Executive Summary

We are living in a world where consumers are being presented with an ever expanding range of alternative payments methods. A wide range of innovative wearables with payment capabilities are available to consumers from smartwatches to wrist bands, glasses, rings and even shoes! Combined with expanding card payment options, such as mobile apps and contactless payments, we sought to find out in which direction consumers are driving adoption.

We also used this opportunity to explore the emerging attitudes to a cashless society by inviting respondents to put forward their opinions on its application within the education section.

This report will reveal the findings from a recent survey conducted in the US, UK and Australia and will highlight:

- Consumer willingness to make payments via wearable devices
- Security concerns relating to payments on wearables
- Smartwatch owner usage of payments functionality
- Consumer attitudes to and adoption of payments apps on smartphones
- The number of contactless payment transactions consumers make each week
- Attitudes towards cash usage and preferred alternatives to cash
- How age, location and gender are impacting adoption rates
- Opinions of cashless system deployment within universities
About this Report

Transaction Network Services (TNS) commissioned an independent online International Survey by Kantar in January 2019 which covered 1,046 UK adults, 1,050 US adults and 1,022 Australian adults.

The survey asked respondents to agree or disagree with a series of statements which reflected their attitudes to and experiences with wearables, smartphone payment apps, and their payment preferences. It also posed questions in relation to cashless systems in the education sector.

The following analysis includes comparison of age groups. Please note that within the UK and Australian survey the lower age bracket was 16-24 years old, while for the US this age group is 18-24 years old.
1. Do Wearables Have a Permanent Place in the Payments Industry?

Consumers globally demonstrate interest in wearables

Wearables are becoming more readily available with new and improved versions hitting the market at a rapid rate. A simple ring, smartwatch or bracelet can provide a quick, seamless payment transaction, and 44% of everyone we surveyed said that they would be willing to make a payment using a wearable device like a ring or bracelet. US respondents were slightly more eager than their UK and Australian counterparts.

*Graph 1 – Percentage of respondents, by country, that would be willing to make a payment using a wearable device*
Globally 48% of men would be willing to make a payment using a wearable device compared to 39% of women. Willingness was also greatest in the younger age groups, potentially setting the stage for strong future growth over the coming decades.

Graph 2 – Number of respondents, by age, that would be willing to make a payment using a wearable device

But do consumers have security concerns?

65% said that security concerns would stop them from using a wearable device to make a payment with Australians appearing the most security conscious.

Graph 3 – Number of respondents, by country, that said security concerns would stop them from using a wearable device to make a payment
When evaluating the gender differences to our security question by country, we consistently see that women report greater security unease than men. However, when we contrast across countries and genders we find that Australian men report greater security concerns than UK women.

**Graph 4 – Security concern variations by country and gender**

Security concerns were largely consistent across the different age groups, except for the 55 to 64 year old category which saw a marked increase in security fears.

**Graph 5 – Number of respondents, by age, that said security concerns would stop them from using a wearable device to make a payment**
Smartwatch owners dabble with payment capabilities

23% of the respondents we surveyed confirmed that they owned a smartwatch. Of these, 44% confirmed they have used it to make a payment with US adults showing slightly higher adoption levels.

**Graph 6 – Percentage of smartwatch owners who have used it to make a payment, by country**

Our survey results again highlighted a substantial difference between the genders with more men than women making payments via their smartwatch.

**Figure 1 – Amount of male vs female smartwatch owners globally who have used it to make a payment**
The age groups also showed variations with older smartwatch owners reporting lower rates of payments adoption.

Graph 7 – Numbers, by age group, of smartwatch owners who have used it to make a payment
2. Attitudes to and Adoption of Smartphone Payment Apps

US adults biggest adopters

When asked about making payments using a smartphone 55% agreed that they like to use mobile payment apps on their smartphone as it is quick and easy. Americans were slightly more likely to do this than the British and Australian adults we surveyed.

Graph 8 – Numbers, by country, who like to use mobile payment apps on their smartphone

High adoption rates among youngest users

A high proportion of the younger generation were in agreement which could be related to their potential greater familiarity with downloading new apps and tools for their smartphones.

Graph 9 – Numbers who like to use mobile payment apps on their smartphone, by age group
In the US and Australia, the greatest adopters were 25 to 34 year olds, while in the UK the highest number was within the 16 to 24 year age group. Looking at the results of the age groups by country we see some interesting variations between the 25 to 34 year old and 35 to 44 year old groups as shown in graph 10 below.

Graph 10 – Percentage of respondents that like to use mobile payment apps on their smartphone, by age group and country

As with the responses given in relation to smartwatch payments, females were more hesitant than males to use mobile payment apps on their smartphones, but the percentage gap was much smaller.

Graph 11 – Numbers, by gender, who like to use mobile payment apps on their smartphone
3. Will Cash Become Lost in the Expanding Cashless Payments Mix?

With the growing collection of alternative payments available, some of which we’ve explored in sections 1 and 2 of this report, our interest now turns to look at how cash and card payments, including contactless, are evolving and consumer preferences for different elements of the payments mix.

70% of respondents said that they rarely use cash

When asked whether they prefer to use cash for the majority of their transactions we found 70% of respondents said that they rarely use cash. This was consistent across the countries we surveyed, but an interesting point of note was the small but present variation between the genders which reveals that slightly more women than men report that they rarely use cash.

Figure 2 – Numbers, by gender, who report that they rarely use cash

Card payments still dominate as main alternative but notable variations exist

Of those that said they rarely use cash, 85% confirmed that they prefer paying by using their credit/debit card and the remaining 15% agreed that they prefer to use their smartphone or wearable device to make the majority of their payments.
Looking at the gender variations we see that, among those that rarely use cash, far fewer women appear willing to make the majority of their transactions via smartphones and wearable devices.

**Graph 12 – Preferences among men and women who rarely use cash**

Our data also reveals that preferences for card payments correlate with age.

**Graph 13 – Preferences among the age groups who rarely use cash**

**UK adults most prolific users of contactless functionality**

Contactless cards are now widely available across the three countries we surveyed and there has been a marked increase in the roll out of contactless enabled point-of-sale terminals within retail, hospitality and other relevant outlets. We, therefore, sought to learn more about the adoption of this functionality by asking respondents how many contactless payment transactions they make on average each week. 71% confirmed they make at least one with UK respondents reporting the greatest usage.
Adoption of contactless payments was also greatest among the 25 to 34 year old age group.

When looking at the quantity of contactless payments made in an average week, we found that more than one in five respondents aged 16 to 44 made between 6-10 contactless transactions a week.
Possibly the most interesting insight that our survey revealed about contactless payments was the different adoption rates between the genders within the different countries. While in the US, contactless usage appears consistent among men and women, in the UK contactless adoption is greater among women than men, while in Australia the picture is reversed with men the biggest users.
Graph 17 – Numbers, by country and gender, of those who make at least one contactless payment a week
4. Would Consumers Support a Cashless Society?

In recent times we have seen individual retailers go cashless, but has this been driven by consumer demand or in response to shrinking bank branch networks making cash handling difficult to manage logistically? That is worthy of further investigation, but while we were surveying opinion we decided to use the opportunity to take a temperature gauge of what consumers think of cashless initiatives in the education sector.

Cashless systems in universities perceived as a good idea

73% of adults think that cashless systems in universities are a good idea as it saves students from carrying cash and having to worry about finding an ATM or the right cash for vending and laundry machines, for example.

In the UK and US the age groups were largely in agreement, with the 55 to 64 year age group slightly less favorable, however, in Australia the data showed a significant dip in support from the 45 to 54 year old group, as shown in graph 18 on page 18.
Graph 18 – Numbers, by country and age, that think cashless systems at universities are a good idea

### US

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<th>Age Group</th>
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<td>25-34 year olds</td>
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<td>35-44 year olds</td>
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<td>45-54 year olds</td>
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<td>55-64 year olds</td>
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### AUS

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<td>55-64 year olds</td>
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### UK

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<td>35-44 year olds</td>
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<td>74%</td>
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<td>55-64 year olds</td>
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US slightly more interested

Globally, 70% of respondents believed that if they were a student they would be happy to have a cashless payment system and use a mobile payment app, fingerprint scan or pre-loaded card to make a payment on campus. The responses varied slightly by country with the US most interested.

**Graph 19 – Numbers, by country, who would use cashless if they were a student**

Interest was greatest among the younger age groups with interest declining in line with age increasing.

**Graph 20 – Numbers, by age, who would use cashless if they were a student**
Changing roles and asking respondents to put themselves in the position of a parent with a child at university, we asked them if they would welcome the option of a cashless system where they could transfer money to them in order to make purchases via the cashless system. The responses were largely consistent with the earlier question, however, here we see in Australia support is greater among fathers, while in the UK mothers are most welcoming.

**Graph 21 – Numbers, by country and gender, who would welcome the option of a cashless system if they were the parent of a student at university**

But could cashless systems put students at great risk of debt problems?

Despite the majority giving their support for cashless systems, 71% of our respondents also felt that universities offering cashless payment systems are an easy way for students to get into debt as it is so easy to make purchases without thinking about the cost implications. Concern was marginally greater in Australia.

**Figure 3 – Numbers, by country, who feel cashless systems are an easy way for students to get into debt**
Comparing the genders, we see that both UK men and women are the most relaxed about the debt risks of cashless systems.

Graph 22 – Numbers, by country and gender, who feel cashless systems are an easy way for students to get into debt
5. Conclusions

Our survey confirms that payments functionality on wearable devices has secured acceptance within society with almost half of our respondents indicating a willingness to make a payment via a wearable device like a ring or bracelet.

Living in the era of the cybercriminal and regular news reports concerning data breaches, it is not surprising to find that consumers exhibit security fears related to wearables. While no unscrupulous activity related to payments made via wearable devices has yet been exposed at the time this report goes to press, the growth of this promising market segment could be irrevocably damaged if fraud was to occur.

The onus now is with all players within the transaction chain of custody to take the necessary security measures to protect data in flight from wearable devices and their associated point-of-sale terminals.

With such good levels of interest, the time is right for the payments industry to also invest in a wider range of terminals and other infrastructure that is primed for this addressable market, so that it is easily accessible by consumers.

Our research has also provided clarity on the regional variations within consumer preferences, in some cases at a very granular level. For example, when looking at the desire to use smartphone payment apps we see substantial variations within the age groups, including a 17% variation between US adults aged 25 to 34 and their UK counterparts, while in the 35 to 44 year old group there is a 15% difference between Australians and Americans. Those in the industry that specifically target these groups will benefit from taking account of these in-depth insights.

Turning to look at cashless, we discovered that 70% of respondents globally rarely use cash. The analysis undertaken on the preferences of these individuals for card payments or smartphone/wearable payments instead has provided some marked indications of how the market might evolve. While card payments are still very much preferred over smartphone and wearable devices for the majority of their payments, younger adults show a greater propensity for the innovative new technology.
It would be realistic to think that, barring any major security incident, the preference for payments made via new methods will increase as a percentage of the payments mix. Players within the industry should expect and plan for this now to ensure they are best positioned to benefit from this market evolution.

Taking a further step into the future, we used our survey as an opportunity to explore attitudes to cashless systems. Sweden long ago put a stake in the ground with its intention to become the first cashless country, but conversely, earlier this year, the city of Philadelphia in the US made moves to ban cashless stores in an attempt to protect the unbanked.

Our data found that almost three quarters of adults support cashless systems in universities and most would use them as both a student or parent of a student. This shows strong potential for the deployment of this technology, but concerns should be noted related to the risk of allowing users to get into debt too easily.

This report gives the payments industry a lot to digest and evaluate. We are in a strong position and new technologies are being welcomed by consumers. Armed with the insights from our research the industry can take the relevant strategic steps to ensure consumer needs are addressed and ongoing growth can be expected as a result.
About TNS and Contact Details

TNS is one of the world’s leading payments connectivity providers and is trusted by hundreds of organizations to securely deliver more than 32 billion payments transactions each year. For over 25 years, TNS has provided innovative data communications solutions to valued partners including merchants, banks, acquirers, processors, ATM operators and deployers, payment service providers and other financial institutions. The company now proudly serves customers in more than 60 countries.

TNS: A global business with regional strength

- 1,250+ active network connections
- Handles communications to more than 108,000 ATMs
- Manages 1 million+ payment-specific SIMs
- Supports millions of point-of-sale terminals
- A level 1 PCI DSS certified service provider
- Offices in 20 countries
- Driving innovation of new technologies, such as encryption and tokenization

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Appendix – Regional and Demographic Survey Components

The survey was conducted by online self-completion interview between January 17th - 21st, 2019 by Kantar.

These online surveys are designed to be nationally representative of adults interviewed across the UK, US and Australia. The survey uses a quota sample (age interlocked with gender, and a regional quota). Post fieldwork correctional weighting within age, gender and region, has been used to ensure the representativeness of the survey.

The lowest age group interviewed surveyed in the US was 18-24, compared to 16-24 in the UK and Australia.
US 2019 survey demographics
1,050 responses received

Gender breakdown:
- Male: 50%
- Female: 50%

Age breakdown:
- 18 – 24 year olds: 21%
- 25 – 34 year olds: 23%
- 35 – 44 year olds: 20%
- 45 – 54 year olds: 15%
- 55 – 64 year olds: 15%

Region breakdown:
- Northeast: 24%
- Midwest: 38%
- South: 21%
- West: 17%

Australia 2019 survey demographics
1,022 responses received

Gender breakdown:
- Male: 49%
- Female: 51%

Age breakdown:
- 16 – 24 year olds: 21%
- 25 – 34 year olds: 22%
- 35 – 44 year olds: 21%
- 45 – 54 year olds: 18%
- 55 – 64 year olds: 18%

Region breakdown:
- New South Wales & Australian Capital Territory: 34%
- Victoria & Tasmania: 28%
- Queensland: 20%
- South Australia & Northern Territory: 10%
- Western Australia: 8%
UK 2019 survey demographics
1,046 responses received

Gender breakdown
- Male: 51%
- Female: 49%

Age breakdown
- 16 – 24 year olds: 19%
- 25 – 34 year olds: 22%
- 35 – 44 year olds: 20%
- 45 – 54 year olds: 22%
- 55 – 64 year olds: 17%

Region breakdown
- North: 36%
- Midlands: 34%
- South: 30%