



**COMPUTOP'S
PAYMENTS & E-COMMERCE REPORT
NORTH AMERICA & OCEANIA 2016**

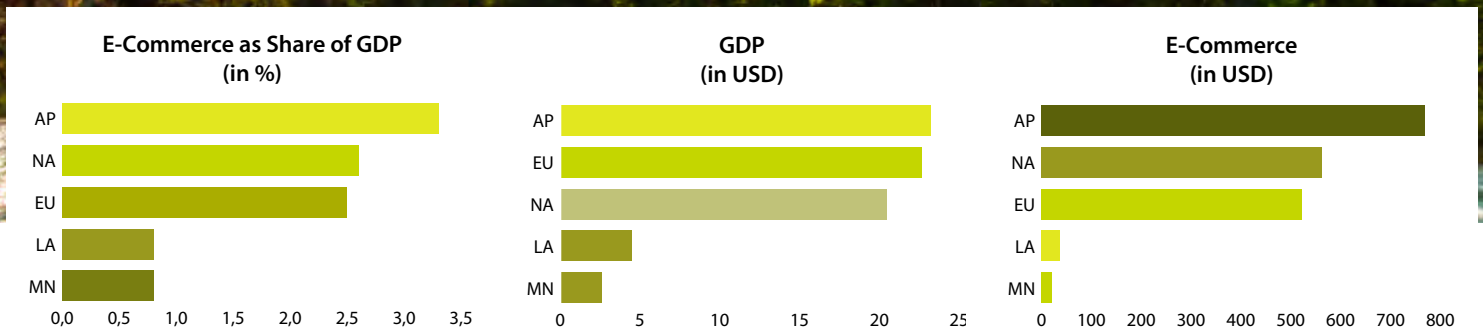




NORTH AMERICA

The third-largest continent in the world, North America was originally settled during the last ice age by the ancestors of Native Americans. Between roughly 10,000BC and 1500AD, the descendants of these first settlers diversified to form many thousands of separate societies ranging in their social and economic organisation from the hunter-gatherers of the American subarctic to the urban societies of the Cahokia, near modern St Louis. From the fifteenth century onwards, North America was settled first by Europeans and later by immigrants from all

over the world. Today, Canada and the United States are two of the world's most culturally diverse and economically successful states. For the last seventy years, the United States has been the world's economic powerhouse and the pre-eminent global power. Home to some of the world's largest corporations and the centre of the global financial industry, North America is a both one of the world's most lucrative e-commerce markets and one of its most competitive.



AP = Asia-Pacific; NA = Northern America; EU = Europe; LA = Latin America; MN = Middle East & North Africa

North America contains less than ten percent of the world’s population but accounts for around 17% of global GDP. As well as extensive mineral resources the extraction and processing of which is worth around \$113 billion a year, North American agriculture brings in over a trillion dollars a year, the continent’s technology sector is worth around \$1.3 trillion annually and petrochemicals a further \$1 trillion. The region is also home to, among other things, thriving service and entertainment sectors.

North American consumer spending is worth approximately \$16.2 trillion a year. The region’s e-commerce market is worth \$562 billion a year – 2.6% of the GDP – making it the second largest in the world. As you’d expect in such a highly developed market,

bank account penetration is high, at 94%. And 62% of North Americans have a credit card. The fintech industry has grown rapidly over the last few years. Although the most common way of paying for online transactions is still credit card. 66% of shoppers in the US and 81% in Canada said they had used a credit card online in the past 6 months. However, almost twenty percent of Americans now use e-wallets. The expectation is that this indicates a growing acceptance of alternative payment methods (APMs), which will lead to a diversification of payment means in the near future. At the moment, PayPal remains the clear leader in the alternative-payments market.

Millennials (consumers who reached adulthood around the year 2000), continue to be early adopters of both new e-commerce platforms and

new e-commerce platforms and new payment means. This is a particularly interesting segment of the population. In both Canada and the United States it's far more diverse than the population as a whole. In the US, for instance, 44.2% of all millennials are members of a minority ethnic group compared to just 21% of older age brackets.

Americans also love their devices, often hopping from screen to screen mid-purchase. According to data from Google, 85% of online shoppers will start a purchase on one device or channel and finish on another. And, interestingly for merchants trying to break the North American

market, consumers who use a number of channels to make their purchases are shopping more and spending more than single-channel shoppers.

The North American market is highly complex as well as highly competitive. In order to break into it, PSPs and merchants need to understand local market dynamics, consumer preferences, and payment culture. That's what you'll find in this report.



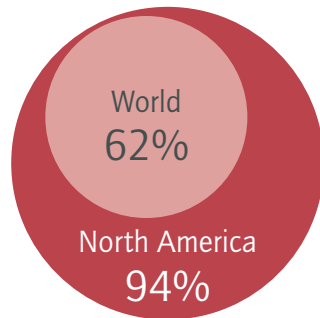


COMPUTOP'S PAYMENTS & E-COMMERCE REPORT
COUNTRY BREAKDOWN
NORTH AMERICA

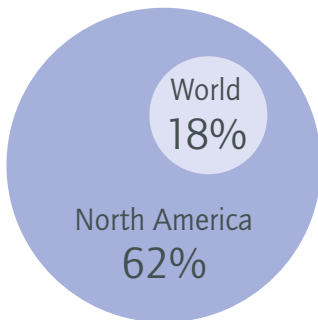
CANADA 7

UNITED STATES 9

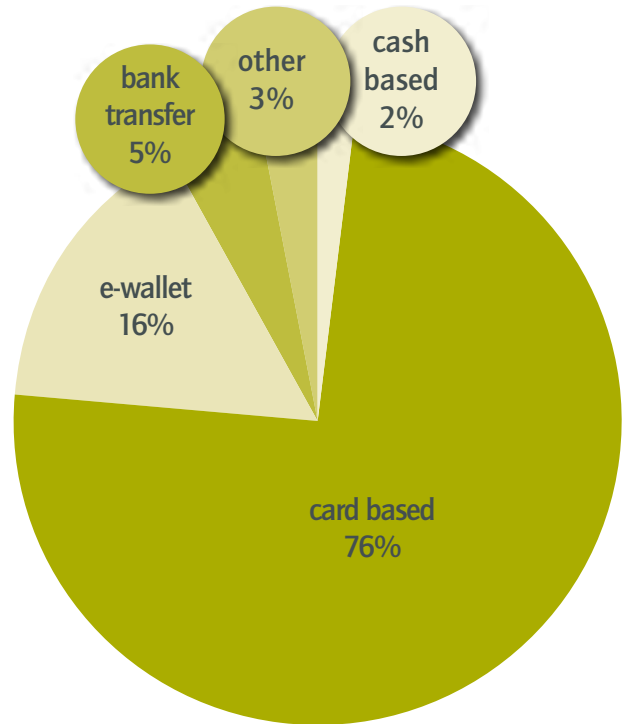
SOME BUBBLES ABOUT NORTH AMERICA



Bank Account Penetration

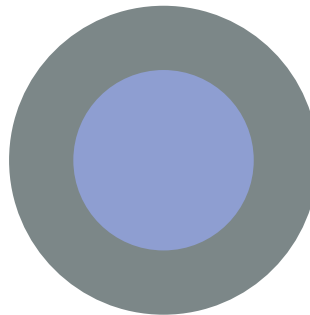


Credit Card Penetration



335 m people live in North America 100%

134 m people use the internet 40%





CANADA



Before European colonisation, Canada was the home of an estimated 500,000 people broadly divided into six geographical and cultural regions. First contact with Europeans came when the Norse tried to settle the area of Quebec known as L'Anse aux Meadows. European incursion proper, however, began with the annexation of parts of what is now Quebec in the sixteenth century. In 1759, the British conquered the remains of French North America, setting the scene for the economic opening up of the Canadian West as part of the British Empire. In the nineteenth century Canada's established east-coast settlements were connected to the inland prairies and to the newly opened-up west coast by the development of Canada's trans-pacific railroad system, fuelling an agricultural revolution in the country that helped bring cheap, affordable food to much of the world's population. Modern Canada is one of the world's leading exporters of grain and other farming produce. But it also has one of the world's most diversified, high-technology economies.

FINANCIAL INCLUSION

Canada is one of the world's most financially inclusive societies. What exclusion remains is concentrated among low-income households and marginalised populations. Canada's National Strategy for Financial Literacy has been working with marginalised communities to increase both understanding of the financial products available and good practice in

managing money. Ninety-nine percent of Canadians have a bank account and 73% have a credit card. Exactly three-quarters of Canadians use online banking, suggesting a high acceptance of both digital transaction and innovation. Canadians are increasingly moving away from cash, particularly for big-ticket retail purchases, for which credit cards are the most common payment type.



99%
banked population



73%
credit card penetration

INTERNET & SMARTPHONE PENETRATION

Only 8% of Canadians are without some kind of Internet access. As part of its Connecting Canadians program, the government has set itself the target of bringing broadband (of 5Mbps or higher) to 280,000 households in remote areas by 2019. Over the next five years, Canada will invest \$500 million in making this a

reality. Smartphone penetration is 71%. Over the past few years, adults of all ages have adopted smartphones in increasing numbers. But millennials remain Canada's core smartphone audience. In 2014, more than 80% of 18-to-34-year-olds had a smartphone.



93%
internet penetration



71%
smartphone penetration

CANADA

E-COMMERCE TRENDS

Canada has a shipping trade with both Asia and Europe. One in five Canadians are recent immigrants. And 75% of Canadians live within 100 miles of the US border. This creates a perfect environment for cross-border e-commerce. Just under half of all purchases are from foreign merchants. The US accounts for 34% of digital spending, Asia-Pacific 10%, and Europe 3%. The total value

of the Canadian e-commerce market is \$20 billion. Online purchases account for just 5.2% of all retail sales. This is low compared to similar markets, for instance the UK on 12% or the USA on 10%. However, around 59% of small-to-medium businesses still do not even have a web site.

Popular APMs



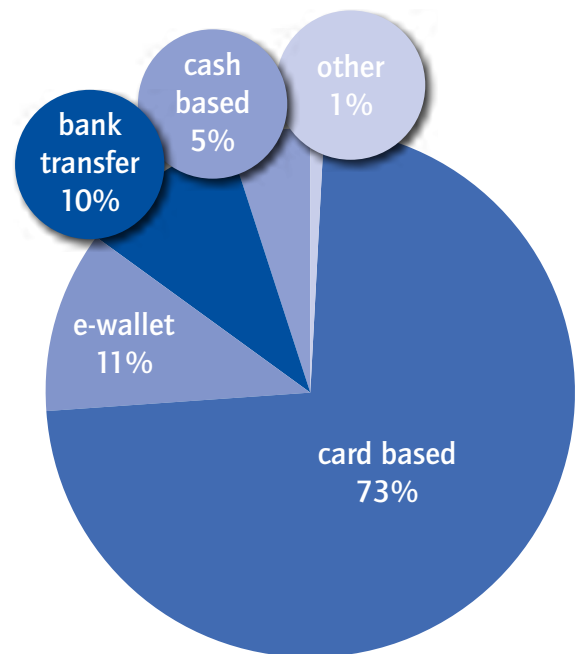
population: 35.5 m

GDP: 1,785.4 bn USD

GDP per capita: 50,235 USD

HOW PEOPLE PAY ONLINE

Almost three quarters of online purchases are made with a payment card of some kind. Both bank transfers and e-wallets are relatively popular, with 10% and 11% of the payments market respectively. As you'd expect with a mature economy, cash-based payments are less popular.



Share of e-commerce transaction



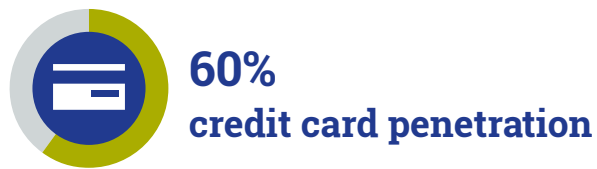
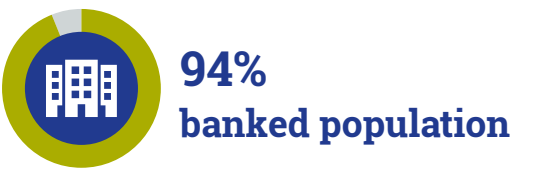
UNITED STATES

In 1776, the thirteen colonies declared their independence from Great Britain and began an experiment in government – the world’s first state run according to enlightenment principles. Since that time the United States has grown to encompass nine times as great a land area as the original colonies with one hundred and thirty times its original population. Waves of immigration have made the country one of the world’s most diverse. The opening of the American West transformed the USA into the breadbasket of much of the world, while the industrial revolution of the nineteenth and twentieth century’s transformed it into the world’s leading economic power. Seventy years after the end of the Second World War, the USA is the world’s only superpower. Measured by GDP, it’s still the richest country in the world.

FINANCIAL INCLUSION

The US is a highly banked market: 94% of Americans have a bank account. Where financial exclusion persists, it tends to be among poorer and minority populations. Thirteen percent of Hispanics, for instance, are still unbanked. In 2015, the US Treasury in partnership with leading financial institutions announced a range of initiatives designed to increase financial inclusion. Among other things, the initiatives targeted

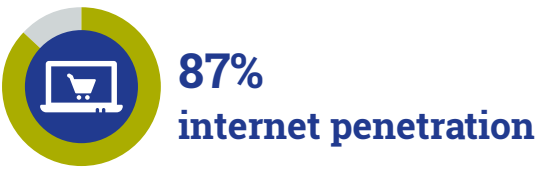
specific under-served populations based on geography, demographics, or a combination of the two. Seventy-two percent of Americans have a credit card. However, since the crash of 2007 it’s becoming increasingly difficult for new customers to get a credit card. This has boosted the importance of alternative payment methods in the USA more than in similar developed markets.



INTERNET & SMARTPHONE PENETRATION

Internet penetration in the United States is high, at almost 88%. The US national broadband plan envisages the creation of a \$15.5 billion Connect America fund, with the goal of helping state and local providers to bring 100Mbps connections to at least 100 million homes by 2020 and to ensure that all Americans

have access to connections of 5mbps or faster. Almost three-quarters of Americans have an Internet-enabled smartphone. And according to eMarketer, 10% of Americans only access the Internet using their phone. However, as the smartphone market approaches maturity growth has begun to slow.





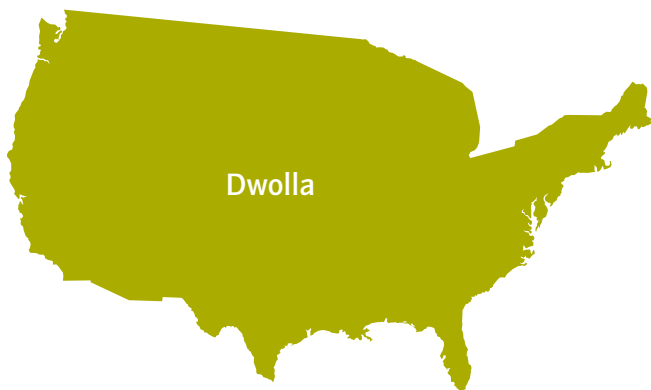
UNITED STATES

E-COMMERCE TRENDS

American e-commerce is worth \$306 billion a year, a figure which is growing at the rate of 15% a year. The country is the world leader in cross-border e-commerce, both imports and exports. The things Americans most like to buy from abroad are clothes,

accessories, and health and beauty products. Online transactions peak markedly on public holidays and other notable seasonal occasions. In 2015 there were \$3 billion worth of sales on CyberMonday alone. Average annual spend per shopper is very high, at \$2,466 a year.

Popular APMs



population: 318.9 m

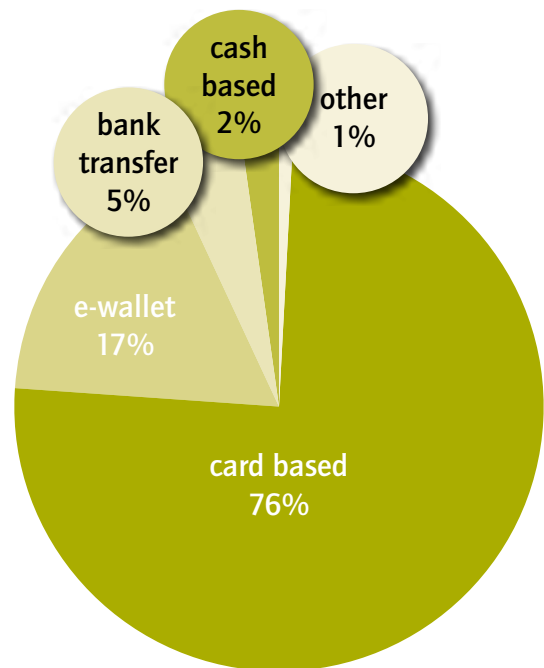
GDP: 17,419.0 bn USD

GDP per capita: 54,630 USD

HOW PEOPLE PAY ONLINE

American customers make high demands of their financial service providers. They expect the safety and security of traditional payment means with the added value of personalisation, customisation and convenience of use.

Fintech, online and mobile banking are on the rise to match those expectations, with e-wallets a large and growing segment of the payment market. For the moment, however, Americans still pay for 72% of all online purchases using their credit and debit cards.



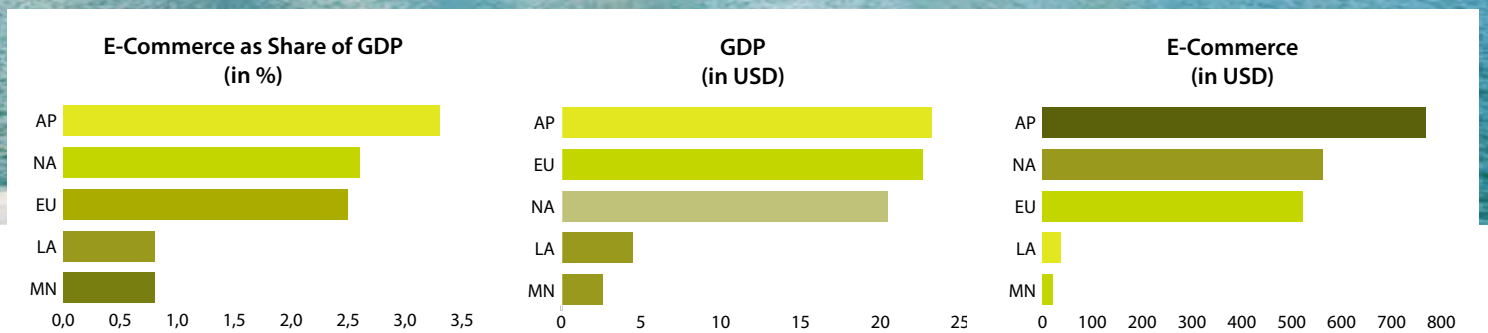
Share of e-commerce transaction



OCEANIA

Made up of over 10,000 islands, Oceania covers over 8 million square kilometres of land but has a population of just 36 million. Even the major regional powers of Australia and New Zealand are very thinly populated by global standards. The region is economically highly diverse. It includes first-world economies that combine a low-population density with a high level of technological development, resulting in some of the world's highest living standards. But it also takes in countries such as Papua New Guinea, where 37% of the

population live below the poverty line. Of all the world's major inhabited regions, Oceania is the furthest from the Earth's main centres of population. This presents some challenges to any company moving into the area. Despite this, the area represents a highly lucrative market. Australia and New Zealand both have a GDP per capita that's well above the global average. And with a Chinese demand for raw materials still relatively high, despite a recent downturn, consumer demand in much of Oceania remains strong.



AP = Asia-Pacific; NA = Northern America; EU = Europe; LA = Latin America; MN = Middle East & North Africa

Financial inclusion in Oceania is good, by world standards: 99% of the region’s population has access to a bank account, compared to just 62% worldwide. Any company moving into the area, however, needs to appreciate that rates of inclusion vary widely from country to country. In Australia 99% of the population has a bank account, in Fiji this falls to 60%, and in rural Papua New Guinea financial inclusion rates fall as low as 5%. E-commerce providers expanding into Australia or New Zealand can assume a highly developed financial infrastructure. This is not true elsewhere.

Most of the online payments in the region are made using a credit or debit card. This isn’t surprising: creditcard penetration in Oceania is 59%, compared to just 18% worldwide. But again, this is no cause for complacency. Even

in developed Australia and New Zealand, over 33% of all transactions are paid for using alternative payment methods (APMs) such as e-wallets, bank transfers, and cash. These two larger markets, with their large populations, skew the figures for the whole region.

In Oceania’s two major markets, Australia and New Zealand, 85% of the population has access to the Internet. Again, however, this headline figure masks disparities between different geographic areas and different economic cohorts. As recently as July 2016, the University of Canberra found that almost half of all Australians who live outside the major cities said that their Internet connection was poor. In New Zealand, until recently only one in five rural dwellers had access to broadband speeds comparable to those available in the cities.

Smartphone penetration in Australia and New Zealand is over 70%. M-commerce in both markets continues to grow extremely rapidly. In Australia in 2015, for instance, m-commerce grew at a rate of 204%. Any e-commerce provider hoping to succeed in these markets, should optimise their customer experience – including payments – for mobile. Failure to do so will incur a heavy penalty in the market.

Finally, although much is made of Oceania's relative isolation from world markets, this shouldn't deter prospective e-commerce investors. Connections have been improving for some time. A 2014 study by the New Zealand Ministry of Transport found that plans to increase the number of large container ships visiting the country over the next decade could cut shipping costs by as much as 10%.

Online connections are also improving. In 2016 Alcatel- Lucent announced that it had signed a contract to build a new undersea Internet cable to New Zealand, which is expected to improve bandwidth and reliability. At the same time, a new undersea cable from Singapore to Australia was also announced. Both developments are expected to be completed by 2018.

Hopefully it's clear that, although it presents some unique challenges – mainly connected with distance and sparse populations – Oceania is also an area rich in opportunities for e-commerce providers. This report focuses on Australia and New Zealand, the two largest markets in the region. It covers their payment cultures, infrastructure, and other crucial details that you'll need to know about if you're expanding into those countries. We hope you find it useful. Good luck!



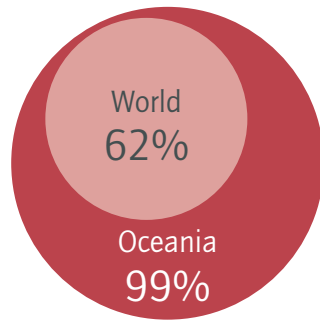


COMPUTOP'S PAYMENTS & E-COMMERCE REPORT
COUNTRY BREAKDOWN
OCEANIA

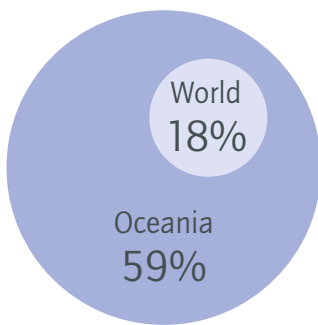
AUSTRALIA 16

NEW ZEALAND.....18

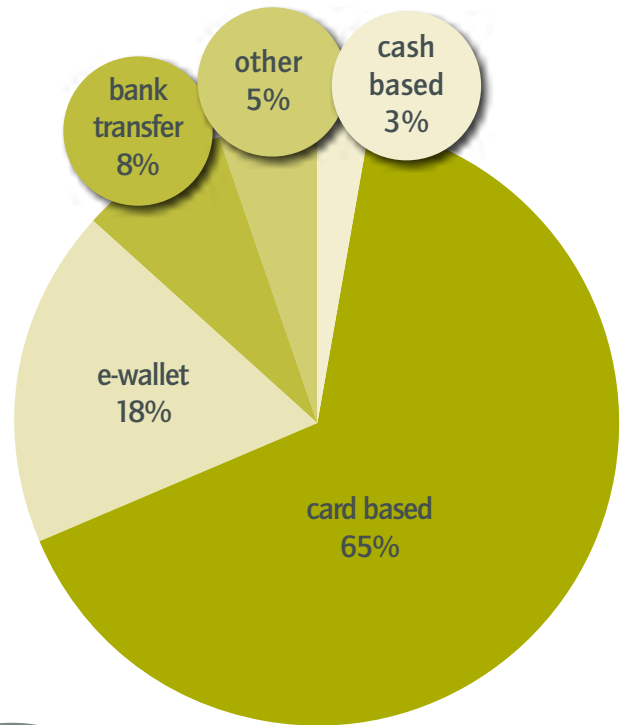
SOME BUBBLES ABOUT OCEANIA



Bank Account Penetration



Credit Card Penetration

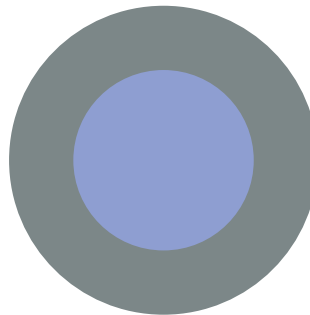


28 m people live in Oceania

23.7 m people use the internet

100%

40%





AUSTRALIA

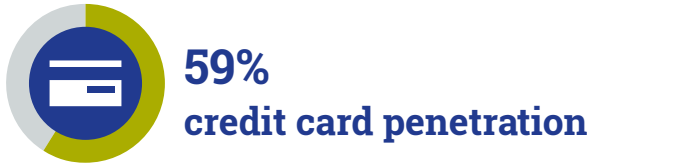


The world's smallest continent but also one of its largest countries, the Commonwealth of Australia is home to an aboriginal culture thought to be the world's oldest continuous civilization. The history of modern Australia famously began with Captain's Cook's voyages of discovery and the subsequent settlement of the country as a penal colony. During the nineteenth century, an increase in free settlement saw the growth of a new society built on largely on agriculture and mining. The period between the wars saw a rise in Australian national sentiment and consciousness, paving the way for the country to forge a new path, less closely aligned to Britain, in the post-1945 world. Agriculture and mining still play a large role in Australia's economy today. The country is a key supplier of coal, iron ore, aluminium, copper, meat, grains, and wool. It benefited hugely from China's industrialisation. Not only do many of Australia's mining and petro-chemical products go to China, even its wool exports are mainly bound for Chinese ports. As well as raw materials, Australia is a leading exporter of manufactured goods including motor vehicles, textiles, and domestic appliances. The country is also home to a thriving service sector, including a tourism industry worth an estimated A\$47.5 billion.

FINANCIAL INCLUSION

Over 99% of adult Australians have a bank account. The country's banking system is one of the best developed in the world. Financial inclusion has been a policy in Australia since at least 2006, when the Australian Financial Inclusion Network was founded. Where financial exclusion does persist, it tends to affect marginalised communities – in particular Australian aborigines, where rates

of financial exclusion are as high as 43%. In 2015, the country committed itself to a Financial Inclusion Action Plan, designed to address the remaining pockets of financial exclusion. As well as a high rate of bank-account penetration, Australia has on the world's highest rates of credit card penetration, at 69%. Australians spend more on their credit cards than any other country in the world.



INTERNET & SMARTPHONE PENETRATION

Almost 85% of all Australians have access to the Internet in some form. The country lags behind the OECD leaders in providing fixed-line broadband, which has caused some Australians to go straight to mobile

broadband. The country's smartphone penetration is 78%. Over half – 56% – of Australians access the Internet at least as often via smartphone as they do using a computer.





AUSTRALIA

E-COMMERCE TRENDS

E-commerce in Australia is worth US\$19 billion a year. Average spend per shopper is US\$1,640, over \$300 higher than the global average. A 2014 study found that 63% of Australians were happy to shop internationally. And, unsurprisingly given the popularity of mobile

Internet, mobile-commerce is growing rapidly. Already in 2016, 30% of Australians say they've shopped using a mobile device. By 2017, m-commerce is expected to be worth US\$560 million.

Popular APMs



population: 23.5 m

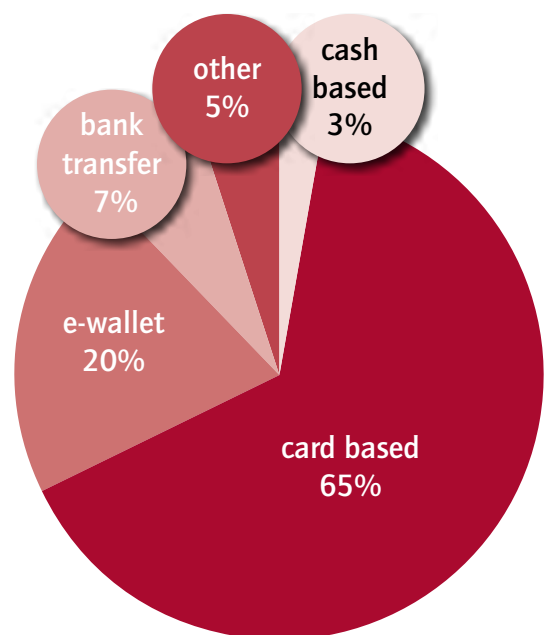
GDP: 1,454.7 bn USD

GDP per capita: 61,926 USD

HOW PEOPLE PAY ONLINE

Up to 80% of the population has used online banking at some point, suggesting a market with a high-rate of acceptance for digital finance. Card-based payments dominate the market, with a 65% market share.

The next most popular type of payment is the e-wallet with a 20% market share, much higher than international averages. Merchants and PSPs set up to operate in developed and mature markets, will feel at home in Australia.



Share of e-commerce transaction



NEW ZEALAND

Settled by the ancestors of today's Maoris in the thirteenth century, modern New Zealand is a constitutional monarchy with a diverse and growing population. The country has two official names: New Zealand in English and Aotearoa in Maori. The country's land area is greater than that of the UK but its population is just 4.5 million, giving New Zealand one of the lowest population densities in the developed world. Most New Zealanders live on the North Island, where the major centres of commerce and industry are to be found. In the nineteenth and twentieth centuries New Zealand's prosperity was closely linked to that of the UK, its main export market. Since 1945, however, and particularly since Britain joined the European Common Market in 1973, New Zealand has pursued a policy of economic diversification. Tourism is one of the largest sources of foreign exchange, contributing around \$10 billion to the economy each year. Perhaps the country's best-known economic success over the last decade, however, has been as a location for film production, in particular for the blockbuster adaptations of The Lord of the Rings and The Hobbit.

FINANCIAL INCLUSION

In 2009 New Zealand formally adopted the 2020 Money Pacific goals, committing the country to provide financial education for all children and adults, to improve consumer protection, and to halve the number of people without access to basic financial services. As things stand, New Zealand does exceptionally well on

financial inclusion with a banked rate of 98.7% and credit card penetration of 61%. A 2014 report for the Australian National Bank noted only one area of possible concern – the absence of an interest cap on informal loans.



100%
banked population



61%
credit card penetration

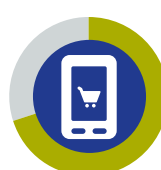
INTERNET & SMARTPHONE PENETRATION

Smartphone penetration in New Zealand is 70%, much higher than both the world and the Asia-Pacific averages. By 2018, it's estimated that 90% of the country's population will own an Internet-enabled smartphone.

The devices are widely used for online shopping and for locating stories and comparing products online. Almost 87% of the population has Internet access of some kind, either mobile or fixed-line.



86%
internet penetration



70%
smartphone penetration

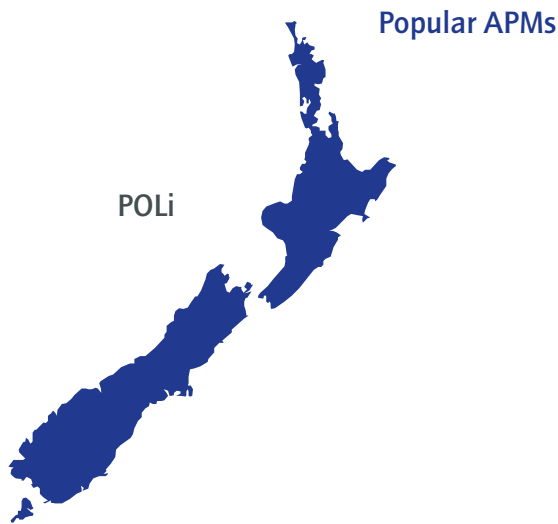


NEW ZEALAND

E-COMMERCE TRENDS

As one of only two countries in the world where merchants aren't charged for processing electronics transactions, New Zealand has a high uptake of e-payments in various forms. The e-commerce market is worth \$3 billion and is growing at a rate of 21% a year. Unsurprisingly given

the small size of the local market, New Zealanders are active cross-border shoppers: 34% of all money spent online is spent with overseas merchants. Annual spend per shopper is \$600 higher than the global average.

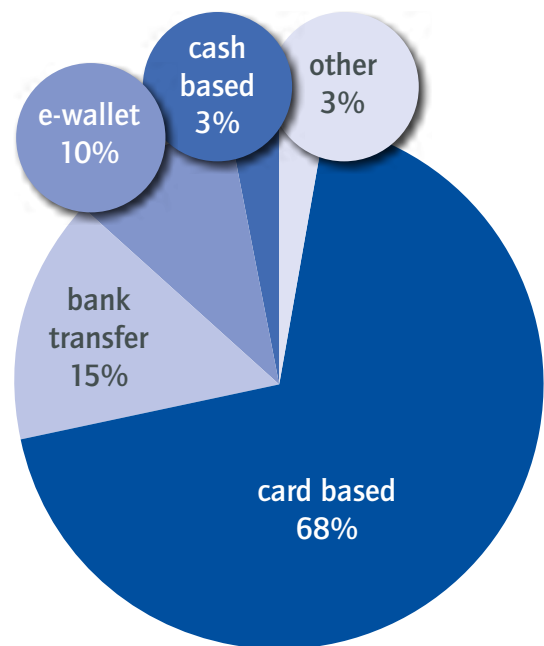


population: 30.9 m
 GDP: 746.2 bn USD
 GDP per capita: 24,161 USD

HOW PEOPLE PAY ONLINE

Most New Zealanders pay for online purchases with their credit or debit cards. The remainder use either bank transfers or e-wallets. Cash-based purchasing has only a tiny foothold in the payment market, just 3%.

Local PSPs include companies such as Flo2Cash, which specialises in processing recurring payments, and general e-payments specialist DPS Payment Express.



Share of e-commerce transaction

Computop is a leading global payment service provider that provides compliant and secure solutions in the fields of e-commerce, POS, m-commerce and Mail Order and Telephone Order (MOTO). The company, founded in 1997, is headquartered in Bamberg, Germany, with additional independent offices in China, the UK and the US. Computop processes transactions totalling \$24 billion per year for its client network of over 14,000 large international merchants and global marketplace partners in industries such as retail, travel and gaming. Global customers include C&A, Fossil, Metro Cash & Carry, Rakuten, Samsung and Swarovski. In cooperation with its network of financial and technology partners, which it has expanded over many years, Computop offers a comprehensive multichannel solution that is geared to the needs of today's market and provides merchants with seamlessly integrated payment processes.

Sources: PPRO and Edgar, Dunn & Company



Computop have been partnering with PPRO for a number of years and many of the alternative payment methods mentioned in this guide are provided through this partnership. PPRO provides Computop access to, processing and collection services for alternative payment methods and value added services, all through one API. Computop's merchants can benefit from this partnership via only one contract for more than 100 alternative payment methods, via their same integration, a single platform and with only one settlement for multiple APMs.

<https://www.ppro.com/acquiring/>

For questions and inquiries about Computop's solutions, contact a payment specialist in your area or visit www.computop.com.

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