

NOVEMBER 2018

CONNECTED COMMERCE

CONNECTIVITY IS ENABLING LIFESTYLE EVOLUTION

Today, 4 billion¹ people (53% of the global population) are connected to the internet, and nearly all of them (92.6%¹) do so using their mobile devices. Everyday, 85% of users (3.4 billion) connect to the internet and spend, on average, six and a half hours online. Consumers are spending more time, with increasing frequency, on an expanded range of diverse digital activities. It is undisputed that internet accessibility, mobile technology and digital innovations are redefining consumers' every interaction and will continue to enable and disrupt many aspects of consumers' lifestyles well into the future.

The "connected life" is well established and the proliferation of access and utility continues to transform how consumers incorporate information, interfaces and exchanges, not only to simplify their lives, but also to add flexibility and personalization, into their increasingly demanding lives. Conventional connected usage has multiplied across communication platforms, social engagement spaces, information portals, financial transactions, gaming and video content, to include a burgeoning appetite for online shopping.

Companies recognize the influence and impact that their online presence (via branded digital properties—websites, advertising and social media) has had on their in-store sales growth, and for other companies this sparked the origins of e-commerce retailing. Development in retailing has quickly become greater in scope than either the physical or virtual store.

Success and sustained growth for manufacturers and retailers will be about creating strategic advantages across converged channels, touchpoints and experiences along the path to purchase, in both developed and developing markets, and evolved and emerging categories.

E-commerce advancement hinges on the consumers—their online usage behavior and habits, adoption drivers, tipping points and challenges. The Nielsen Connected Commerce report provides insights into the global connected consumer, shopping traits, category evolution and barriers, to identify future growth prospects.

PAVING THE WAY FOR E-COMMERCE

Connectivity today brings the convenience of hassle-free shopping - anytime, anywhere. At no point in time could this be more apt than now, considering the merging of multiple factors impacting the complexity of consumers' lives—and shaping new found shopping experiences.



Busy City Dwellers – urban, on-the-go lifestyles call for simpler, quicker and easier ways to perform regular shopping activities.



Retail Transformation – new players, investment in technology and beyondthe-border retailers have opened up additional avenues to browse and buy.



Native Digital Shoppers – Generations Y (Millennials) and Z, accustomed to using digital devices and services, are early adopters of e-commerce.

Global online sales in 2017 totaled US\$2.3 trillion² or 10.2% of total retail sales and is expected to reach 17.5% by 2021. Online retail development correlates strongly with constantly improving internet access, especially in mobile-first communities. With connectivity and digital development exploding in Asia, it is no surprise that the fastest growing e-commerce markets are located there.

In 2019, online retail trail blazer, Amazon, will turn 25 years old. It is easy to overlook the fact that e-commerce is still in a nascent stage, despite considerable advances in online retail subscriptions, augmented and virtual reality services, addressable, personalized advertising, mobile connected payments and drone delivery. With continued technological innovation ecommerce growth is set to outpace traditional formats for years to come.

Around the globe, the number of consumers who are connected and making online purchases will continue to multiply every year as newly connected consumers enter the online retail environment.

THE COMBINATION OF EXISTING CONNECTED CONSUMERS SPENDING MORE, MORE OFTEN, AND NEWLY CONNECTED CONSUMERS PURCHASING FOR THE FIRST TIME WILL PROPEL E-COMMERCE GROWTH.

STARS AND STARTOUTS

In markets around the world categories such as travel, entertainment (books, music, events) and durable goods (fashion, IT/mobile, electronics) are the front runners for consumers to enter the online retail sphere. After two decades of e-commerce retailing, these categories have higher online purchasing penetration and frequency of purchasing than most consumer goods categories.

The ability to search and compare product and service specifications, product availability and prices, as well as access to products from beyond home borders, has contributed to the success of these categories. Additionally, for many durable goods, entertainment and service categories, consumers make a one-time purchase or replenish less frequently than they do for most fast-moving consumer goods (FMCG) categories. While the individual transaction value may be higher, these combined factors have made them more attractive to consumers to experiment with.

Consumers are, however, also looking for e-commerce options for an increasing range of categories, as their more immediate needs for convenience and ease expand. The availability of suppliers, quality products, broader assortment, competitive pricing, alternative fulfilment and delivery, payment options, simpler website/application interfaces and increasing user trust and confidence are all aligning to entice more consumers online, more often. These factors point to significant opportunities for FMCG categories, which need to be replenished weekly or daily, and take up a sizeable portion of consumers' time to shop in physical stores.

TOP ONLINE CATEGORY PURCHASING % Global Consumers Claimed Purchasing, 2018 **FASHION** 61% **TRAVEL 59**% **BOOKS &** 49% MUSIC IT & **47**% MOBILE **EVENT** 45% **TICKETS**

SIMILARITY IN REGIONAL ADOPTION

The trajectory of e-commerce categories has followed similar evolutionary paths in markets around the world. The categories with the highest online purchasing penetration are comparable across the regions, albeit at differing levels, depending on the market's development factors. Markets at earlier stages of e-commerce development, such as Latin America, Africa/Middle East and parts of Southeast Asia, are still growing purchasing penetration across services, entertainment and durables categories, while more established ecommerce markets enjoy increasing online purchasing incidence and frequency, as well as expansion into consumables categories.

ONLINE PURCHASING - TOP 3 CATEGORIES BY REGION

% Global Consumers Claimed Purchasing, 2018

ASIA PACIFIC		
TRAVEL	$\overline{\mathbf{x}}$	70 %
FASHION		69%
IT & Mobile		55 %

NORTH AMERICA		
TRAVEL	$\overline{\mathbf{x}}$	55 %
BOOKS & MUSIC		55 %
FASHION		54 %

WESTERN EUROPE		
TRAVEL	$\overline{\gamma}$	62 %
FASHION		57 %
BOOKS & MUSIC		54 %

EASTERN EUROPE		
FASHION		53 %
TRAVEL	\mathbb{A}	44%
EVENT TICKETS	222	44%

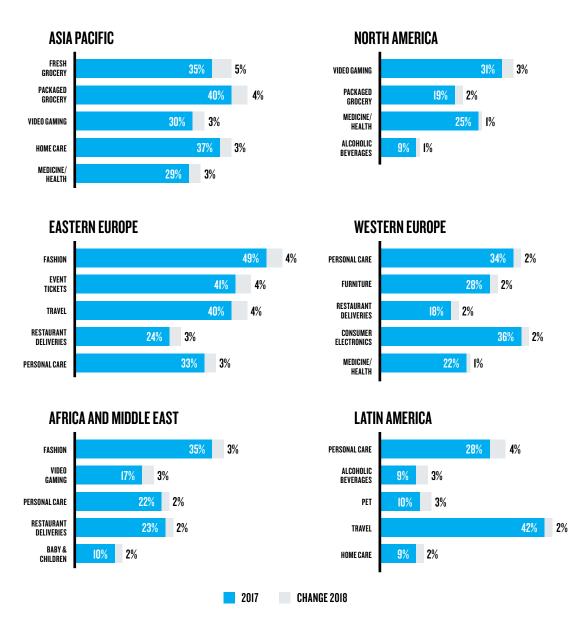
AFRICA & MIDDLE EAST		
FASHION		38%
TRAVEL		38%
IT & Mobile		31%

LATIN AMERICA		
TRAVEL	\mathbb{A}	47%
FASHION		44%
BOOKS & MUSIC		41%

Markets in North America, Pacific and North Asia are benefitting from increases in online purchasing in FMCG categories — personal, health and household care, as well as packaged grocery products. Strong online purchasing markets, China and South Korea, are further advancing from e-commerce growth in dry and fresh grocery products. The growing acceptance of edible consumable products highlights the transforming FMCG dynamics and opportunities for markets around the world in the years ahead.

ONLINE PURCHASING - EVOLVING PRODUCT CATEGORIES BY REGION

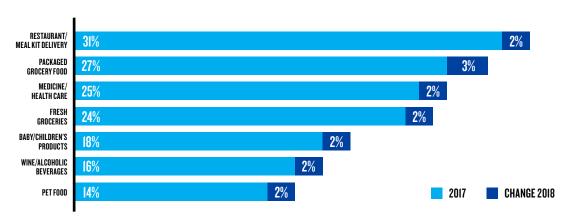
% Global Consumers Claimed Purchasing, 2017 - 2018



The need for efficiency in consumers' lives will be an essential determinant in driving further growth in online purchasing. This is already evident in the largest increases in online purchasing, over the last year, coming from consumables categories. Packaged grocery penetration increased by three percentage points and fresh groceries, restaurant/meal kit deliveries, medicine/health care, products for babies/children, pet food and wine/alcoholic beverages all increased by two points.

INCREASES IN ONLINE CONSUMABLE CATEGORY PURCHASING

% Global Consumers Claimed Purchasing, 2017 vs. Change in 2018

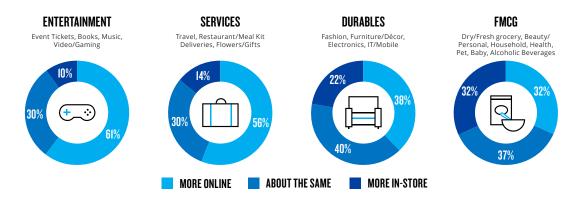


Source: Nielsen Connected Commerce Global Survey 2018

As consumers gain confidence in purchasing online, shopper penetration, volume and frequency of online purchases have continued to grow, and the relationship between online and in-store shopping has started to shift in favor of online activity for more mature categories. Consumers indicate that they are purchasing entertainment (61%) and services (56%) categories more often online than instore. Durable categories have a greater proportion of consumers (40%) purchasing online and instore at the same frequency as augmented and virtual reality services become more widely available. As consumers are increasingly able to realistically "try-out" clothing and furniture in their home environments, the frequency is likely to tip in favor of further online shopping.

ONLINE PURCHASING INCIDENCE

% Global Consumers Claimed Purchasing Frequency, 2018



ONLINE FMCG IS GAINING MOMENTUM

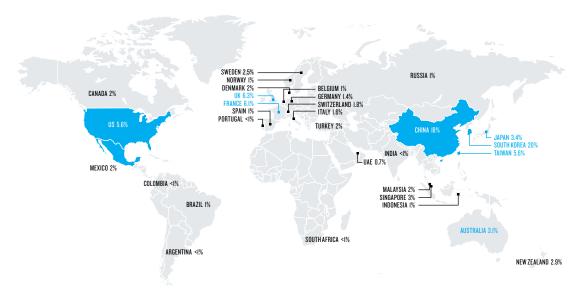
"THE PATH OF E-COMMERCE GROWTH IN SOUTH KOREA WAS SIMILAR TO WHAT WE ARE SEEING IN MANY MARKETS TODAY. INITIALLY THERE WAS HIGHER PENETRATION IN TRAVEL AND FASHION, BUT AS CONSUMERS BECAME MORE FAMILIAR AND CONFIDENT, AND RETAIL OFFERINGS IMPROVED, THEY VENTURED INTO BEAUTY, INFANT PRODUCTS AND GROCERIES, AND THEN INTO AREAS THAT MANY THOUGHT WOULDN'T SUCCEED IN E-COMMERCE, SUCH AS FRESH PRODUCE.

TODAY SOUTH KOREAN ONLINE FMCG SALES ACCOUNT FOR 20% COMPARED TO 6-7% GLOBALLY - THE TRANSFORMATION AND OPPORTUNITIES ARE CLEARLY EVIDENT"

Ji Hyuk Park - E-Commerce Leader, Nielsen Korea

FMCG e-commerce has masses of potential in the majority of markets around the world. Nielsen reviewed 34 global markets and current online sales account for 6-7% of FMCG sales, but compound annual growth (+22%) over the next five years will outpace offline retail sales (+4%) and global GDP growth (+3%) by nearly five times³. By 2022, FMCG e-commerce will swell to in excess of US\$400 billion and comprise 10-12% of all FMCG sales³. Online FMCG sales will grow twice as fast in developing markets compared to developed nations.

ONLINE FMCG SALES FOR GLOBAL MARKETS



^{*}Regions highlighted in blue indicate advanced online FMCG market conditions. Source: Nielsen Future Opportunities in FMCG e-commerce report, September 2018

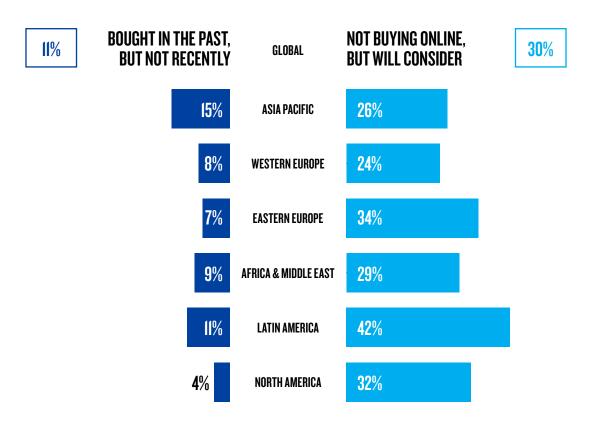
The growth potential and opportunities for FMCG manufacturers and retailers are reinforced by the increasing purchasing rates of categories, as well as by consumers' online purchase intentions for the coming year. On average, 26% of global online shoppers purchased FMCG products in the last year, representing a 2% increase compared to 2017, and in 2018 one third of consumers say they are now purchasing more often online than in-store.

Seventeen percent of consumers are purchasing FMCG products on a regular basis, while 11% have previously purchase online, but not recently. In addition, 30% of consumers are not currently buying groceries online but are willing to consider doing so in the near future. In developing markets this intent is just as important, with 29% of African and Middle Eastern consumers and 42% of Latin American consumers open to online purchasing.

A CONSIDERABLE 41% OF POTENTIAL CONSUMERS COULD BE ENTICED ONLINE, OR BACK ONLINE FOR FMCG PRODUCTS, SUCCESS WILL BE DEPENDENT ON INFRASTRUCTURE AND RETAIL ENABLEMENT.

CONSUMER OPENESS TO ONLINE PURCHASING

% Global Consumers Claimed Purchasing, 2018



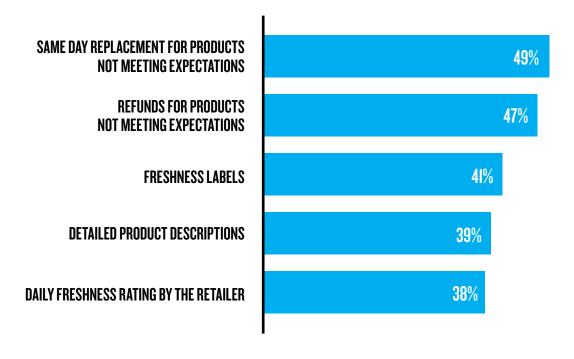
BRINGING FRESH ON BOARD

Fresh foods (fruit, vegetables, dairy, meat, fish and poultry) are a large proportion of the FMCG basket as consumers' focus on health and wellness intensifies. Previously, this category had one of the lowest global online penetration levels, however, shopping for fresh produce has gained traction with a two percentage points increase into 2018.

There are a number of specific fresh food purchase enablers that would encourage more consumers to purchase online. Daily freshness ratings, detailed product descriptors and labels indicating how many days products will last for are important quality indicators to help consumers overcome the physical aspects of assessing freshness. In addition, where consumers' expectations are not met, refunds and same day replacements will also alleviate the reluctance of purchasing these items.

ENABLERS TO ENCOURAGE ONLINE BUYING OF FRESH PRODUCTS

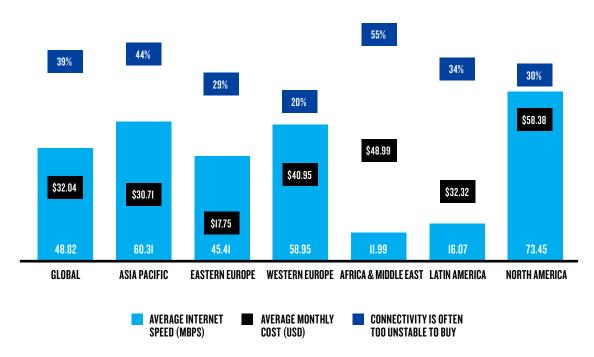
% Global Consumers Who Would Be Encouraged by the Following Offers, 2018



CONNECTIVITY AND SECURITY HURDLES

Obstacles to online purchasing have become fewer as connectivity, technology and security have advanced. Internet connectivity in many developing markets remains one of the biggest barriers, with 55% of Africa/Middle East consumers, compared to 39% globally, in agreement (strongly/somewhat agree) that internet connectivity is often unstable or limited to make purchases online. As internet quality and speed improves, and data costs decrease, more consumers will enjoy uninterrupted connectivity that will facilitate e-commerce purchasing.

REGIONAL CONNECTIVITY AND SPEED OF INTERNET



Source: Nielsen Connected Commerce Global Survey 2018, Numbeo Monthly Internet Price USD Dollars (2018), We Are Social & Hootsuite | Fixed Internet Speed in Mbps by Country | Digital in 2018

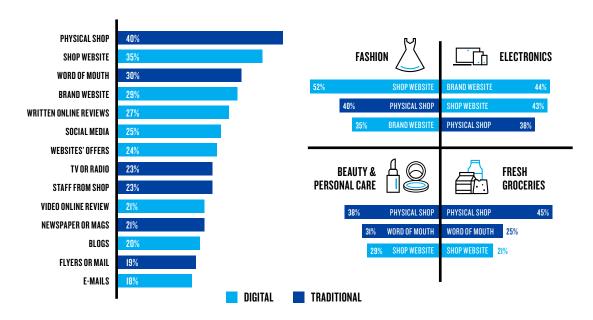
Today, it appears that consumers are less concerned about the safety and security of their personal information. Sixty-three percent of global online consumers are confident that when buying online their personal information on retailer websites is secure, 24% are still hesitant and 13% are not convinced. Secure payment methods and alternate mobile wallets that are being rolled out in many markets will further help overcome these obstacles.

GET AHEAD BY ENGAGING CONSUMERS

Consumers' first foray into connected commerce may not be to make a purchase, but to browse for information, compare products and prices and discover new stores or items of interest. They may click on an attention-grabbing advertisement to view what's on offer or read reviews in social media that may prompt a purchase. Digital media assets are becoming a vital part of building awareness and consideration, satisfying shoppers' search needs and delivering tangible links to generate purchase outcomes. Fifty-two percent of consumers visit store websites for fashion product discovery, 44% visit brand websites for consumer electronics, nearly one third, across categories, read online written reviews and more than a quarter go to social media. How and where consumers source information may vary by category, but currently FMCG continues to rely on traditional mediums such as physical stores and word of mouth.

GLOBAL INFORMATION SOURCES TO AID DECISION MAKING





Source: Nielsen Connected Commerce Global Survey 2018

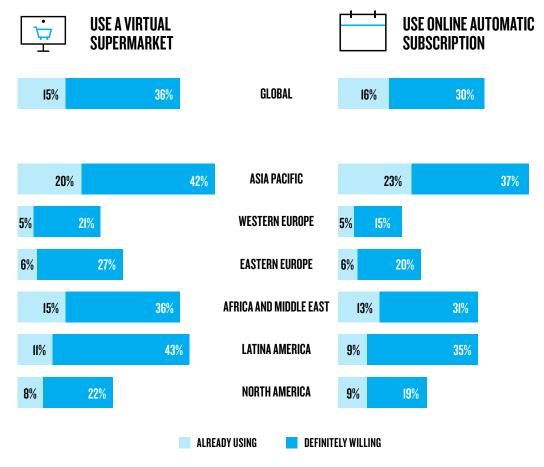
The start to any brand's e-commerce journey is building multi-channel presence and identifying the moments to immerse brands and retail triggers into consumers' online activities. Individualized, personal, relevant, interactive and absorbing content across all touchpoints will lead to improved buying conversion.

ENRICH THE CONSUMER EXPERIENCE

As e-commerce continues to evolve there are numerous areas to improve consumers' overall online experience that will encourage trial and steer conversion to online. With convenience as one of the primary motivators for connected commerce, shoppers are looking for a frictionless experience which saves time, reduces obstacles and provides an enjoyable experience. Consumers' considerable willingness to try different options for purchasing, payment or delivery has grown over the years. Globally, 31% of consumers are already using online for home delivery, and a further 33% are willing to do so. In addition to this option, one in six consumers are using other methods that incorporate virtual reality and automation for greater ease, and benefitting from retailer loyalty applications.

ADVANCED ONLINE SHOPPING EXPERIENCE

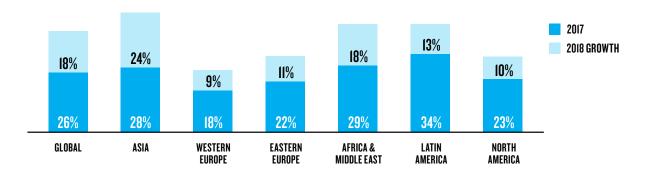
% Consumers Using Technology-Enabled New Features



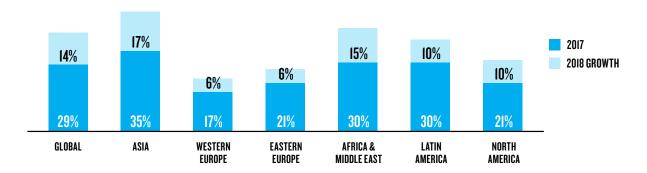
Fulfilment and delivery options are also progressing to suit consumers' preferences and circumstances. Alternative collection points better suited to consumers' needs are growing in usage and acceptance.

% CONSUMER OPENNESS TO ONLINE BUYING BEHAVIORS

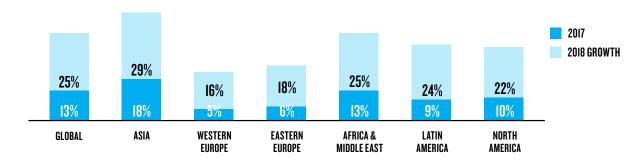
ORDER ONLINE AND PICK UP INSIDE THE STORE



ORDER ONLINE AND USE DRIVE-THRU PICK-UP



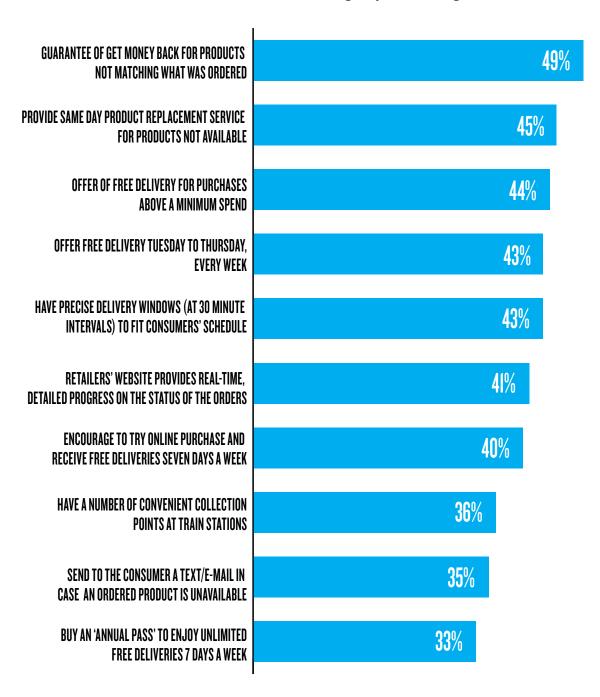
3 ORDER ONLINE AND PICK-UP CURB SIDE OUTSIDE THE STORE



Retailers can further solve consumers' apprehensions via interactive services and guarantees. Same day replacement, free delivery for high value orders, responsiveness and money back for incorrect orders feature highly to encourage online purchases of consumable products.

ENTICERS TO BUY ONLINE

% Global Consumers Who Would Be Encouraged by the Following Offers



SATISFYING THE CONSUMER

THE CONSUMER IS AT THE CENTER OF THE CONNECTED COMMERCE OPPORTUNITY.

AN E-COMMERCE APPROACH THAT DELIVERS ON THE VARIOUS AND VARIED LOCAL

CONSUMER PREFERENCES AND CIRCUMSTANCES WILL HAVE A COMPETITIVE ADVANTAGE,

BUT THOSE WHO SOLVE CONSUMERS' CONVENIENCE ASPIRATIONS WILL WIN.

Sue Temple – VP, Global Consumer Insights Product Leadership, Nielsen



User Essentials

- Simple, easy, fast webpage/application navigation
- · Detailed product descriptions, images, reviews
- Loyalty/reward schemes offering automation options (repeat orders, subscriptions)
- · Secure payment methods to overcome security concerns
- · Suitable delivery or collect options



Product Prospects

- Plan for product evolution entice consumers into FMCG through slower purchase cycle (skin care), large/bulky (diaper, pet food, toilet tissue) and regular, repeat products (sugar, tea/coffee)
- Make premium, scarce, niche or out-of-country products available
- Provide fresh produce platforms to virtually assess quality and freshness



Moments To Actions

- · Use generic digital for broad reach and bespoke digital to individually connect with consumers
- · Omnichannel, including social, engagement with in-the-moment purchase enablers
- · Include in-store digital touchpoints and frictionless payment technology



Consumer Contentment

- Save time, make it simple and easy
- Remove the barriers
- · Supply it fresh
- Engage

SOURCES AND METHODOLOGY

- We Are Social & Hootsuite, Digital in 2018, January 2018
- eMarketer, Total Retail and E-Commerce sales, 2018
- 3 Nielsen Future Opportunities in FMCG E-commerce Report, September 2018
- 4 Nielsen Connected Commerce Survey, June 2018

About The Nielsen Connected Commerce Survey

The Nielsen Connected Commerce report provides an understanding of the global connected consumer, their shopping traits along with product category evolution and the barriers to identify future growth prospects. It also identifies consumers' claimed online category purchases and the changes in category purchase penetration. Further, the report presents consumers' online purchasing behaviour and expectations from their online shopping experience. The insights from this report will assist FMCG companies in formulating strategies to enhance consumers' shopping experiences in the digital world.

Survey Methodology

The Nielsen Global Connected Commerce Survey was conducted in May 2018, and polled more than 30,000 online consumers in 64 countries throughout Asia-Pacific, Europe, Latin America, the Middle East/Africa and North America. The sample is based on Internet users who agreed to participate in this survey and has quotas based on age and sex for each country. It is weighted to be representative of Internet consumers by country. Because the sample is based on those who agreed to participate, no estimates of theoretical sampling error can be calculated. However, a probability sample of equivalent size would have a margin of error of $\pm 0.6\%$ at the global level. The Nielsen survey is based only on the behavior of respondents with online access. Internet penetration rates vary by country. Nielsen uses a minimum reporting standard of 60% Internet penetration or an online population of 10 million for survey inclusion.

While an online survey methodology allows for tremendous scale and global reach, it provides a perspective only on the habits of existing Internet users, not total populations—something particularly relevant when reporting an activity such as e-commerce behaviors.

In developing markets where online penetration is lower, audiences may be younger and more affluent than the general population of that country.

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.



THE SCIENCE BEHIND WHAT'S NEXT™

