

## THE FUTURE OF PAYMENTS - USAGE TRENDS AND EMERGING TECHNOLOGIES

<b>Committee name</b>	Residents, Education and Environmental Services Policy Overview Committee
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<b>Papers with report</b>	N/A
<b>Ward</b>	All

### HEADLINES

Residents within the London Borough of Hillingdon have access to a wide range of valued services provided by the Council, many of which are paid services. The Residents, Education and Environmental Services Policy Overview Committee has commissioned a review into how the Council can modernise existing payment methods to improve the payment experience of Hillingdon residents.

This report aims to provide the members of the Committee with information relating to global current and future payment trends and technology, to give a broader, forward looking perspective to the Committee's review. This report does not make any suggestions on any specific future payment technologies to be used in Hillingdon. Information in this report has been independently researched and compiled by Democratic Services.

### RECOMMENDATION:

**That the Residents, Education and Environmental Services Policy Overview Committee notes and comments on the information presented within the report.**

### SUPPORTING INFORMATION

#### The Future of Payments

As user habits change and technology improves, the ways in which users pay for goods and services has changed significantly in recent years, making it both simpler and quicker to make payments. Trends driving these changes include advancements in technology; competition and collaboration between emerging and already existing companies, and an environment of regulation that is conducive to innovation. Trends indicate that cash will not feature as much in financial transactions in the future, with more people using contactless cards and smartphones to make purchases. In the UK, 57% of people report using less cash than they did a year ago, with

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47% of Britons carrying less than £5 on their person.

Although the role of cash is still significant, alternative ways of making payments are becoming more popular. These methods include debit and credit cards, contactless payments, smartphones and other new innovative methods. Whilst not all of these new payment methods may be directly applicable to the London Borough of Hillingdon, they do provide an insight into the global trends driving the future of payments. The most popular of these alternatives is currently debit and credit cards. Payments UK initially predicted the use of cards to exceed cash by 2020, however, it was later reported that the last quarter of 2017 saw the use of the debit card overtake cash as the most frequently used payment method for the first time. The use of cash is only expected to fall in upcoming years, to just 16% of all transactions by 2027.

Despite the reduction in cash payments, forecasts do not yet predict a cash-free society to be the future. The role of cash still remains important to many people and the complete elimination of cash would therefore not be beneficial. Instead, it is important retain a range of available methods for people to make transactions and enhance customer experience overall. Traditional methods of payment have been adapted to suit the changing expectations that people now have, with one example being contactless payments using a bank card.

### Contactless

Existing cards in circulation have been adapted to enable people to make contactless payments, which are quicker and more convenient than using chip and pin. Currently, 78% of debit cards and 62% of credit cards are contactless enabled, with this only set to rise. In addition to this, the card industry has committed to making all bank-issued payment terminals capable of accepting contactless payments by 2020. The commitment from the industry, as well as people feeling more secure with making contactless payments, has resulted in a surge in the use of contactless methods to make payments.

It is not only the younger generation using this method to make payments; over half of people aged 65 and over are using a contactless card. This is because the contactless card is able to balance the speed and convenience people expect when making a payment with the security offered by chip and pin payments. Additional security features for contactless cards include a £30 limit in any transaction, and occasionally having to enter the pin number to verify the user as the cardholder. The combination of convenience and security means people are increasingly comfortable with making contactless payments, with demand for the payment limit to be increased to allow larger transactions.

### Smartphones

Debit and credit cards are not the only ways to make contactless payments. Many smartphones have the capability of making contactless payments, with 30% of people reporting having used their smartphone to make payments. In the UK, 87% of people either own or have ready access to a smartphone, up from 52% in 2012. With the expectation that transactions are convenient and quick, and smartphones becoming an integral part of daily life, they are likely to feature prominently in the future landscape of making payments. The general public even recognise this, with 52% believing they'll mainly be paying for goods and services using their phone in just 5

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years' time. This marks a potential change in user habits, with users now recognising and becoming increasingly comfortable with the idea of using smartphones to make transactions.

In addition to being used to make contactless payments, smartphones are also used to make payments online, within apps and through the use of a digital wallet. Smartphones have Near Field Communication Technology, which means that when it is held near a payment reader, the transaction is completed. The capability to complete transactions, as well as connecting people to each other, makes the smartphone the ideal device to lead into the future of payments.

Companies such as Apple and Samsung are leading the way in the production and usage of their devices, with the majority of people owning a device made by either one of these two manufacturers. However, while the phones produced by Apple and Samsung have the capability to make these transactions, not all payment readers do. Businesses are recognising the change in user habits and have introduced payment readers with the capability of accepting payments from Apple Pay and other mobile wallets.

Trends suggest that contactless payments and the use of smartphones are the immediate future; however, other technological advancements have led to new innovative ways to make payments. These methods have the potential to become as popular as contactless payments and are beginning to be used and accepted by people in ever greater numbers.

### Biometrics

The use of biometrics is a recent addition to the payment landscape. To make a payment using biometrics, the user is identified using biometric authentication, such as fingerprint, iris or facial recognition, which then authorizes the sale. Making a payment using biometrics is both quick and simple, much like contactless cards and smartphones, however there are additional qualities that make biometrics stand out as a future method of making payments. These include not having a requirement to remember a pin or password, thereby increasing security and convenience for the user.

People have adjusted to the idea of using biometrics to make payments, with 63% reporting they would be happy to use biometrics to authorise a payment in-store and 61% being comfortable with doing so online. However, users remain discomfited by certain types of biometrics. For example, while 69% would be comfortable with finger scanning, just 24% would be comfortable with facial recognition.

These figures suggest a positive shift in general opinion towards the use of biometrics and companies such as Apple, Google and Amazon are largely responsible for this. The products these companies sell have normalised the use of biometrics in daily life, by using them for simple tasks such as unlocking a phone. The exposure people have to these technologies every day makes it easier to potentially transition to biometric payment methods, with people feeling more comfortable using biometrics to conduct their financial transactions.

The surges in technological advancement from these large companies, who have successfully integrated biometrics into their products, have pushed other companies, especially banks and card providers, to catch up. In an effort to do so, MasterCard have committed to including finger

scanning and facial recognition as options for payments for their customers by April 2019. Including these methods to make payments will allow for a greater level of security, as well as more choice when paying for goods and services.

Voice recognition is another innovation within biometrics, with smart assistants such as Alexa, Siri, Google Home and Cortana being used in multiple households throughout the country. These assistants are used to aid people in conducting their everyday tasks, such as adding items to a shopping list or finding directions to a particular location. Although people are comfortable allowing a smart assistant to conduct menial tasks, currently only 18% of people would be comfortable using voice recognition to make a payment. Until the security concerns people have are addressed, there will be a barrier to the widespread acceptance of biometrics and a method of payment.

### Self Service / Queue-less

Self service kiosks are another addition to the payment landscape, with supermarkets, fast-food chains and other companies rolling these out in their stores throughout the world. This allows users to be their own cashier and choose, order and pay for their own items rather than waiting in a queue at a traditional till operated by a member of staff. While this method does not always avoid a queue, it is a more convenient way for users to pay for a variety of different services or products. The London Borough's of Hackney and Harrow, as well as the Royal Borough of Kensington and Chelsea have rolled out self service kiosks to pay for services such as council tax and rent. These operate during working hours and accept cash and card payments, for the convenience of their user. These kiosks reduce the number of staff required to conduct transactions, however, for members of staff remain available, should residents require further assistance.

In an effort to make self service even more efficient, queue-less shopping has been introduced by Amazon. In Seattle, a store was recently opened that allows customers to walk in to the shop, choose the items they wish to purchase and then walk out without having to queue or go through a checkout. All the customer needs is an Amazon account and a smartphone with the Amazon Go app. The customer scans in at the store entrance and cameras track the items picked and put them in a virtual cart until the customer leaves the shop. At this point, the account is charged and a receipt is sent out to the customer to confirm the purchases made. Although this method is not the immediate future, and may not directly apply some of the services offered by local government, it does reveal the direction of travel for new payment methods, and how integrated technology and customer experience are driving innovation in payments.

### Social Media

One platform yet to be completely utilised for making payments in the UK is social media. In total, 76% of internet users have a social media profile of some type, such as Facebook or Twitter. These profiles allow people to directly interact with other users from any location and at any time. In China, an app called WeChat has become popular, which combines many activities people carry out every day, such as social networking, transferring money, ordering food and booking a GP appointment. Given that the majority of people now have access to smartphones and have social media accounts, it would appear a good way to bring various disparate functions, including

payments. Despite this taking off in China, opinion in the UK differs somewhat. It is reported that 75% of people in the UK are not comfortable with using a messenger app to make payments.

### Internet of Things

The commonality between most of the emerging methods of payment is the Internet of Things (IoT). The IoT consists of devices that are connected to the internet, creating a network of communication with other devices. It is expected that by 2020 there will be over 20 billion connected devices around the world. These devices can range from smartphones, to household appliances such as kettles. This network means that devices, and therefore the users of these devices, are more connected than ever before. As a result, this has changed the way payments are made, especially with the rapid development of technology.

The IoT has simplified and made transactions more efficient for users by integrating devices used on a daily basis. The use of the smartphone is just one example that allows users to make payments in a more convenient way, whether it be using the contactless ability or ordering via an app. Perhaps most importantly, the IoT has changed the habits of users. Users now expect convenience and to be able to conduct all of their business in one place at the same time. In previous years, consumers have been wary of using smartphones to make transactions, particularly because of security concerns.

However, with the development of the mobile wallet, as well as Apple Pay, which requires the user's finger print to verify the transactions, customer habits have changed to favour using smartphones to make payments. The ability of devices to now safely store payment and personal data, alongside their increasing everyday use makes them a strong feature in the future of making payments. The shift towards the IoT is forcing businesses to change the way they accept and make transactions in order to keep up with changing customer habits. Rather than just one dominant method of payment, it is likely that the future will see a combination of methods of payment, such as a contactless, verified using biometrics.

### **Implications on related Council policies**

None at this stage. This report sets out future trends nationally and globally. A role of the Policy Overview Committees is to make recommendations on service changes and improvements to the Cabinet who are responsible for the Council's policy and direction.

If applicable, reference any particular approved Council policies relevant to this.

### **How this report benefits Hillingdon residents**

This report sets out global trends in relation to payments, which would be just as applicable to residents in Hillingdon, as elsewhere in the UK.

### **Financial Implications**

None at this stage. This report sets out future trends nationally and globally. However, in formulating any eventual recommendations, it is important that the Committee considers cost

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effective proposals that benefit resident taxpayers in relation to this review, which would ultimately be determined by Cabinet as part of the Council's broader budget planning process.

## **Legal Implications**

None at this time.

## **BACKGROUND PAPERS**

[Worldpay Consumer Behaviour and Payments Report 2017](#)

[World Cash Report 2018 - G4S](#)

[Changing Payments Landscape - Payments UK](#)

[UK Payment Markets Summary 2017 - Payments UK](#)

[UK Payment Markets Summary 2018 - UK Finance](#)

[Device Penetration - Deloitte](#)

[MasterCard Biometric Article](#)

[Adults' Media Use and Attitudes - Ofcom](#)

[Connected Things - Gartner](#)