTech community increasingly bring value-added initiatives to payment and financial products, paving the way toward increased innovation within the payments ecosystem. All of these factors have started to change and will continue to shape the way consumers pay, shop and engage with the retail and financial ecosystems, creating new value propositions throughout the sector.

The digital payment revolution is still in its infancy. However, the potential within this dynamic arena is encouraging. It highlights a need for stakeholders to listen to the consumer's voice – a key step to developing customer-centric strategies that will address concerns related to security and create a seamless payment experience.

In summary, the increase in consumer payment choices will lead to the creation of more opportunity within the payments ecosystem. However, the new digital payment revolution will need to be monitored for issuers to proactively engage in new innovative market trends and meet the evolving needs of consumers. Our survey provides new market insights into consumers' current behaviour, attitudes and concerns about emerging trends in the field of payments.

II. ABOUT THE STUDY

Our quantitative market research is based on an online survey of 500 U.K. residents. The respondents displayed diverse socio-demographics, including gender, age, income, occupational status and level of education. We required that the respondents be at least 18 years old, reside in the U.K. and own at least one credit card and one debit card. We can say with 95 percent confidence that our sample size adequately represents the approximately 32 million-person U.K. population with a sample error of +/- 4.5 percent that meet these criteria.

We asked payment-specific questions to comprehend consumers' attitudes, preferences and perceptions regarding the aforementioned payment topics.

¹ Deloitte (2015). *The emerging challenge for European retail banks*. [Online]. Available at: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financial-services/deloitte-uk-payments-disrupted-2015.pdf> [Accessed 15 December 2015]

² Dunkley, E. (2015). *Cash on the wane in UK as plastic powers ahead*. [Online]. *Financial Times*. 11 December 2015. Available at: <http://www.ft.com/cms/s/0/59692942-9f5a-11e5-beba-5e33e2b79e46.html#axzz3uyn2hPzx> [Accessed 22 December 2015]

³ RBR (2015). *Contactless cards achieve breakthrough in Europe*. [Online]. *Retailing Banking Research*. 8 December 2015. Available at: http://www.rbrlondon.com/about/GC20_Press_Release_081215.pdf [Accessed 22 December 2015]

⁴ The UK card association (2015). *Contactless Statistics*. [Online]. November 2015. Available at: http://www.theukcardsassociation.org.uk/contactless_contactless_statistics/index.asp [Accessed 28 January 2016]

⁵ TSYS (2015). *2015 U.K. Consumer Mobile Payment Study*. [Online]. TSYS International. Available at: http://tsys.com/Assets/TSYS/downloads/rs_2015-uk-consumer-mobile-payment-study.pdf [Accessed 20 December 2015]

III. SUMMARY OF STUDY'S KEY FINDINGS



a. U.K. consumers indicated that they would like access to tools that allow them to proactively monitor, track and manage specific functionalities of their accounts.



e. M-payment usage could grow in the short term if consumers were better informed about the benefits of tokenisation.



b. U.K. respondents consider the idea of paying in instalments as a valuable proposition with a substantial increase in terms of perceived value in comparison to 2015.



f. P2P payments have a considerable awareness level and the usage level is relatively high.



c. The majority of respondents would like to self-determine the level of offers and discounts they receive from a merchant identified by their bank - and there was a slight increase in terms of perceived value for this service compared with 2015.



g. Among respondents, there is a moderate level of awareness of virtual currencies like Bitcoin. On the other hand, the usage level of these currencies is extremely low (close to zero). From the consumer viewpoint, the emerging trend has a low likelihood of significant growth in the short term.



d. Surveyed U.K. consumers confirmed the growing trend of contactless card usage. The convenience of not having to enter a PIN is the highest perceived benefit of contactless payments. Security is the overwhelming concern expressed by the majority of respondents.

Segmenting the Respondents by Digital Capability

As demographics are no longer sufficient to differentiate in an era where all have equal access to digital tools, we segmented our sample into three digital categories, reflecting the approach articulated by Everett Rogers. We will be using it as a predictive tool in order to make conclusions regarding emerging trends.

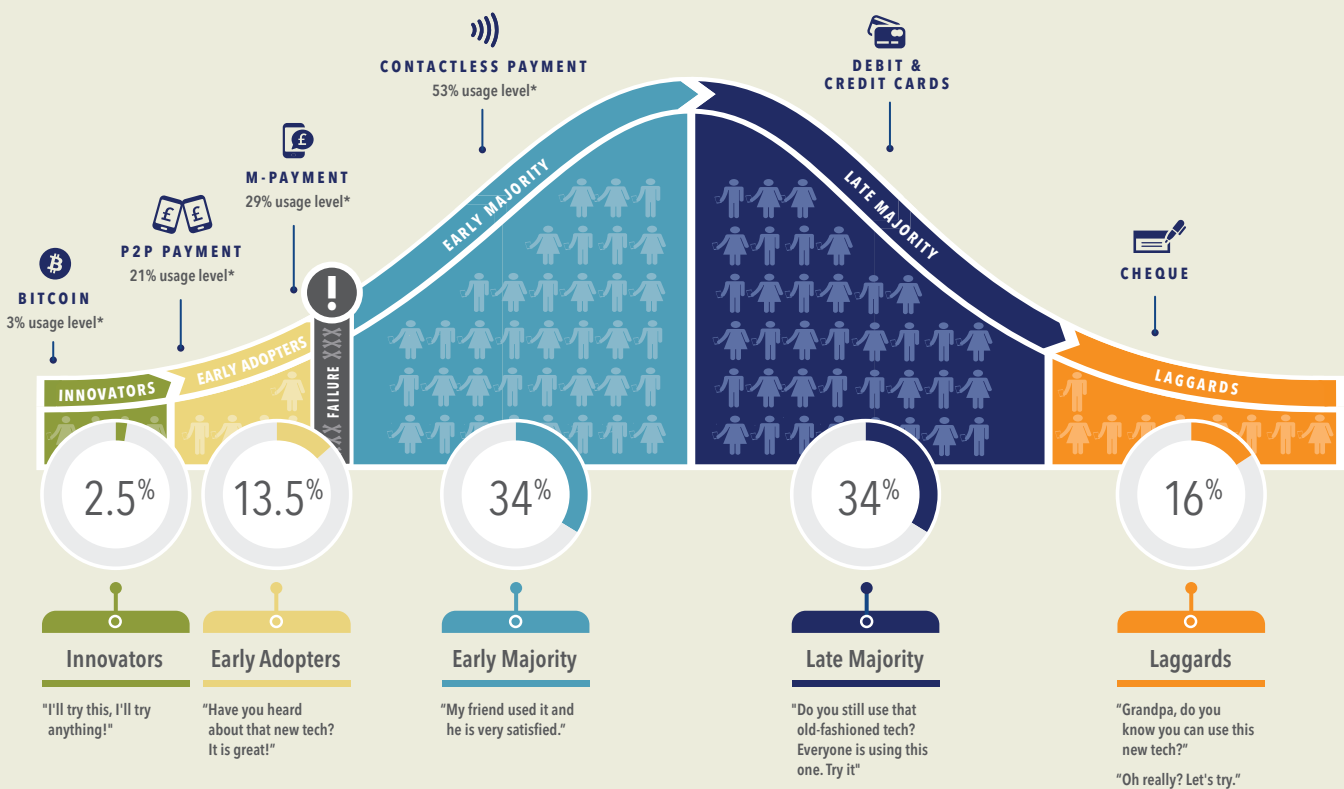
According to Rogers' diffusion of innovation theory⁶, there are five different types of technology adopters: Innovators, Early adopters, Early Majority, Late Majority and Laggards. For this study, we combined these groups to create three categories according to their usage of Retailer Apps:

- **Hyper Digitals** represent the "Innovators" and "Early Adopters" categories. These people are the first to use and value an innovation - helping to "diffuse" a new technology. In the context of our purpose, they are the respondents who use a retailer app daily or a few times a week.

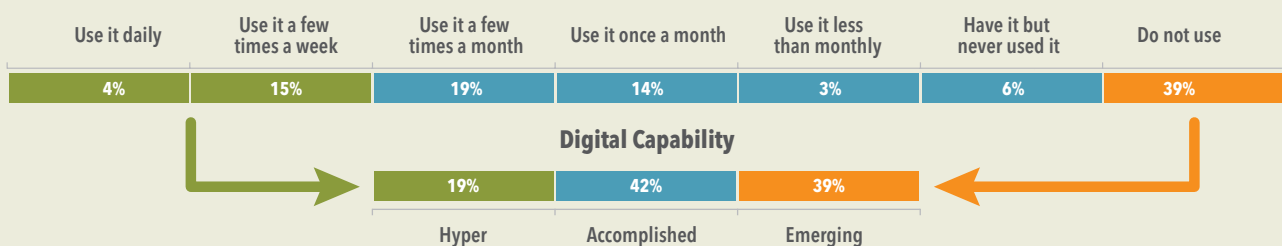
- **Accomplished Digitals** represent the "Early Majority" and "Late Majority" categories. This category follows the "Innovators" and "Early adopters" once the technological trend is growing. In our context, they are the respondents who use a retailer app from less than monthly to a few times a month.
- **Emerging Digitals** represent the "Laggards" category of Rogers' theory. This group is the last to try and potentially adopt a "new" technology. For the purposes of our research, they are the respondents who do not yet have a retailer app.

In sum, particular attention should be dedicated to Hyper Digitals as pioneers of new banking features. A positive user-experience among Hyper Digitals means other consumers ("Accomplished" and "Emerging") are likely to follow the trend, thanks to the recognised link between customer satisfaction, retention and word-of-mouth advocacy.

Rogers Diffusion of Innovation: Adopter Categories



Please select the option that best describes your usage of Retailer Apps (E.g. Amazon, Tesco, Argos, and Morrison)



⁶ Rogers, E.M. (2003). Diffusion of innovations (5th ed.). New York: Free Press.

*Source: 2016 TSYS U.K. Consumer Payments Study

2016 U.K. Consumer Payment Study

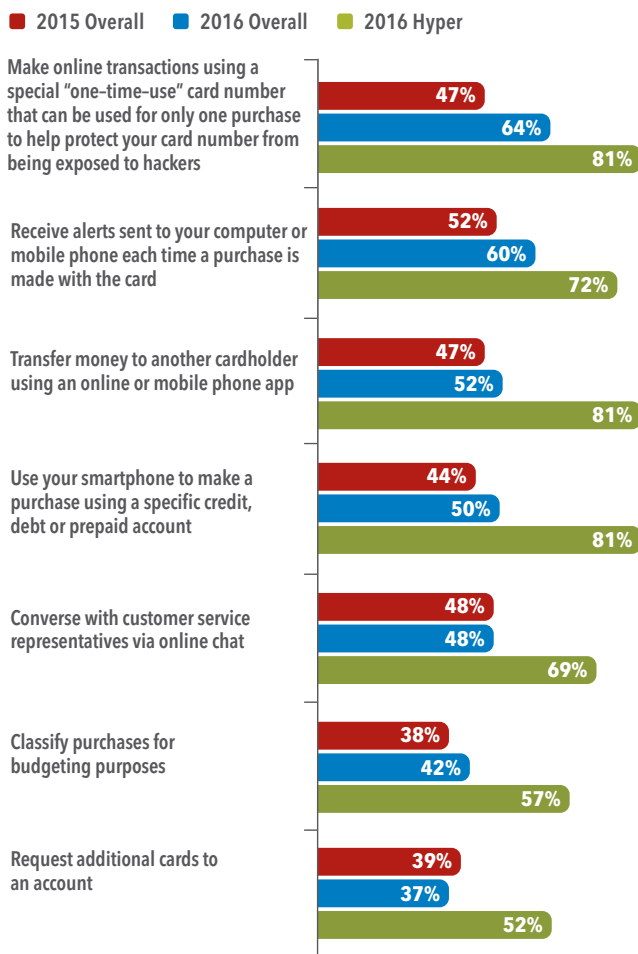
1. Self-Direction & Preference Management

Self-direction through mobile and online applications allows cardholders to remotely manage their payment card functionality. Similarly, preference management is about allowing cardholders to self-select engagement levels, including frequency and channels. Overall, both descriptors refer to the cardholder's ability and/or desire to self-select their level of management and engagement through specific banking functionalities.

In this section, we explore consumers' preferences regarding self-direction and preference management by investigating which features the respondents said they would like to have, in comparison to those that they had been interested in during the previous year.

Payment card programs (Debit, Credit, and Prepaid) can sometimes be made more valuable because of features added by the financial institution or merchant. On a scale from (1) "not at all valuable" to (7) "extremely valuable", please rate the following capabilities in terms of how useful they would be to you.

Graph 1



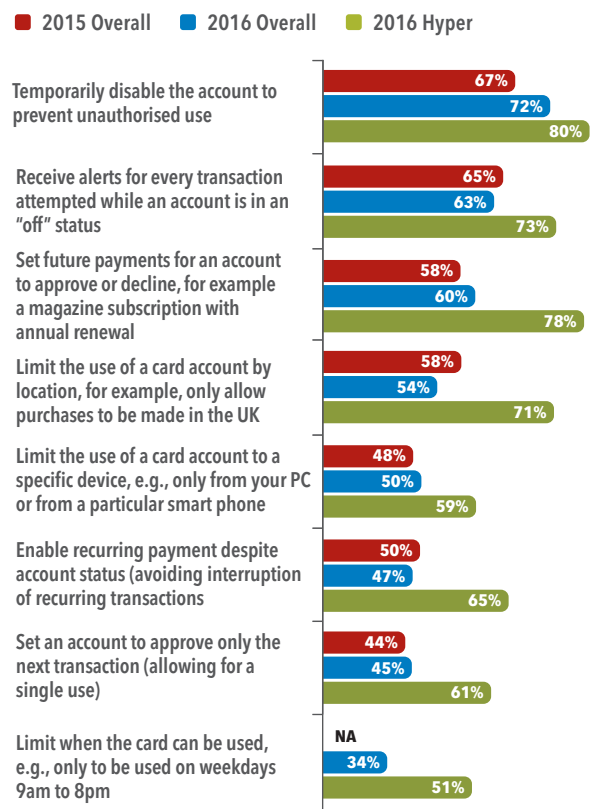
*Percent responding as most valuable (Top three of seven ratings)

Taking into account the results of the previous year, we anticipated a high popularity of features related to fraud protection, such as the ability to make online transactions using "one-time" cards and the option to receive alerts when a transaction is made. We found that they ranked in at 64 and 60 percent, respectively. The aforementioned options also witnessed a significant increase (up 17 and 8 percent respectively) in terms of perceived usefulness when compared to 2015. Within six months of Apple Pay entering the U.K. market, we see that potential functionalities offered by smartphones, such as the abilities to transfer money using a mobile app (52 percent) and to use a smartphone to make a purchase (50 percent), are becoming desirable features from a banking customer's point of view. In 2015, those mobile payment options ranked lower, at 47 and 44 percent respectively.

Finally, apart from having the ability to classify purchases for budgeting purposes – which saw an increase of four percent since the last survey – the responses were similar to 2015. The options to "converse with customer service representatives via online chat" and "request additional cards" received the lowest level of perceived value.

If you could limit how, when and where purchases were made on your card, how valuable would the following activities be? On a scale of (1) "not valuable" to (7) "extremely valuable", please rate the following capabilities.

Graph 2



*Percent responding as most valuable (Top 3 of seven ratings).

Among the self-direction choices offered, the ability to temporarily disable an account scored highest at 72 percent – an increase of five percent over the previous year.

At the other end of the spectrum are the figures for “the ability to limit the time when the card can be used” – a new question added this year – and “the ability to allow for a single use” which does not significantly vary in relation to 2015.

A significant portion of survey respondents found such self-direction features to be “Somewhat valuable”, “Very Valuable” or “Extremely valuable.” While there was no meaningful change from 2015 to 2016 for most capabilities, respondents continued to show a significant level of perceived value for the majority of the self-direction options provided, most noticeably reflected among the Hyper Digitals.

We then investigated preferences in terms of communication channels.

Please select your preferred communication channel when receiving notifications/offers from your bank.

Graph 3

Preferred Communication Channel for Banking Notifications/Offers

	2015	2016	Variation
Email	60%	60%	0%
Mail	26%	22%	-4%
SMS (text message)	10%	10%	0%
In person at a bank branch	NA	5%	NA
Phone call	4%	3%	-1%
Social Media (Facebook, Twitter, etc.)	0.4%	1%	0.6%

As shown in Graph 3, email, mail and SMS are the most-preferred communication channels, with little variance between the analysed years. The overwhelming majority of respondents prefer email as a communication channel.

How frequently would you like to receive communications from your bank?

Graph 4

Timing Preference for Banking Notifications/Offers

	2015	2016	Variation
Once a month	49%	52%	3%
I want the ability to decide how frequently my bank communicates with me	28%	23%	-5%
Once a week	17%	17%	0%
Once a year	4%	5%	1%
Never	2%	3%	1%

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Finally, we asked our sample of U.K. consumers how often they'd like to receive information from their banks. The majority of respondents – 52 percent – would prefer once-a-month communications. This figure may simply reflect cardholders' familiarity with monthly statements. On the other hand, 23 percent of respondents would prefer to take control and decide how frequently their bank communicates with them. Banks need to pay attention to cardholders who want the ability to decide the timing of banking notifications.

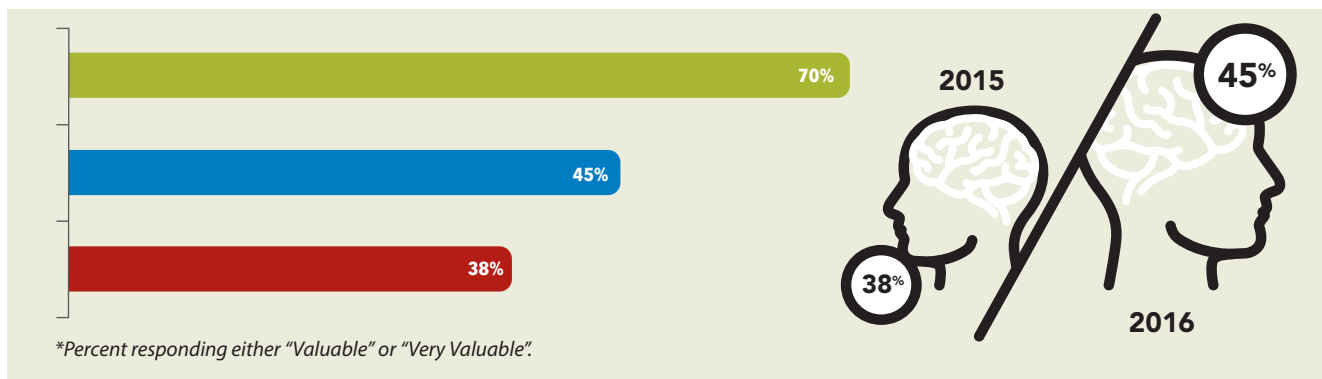
To summarise, respondents indicated that they like being provided with tools that allow them to proactively monitor, track and manage specific functionalities of their accounts. A number of these control and preference management options are currently of particular interest when provided via mobile capabilities.

When making a purchase, how valuable would an instalment choice be for you, for example, purchasing a £500 refrigerator and paying it off in monthly instalments of £100?

Graph 5

Perceived Value of Instalments

■ 2015 Overall ■ 2016 Overall ■ Hyper 2016

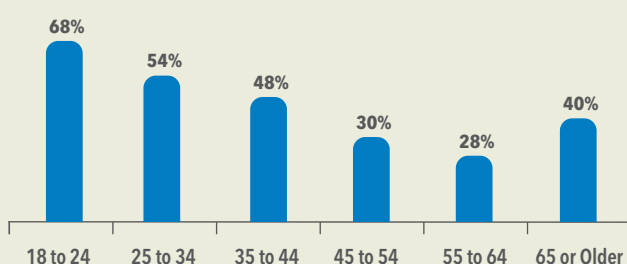


The U.K. consumer perception around instalments is encouraging. As reported in Graph 5, a significant portion of respondents consider the idea of paying in instalments an attractive proposition. In 2016 that proposition scored 45 percent, increasing by seven percent, a statistically significant increase over 2015. The graph is even more compelling when observed from the Hyper Digitals angle, in which 70 percent find it "Valuable" or "Extremely Valuable."

Whom to target? - Instalments-

Graph 6

Perceived Value of Instalments by Age



2. New Revenue Streams

With the European Multilateral Interchange Fees (MIF) regulation having upended the payment card revenue mix, issuers need to identify new revenues streams. Instalments and partnership marketing are two promising avenues for pursuing revenue not tied to MIF.

We investigated the extent that consumers would be interested in these banking services.

Instalments

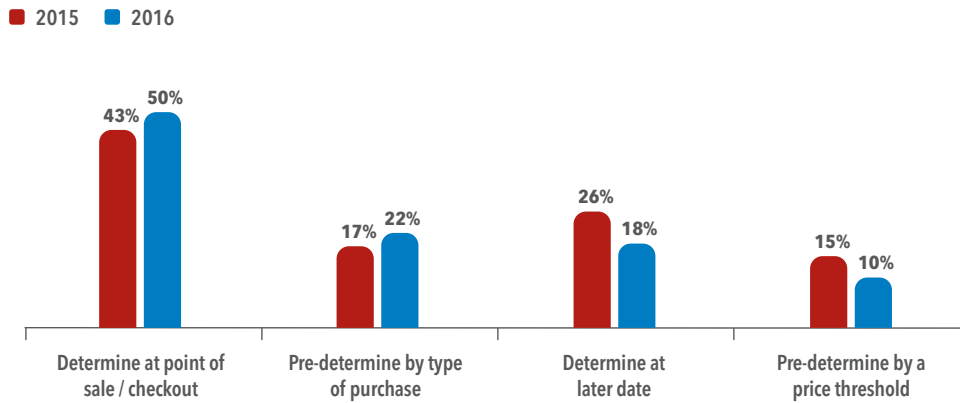
Instalments allow shoppers to split transactions across monthly payments using their existing cards. The product can have a significant impact in terms of high-value and unexpected purchases, such as TVs and car repairs, by making such expenditures more manageable.

We then went deeper with the analysis to identify the potential targets of an instalment service provider. Having looked across all socio-demographics, we found a significant level of association between the age of respondents and their propensity to find instalments "Valuable" or "Very Valuable." In other words, people who are interested in instalments tend to be younger. However, the 65 or older group bucks the trend. Perhaps fixed income makes instalments an attractive option for pensioners.

If deciding to pay for a purchase with instalments, when would you prefer to choose this feature?

Graph 7

Timing & Location Preference for Instalments



We asked the 45 percent of all respondents who found instalments “Valuable” or “Very Valuable” to tell us at which stage of the purchasing process they would like to select the instalments options. In 2016, 50 percent reported a preference for deciding at the point of sale, an increase of 7 percent over 2015.

Partnership Marketing

The main goal of partnership marketing programs is to enable issuers to deliver more value to cardholders by sending them merchant-sponsored offers tailored to each cardholder’s unique spending habits and preferences. Like instalments, the potential revenue streams from partnership marketing are not tied to MIF and can be an integral part of an issuer’s MIF-exposure mitigation strategy.

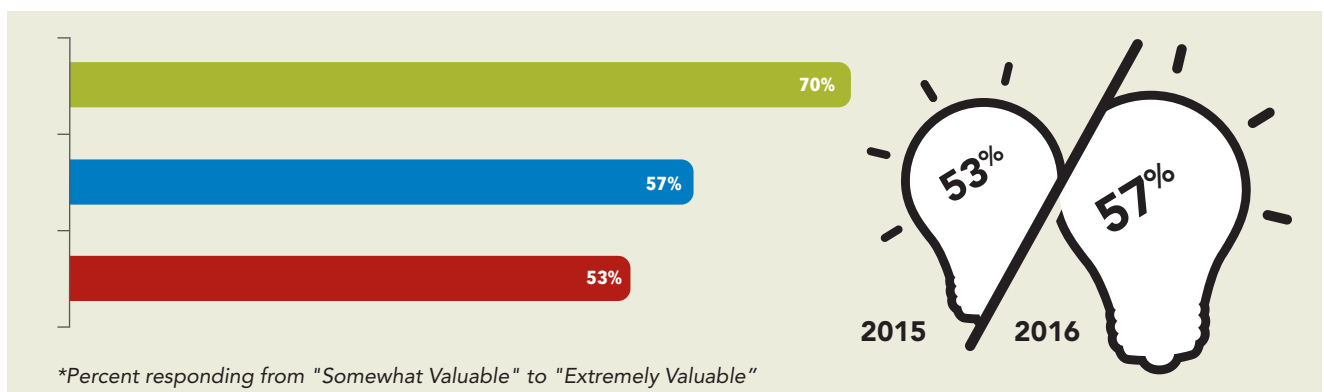
We asked respondents questions to measure attitudes toward partnership marketing.

If you could self-determine the level of offers and discounts you receive from a merchant identified by your bank, for example, how often you get offers for discounts at particular merchants, and what types of merchants are included, how useful / valuable would you consider this service on a scale of (1) “not Valuable” to (7) “Extremely Valuable”?

Graph 8

Perceived Value of Partnership Marketing

■ 2015 Overall ■ 2016 Overall ■ Hyper 2016



**Percent responding from “Somewhat Valuable” to “Extremely Valuable”*

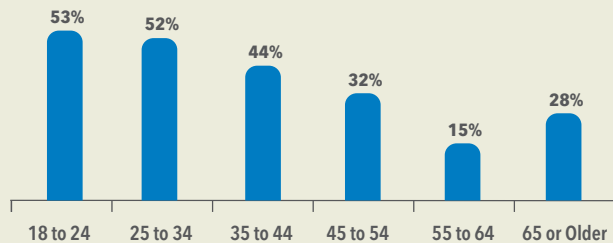
More than half of U.K. survey respondents found the ability to self-determine the frequency of offers and discounts they receive from a merchant identified by their bank as either “Somewhat Valuable”, “Very Valuable” or “Extremely Valuable.” This was an increase of 4 percent over 2015. Of great interest is the longer-term potential of this service – as suggested by the significant value that Hyper Digitals ascribe to partnership marketing.

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Whom to target with partnership marketing?

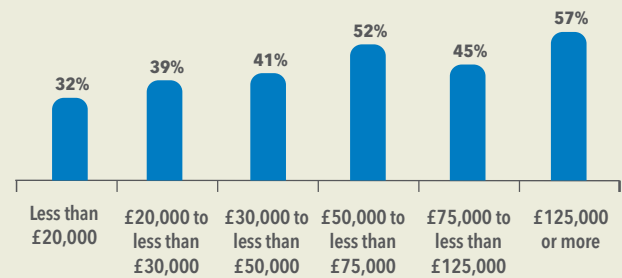
Graph 9

Partnership Marketing Perceived Value by Age



Graph 10

Partnership Marketing Perceived Value by Household Income



There is a significant level of association between the propensity of respondents to find partnership marketing from “Somewhat Valuable” to “Extremely Valuable” and only two socio-demographics, age and income. In simple terms, people who are interested in partnership marketing tend to be younger and have a higher income. For those banks pursuing younger cardholder and/or whose profitable portfolios tend to be wealthier, partnership marketing may be an attractive proposition.

3. Frictionless Cardholder Experience

Society’s payment habits are continuously changing, and consumers are becoming more comfortable with new technologies that can enhance the payment experience. For instance, contactless cards can reduce friction during the purchasing process. Another example is cardholders instantly receiving, in real time, new or replacement debit, credit or prepaid plastics in a branch or from retail outlets, corporate headquarters or even kiosks, with a self-select PIN process to enable immediate card use. It is clear that many elements of customer engagement play critical roles in making payments frictionless.

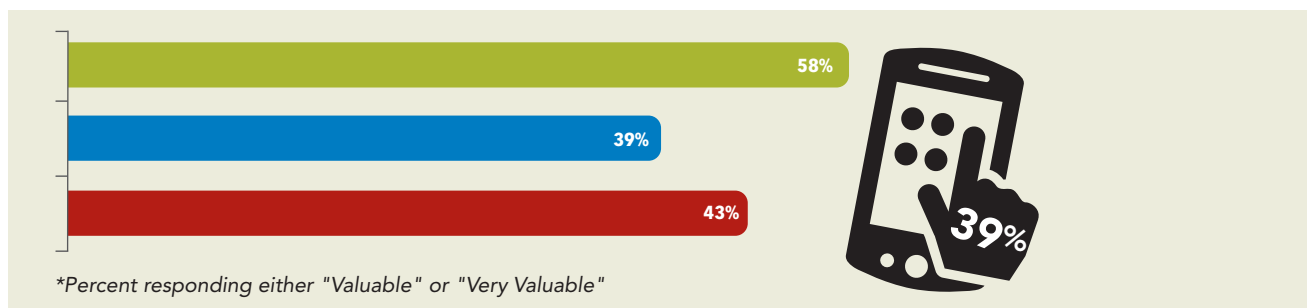
We investigated these aspects to gain insight into whether consumers are likely to appreciate new technologies or banking practices that allow them to make the cardholder experience seamless and frictionless.

If you were applying via your mobile phone, e.g., via a banking app, for a new credit/debit card, and you were given the option to receive your PIN electronically rather than receiving a paper PIN mailer, how valuable would you consider this service?

Graph 11

Perceived Value of PIN Sent Electronically

■ 2015 Overall ■ 2016 Overall ■ Hyper 2016



Electronic PIN management allows financial institutions to offer customers immediate PIN replacement through a variety of channels without the costs and delays associated with traditional, postal-delivered PIN solutions. Electronic PIN management addresses the increasing demand for paperless delivery methods, as well as heightened security concerns – allowing secure issuance of PIN codes via SMS, Web, app and IVR delivery. Almost 40 percent of respondents found this banking feature either “Valuable” or “Very Valuable.”

Through which channel would you prefer to receive your PIN electronically?

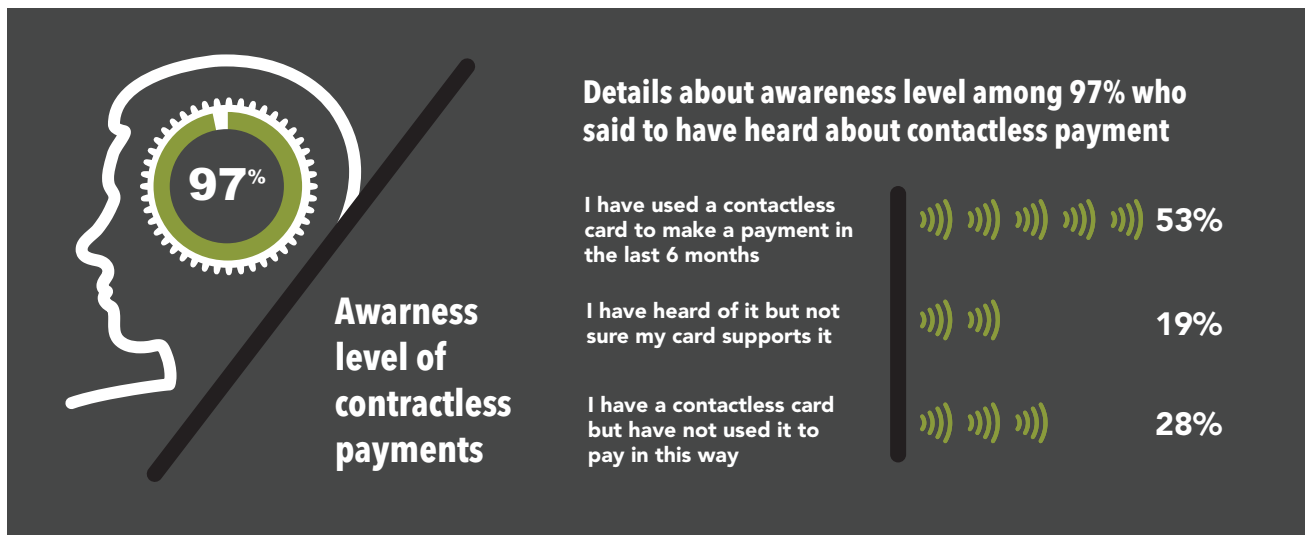
Graph 12
Preferred Communication Channel for Receiving PIN

	2015	2016	Variation
Online Banking	36%	43%	7%
SMS (text message)	42%	39%	-3%
Mobile App	16%	14%	-2%
IVR (incoming voice response, Incoming phone call)	6%	2%	-4%
ATM/Self-Service Kiosk	NA	2%	NA

We asked the 39 percent of respondents who found electronic PIN management to be “Valuable” or “Very Valuable” to indicate their preferred channel for receiving the electronic PIN. SMS and Online Banking are attractive channels for PIN management with the “Online Banking” option having increased by 7 percent compared to 2015.

Have you ever heard about Contactless Debit or Credit Cards?

Graph 13
Contactless Payment Awareness



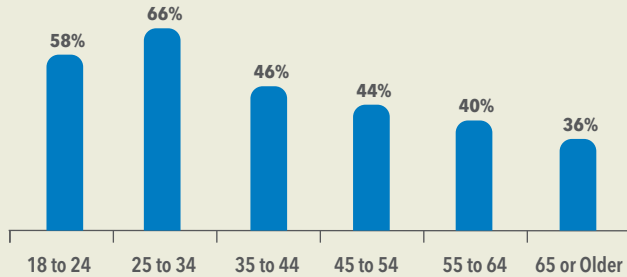
In this section, we look to identify both the level of awareness and actual usage of contactless payments. The overwhelming majority (97 percent) of respondents are aware of the possibility of paying using contactless capabilities. Among the 97 percent who have heard about contactless payments, 53 percent have used it to pay. Furthermore, almost 20 percent of respondents do not know if their cards allow it, and 28 percent are familiar with the concept but have not used contactless as a payment method.

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Whom to target? – Contactless Payment

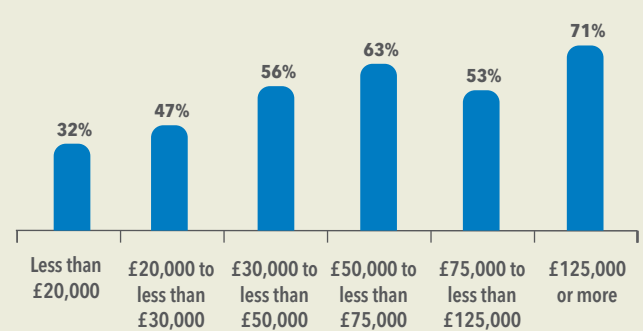
Graph 14

Contactless Usage Level by Age



Graph 15

Contactless Usage Level by Household Income

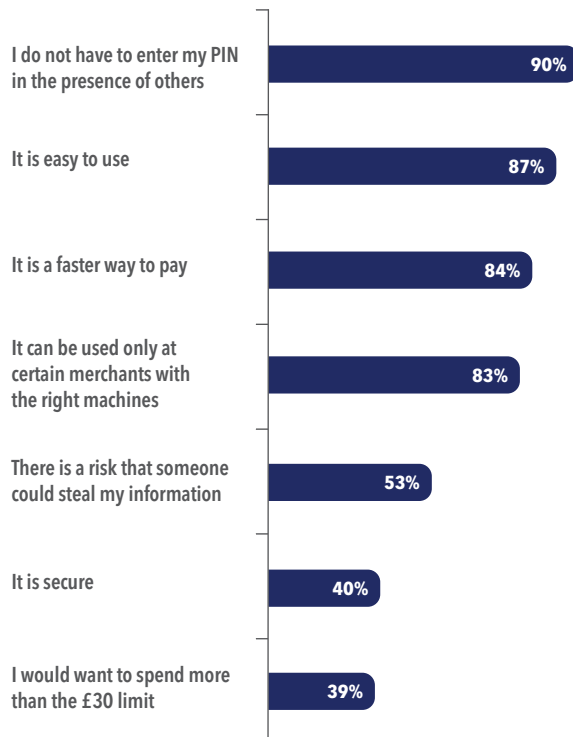


We applied a statistical analysis in order to identify the typical user profile of contactless card. There is a significant level of association between the usage of contactless card and only two socio-demographics, age and income. This means that younger people, especially the ones aged 25 to 34 years, and people with higher income are more interested in using contactless cards. We did not find any significant association with other socio-demographics such as gender, employment status and educational level. Contactless terminals are predominately deployed in London and the South of England, where household incomes tend to be higher also. This in large part can help explain the positive correlation between income and contactless usage.

Based on the previous description of how contactless payments work, to what extent would you agree with the following statements?

Graph 16

Perceived Benefits of Contactless Payments



*Percent responding either "Agree" or "Strongly Agree"

Finally, we asked consumers about the benefits they associate with contactless cards. The basic advantages of contactless are widely recognised: no PIN is needed (90 percent), ease of use (87 percent) and its speed at checkout (84 percent). However, 53 percent of respondents perceived a risk that personal information can be stolen during contactless usage, and only 40 percent believed it to be secure. Overall, our research can confirm that contactless cards have finally reached a breakthrough in the U.K. with a high awareness level and a considerable usage level. In the long term, the lack of adequate infrastructure outside greater London may discourage further adoption.

4. Emerging Payments

Payments are brimming with new technological advancements, each promising to create a more dynamic, efficient and cost-effective payment ecosystem. Highlights involve m-payments, P2P payments, and virtual currencies. New to the 2016 edition of the U.K. consumer payments study, this emerging payments section provides insight into the extent to which end-users are ready to embrace these innovative payment methods.

In order to ensure that respondents would have a consistent understanding, we provided definitions and explanatory videos regarding the topics.

This section explores:

- i. M-payments and tokenisation
- ii. P2P payments and lending
- iii. Virtual currencies

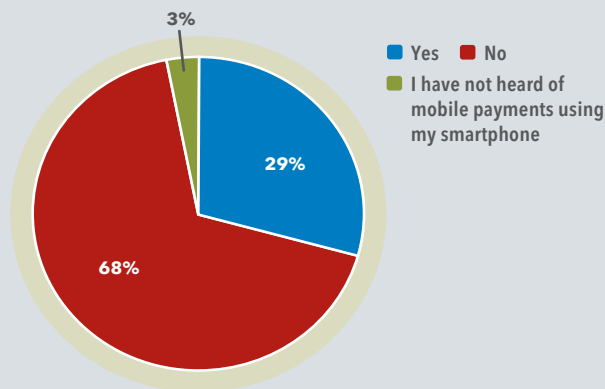
i) M-payments and tokenisation

In this section, we explore the behaviour and attitudes of U.K. consumers in the area of m-payments and tokenisation. In our survey we focused exclusively on m-payments made in-store, as opposed to in-app.

Have you made a mobile payment in-store using your smartphone in the last month?

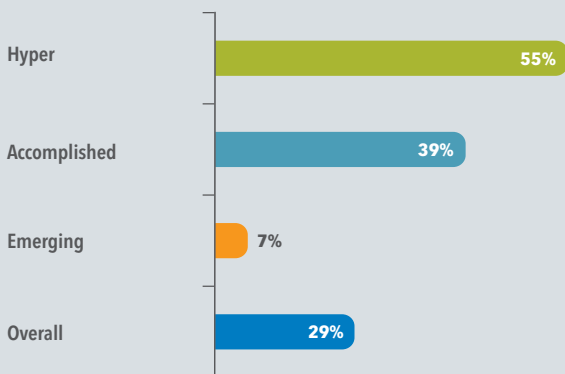
Graph 17

M-Payments In-Store Usage and Awareness Level



Graph 18

Usage of M-payments Across Digital Categories



When considering the surprisingly high 29 percent of respondents that reported having made an m-payment in the last month, a couple of factors regarding the survey samples must be considered. First, the screening questions limited responses to those holding a debit card, a credit card and a mobile phone. Second, the nature of online surveys requires a minimal proficiency in computer usage.

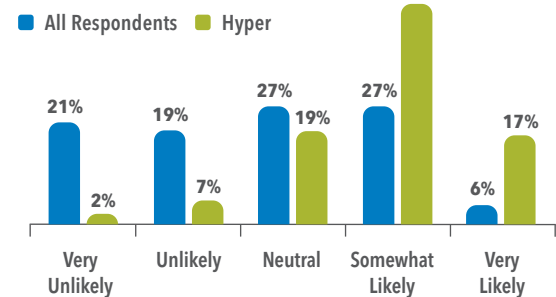
When these factors are combined, the makeup of the respondents naturally tends to be younger overall than the population at large. This is shown in Graph 27 comparing the age distribution of this sample to the population of the U.K. at large. Graph 18 shows, as anticipated, how the Hyper Digitals have the highest percentage of usage (55 percent), followed by the Accomplished and Emerging categories with 39 and 7 percent respectively.

We then wanted to explore the role that security concerns play in the reluctance of respondents to use m-payments. We showed a brief explanatory video of the security features of tokenisation-enabled m-payments.

Based on the video, if that security technology was in place, how likely would you be to use a smartphone to make a mobile payment in future?

Graph 19

Level of Propensity Among 71% Who Did Not Use M-Payments After Knowing More About the Security Behind Them



After receiving more information on the benefits of tokenisation, 33 percent of respondents who did not use m-payments indicated that they would be "Somewhat Likely" or "Very Likely" to utilise them.

While better educating cardholders on the security features of m-payments would likely drive further adoption, m-payments will not reach full potential without delivering more significant value propositions to spur widespread migration from physical cards. Loyalty programmes and laser-focused offerings from merchants to enhance cardholders' lifestyles are examples of the extra value needed to persuade the later adopters.

ii) P2P payment and lending

P2P payments allow people to transfer money more efficiently and at lower cost, eliminating the need to go to a money transfer agency, remember a cheque book or find an ATM. Business Insider forecasts a global CAGR of 45-50 percent between 2016 and 2018 for the market of P2P transfers and remittances. This represents a potential global market value of almost £700 billion⁷.

⁷ Heggestuen, J. (2015). THE PEER-TO-PEER PAYMENTS REPORT: The exploding market for smartphone apps that transfer money. Business Insider UK. 11 May 2015. [Online] Available at: <http://uk.businessinsider.com/growth-in-peer-to-peer-payment-apps-report-2015-4?r=US&IR=T> [Accessed 31 January 2015]

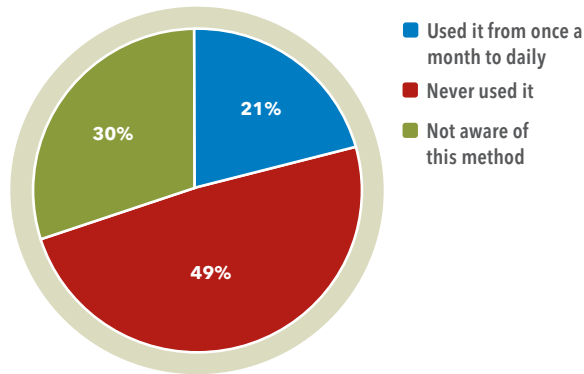
2016 U.K. Consumer Payment Study

With regard to the survey questions related to P2P payments, we defined the capability as a method allowing cardholders to transfer funds from their bank account or credit card to another individual's account via the Internet or a mobile phone.

How often do you make a payment to another person using a peer-to-peer mobile or online application?

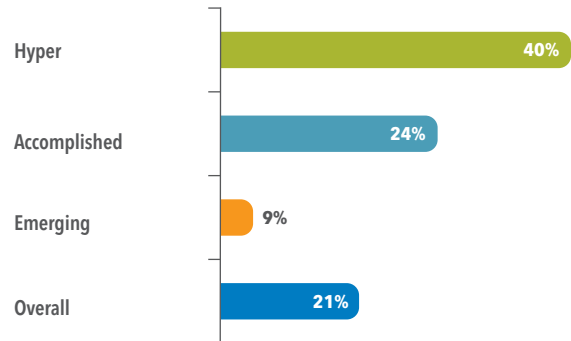
Graph 20

Usage & Awareness Level



Graph 21

Usage of P2P Payments Across Digital Adoption Segments



Level of Satisfaction Among 21 Percent Who Reported Having Used P2P Payments*



*Respondents reporting "Poor" or "Very Poor" satisfaction totaled 0%

Thirty percent of respondents reported that they were not aware of this method. The remaining 70 percent of respondents said they knew of P2P payments, with 21 percent claiming to have used it at least monthly. Again, Hyper Digitals lead the way in being the most active users of this technology.

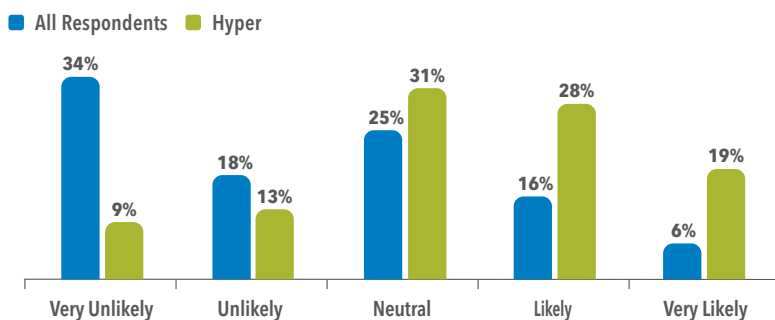
While the vast majority have not used P2P payments, those who did were very satisfied. Eighty-six percent of respondents who made a P2P payment reported a good to excellent level of satisfaction – and only 13 percent reported an "average" experience.

After providing a video and definition of P2P payments to those who had not used them, we investigated their propensity to do so in the next month.

After watching the video and reading the definition of P2P payments, how likely would you be to use P2P payments in the next month?

Graph 22

Short-Term Propensity Toward P2P Payments



We expected more respondents to express interest in using P2P payments after our further explanation. Surprisingly, respondents reported a consistently low level of likelihood to use P2P payment (22 percent).

P2P lending, as opposed to P2P payments, connects borrowers with investors. Statista forecasts that P2P lending will grow at a CAGR of 32 percent between 2015 and 2025⁸.

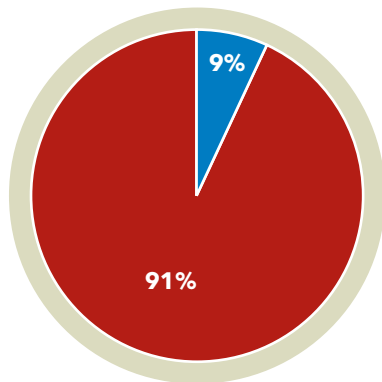
In our survey we described P2P lending as the practice of lending money to unrelated individuals, or “peers,” without going through a traditional financial intermediary such as a bank. For example, we explained P2P lending could help borrowers obtain a loan despite a low credit score, while providing a benefit to lenders through a better market return rate.

Have you already lent or borrowed money via one or more P2P lending platforms last year?

Graph 23

P2P Lending Usage Level

■ Yes ■ No

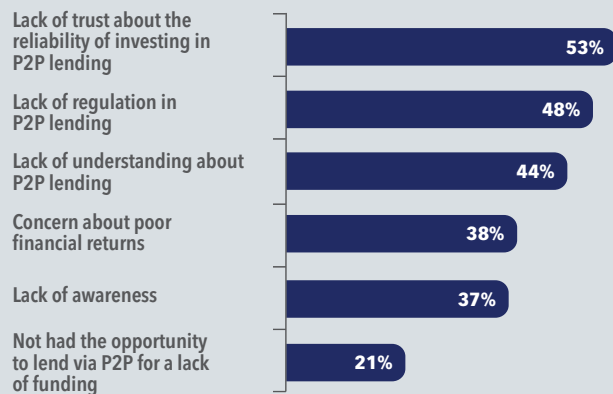


We wanted to understand why the overwhelming majority of respondents (91 percent) have not borrowed or lent money via P2P lending platforms.

How influential are the following in your choice to not lend or borrow via P2P networks?

Graph 24

P2P Lending Consumers’ Inhibitors



*Percent responding from “Influential” to “Extremely Influential”

We expected the main reason for low P2P lending usage to be a simple lack of awareness. However, respondents reported that a lack of awareness – at 37 percent – was not, in fact, the main reason. “Lack of trust about the reliability” (53 percent), “Lack of regulation” (48 percent) and “Lack of understanding” (44 percent) were actually the top-three reasons. At the other end of the spectrum, only 21 percent of respondents stated that they had not lent money through a P2P platform because of a lack of funding.

There is currently a high level of concern in the P2P lending space regarding reliability and lack of regulatory oversight, but prospective lenders and borrowers may feel more comfortable with these services as the players’ reputations grow. This will be a fascinating space to observe in 2016, and we’re very interested to see how this trend develops. In the meantime, established banks should continue to monitor these lending platforms to determine how they can leverage the technology and combine it with their elevated position of consumer trust.

iii) Virtual currencies

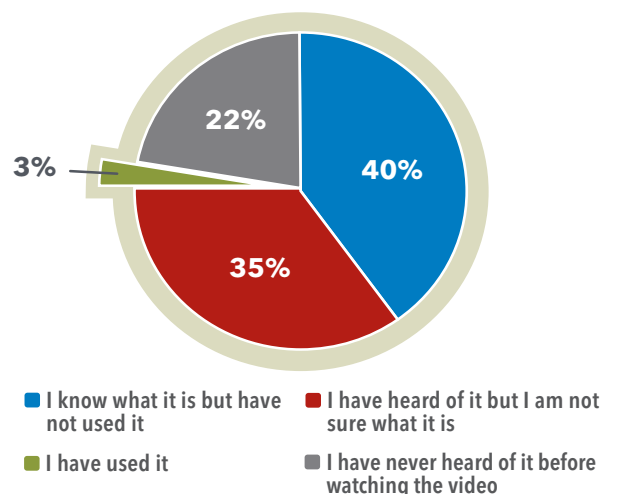
The digital/crypto-currencies such as Bitcoin have been on the tip of everyone’s tongues in the payments realm in recent years, but how aware is the average consumer of these influential innovations?

After showing an explanatory video and written definition to respondents, we wanted to investigate consumer awareness and general attitudes toward Bitcoin through the survey.

How familiar are you with virtual currencies such as Bitcoin?

Graph 25

Virtual Currency Awareness and Usage Level



⁸Statista, (2016). Value of global peer to peer lending from 2012 to 2025 (in billion U.S. dollars). [Online] Available at: <http://www.statista.com/statistics/325902/global-p2p-lending/> [Accessed 31 January 2015]

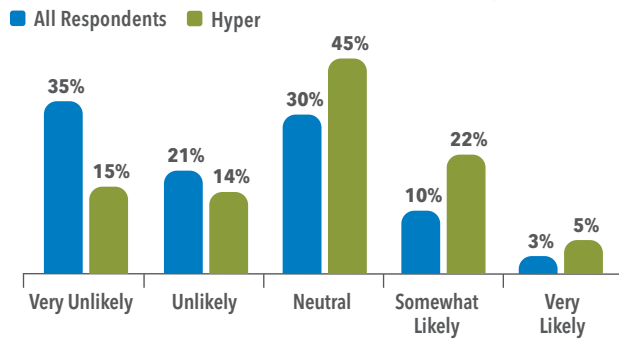
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Fifty-seven percent of respondents reported to either be unaware of virtual currency or unsure of what it is. Astonishingly, a full 3 percent reported having used it. Given the +/-4.5 percent margin of error on our sample size, however, the true population may very well have a much smaller usage – perhaps approaching zero.

Having inquired about the familiarity of the respondents with virtual currencies, we next looked to glean an understanding of their attitudes toward it.

How likely would you be to use Bitcoin or any other virtual currency in the next year?

Graph 26
Level of Usage Propensity in the Next Year Among 97% Who Did Not Use a Virtual Currency



Among the 97 percent of respondents who did not use a virtual currency (Graph 26), 13 percent indicated that they were “Somewhat Likely” or “Very Likely” to use one next year – which would represent a significant increase over the respondents who claimed to have used it to date. Much more so than P2P activities, Bitcoin looks set to remain a niche player in the near-term from a consumer-proposition perspective.

IV. IMPLICATION FOR ISSUERS

1) Cooperation is key. Aside from an understanding of consumer desires and opinions, cooperation among the banking industry, the FinTech community and other participants in the payments space will also be essential in the proliferation of new electronic payment technologies. This has shown to be true so far, but the scale of cooperation must increase.

For instance, in Denmark the cooperation between Verifone, a technology provider for POS terminals, and Swipp, the leading Danish mobile payment app, has helped to promote the usage of m-payments through a mobile payment app based on Bluetooth Low Energy (BLE) technology. The partnership will allow more than 800,000 Danes who currently use Swipp to use mobile payments in-store on a day-to-day basis, as currently more than 50 percent of all terminals in Denmark are supplied by Verifone.

Furthermore, in Sweden, merchants have the ability to decline cash from customers in order to incent the usage of non-cash payment methods.

These examples demonstrate the importance of cooperation across the payments landscape in facilitating consumer conversion to cashless payment methods.

2) Issuers should pay attention to early adopters.

According to Rogers’ diffusion of innovation theory (See page 5), about 16 percent of the stratified population can be expected to fall into the “Hyper Digitals” category. While Rogers first posited this maxim in the 1960s, it has weathered the passage of time robustly and remains true today.

For this study, we took the usage of retailer apps as a sign of one’s digital capability and found a bell curve approximating Rogers’ figures, with 19 percent of the survey respondents in the early adopter/ innovator stage. One of the takeaways from this bell curve is the special attention that should be paid to the early adopters, as their behaviour can be predictive of industry trends.

We analysed early adopter attitudes toward many different payment features and scenarios in their relationship with card issuers. This is a great indicator of where the market is headed from a consumer desire perspective – and delivering features and functionality that delights the early adopters today will put issuers in a better competitive position.

Here is a look at the recurring themes that the early adopters found most valuable:

User Experience (UX): Similar to Maslow’s Hierarchy of Needs, UX has a pyramid structure in which the fundamentals must be addressed before addressing more advanced needs. For a proper UX, functionality is table stakes; it simply must work or there is no UX. By delivering on ease of use, we start to make inroads in the user experience. But, when we can make the experience pleasurable we create brand advocates and drive net promoter scores.

Lack of Friction: Human nature is to pursue the path of least resistance unless we are incredibly passionate about a particular challenge. In other words, we do not like friction. With good reason, the payment industry is focusing on seamless transactions, putting payments into the background, where the focus is on the purchase, not the act of paying. It’s one of the guiding principles of People-Centred- Payments.

Building Trust: As the general population’s digital capabilities continue to grow inexorably, issuer’s abilities to deliver a full digital experience will be a market differentiator only in the short term. The momentum that many issuers are building through Treating Customers Fairly (TCF) initiatives and transparency efforts will be critical and common commodities in the future.

3) Leveraging the open environment for new partnerships between merchants and issuers.

To replace revenue from MIF rate reductions, issuers should pursue a three-pronged approach:

- Drive a larger cardholder base through higher acquisition rates
- Increase transaction rates
- Develop new revenues streams not tied to MIF

Regarding the first two items, issuers should look to harness the power of their internal data to both develop portfolio management strategies that support cardholder base expansion. And in relation to the third item, a significant portion of survey respondents were open to the idea of receiving offers from merchants identified by their banks, with a substantial increase in terms of perceived value in this area compared with 2015. Partnership marketing would allow issuers to seamlessly and quickly deliver more value to cardholders by sending them merchant-sponsored offers tailored to each cardholder's unique spending habits and preferences. The potential new revenue streams, instalments and partnership marketing, are not tied to MIF and can be an integral part of an issuer's MIF exposure mitigation strategy.

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V. ABOUT THE ONLINE SURVEY RESPONDENTS

We can say with 95 percent confidence that our survey size of 500 respondents represents the approximately 32 million people in the U.K. population, meeting the following four criteria:

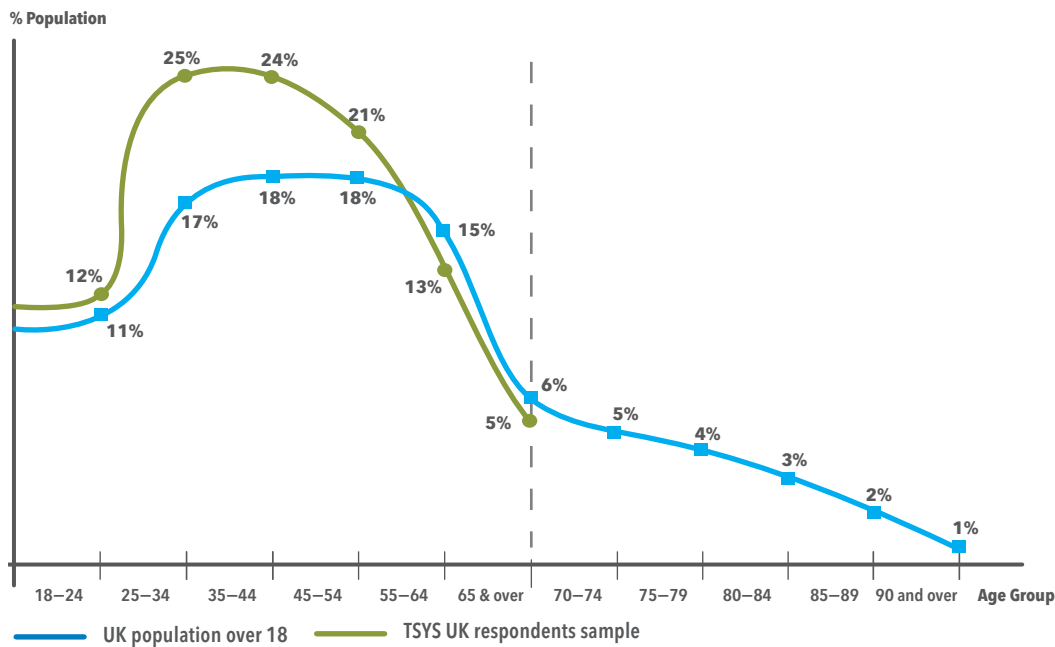
- Holds a debit card
- Holds a credit card
- Has a mobile phone
- Is at least 18 years of age

The margin of error of our sample is +/- 4.5 percent.

Taking into account the comparison between the age distribution of the actual U.K. population and the survey's sample of respondents, we can infer that our sample skewed slightly younger.

Age comparison between U.K. population over 18 years old and TSYS sample

Graph 27



Gender

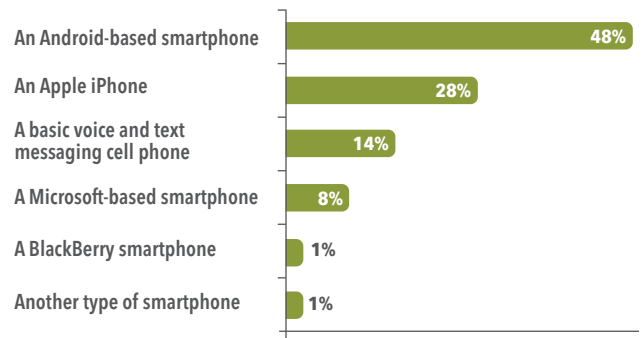
Female 52%



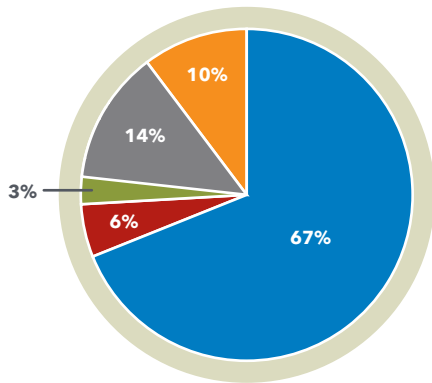
Male 48%



Type of Smartphone Owned

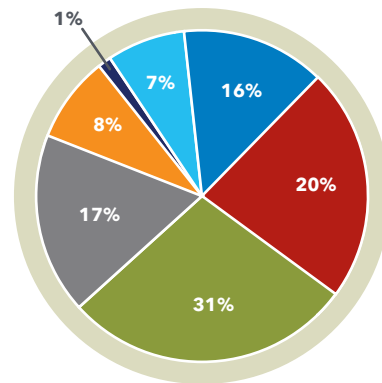


Employment Status



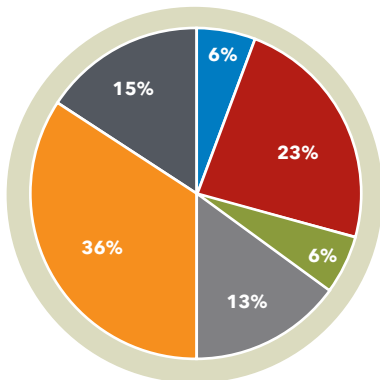
- Employed full or part time
- Student
- Retired
- Self-employed
- Unemployed

Household Income



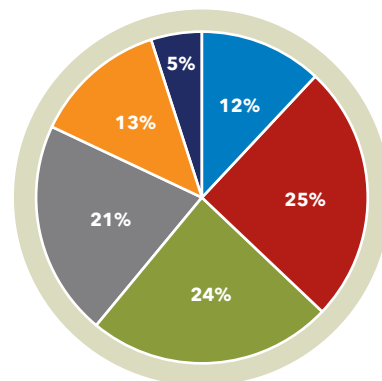
- < £20,000
- £30,000 - £50,000
- £75,000 - £125,000
- Prefer not to answer
- £20,000 - £30,000
- £50,000 - £75,000
- > £125,000

Education



- Incomplete secondary education (Below GCSE/O-Level)
- Some vocational or technical qualifications
- University education completed
- Secondary education completed (O-level or equivalent)
- Vocational or technical qualifications
- Post graduate degree or equivalent

Age



- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 or older

TSYS at a Glance

OUR PURPOSE IS TO
Improve Lives and Businesses by Putting People at the Centre of Payments.

WHO WE ARE



NYSE Stock Ticker
TSS

30+
 YEARS

Established
1983

WHO WE SERVE

More Than
400 clients in 80 countries
 A Global Scale With Regional Focus

FINANCIAL STRENGTH

*As of 12/31/2015
 Investment Grade Credit Rating from Standard and Poor's, and Moody's*

\$9.1 billion
 Market Cap

\$2.8 billion
 Total Revenues

\$3.9 billion
 Total Assets

\$833.9 million
 Adjusted EBITDA

\$452.1 million
 Adjusted Earnings From
 Continuing Operations

23.1 billion
 Transactions Processed Per Year

PEOPLE

More than
10,500
team members
 Around the World

For the fourth time
 in five years,
 TSYS was named

**2016 WORLD'S MOST
 ETHICAL
 COMPANIES™**
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In 2014, TSYS
 was recognized by
 for our commitment to improve the quality
 of life in communities where we do business.

**THE
 CIVIC
 50**



GET TO KNOW US

at tsys.com, or contact us at **+44 (0) 1904 562000** or email sales@tsys.com to learn more about how we can work together to put people at the centre of payments.

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ABOUT TSYS

At TSYS® (NYSE: TSS), we believe payments should revolve around people, not the other way around.* We call this belief People-Centered Payments®. By putting people at the center of every decision we make, TSYS supports financial institutions, businesses and governments in more than 80 countries. Through NetSpend®, A TSYS Company, we empower consumers with the convenience, security, and freedom to be self-banked. TSYS offers issuer services and merchant payment acceptance for credit, debit, prepaid, healthcare and business solutions.

TSYS' headquarters are located in Columbus, Ga., U.S.A., with local offices spread across the Americas, EMEA and Asia-Pacific. TSYS is a member of The Civic 50 and was named one of the 2016 World's Most Ethical Companies by Ethisphere magazine. TSYS routinely posts all important information on its website. For more, please visit us at www.tsys.com.



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