FUTURE OPPORTUNITIES IN FMCG E-COMMERCE:

MARKET DRIVERS AND FIVE-YEAR FORECAST

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

TABLE OF CONTENTS

SUMMARY 3

KEY MESSAGES 6

FMCG E-COMMERCE GLOBAL LANDSCAPE 7

10 KEY DRIVERS OF E-COMMERCE MARKET SUCCESS 8

FMCG E-COMMERCE FIVE YEAR FORECAST 20

FORECASTS FOR SELECT EIGHT MARKETS

- COLOMBIA 23
- NEW ZEALAND 24
- NORWAY 25
- POLAND 26
- PORTUGAL 27
- TAIWAN 28
- THAILAND 29
- UNITED ARAB EMIRATES 30

E-COMMERCE ADVICE FOR RETAILERS AND MANUFACTURERS 31

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

SUMMARY

E-commerce is reshaping the global retail market. Since the turn of the century, online shopping has boomed as internet access has reached all corners of the world and smartphones have quickly become an intrinsic part in the lives of billions of people. While global behemoths like Amazon and Alibaba are well known around the world, the rise of e-commerce is providing exciting growth opportunities for hundreds of thousands of companies in all shapes and sizes, from major bricks-and-mortar players through to tiny cottage industries. E-commerce has opened up a whole new shopping world, providing hundreds of millions of consumers with access to much greater assortment and value opportunities, and helping to satisfy their increasing demand for convenience. Today, e-commerce across multiple categories like Fashion, Electronics, FMCG and others account for about US$2.8 trillion[a], some 10% of the global retail market. Growing at an estimated 20% a year, e-commerce shows no signs of slowing, and by 2020 it is likely to be worth in excess of US$4 trillion[b].

To date, the e-commerce boom has so far favoured the travel sector, as well as apparel and electronics retailers. And despite the global buzz, e-commerce currently contributes less than 7% of the global fast-moving consumer goods (FMCG) market, which is US$4 trillion value[a]. One key reason for the slower uptake of online FMCG has been the logistical challenges associated with ensuring fresh and perishable products arrive to the consumer in top condition. Additionally, in advanced markets, especially those with dense populations such as Germany, many FMCG products are readily available in close proximity to consumers at brick-and-mortar stores. However, with increasing consumer demand for convenience, and better technology and other enabling conditions, online FMCG growth is accelerating across the globe: Nielsen's Future Opportunities in FMCG E-commerce study estimates four times faster than offline sales. Compared with other global markets, South Korea and China demonstrate the highest uptake of online FMCG, where e-commerce has already reached 18% and 16% market share of their respective FMCG markets. By 2022, FMCG e-commerce will be in excess of US$400 billion and comprise 10%-12% of all FMCG sales globally.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

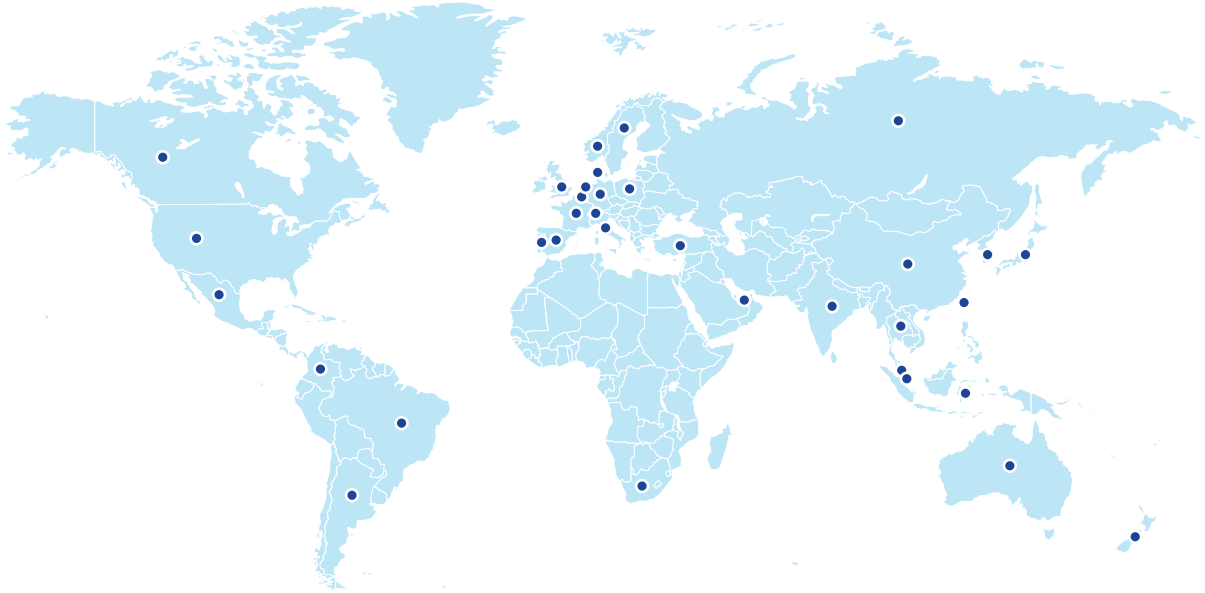
Although a highly unlikely scenario, if the current global growth rates for online and offline FMCG remain constant, online sales will exceed those from bricks-and-mortar stores by 2037[a]. There is a greater likelihood of convergence between offline and online commerce with concepts such as click and collect and alternative delivery solutions introduced by businesses. E-commerce growth varies around the world. In some countries, it's taking off, while it's stagnating in others. Emerging technologies, macroeconomic conditions, cultural differences and many other factors are influencing the evolution of e-commerce at the market level. Understanding which factors are driving or holding back e-commerce growth, and how these factors interrelate at a market level, gives us great insights into where current and emerging opportunities lie. And what is becoming increasingly clear, for most FMCG brands, future success will be significantly determined by how successful they are online.

This paper examines the current drivers of FMCG e-commerce and what the e-commerce market will look like by 2022. The objectives of this paper are two-fold. One is to stimulate conversations between FMCG players, governments and regulatory bodies on how to create a more enabling environment for e-commerce. The second is to help clients prioritise markets and make more informed decisions about their e-commerce investments. To achieve these objectives, this study analysed the current state of FMCG e-commerce in 34 markets and identified 10 key drivers, that most correlate to online success.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

NIELSEN'S FUTURE OPPORTUNITIES IN FMCG E-COMMERCE ANALYSIS COVERS 88% OF WORLD GDP AND 65% OF WORLD POPULATION

This study used these drivers as key inputs to generate a five-year forecast of the e-commerce prospects in these 34 markets. This paper presents the results of the analysis of drivers as well as the forecasts for eight of these markets.



NORTH AMERICA

- Canada
- USA

LATIN AMERICA

- Argentina
- Brazil
- Colombia
- Mexico

PACIFIC

- Australia
- New Zealand

MIDDLE EAST AND AFRICA

- South Africa
- United Arab Emirates

WESTERN EUROPE

- Belgium
- France
- Germany
- Italy
- Netherlands
- Portugal
- Spain
- Switzerland
- United Kingdom

EASTERN EUROPE

- Russia
- Turkey
- Poland

NORDICS

- Denmark
- Norway
- Sweden

ASIA

- Mainland China
- Taiwan Region
- India
- Japan
- South Korea

SOUTHEAST ASIA

- Indonesia
- Malaysia
- Singapore
- Thailand

Note: This report shares data and insights for select eight markets. For more information on other markets, please contact your local Nielsen representative.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

KEY MESSAGES

1. FMCG online growth will continue to outpace offline growth, and most retailers and manufacturers need omnichannel strategies to ensure future success.

2. For FMCG e-commerce to thrive, a market must have foundational infrastructure in place, such as high penetration levels for bank accounts, mobile payments internet access and smartphone uptake.

3. Markets with densely populated areas, a pro-business landscape, postal reliability, trusting people and a savings-conscious society will enjoy greater online FMCG success.

4. The presence of large e-commerce players in a market—such as Amazon and JD.com—creates a "snowball effect" for online FMCG success.

5. Online FMCG sales are set to double globally over the next five years and will grow twice as fast in developing markets than in developed markets.

6. Nielsen's FMCG E-commerce study anticipates that e-commerce as a proportion of total FMCG sales will more than double by 2022 in 14 of the 34 markets that were analysed as part of this study.

7. By 2022, global FMCG e-commerce sales set to become a US$400 billion opportunity.

8. The Asia region is expected to provide some of the biggest growth opportunities for online FMCG over the next five years.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

FMCG E-COMMERCE GLOBAL LANDSCAPE

Although accelerating, FMCG online growth varies hugely across markets. South Korea is the global leader with nearly one-fifth of all FMCG sold via online channels, and China is not far behind. Although the U.S. is a major market in terms of the total value of online sales, e-commerce still accounts for a relatively small share of total FMCG sales there—a lesser proportion than in the U.K. and France. Latin American markets have been slow to embrace e-commerce, as have some European and Asian markets as well, such as Germany and India respectively.

Whether nascent or already booming, online FMCG growth potential exists in nearly all markets. Most major FMCG players already have e-commerce as a key pillar of their growth strategy and are actively scaling up investments to increase their online offerings and geographic coverage. In doing so, they are rethinking and reshaping their entire brand strategies. However, many players are still uncertain what form their strategies should take and how to best execute them. In this quickly evolving space, e-commerce success requires much more than simply trying to take offline capabilities online. Bigger companies are setting ambitious financial targets and testing and innovating in the online space, sometimes failing too. Profits can initially be hard to come by, but for most players, the eye is on the long-term prize.

For retailers and manufacturers that have yet to embark on their e-commerce journey, future success means making decisions now. The good news for brands lacking a strong e-commerce presence is that it's not too late. In many developing markets, online FMCG is just beginning to show promise. In more advanced markets, there is still much opportunity to ramp up online shopper penetration, and the frequency and amount that current online shoppers spend. For nearly all FMCG companies, the question is no longer one of "bricks versus clicks". Rather, the formula for winning involves developing an omnichannel strategy.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

10 KEY DRIVERS OF E-COMMERCE MARKET SUCCESS

This study identified 10 drivers that most correlate with FMCG e-commerce success. As shown in diagram 1, these are foundational, macro, social and supply drivers. For most drivers, the analysis from this study supported to develop a "success threshold" indicator[1]. The drivers are overviewed below.

Diagram 1

THE KEY DRIVERS FRAMEWORK TO GAUGE THE CURRENT POTENTIAL FOR SUCCESS OF FMCG E-COMMERCE

			Supply	Maturity of FMCG E-commerce Players
		Social	Trust	Savings Culture
	Macro	Ease of Doing Business	Population Density*	Postal Reliability
Foundational	GDP (PPP)	Bank Account Penetration	Internet Penetration	Smartphone Penetration

*We also see Store Density is an important factor, especially related to the success of click and collected and hyperlocal models

[1]For FMCG Maturity and Trust, there was no specific success threshold used as the assessments of these two drivers were based on multiple indices and factors.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

MARKET SIZE

For e-commerce, market size matters. Large markets generally provide more opportunities and profit potential for e-commerce players. Nine of the world's 10 largest economies in the world generate the most online FMCG sales. Bigger markets are also able to mobilise larger investments into e-commerce technology and innovation, which further accelerates e-commerce. These lead markets can also be seen as test markets, and their experiences strongly influence how e-commerce will evolve elsewhere. The U.S. and China, the world's two largest economies, not only generate the most FMCG sales, but are also leading innovators. Cashier-less supermarkets such as Hema and Amazon Go originated in these two markets, along-with dash buttons, meal kits, subscription boxes, predictive personalisation and voice-activated shopping.

Smaller markets can also do well in the online FMCG space if their economies are advanced and some other foundational drivers are in place. Singapore and New Zealand, for example, are enjoying e-commerce success due to their high per-capita GDP combined with excellent internet, smartphone and bank account penetration.

> ACCORDING TO NIELSEN'S FMCG E-COMMERCE STUDY, THE SUCCESS THRESHOLD IS NATIONAL GDP OF AT LEAST US$1.8 TRILLION AT PURCHASING POWER PARITY.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

BANK ACCOUNT PENETRATION

Bank accounts are essential for the vast majority of e-commerce purchases. Credit and debit cards, and mobile wallets (e.g., Alipay and PayPal) are the most popular ways to make online purchases, and they all require bank accounts. Markets that succeed at e-commerce tend to have very high levels of bank account penetration. Markets where bank accounts are not prevalent are forced to rely on payment on delivery mechanisms for e-commerce, but this constrains online growth potential.

The importance of bank account penetration was recently highlighted in India. In November 2016, demonetisation in the country created an unprecedented surge in new bank account openings, steering to an estimated increase of up to 40% in sales volume for a leading FMCG e-retailer[2].

> ACCORDING TO NIELSEN'S FMCG E-COMMERCE STUDY, THE SUCCESS THRESHOLD IS AT LEAST 94% OF THE POPULATION HAS A BANK ACCOUNT.

INTERNET PENETRATION

The growth potential for e-commerce in a market is directly correlated with its internet penetration. To make an order or an online payment a user needs access to the internet. From 2010 to 2016, internet penetration in Russia jumped from 37% to 76% and was a key factor in driving e-commerce sales from around US$3 billion to approximately US$13 billion during the same period[a]. Similarly, in Nigeria, internet access has doubled in the past five years, which has helped drive impressive growth for the country's biggest online retailer Jumia, which posted an impressive 47% increase[a] in sales in 2017.

In markets where penetration remains low, such as Indonesia, investments in internet infrastructure will need to be made to boost the growth of e-commerce.

> ACCORDING TO NIELSEN'S FMCG E-COMMERCE STUDY, THE SUCCESS THRESHOLD IS AT LEAST 85% OF THE POPULATION HAS INTERNET ACCESS.

[2]dnaindia.com/business/report-e-grocery-platform-bigbasket-expects-to-cross-rs-2000-crore-by-fiscal-end-2279673

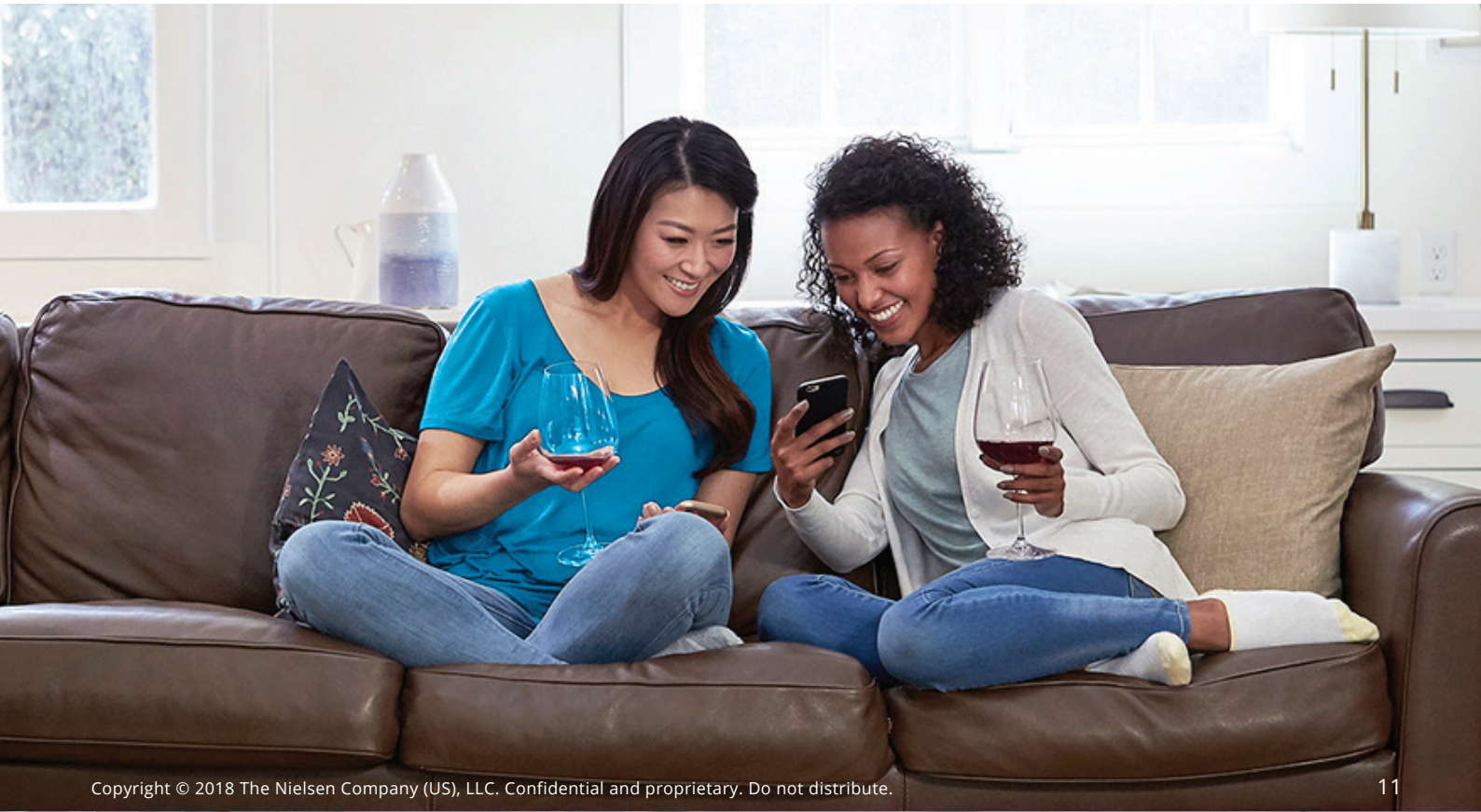
Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

SMARTPHONE PENETRATION

Smartphone penetration has a strong correlation with FMCG e-commerce success. This is especially apparent in many emerging markets where smartphones are cheaper and more readily available than computers. In markets like Indonesia, consumers are leaping straight to mobile e-commerce from traditional trade, largely skipping modern trade and computer-based e-commerce. Players in these emerging markets should focus on mobile e-commerce as a growth strategy.

Smartphone access is also an important driver in advanced markets. Switzerland's leading online grocery portal LeShop took eight years to reach its first €50 million in e-commerce sales on personal computers. Comparatively, it took just three years to reach €50 million on mobile phones[a]. In South Korea, smartphones are now used for more than half of all business-to-consumer online sales while in Canada, FMCG has emerged as the most frequently shopped categories from smartphones.

> ACCORDING TO NIELSEN'S FMCG E-COMMERCE STUDY, THE SUCCESS THRESHOLD IS AT LEAST 67% OF THE POPULATION HAS A SMARTPHONE.



Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

EASE OF DOING BUSINESS

Countries where establishing a business is relatively easy tend to be more successful at e-commerce. Although many measures of ease of doing business focus on brick-and-mortar operations, some of the metrics are relevant for e-commerce operations where there is no need to establish a direct physical presence in a market. For example, trading across borders, and paying taxes.

The World Bank ranks South Korea as one of the top five nations with high consumer protection, ease in taxation and permits for businesses, and simplified trading across borders.

> ACCORDING TO NIELSEN'S FMCG E-COMMERCE STUDY, THE SUCCESS THRESHOLD IS A COUNTRY'S DISTANCE TO FRONTIER SCORE IS MORE THAN 77[3].
>
> DISTANCE TO FRONTIER SCORES HELP ASSESS ECONOMIC REGULATORY PERFORMANCE OVER TIME, WITH 100 BEING THE "FRONTIER".

POPULATION DENSITY

Countries with a high population density have significant e-commerce advantages through lower logistic and infrastructure costs. In countries with dense populations, deliveries can reach more people in a shorter time and requires less stores and depots. In countries like the Netherlands and the U.K., nationwide e-commerce home deliveries are far more viable than countries such as Australia.

E-commerce can still thrive in relatively sparsely populated countries, especially those that have many cities. For example, more than half of all the U.S. FMCG online sales in 2016 originated in major cities within eight states. And as is the case in France, nationwide click-and-collect e-commerce can help overcome the barrier of low population density. On the flip side, countries like Germany, which has a high density of grocery stores, often have lower e-commerce sales. In these markets, many consumers already have easy access to nearby physical stores, which reduces the convenience value of online FMCG shopping.

> ACCORDING TO NIELSEN'S FMCG E-COMMERCE STUDY, THE SUCCESS THRESHOLD[C] IS POPULATION DENSITY OF MORE THAN 135 PEOPLE PER SQ. KM.

[3] Distance to frontier scores help assess economic regulatory performance over time, with 100 being the "frontier." See http://www.doingbusiness.org/data/distance-to-frontier for more information.

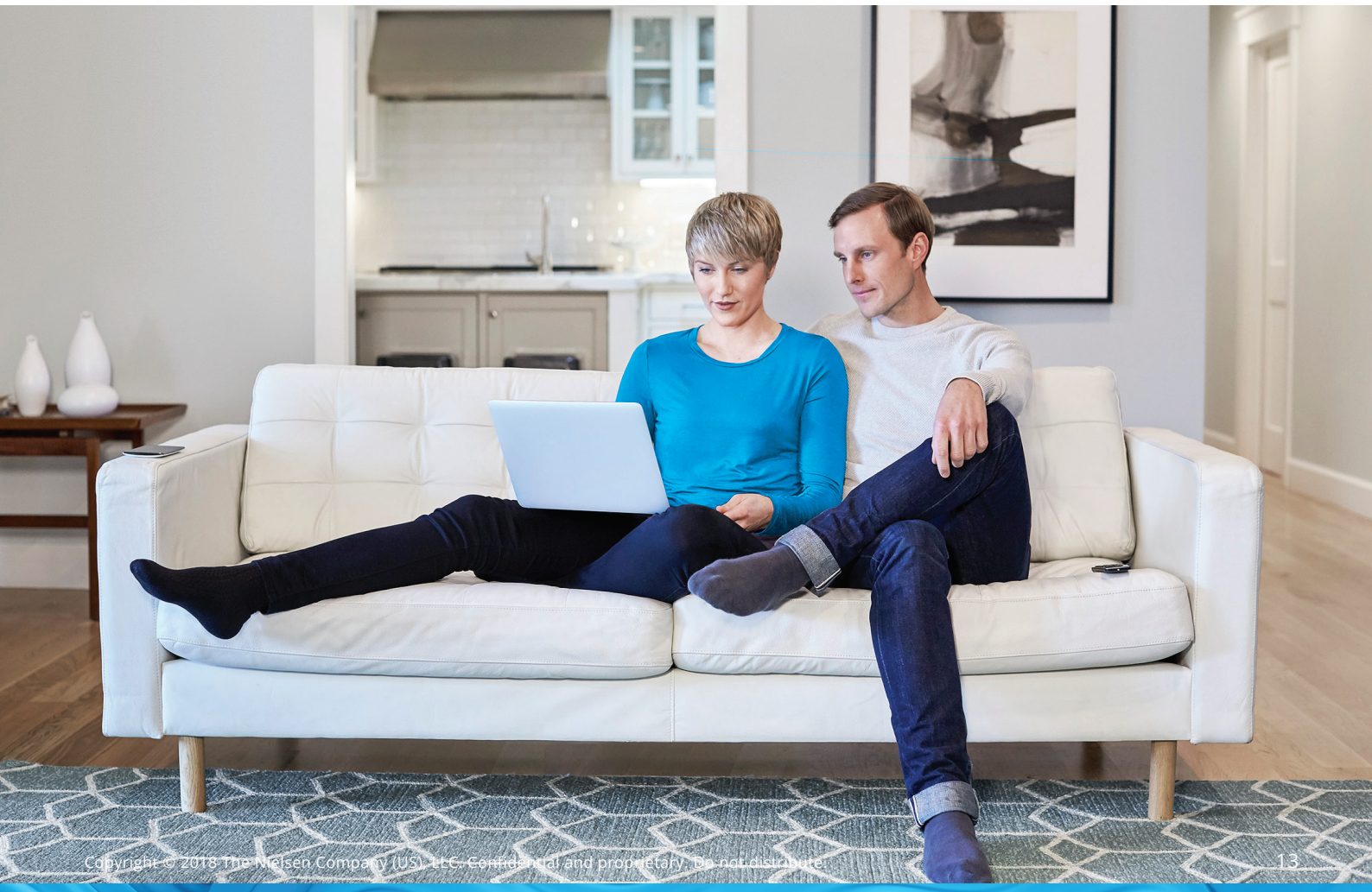
Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

POSTAL RELIABILITY

The vast majority of e-commerce sales utilise public and private postal services. The reliability of these services is an important contributor to e-commerce success. Customers need to be sure that their purchases will arrive when expected and in top condition. Singapore is a great example of postal reliability with its standardised addresses and efficient postal code system, which are complemented by densely populated areas and a good transport network. Packages can be cost-effectively delivered from one end of the country to another overnight. In markets where postal reliability is more constrained, click-and-collect systems tend to play a greater role.

> ACCORDING TO NIELSEN'S FMCG E-COMMERCE STUDY, THE SUCCESS THRESHOLD IS A POSTAL RELIABILITY SCORE THAT IS GREATER THAN 72[4].

[4] The UPU's Integrated Index for Postal Development (2IPD) offers a benchmark performance score (from 0 to 100) along four dimensions of postal development: reliability, reach, relevance and resilience.



Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

TRUST

Consumer trust is crucial for e-commerce success. Trust includes many aspects. For example, shoppers need to be sure that they are purchasing genuine products, that deliveries will arrive safely on time and in good condition, and that the payment process is secure. Trust is a particularly important consideration in the FMCG online space, especially for fresh and frozen foods, where the quality of the product can easily be compromised.

A lack of trust is seen as a significant barrier to e-commerce success in some Latin American markets. Customers there tend to be sceptical about product quality and often feel it is unsafe for unattended delivery items to be left on their doorstep. This means more delivery attempts are required, which in turn greatly increases the logistics cost.

SAVINGS CULTURE

A strong savings culture is perhaps a surprising driver, but the data suggests that it's an important one. Markets where the population saves more tends to also spend more online. And notably, these sales are generally not cannibalising offline sales, indicating that consumers are comfortable dipping into their savings for additional purchases. Such consumers are generally value conscious and actively pursue good deals. China has a high household savings rate, and consumers there are certainly enticed by the promise of cheaper prices, as reflected by the incredible success of Black Friday, the world's biggest shopping day.

> ACCORDING TO NIELSEN'S FMCG E-COMMERCE STUDY, THE SUCCESS THRESHOLD IS A HOUSEHOLD SAVINGS RATE GREATER THAN 7.8% OF NET DISPOSABLE INCOME.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

MATURITY OF FMCG E-COMMERCE RETAILERS

There is a clear relationship between mature e-commerce markets and high online FMCG sales. How well established e-commerce is in a market not only determines current success but is also a key driver of future growth. The length of time e-commerce players have operated, their geographical reach, brand assortment, prices and deals, delivery time and options are among the indicators of e-commerce maturity. Mature e-commerce markets can more easily ensure consumer loyalty, engage new online shoppers, and develop cutting edge services that make the online shopping experience more appealing.

France is one of Europe's most successful e-commerce markets. There, online FMCG services have been around since the early 2000s, and its click-and-collect system is nationwide with same-day pick up availability. Prices are competitive and France has a very strong product range available. Markets in which major players are active, such as Amazon and eastern giants JD.com and Alibaba, will have, or more quickly develop, mature FMCG markets.

OTHER DRIVERS

During the analysis of this study, other potential drivers were identified but did not show a significant impact. These include; social media prevalence, individualistic versus collectivist society and household income.

Although social media has an important role to play in purchasing decisions—especially for new or niche brands—it is not a significant factor at the market level. Research company eMarketer estimates that social media drives only 3%-5% of FMCG e-commerce traffic, and two of the world's biggest FMCG players, P&G and Unilever, are now cutting back on their digital ad spend.

E-commerce has succeeded in markets with close-knit communities such as Korea but struggled in others, including India. It is a similar story for more individual societies where e-commerce is flourishing in France but slow to take root in Germany. Online FMCG is definitely not just for wealthy households either. Empowered by better connectivity, lower socio-economic segments of society are rapid adopters of e-commerce in many markets. For these consumers, e-commerce enables them to access a much wider array of products and at competitive prices.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

MARKET ANALYSIS OF SUCCESS THRESHOLDS

This study assessed the progress of 34 markets against the driver success threshold metrics. If a market exceeded the 60th percentile of a threshold, the analysis from this study designated its performance "optimal" for that driver. If it is in the 40th to 60th percentile, it is designated "average," and anything below the 40th percentile, it is designated "poor."

As shown in diagram 2, not all drivers need to be optimal for a market to achieve online FMCG success. And which drivers need to be "optimal" or at least "average" also varies depending on the market. However, the analysis from this study revealed a general pattern, of successful FMCG e-commerce markets, which is that at least two foundational drivers should be "optimal" as should at least two of the five macro and social drivers. In addition, the "maturity of FMCG e-commerce" driver should also be average or optimal. Although China has only one optimal foundational driver, its large number of internet and smartphone users drive the e-commerce success. This study focussed on national markets, the same framework analysis can easily be applied to a city or region.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

STUDY METHODOLOGY: DRIVERS ANALYSIS

1. Markets were selected across the developed and developing countries, covering a broad representation of geography, culture and e-commerce maturity. The selection was also influenced by the market's importance to Nielsen's global clients as well as data availability.

2. Potential drivers were listed based on the supporting ecosystem needed to fulfill customer e-commerce expectations, which was informed by previous Nielsen analyses, including Digital Shopper Segmentation.

3. Key "success" indicators were identified for each driver and then measured for each market.

4. Statistical tests for each market were applied to establish correlations and causal relationships between the driver and size and share of FMCG e-commerce.

5. A key success threshold for each driver metric was identified.

6. The findings were validated and fine-tuned using industry expertise and local data and by researching real world examples in each market.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

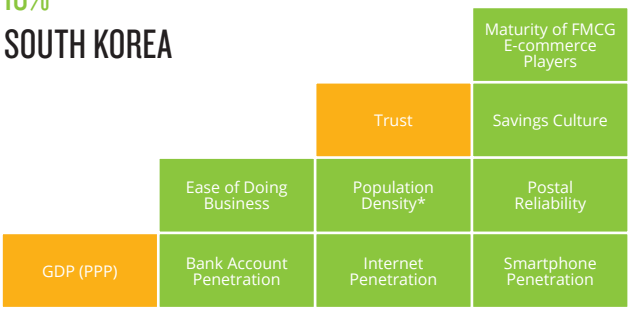
Diagram 2

COMPARING ACROSS MARKETS

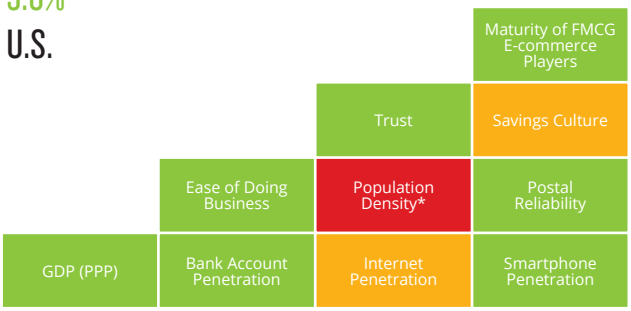
LEGEND: POOR AVERAGE OPTIMAL

* Thresholds determined from a sample of 34 markets worldwide
** Percentages represent the e-commerce channel contribution towards total FMCG sales

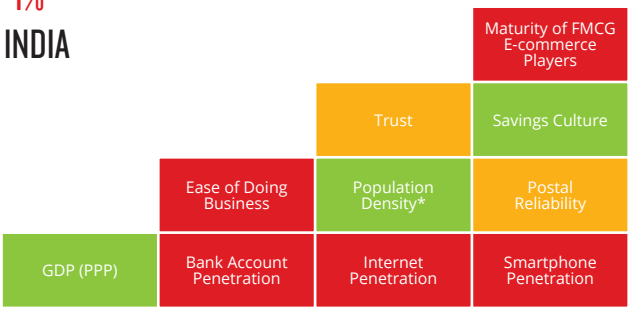
18%
SOUTH KOREA



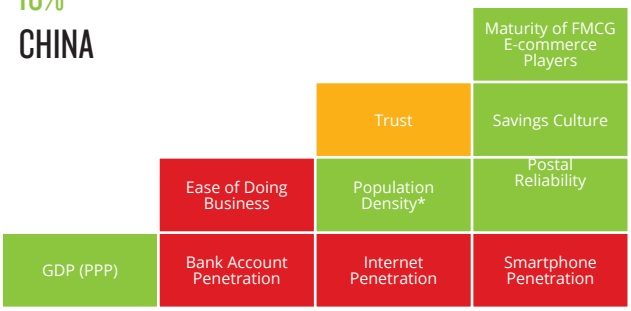
5.6%
U.S.



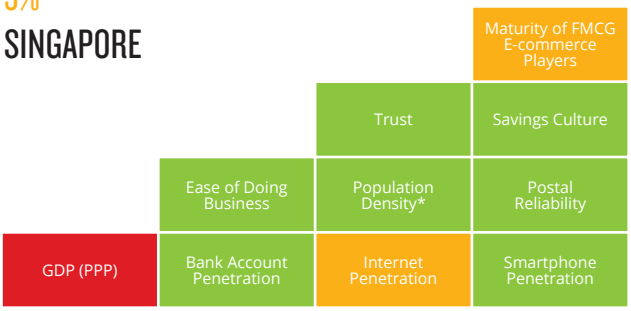
~1%
INDIA



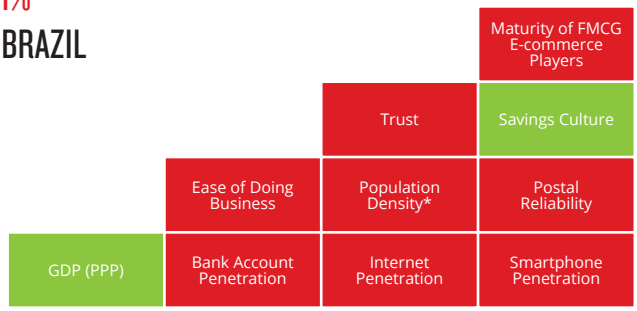
16%
CHINA



3%
SINGAPORE



1%
BRAZIL



Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

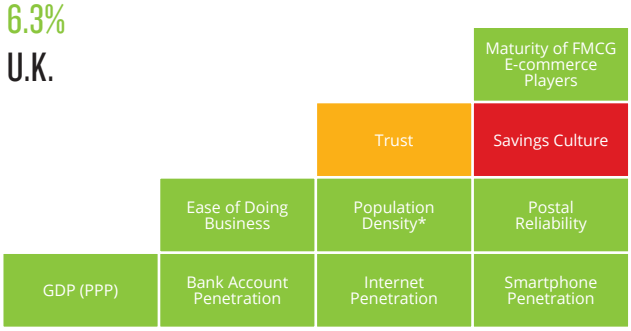
Diagram 2

COMPARING ACROSS MARKETS (CONTINUATION)

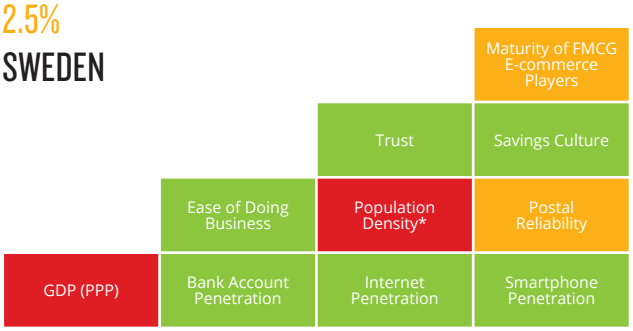
LEGEND: POOR AVERAGE OPTIMAL

* Thresholds determined from a sample of 34 markets worldwide
** Percentages represent the e-commerce channel contribution towards total FMCG sales

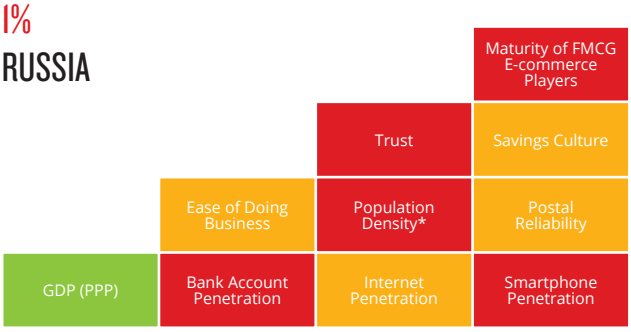
6.3% U.K.



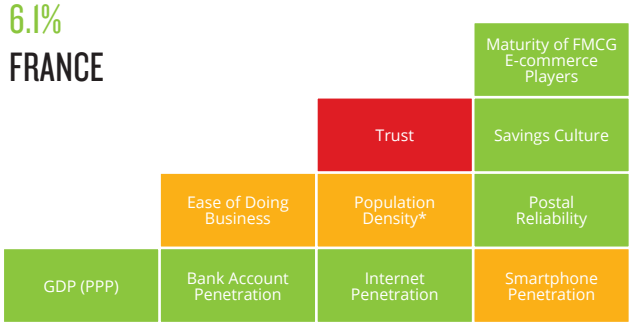
2.5% SWEDEN



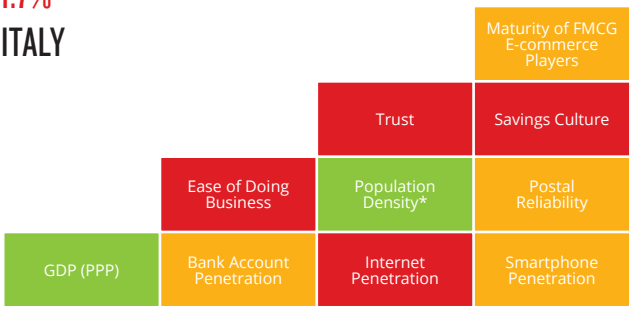
1% RUSSIA



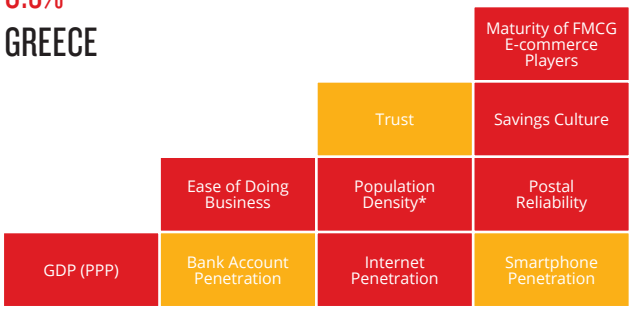
6.1% FRANCE



1.7% ITALY



0.3% GREECE



Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

FMCG E-COMMERCE FIVE-YEAR FORECAST

Although the 10 drivers provide excellent insights about the potential for e-commerce success, they have limitations for assessing future growth prospects. Thus, for the five-year market forecasts, this study used the driver information along with other sources to estimate the value and proportion of total FMCG sales e-commerce by 2022 in 34 markets. Here, the study summarises the major forecast findings at the regional and global levels and then presents the specific numbers, with commentary, for eight markets from different regions.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

STUDY METHODOLOGY: FIVE YEAR FORECAST

1. This study used a combination of e-commerce driver data, additional Nielsen and third party e-commerce data; as well as expert opinion to identify three key "levers" to assess the growth prospects for each of the 34 markets.

2. Lever 1 is "Favorable Megatrends" and includes elements such as median age, the number of "connected spenders" (middle class consumers connected to the internet) and total FMCG sales through traditional channels. To indicate strong e-commerce growth, a market's population would have a relatively low median age, a fast growing number of "connected spenders" and a high proportion of FMCG sales from traditional trade channels.

3. Lever 2 is "Strategic Investments" made by FMCG companies, logistics and telecom companies, governments, banking and financial institutions; that would contribute to the growth of e-commerce. For example investments in infrastructure can be towards improving infrastructure, changing customer habits or funding innovation.

4. Lever 3 is "Technology & Innovation" that captures the uptake of technologies and innovations to solve current barriers to online FMCG, especially related to improving operational efficiency, profitability and customer experience.

5. For further analysis this study applied various statistical and validation techniques (regression, time series forecasting, Delphi-method etc.) to generate projections of FMCG e-commerce sales value and share of total FMCG for each market.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

GLOBAL AND REGIONAL RESULTS

By 2022, at least 15 of the 34 markets analysed will be US$1 billion FMCG markets, up from 10 currently. The median value of FMCG e-commerce across the 34 markets is currently US$500 million, and this study forecasts that by 2022, the median value will reach US$1 billion with global online FMCG sales exceeding US$400 billion. The study also anticipates that e-commerce as a proportion of total FMCG sales will more than double by 2022 in 14 of the markets.

Looking at the results from a more specific geographic and market maturity point of view, this study presents some interesting trends emerging. In Asia, many consumers live in some of the world's biggest and most densely populated cities and were technology is rapidly being embraced as a key component of urban lifestyles. As a result, Asia is expected to provide some of the biggest growth opportunities for online FMCG over the next five years. Another interesting trend is happening across developing markets—in Asia and elsewhere too—where markets are "leap-frogging" from traditional trade straight to e-commerce. The rapid and relatively cheap deployment of mobile technology is already happening in these markets and this means developing markets are well positioned to bypass modern trade infrastructure and the heavy investment it requires. Developing markets hold much promise for rapid FMCG e-commerce growth in the coming years.

Meanwhile, this study expects other regions will also show healthy FMCG online growth and adoption too, but at a lesser pace than in Asia. The online growth prospects in regions such as Western Europe is comparatively constrained compared to Asia due to many of the mature markets having well-established modern trade formats in place. This means FMCG purchases are already easily accessible for many consumers at nearby physical stores, which lessens the convenience appeal of online purchasing. The relatively small number of high-density cities is also a contributing factor for slower growth.

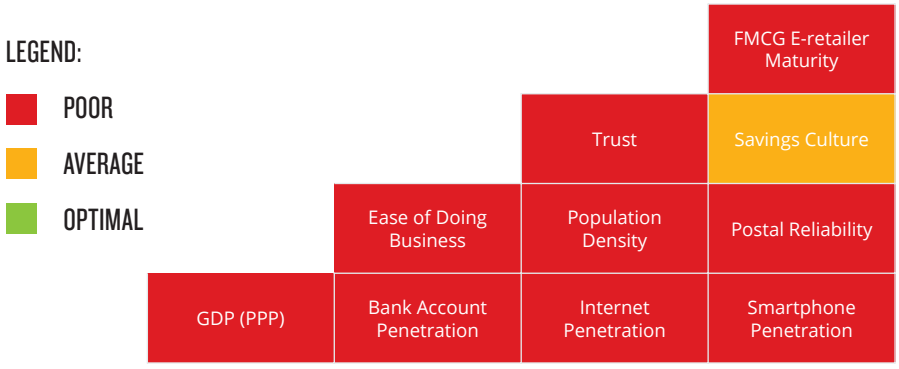
Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

COLOMBIA

Colombia's population in 2017 was just over 49 million people, and the EIU[d] expects it to increase to just under 51 million by 2022. GDP growth is expected to remain steady during the next five years, while the proportion of the population with access to the internet is forecasted to increase[d] from 62% to over 73%. The urbanisation trend is expected to continue, with 78% of the population living in urban centres by 2022, up from 77% in 2017[e]. With greater internet access and more people living in towns and cities, connectivity is becoming less of a barrier to online shopping. Online FMCG purchases are increasingly familiar for Colombians with a third of respondents surveyedf by Nielsen saying they already use this type of service while nearly half are "definitely" willing to try it.

Colombian start-up ecosystem has platforms such as Rappi (first online unicorn start-up of this market), Merqueo and Mercadoni, an online grocery and delivery platform that attributes its growing popularity to chaotic city conditions that make people less willing to undertake physical shopping missions. The immense challenges to solve these issues bodes well for increasing e-commerce adoption here. Colombia's connected spenders will increase their total consumption from US$29 billion in 2015 to US$105 billion by 2025[g].

Nielsen's FMCG E-commerce estimates that e-commerce's share of total FMCG value will increase 117% by 2022 and will be worth US$307 million.



2022 | ONLINE FMCG WILL BECOME:

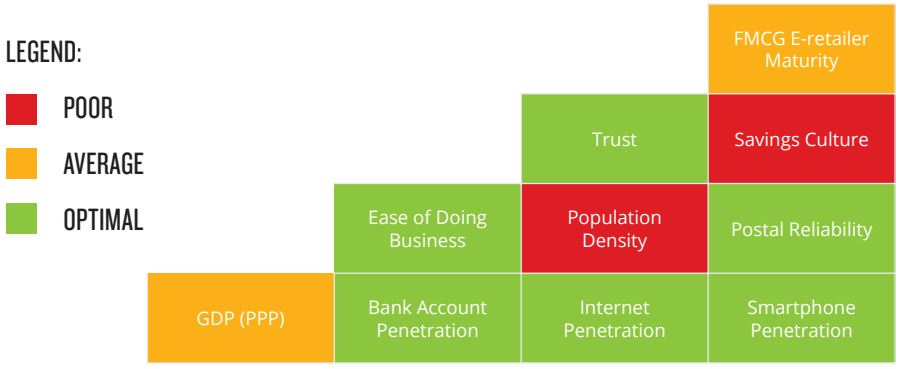
Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

NEW ZEALAND

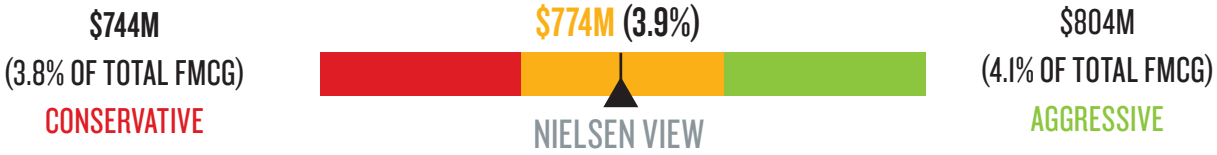
New Zealand's population in 2017 was 4.8 million and is expected to increase to just over five million by 2022[d] driven by immigration and increasing life expectancy. The country's ageing population trend will become more prominent, with the above 65 age group likely to comprise 17% of the total population by 2022, up from 15% in 2017[d]. Aided by its population growth, New Zealand's economic and FMCG outlook for the next few years is one of steady and stable growth.

New Zealand is a comparatively advanced market in terms of technology adoption and infrastructure supportive of e-commerce. For example, less than 20%f of New Zealand's consumers view internet connectivity as an issue for online purchasing, which is a low figure compared to many markets in the Asia-Pacific region. A 15% goods and services tax on low-value goods bought online from overseas will be introduced in 2019[h] and may slightly slow e-commerce growth in the short term. However, domestic e-commerce signals are largely positive. While only 9% of kiwis surveyed said they already make online FMCG purchases, 57% indicated that they are either somewhat or definitely willing to do so in the future. New Zealand's connected spenders are expected to spend US$75 billion in 2025 from US$39 billion in 2015[g].

Nielsen's FMCG E-commerce study estimates that e-commerce's share of total FMCG value will increase 34% by 2022 and will be worth US$ 774 million.



2022 | ONLINE FMCG WILL BECOME:



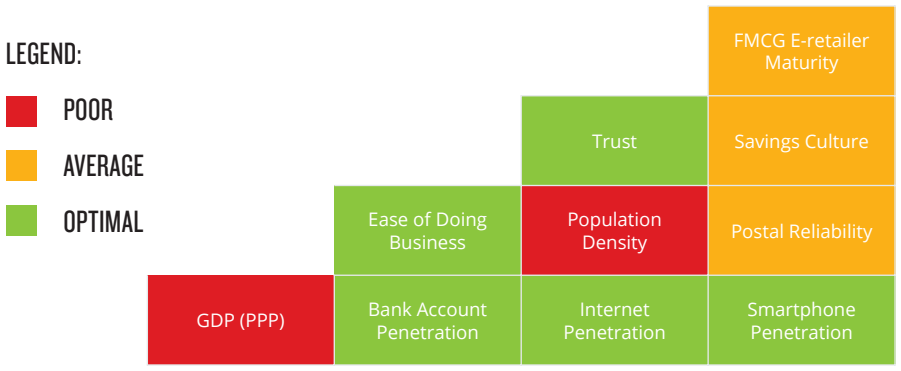
Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

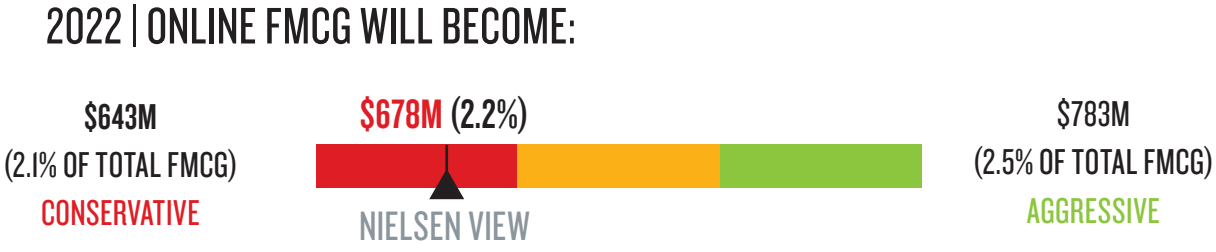
NORWAY

Norway's population was 5.3 million in 2017 and the EIU[d] expects it to reach 5.5 million by 2022. Well known for its public services, progressive social attitudes and quality infrastructure, Norway is seen as an agile market that implements and adopts new business and consumer models very rapidly.

With advanced infrastructure in place, it is no surprise that only 16%[f] of consumers see internet connectivity as an issue when purchasing online, which is much lower than many other markets in Europe. However, so far there have been relatively few strategic investments to support e-commerce in Norway and many of the factors associated with such a business model in Norway is presenting a cost barrier that may slow development. Although consumers there are satisfied with their current FMCG shop, there are clear opportunities for greater cross border e-commerce with other Nordic markets, particularly for specialist categories and products. Although online FMCG may not be on the verge of an explosion in growth in Norway, it is a market well worth tracking as we estimate the total consumption of connected spenders there will move from US$58 billion in 2015 to US$99 billion by 2025[g].

Nielsen's FMCG E-commerce study estimates that e-commerce's share of total FMCG value will increase 119% by 2022 and will be worth US$678 million.





Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

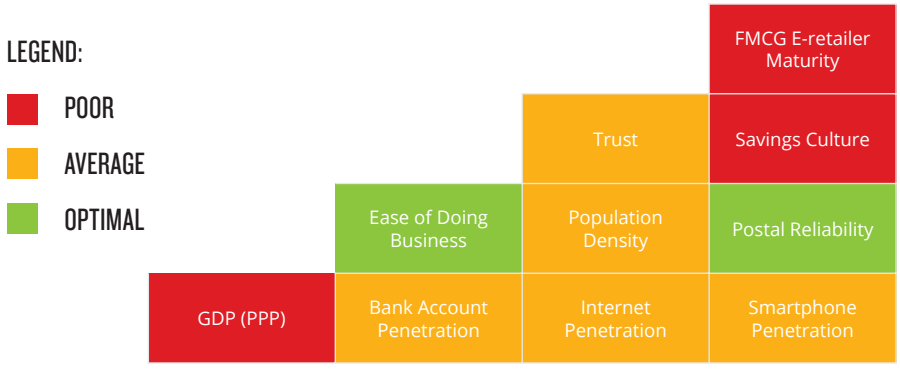
POLAND

Poland's population was 38.5 million in 2017 and the EIU[d] expects it to drop to about 38.2 million by 2022. Recent economic growth, improving job prospects and higher incomes are driving healthy consumption. Economic indicators are positive for ongoing stable growth in the coming years. The business sector has flagged rising wages as a "double-edged sword" though, as this is driving up their costs and could slow investment into developing new business models.

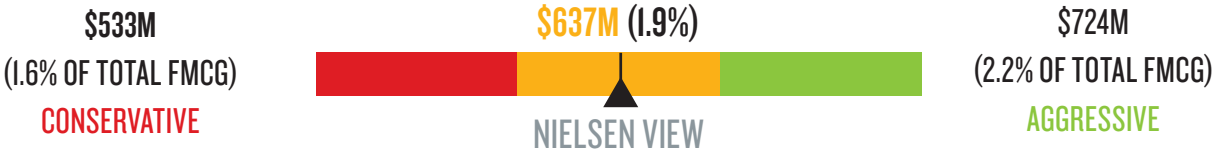
Nearly a quarter of Polish consumers feel that internet connectivity is a barrier to online purchasing, which is close to the European average (26%)[f]. There has been considerable recent activity from industry players in this area and the large population with healthy consumption potential may be drawing some priority in terms of focus. Current consumer engagement with e-commerce is relatively high with over a quarter of people surveyed saying that they already make online FMCG purchases while nearly 60%[f] indicated that they are willing to do so in the future.

The retail giant Carrefour recently invested in a concept store in Poland that will explore omnichannel technologies and solutions with e-commerce options. Poland's consumer spending is expected to increase from US$84 billion in 2015 to US$188 billion by 2025[g].

Nielsen's FMCG E-commerce study estimates that e-commerce's share of total FMCG value will increase 106% by 2022 and will be worth US$637 million.



2022 | ONLINE FMCG WILL BECOME:



Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

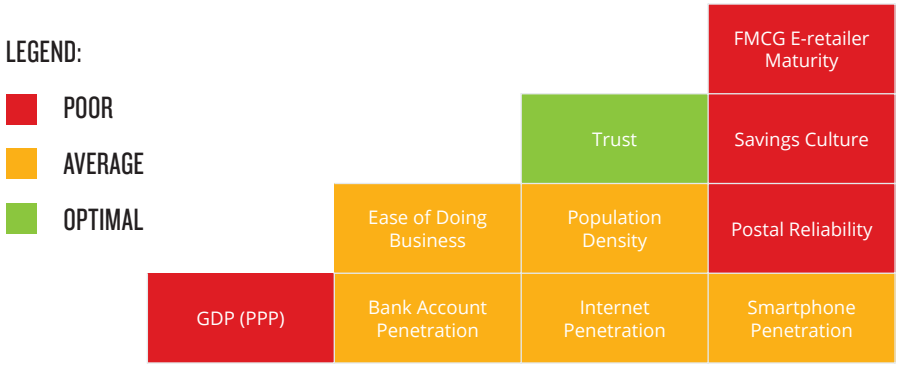
PORTUGAL

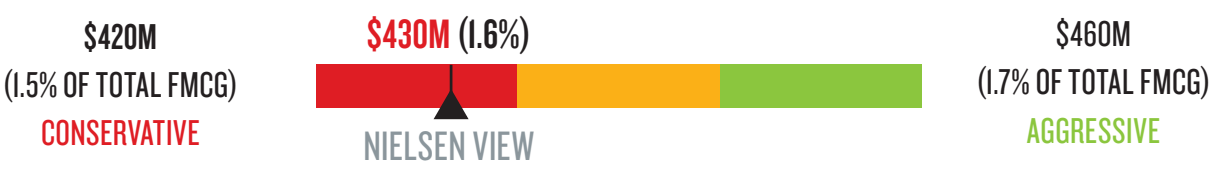
Portugal's population in 2017 was 10.3 million and the EIU[d] expects it to drop to just over 10.1 million by 2022 due to falling birth rates. GDP growth is expected to be quite stagnant over this period. The urbanisation trend is set to continue, with 67.1% of the population expected to be living in cities and towns by 2022, up from 64.6% in 2017e. Meanwhile, during that period, the internet penetration rate will make a significant climb from 75.3% to 85.8%[e].

With slow economic growth expected, FMCG consumption will likely be flat, and this may stifle e-commerce growth. The lack of quality supporting infrastructure is also a barrier to e-commerce. Just under one-third of consumers say that internet connectivity is a problem for online purchases, which is a considerably higher proportion than the European average of 26%. More promisingly, 17% of people surveyed[f] by Nielsen said they already use e-commerce for FMCG purchases, while two-thirds said they are willing to try it.

Although the presence of more e-commerce platforms and players is leading to greater investment and development, this is being offset by sluggish purchase activity from connected spenders. Total consumption by connected is expected to increase from US$27 billion in 2015 to US$62 billion in 2025[g].

Nielsen's FMCG E-commerce study estimates that e-commerce's share of total FMCG value will increase 73% by 2022 and will be worth US$430 million.





Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

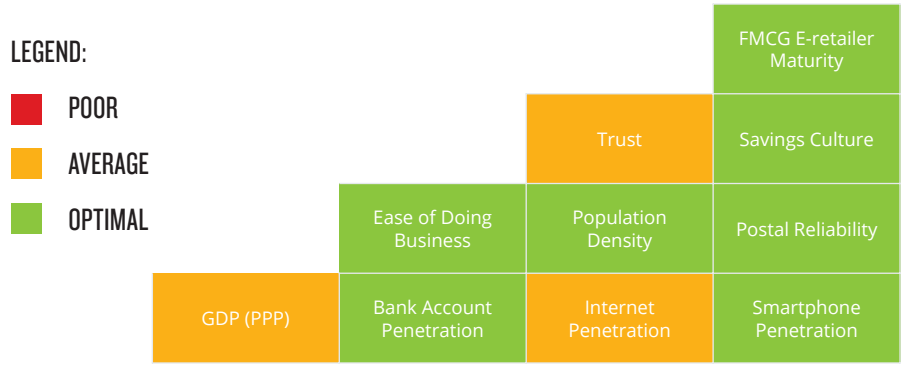
TAIWAN

Taiwan's population in 2017 was 23.5 million and the EIU[d] expects it to increase to 23.6 million by 2022. The proportion of the population that lives in urban areas was 77.7% in 2017, and this has helped enable a very high internet penetration rate of 88.5%[e].

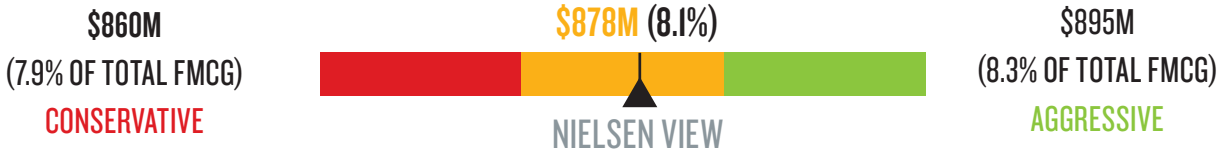
Although Taiwan is renowned for its technology, consumers there are only slightly more confident in their internet connectivity than the regional average. Some 37% of consumers surveyed[f] in the market either strongly or somewhat agree that internet connectivity is a barrier for them to make online purchases. There are some positive indicators for e-commerce growth in Taiwan. For example, 34% of consumers surveyed[f] said they are already purchasing FMCG products online.

The emergence of new e-commerce players is creating an increasingly competitive retail landscape. Taiwan's proximity to some of the most innovative and dynamic online markets, such as Mainland China and South Korea, means the current is well positioned to adopt and exchange very rapidly. Between 2017 and 2022 the total consumption value of connected spenders is expected to increase from US$108 billion in 2015 to US$230 billion by 2025[g].

Nielsen's FMCG E-commerce study estimates that e-commerce's share of total FMCG value will increase 45% by 2022 and will be worth US$878 million.



2022 | ONLINE FMCG WILL BECOME:



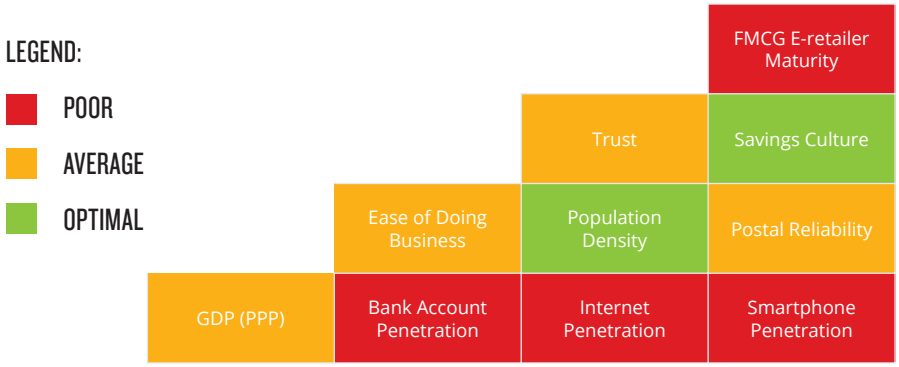
Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

THAILAND

Thailand's population in 2017 was 68.3 million and the EIU[d] expects it to increase to just over 68.6 million by 2022. The urbanisation trend there is expected to continue, with 57.8% of the population living in towns and cities by 2022, up from 57.2% in 2017[e]. Although there has been continuous large investments in transport and communication infrastructure, it has not yet translated to a high internet penetration rate, with just under half the population having internet access in 2017. However, by 2022 this is expected to jump to 67.7%[d].

Some of Thailand's regional areas are fairly isolated and this may explain why 52% of consumers surveyed[f] strongly agree or somewhat agree that internet connectivity is a barrier to online shopping. Those living in more developed areas of the market have adopted technology and connectivity with a passion. Indeed, internet connected Thai people rank as some of the most active online users anywhere in the world, spending long periods on their devices every day. There is currently a lot of activity and innovation in e-commerce by companies, including Grab and Line. Innovation is building on and contributing to Thai people's positive consumer sentiment toward e-commerce. Of consumers surveyed[f] by Nielsen, 38% of respondents said they already use e-commerce for online FMCG purchases and nearly 60% indicated a willingness to do so in the future.

Nielsen's FMCG E-commerce study estimates that e-commerce's share of total FMCG value will increase 134% by 2022 and will be worth US$505 million.



2022 | ONLINE FMCG WILL BECOME:

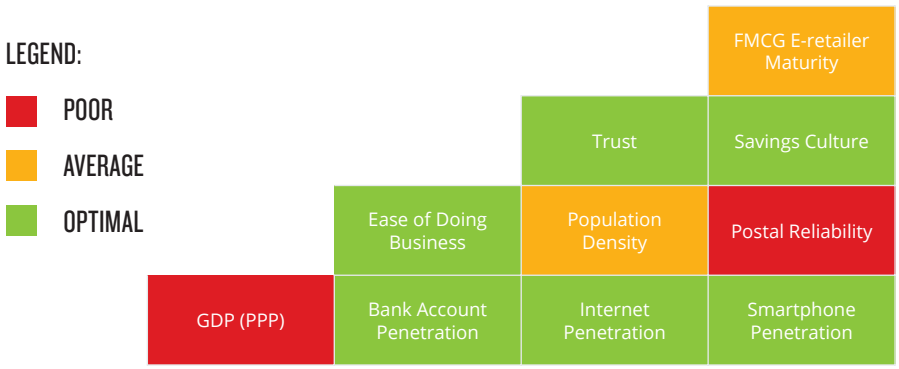
Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

UNITED ARAB EMIRATES

The United Arab Emirates' (UAE's) population in 2017 was 9.4 million people and the EIU[d] expects it to increase to 10 million by 2022. An important economic hub in the Middle East, the UAE prides itself as being an open and progressive place for international business, politics and leisure. Signs of social change in neighbouring markets may attract more foreign interest and investment. The UAE has been strategically positioning itself as a regional leader for e-commerce and technology and this is attracting significant investment from big players.

One result of large infrastructure investments in the country has been the extremely high level of internet penetration, with 95.6% of the population having access to the internet in 2017[e]. UAE consumers are the most confident in the region in regard to their internet connectivity, with 46% of consumers saying[f] it is an issue when purchasing online, which is much lower than many markets in the region. In terms of e-commerce use, 24% of consumers there said they already make online FMCG purchases, which is close to the regional average, and 64% indicated[f] that they are willing to do so in the future.

Nielsen's FMCG E-commerce study estimates that e-commerce's share of total FMCG value is likely to increase 138% by 2022 and will be worth US$112 million.



Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

E-COMMERCE ADVICE FOR RETAILERS AND MANUFACTURERS

As this study shows, e-commerce is rapidly becoming a bigger factor in FMCG markets around the globe. Although the growth rates will vary between countries and regions, all retailers and manufacturers should be looking to pursue e-commerce opportunities in their focus markets. They should also be keeping an eye on emerging opportunities in new markets and be ready to enter when the e-commerce drivers and levers are right.

Regardless of whether FMCG companies are multinational or locally focused, all should be looking to develop omnichannel strategies to sustain and maximise growth opportunities in the coming years. Simply replicating an offline strategy will not suffice either—a tailored online approach is essential for success. This includes product pictures, clear brand descriptions and ideal shelf positioning, whether physical or digital—think eye-level in bricks-and-mortar but think "first page" of online search results. It also involves creating different product portfolios for online platforms, which may include a wider range of product sizes and flavours. Retailers should also look to enhance the scope of their online offerings by expanding in-country coverage for delivery; providing quicker, more convenient delivery options; and offering products that are difficult to find offline.

Buying online requires a higher level trust compared to offline. Consumers are thinking: can I trust that this item advertised is a genuine product without seeing it in the flesh before delivery? Do I trust that the item will be delivered on time and in good condition and that my neighbours won't steal it from the doorstep? Do I trust that my bank details are safe for online purchases? Retailers can help to build credibility and trust with customers in many ways. They can report counterfeit products to authorities, engage with secure online payment companies such as PayPal, ensure that the delivery networks they use are highly rated and trusted, and they can prioritise fresh and frozen deliveries to ensure they arrive in top condition.

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

Both retailers and manufacturers need to continually invest in e-commerce for their retail platforms and for their products. This includes embracing new technology to change the landscape for operational efficiency internally and also for an enhanced consumer experience: quick, easy, accessible. In China, QR codes via smartphone digital wallet providers, such as WeChat and Alipay, are replacing cash in major cities, including even in the smallest of traditional trade stores. This is a great example how investment and technology are boosting e-commerce to new levels.

Finally, at the macro level, by working with other players as well as government, FMCG manufacturers and retailers can help influence some of the changes needed to improve the enabling environment for e-commerce in markets they are currently operating or planning to operate in the future. For example, they can consider to engage government in discussions to improve policies, regulations and public financing to overcome e-commerce hurdles. This includes strengthening the business case for, and supporting initiatives that improve, digital literacy, connectivity, financial inclusion, and ease-of-doing business.

THIS REPORT SHARES DATA AND INSIGHTS FOR SELECT EIGHT MARKETS. FOR MORE INFORMATION ON OTHER MARKETS AND NIELSEN'S E-COMMERCE SOLUTIONS, PLEASE CONTACT YOUR LOCAL NIELSEN REPRESENTATIVE.

Sources:
a. CPG Size and CPG e-commerce Size - What's Next in E-commerce: Understanding the Omnichannel Consumer, Nielsen Study, Nov 2017.
b. Overall e-commerce and Growth Forecast: eMarketer
c. https://data.worldbank.org/indicator/EN.POP.DNST
d. Economist Intelligence Unit, www.eiu.com
e. World Urbanisation Prospects, United Nations, esa.un.org/unpd/wup/Country-Profiles
f. Nielsen Connected Commerce Global Survey, June 2018
g. The Rise Of The Connected Spender, 2017, Demand Institute
h. stuff.co.nz/business/industries/103516025/amazon-tax-what-it-means-for-online-shopping

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.

ABOUT THE NIELSEN FUTURE OPPORTUNITIES IN FMCG E-COMMERCE

The Nielsen Future Opportunities in FMCG E-commerce report presents the changing FMCG e-commerce landscape in 34 markets, influenced by foundational, macro-economic, social and supply growth drivers. Smartphone penetration, internet access, online banking, delivery infrastructure and need for convenience has encouraged consumers to buy FMCG online in many markets. This report estimates the percentage e-commerce channel share and market size of online FMCG compared to offline sales for 34 markets, by the year 2022. It provides insights to manufacturers and retailers to pursue FMCG e-commerce strategies that will help sustain and maximise growth opportunities in the coming years. countries, covering more than 90% of the world's population. For more information, visit www.nielsen.com.

ABOUT NIELSEN

Nielsen Holdings plc (NYSE: NLSN) is a global measurement and data analytics company that provides the most complete and trusted view available of consumers and markets worldwide. Our approach marries proprietary Nielsen data with other data sources to help clients around the world understand what's happening now, what's happening next, and how to best act on this knowledge. For more than 90 years Nielsen has provided data and analytics based on scientific rigor and innovation, continually developing new ways to answer the most important questions facing the media, advertising, retail and fast-moving consumer goods industries. An S&P 500 company, Nielsen has operations in over 100 countries, covering more than 90% of the world's population. For more information, visit www.nielsen.com.

nielsen

THE SCIENCE BEHIND WHAT'S NEXT™

Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute. ID: 181089

At Nielsen, data drives everything we do—even art. That's why we used real data to create this image.
Copyright © 2018 The Nielsen Company (US), LLC. Confidential and proprietary. Do not distribute.