



**Transaction
Network Services**

One Connection – A World of Opportunities

WHO IS DRIVING ADOPTION OF CARD PAYMENTS AT UNATTENDED TERMINALS?

A report prepared by
Transaction Network Services
August 2018





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Executive Summary

The evolution of unattended terminals has continued at pace in recent years and the number of these accepting credit and debit card payments has expanded significantly. Convenience, ease of use and fast transactions are three of the key motivators among consumers for making card payments, but have these been adopted by shoppers making purchases from unattended terminals, such as kiosks, vending machines, parking meters and others?

This report reveals the interesting findings of a recent survey conducted in the US, UK and Australia, including:

- **The number of people who use their credit or debit card at a variety of different types of unattended terminals**
- **Which countries have greatest adoption levels**
- **Whether consumers are willing to pay a charge to use their cards instead of cash for low-cost items at vending machines**
- **How age and gender variations influence usage**
- **The desire for all unattended terminals to accept both card and cash payments**
- **The potential for new technologies, such as wearable devices and digital wallets, to widen the number of card payment methods available at unattended terminals**
- **Concerns about whether using their cards at unmanned vending machines and kiosks puts consumers at risk of card fraud**



About this Report

Transaction Network Services (TNS) commissioned a US, Australian and UK Ncompass International Omnibus Survey by Kantar TNS which ran between 8th – 12th March 2018 and covered 1,027 US adults, 1,032 Australian adults and 1,024 UK adults.

The survey asked respondents to agree or disagree with a series of statements which reflected their attitudes to and experiences with making card payments at unattended terminals.

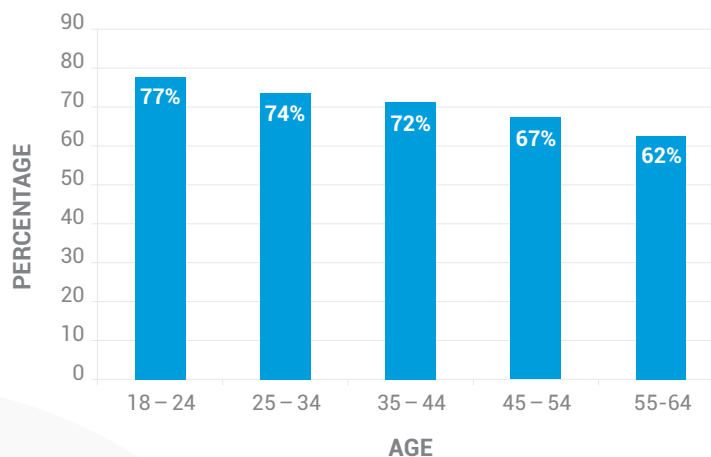
This report presents the key findings of this survey and, where available, compares and contrasts the results with the same questions asked between 4th – 8th February 2016, which covered 1,050 US adults, 1,030 Australian adults and 1,002 UK adults.

1. Consumer Adoption of Card Payments at Unattended Terminals

As the variety of payment methods expands and consumer behaviors evolve, the ability to make credit and debit card payments at unattended terminals is highly in demand among consumers with 70% of respondents in our survey saying they would prefer unattended vending machines and kiosks to accept both card and cash payments.

Demand among the younger age groups is particularly high, as shown in graph 1.

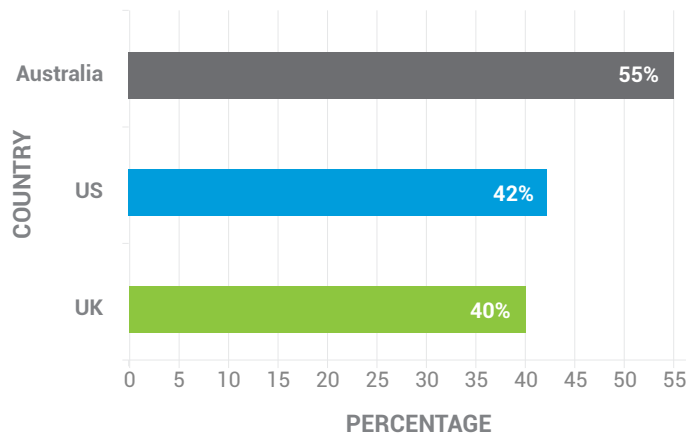
Graph 1 – Adults who prefer option of both card and cash



Regional variations

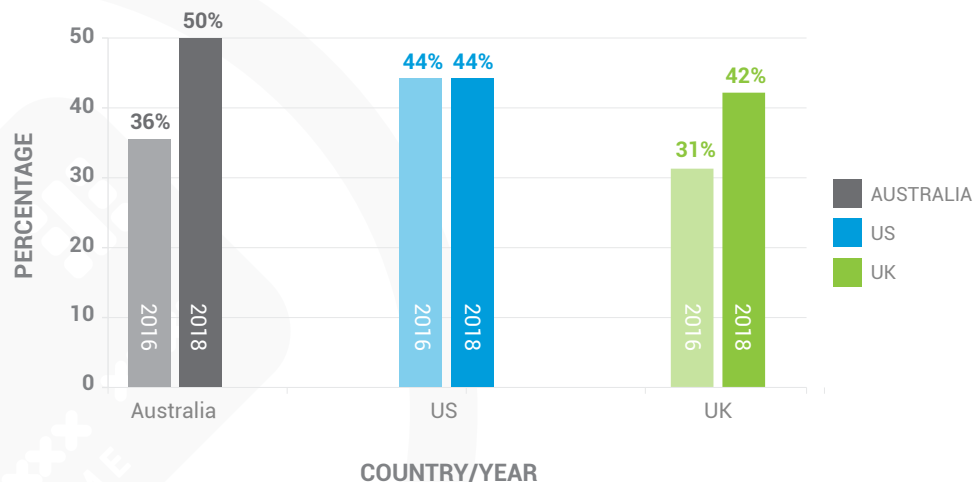
A significant number of respondents across the US, UK and Australia responded positively to our questions about using their credit and debit cards at unattended terminals, with Australian's appearing to lead the drive in adoption.

Graph 2 – Adult use of credit/debit cards at unattended parking meters, kiosks and exit barriers



When contrasting with the data obtained in our 2016 survey, we can see a marked increase in usage among Australian and UK adults when buying items of food and drink. US usage, which was previously the highest of the three countries in 2016, has remained consistent resulting in it being overtaken by Australia and almost being equaled by the UK.

Graph 3 – Adult use of credit/debit cards at kiosks or vending machines to buy food or drink in 2018 vs 2016

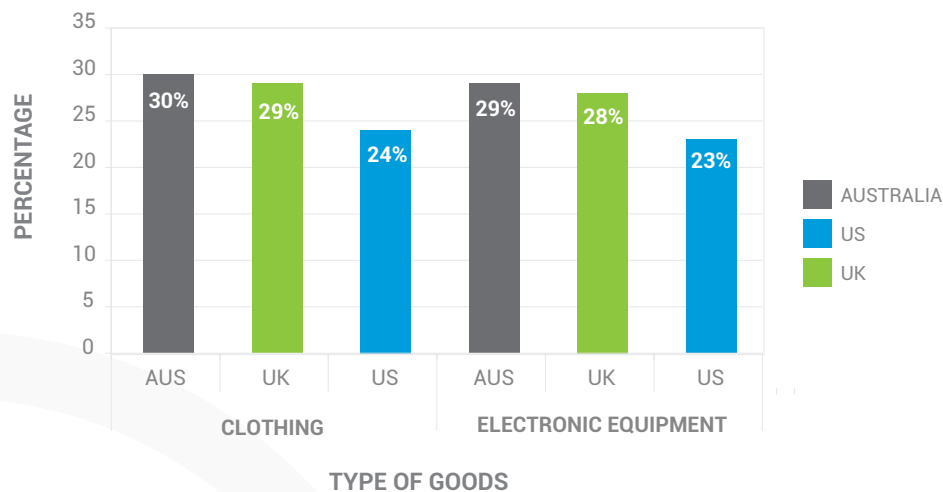


Expanding purchase options

The types of items available to purchase at unattended kiosks and vending machines has grown significantly. Our survey explored whether consumers are embracing these new purchasing options, looking at clothing, electronic equipment and tickets, in particular.

27% use their credit or debit card at unattended kiosks or vending machines to buy items of clothing and the same number use them to buy electronic equipment. When looking at the regional differences between the answers given it appears Australian and UK adults gave very similar responses, with US adoption appearing to lag behind slightly.

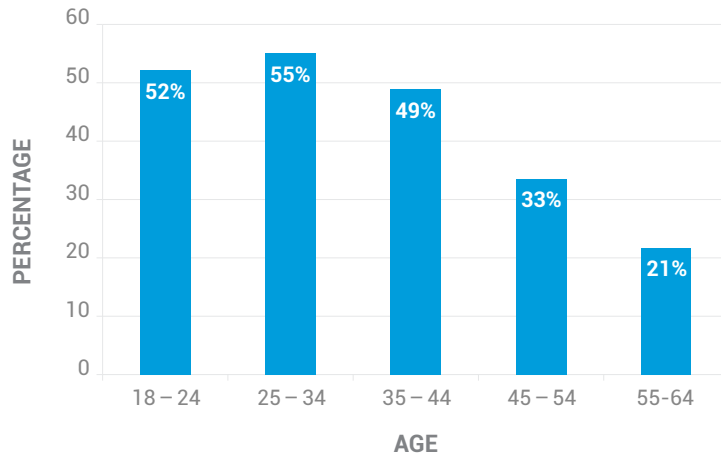
Graph 4 – Adult use of credit/debit cards to purchase different product categories at unattended terminals



42% said they prefer to use their credit or debit card at unattended ticket kiosks rather than buying or collecting their tickets from a person at the counter. Ticket collection is typically considered a destination purchase, with ticket purchasing both an impulse buy and driven decision. With that in mind, it is not unexpected that the desire among consumers would lean towards greater numbers preferring the efficiency and speed which unmanned ticket machines might offer over queuing at the ticket booth.

The younger age groups, in particular, showed a stronger preference for using machines:

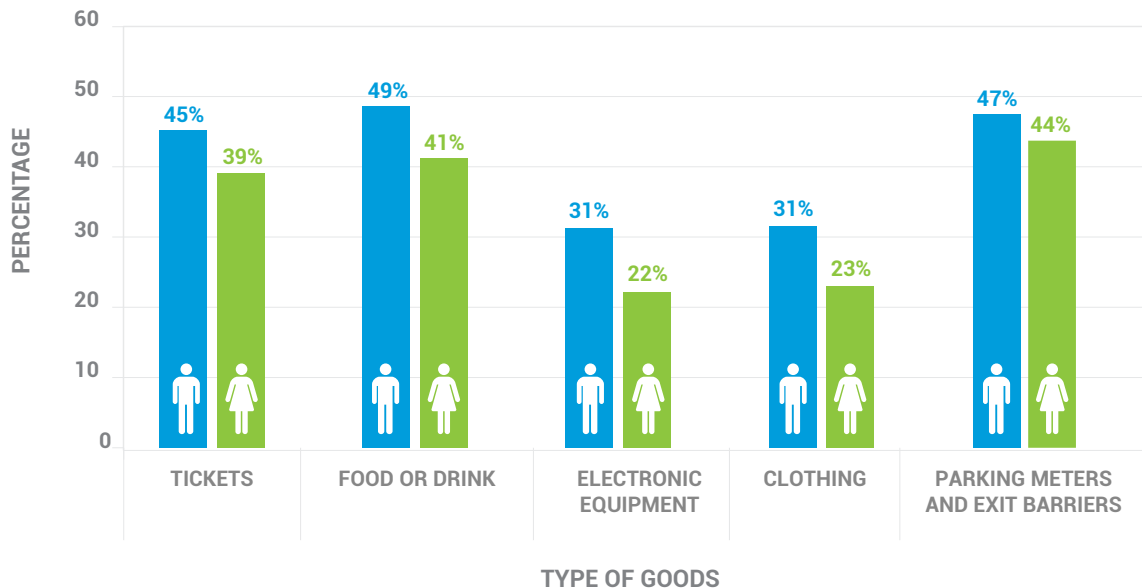
Graph 5 – Adults who prefer to use ticket kiosks rather than buying/collecting from a person



Men biggest adopters globally

Our results showed that men are consistently the biggest users of unattended terminals across the US, UK and Australia, but the gender gap was biggest when asked about purchasing tickets, over clothing, electronic equipment and food or drink.

Graph 6 – Gender variations in the use of credit/debit cards to purchase different product categories at unattended terminals



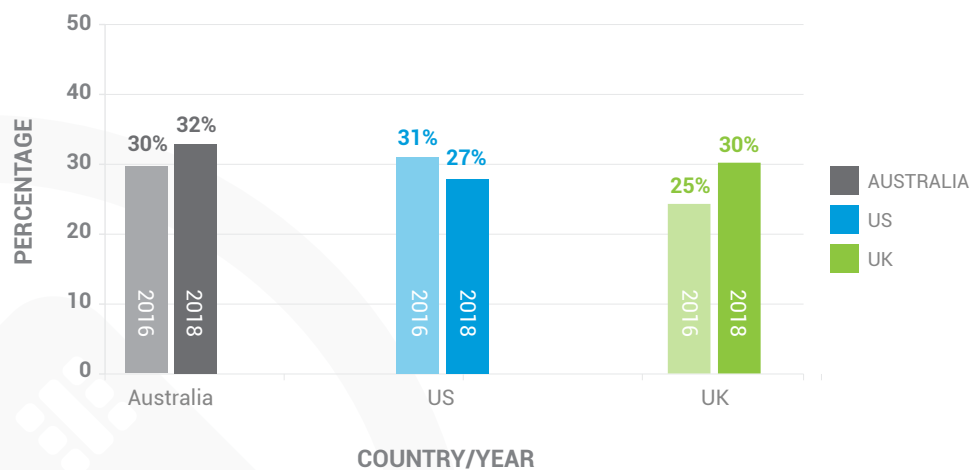
2. The Impact of Charging for Card Use

Acceptance increases for some but not others

Our survey explored the impact of charging for using credit or debit cards instead of cash for low-cost items in vending machines and found that acceptance of a charge appears to have increased within the UK and Australia since our 2016 survey, but willingness to pay for card use has declined among US adults.

Globally, 49% said they prefer to use their credit or debit cards instead of cash for low-cost items at vending machines, if there is no charge, the same result which was seen in our 2016 survey. When asking if they prefer to use their cards even if there is a charge this falls to 30%, which again is in line with our 2016 figures. When looking at the regionally specific data we see some interesting changes as noted above and highlighted in graph 7 below.

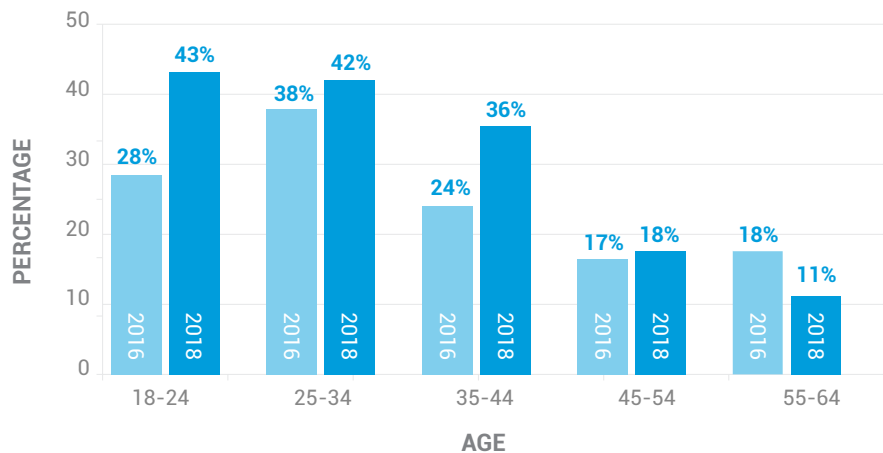
Graph 7 – Adults that prefer to use their credit/debit cards instead of cash for low-cost items at vending machines, even if there is a charge in 2018 vs 2016



UK results show potential

The UK increase was greatest and on review of the responses by specific age groups we see that the most significant rises in acceptance of a charge were in the lower three brackets. This could signal an important shift in the UK as the ability to charge a small fee for card use may provide the additional funding needed to help the unattended terminals market in the country significantly take off.

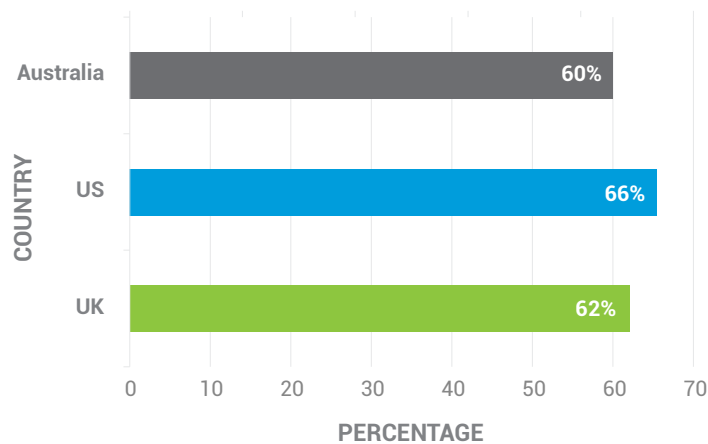
Graph 8 – UK adults who prefer to use cards even if there is a charge in 2018 vs 2016



3. Security Fears Still Evident

Concern over card fraud at unattended terminals has fallen very slightly across all regions in the last two years, however, 63% of the respondents in our survey still felt that using their credit or debit cards in unmanned vending machines and kiosks put them at risk of card fraud. Security fears appear greatest among US respondents.

Graph 9 – Concerns that using cards at unmanned vending machines and kiosks increases the risk of fraud

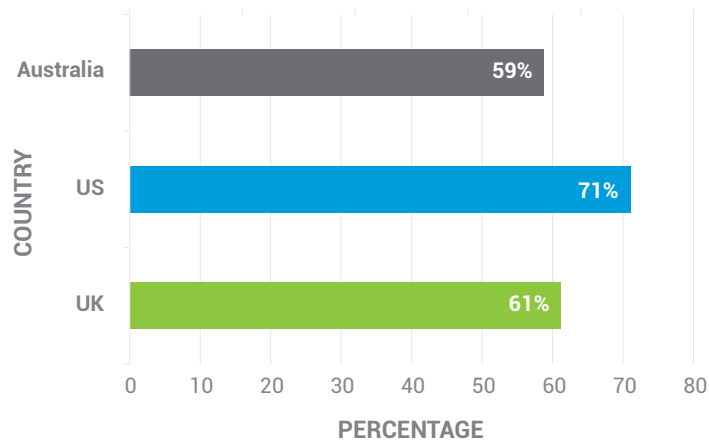


US anomaly highlights potential industry issue

In Australia and the UK, the oldest age group – 55 to 64 year olds – was the most concerned, however, in the US, this group was second behind the youngest age group of 18 to 24 year olds. The lower adoption of card payments at unattended terminals among the oldest age group would seem consistent with them exhibiting heightened security concerns and this being a possible barrier to them taking up this payment option.

However, the lowest age group, which is one of the biggest adopters appears to be doing so in the US despite their security fears and raises a point for the industry to note in that more reassurance of cardholder data protection is required. 18 to 24 year olds in the US are markedly more concerned than their counterparts in the UK and Australia, as shown in graph 10.

Graph 10 – Concerns among 18 to 24 year olds that using cards at unmanned vending machines and kiosks increases the risk of fraud



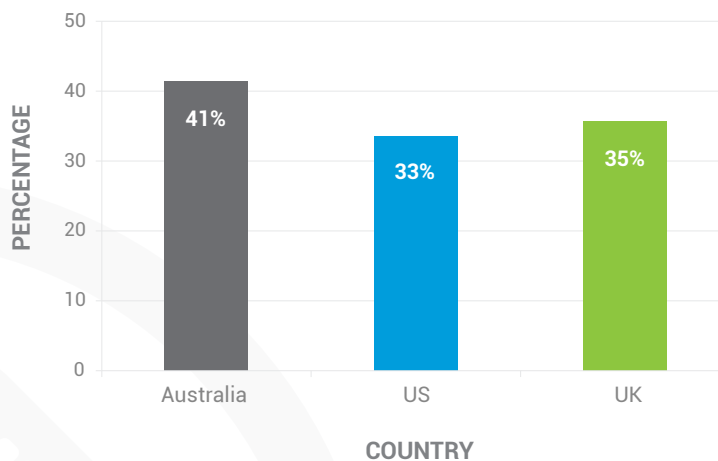
4. The Potential of New Card Payment Options

With new technology giving rise to new ways to pay, we used this opportunity to explore the potential of two consumer driven developments that were impacting the unattended payments landscape – wearables and digital wallets.

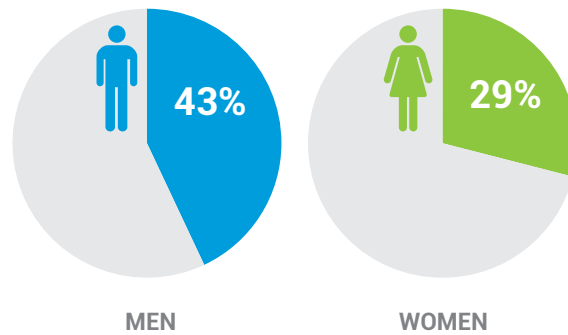
More than a third of respondents show interest in wearables

36% of the respondents in our survey said they would be willing to make a payment at an unattended kiosk or vending machine using a wearable device, such as a bracelet, fitness tracker, keyring, etc. Australian adults appeared most keen out of the different countries while men demonstrated a significantly higher level of interest than women.

Graph 11 – Adults willing to make a payment at an unattended kiosk or vending machine using a wearable device, by country

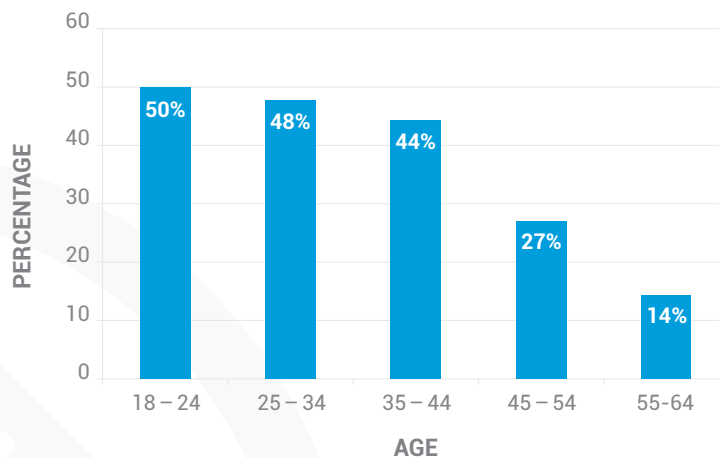


Graph 12 – Adults willing to make a payment at an unattended kiosk or vending machine using a wearable device, by gender



Half of 18 to 24 year olds appear interested in the potential of wearable devices with payments functionality, as shown in graph 13 below.

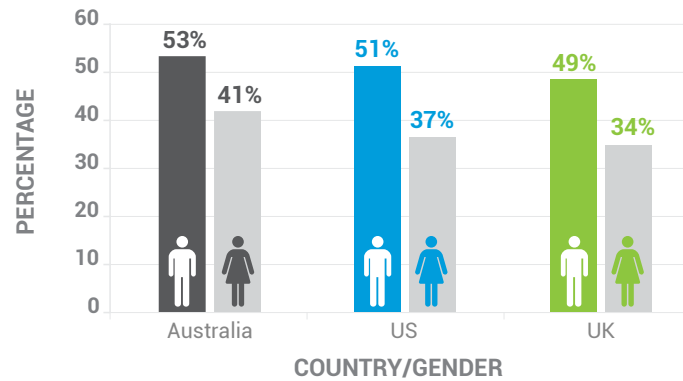
Graph 13 – Adults willing to make a payment at an unattended kiosk or vending machine using a wearable device, by age group



Men set sights on digital wallets

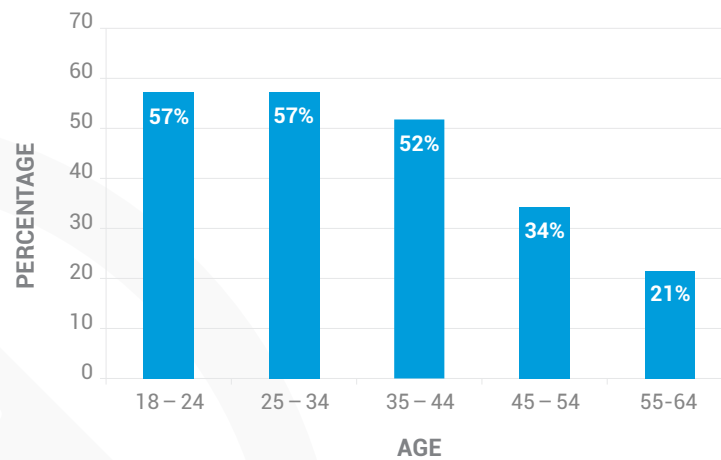
More than half of the men in our survey said they would be willing to make a payment at an unattended kiosk or vending machine using a mobile wallet or digital wallet within their smartphone, such as ApplePay, Mastercard Masterpass, Samsung Pay, Android Pay, Banks own, etc.

Graph 14 – Respondents willing to make a payment at an unattended terminal using a digital wallet by country and gender



The potential of digital wallet use at unattended terminals is further strengthened by a significant willingness among the younger age groups.

Graph 15 – Adults willing to make a payment at an unattended terminal using a digital wallet by age





5. Conclusions

Our survey confirms that card payments at unattended terminals are being positively received and adopted by consumers. The convenience of using a credit or debit card instead of carrying cash appears to support the current needs and expectations of consumers, while the efficiency and speed that unattended terminals can offer over traditional retail environments is likely to be another contributory factor in their success.

The future would appear very positive with there being a sufficient willingness among a significant number of adults to using wearable devices and digital wallets within smartphones at unattended terminals.

At the same time, however, the industry needs to continue to reassure cardholders that their data is secure as security fears were reported among almost two thirds of our respondents. If unchecked, this could become a barrier to adoption so is worthy of sufficient time and attention.



About TNS

TNS is one of the world's leading payments connectivity providers and is trusted by hundreds of organizations to securely deliver more than 27 billion payments transactions each year. For over two decades, 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 500,000+ 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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- UK - +44 (0)114 292 0200
- France - +33 (0)1 7236 6321
- Italy - +39 02 481 225 3
- Spain - +34 91 799 1670
- Asia Pacific - +61 2 9959 0800

By email:

- solutions@tnsi.com
- Or please visit www.tnsi.com



Appendix – Regional and Demographic Survey Components

The survey was conducted by online self-completion interview between 8th – 12th March 2018 by Kantar TNS. Our survey in 2016 was also conducted by Kantar TNS and ran between 4th – 8th February 2016.

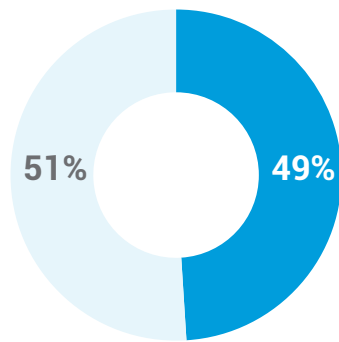
These online surveys are designed to be nationally representative of adults interviewed per country. The surveys use a quota sample (age interlocked with gender, and a regional quota). Post fieldwork correctional weighting within age, gender and region, has been used to ensure the representativeness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



US 2018 survey demographics

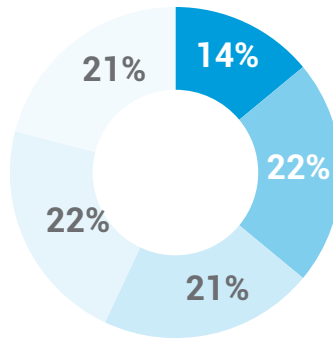
1,027 responses received

Gender breakdown



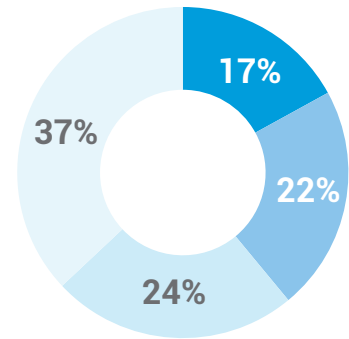
- Male
- Female

Age breakdown



- 18 – 24 year olds
- 25 – 34 year olds
- 35 – 44 year olds
- 45 – 54 year olds
- 55 – 64 years old

Region breakdown

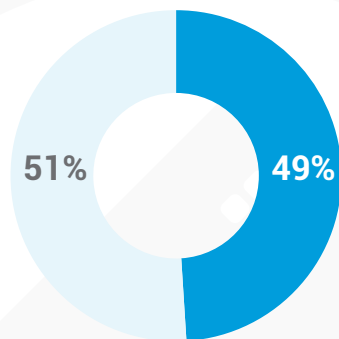


- Northeast
- Midwest
- West
- South

US 2016 survey demographics

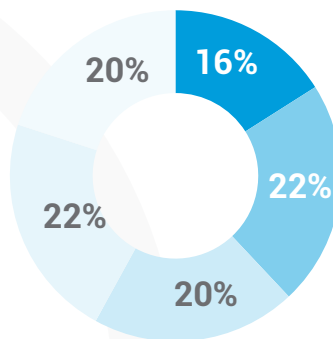
1,050 responses received

Gender breakdown



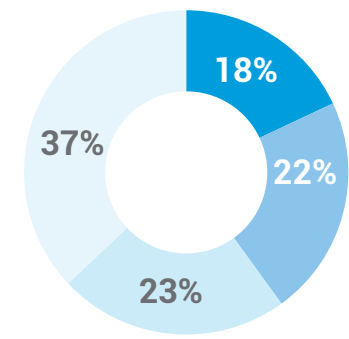
- Male
- Female

Age breakdown



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Region breakdown



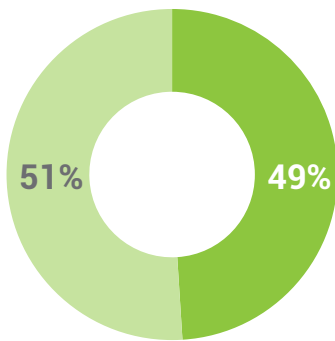
- Northeast
- Midwest
- West
- South



UK 2018 survey demographics

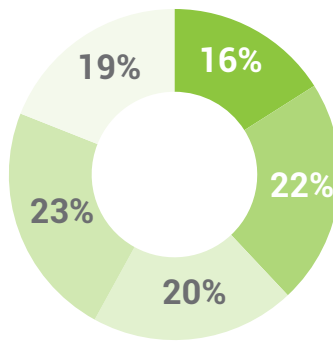
1,024 responses received

Gender breakdown



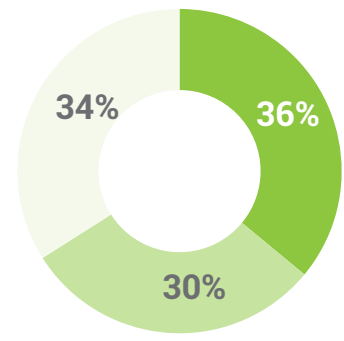
- Male
- Female

Age breakdown



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- 35 – 44 year olds
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Region breakdown

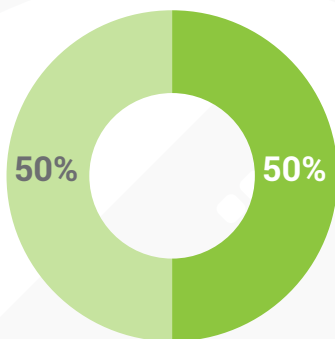


- North
- Midlands
- South

UK 2016 survey demographics

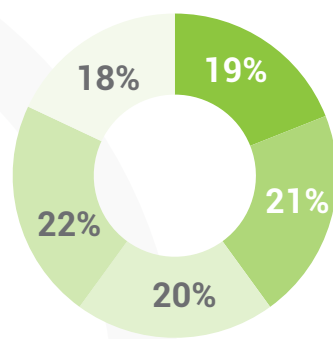
1,002 responses received

Gender breakdown



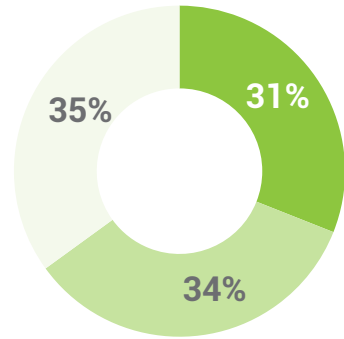
- Male
- Female

Age breakdown



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Region breakdown



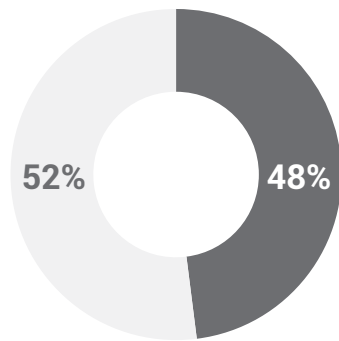
- North
- Midwest
- South



Australia 2018 survey demographics

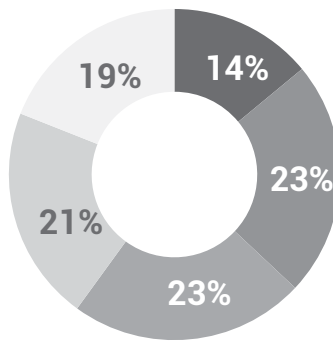
1,032 responses received

Gender breakdown



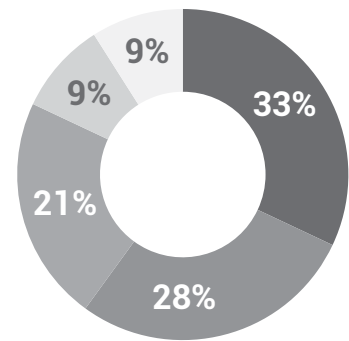
- Male
- Female

Age breakdown



- 18 – 24 year olds
- 25 – 34 year olds
- 35 – 44 year olds
- 45 – 54 year olds
- 55 – 64 years old

Region breakdown

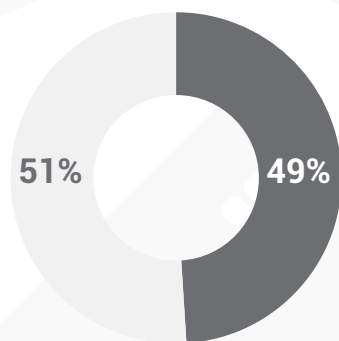


- New South Wales & Australian Capital Territory
- Victoria & Tasmania
- Queensland
- South Australia & Northern Territory
- Western Australia

Australia 2016 survey demographics

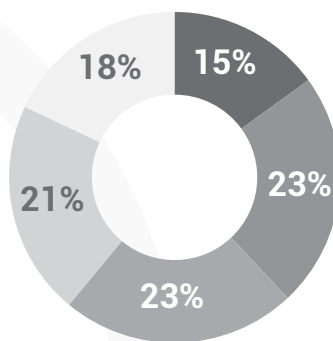
1,030 responses received

Gender breakdown



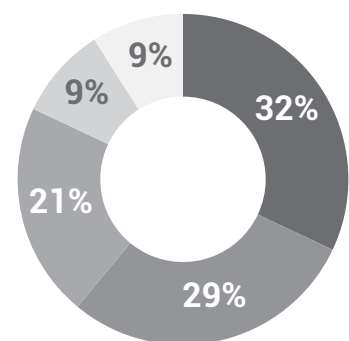
- Male
- Female

Age breakdown



- 18 – 24 year olds
- 25 – 34 year olds
- 35 – 44 year olds
- 45 – 54 year olds
- 55 – 64 years old

Region breakdown



- New South Wales & Australian Capital Territory
- Victoria & Tasmania
- Queensland
- South Australia & Northern Territory
- Western Australia