OH, BABY!

TRENDS IN THE BABY FOOD AND DIAPER MARKETS AROUND THE WORLD

10000

AUGUST 2015



AN UNCOMMON SENSE OF THE CONSUMER $^{\mbox{\tiny TM}}$

CONTENTS

INTRODUCTION AND METHODOLOGY

PART I: THE BABY FOOD AND FORMULA MARKET AROUND THE WORLD

Increasing prosperity and modernization drives baby food growth
Packaging innovation and organic options drive sales
The value of trusted advisors
Brand name, nutrition and safety are important purchase criteria
Price is a dominant driver in Western markets
Brand loyalty is fleeting
Strategies for success in the baby food and formula category

PART II:

THE BABY DIAPER MARKET AROUND THE WORLD

Diaper growth is strongest in developing markets	25
Diaper pants popularity is on the rise	28
TV + diapers = strong influence	30
Function first for diapers	33
Price is a top priority	34
What's in a name?	36
Strategies for success in the diaper category	37

PART III:

E-COMMERCE

Asia leads the way in online purchasing	39
Strategies for success in e-commerce	42

LITTLE CONSUMERS, BIG CHALLENGES

AROUND THE WORLD

BABY FOOD/FORMULA:

- Almost half of baby food (46%) value sales come from North America and Europe, while Asia-Pacific accounts for 49% of baby food and 53% of formula value sales.*
- Sales of baby food pouches and organic products are growing strongly, increasing 28% and 26%, respectively, from a year ago.
- Word-of-mouth communications is the most commonly cited source for information about baby food/formula.
- Brand name, nutrition and safety are the most important purchase criteria for baby food. Price is an important purchase consideration in developed markets.



DIAPERS:

- More than half (51%) of diaper value sales come from North America and Europe, but the most rapid growth is happening in developing countries.*
- Diaper pants are the fastest-growing segment, with sales increasing 20% over the previous year. Sales are primarily concentrated in Asia-Pacific and Europe.
- Skin protection and comfort are the most important diaper purchase considerations.
- Seventy percent say they've switched diaper brands, and price is a key driver in every region except Asia-Pacific.

*See Methodology section for list of countries included in the analysis.

There are few things as precious as a newborn baby, and parents want the very best for their child—from the food they put in their mouths to the diapers they put on their bottoms. And they're willing to spend for it. Nielsen estimates baby food and formula sales around the world will reach nearly \$30 billion in 2015', and the diaper market is estimated to exceed \$29 billion².

But for baby care manufacturers, there's plenty at stake in the battle for baby bucks. Globally, births are declining across all regions. Between 1960 and 2013, birthrates around the world declined 45% on average, according to the World Bank. In addition, parents' hearts and minds are not easily won. Competition in the baby care market is stiff, and numerous branded and store-brand products at various price points compete for moms' attention. Moreover, the window for purchasing baby care products is relatively short. For example, in developed markets, babies spend an average of three years in the diaper market. In some developing markets, like China, where potty training begins earlier, the timeframe can be even shorter: 14 months on average, according to a 2015 Ad Age report.

"Despite challenges, opportunities in the baby care market remain sizeable," said Liz Buchanan, director, Global Professional Services, Nielsen. "Consumers are deeply invested in these categories, and they are highly discriminating about the products they buy for their children. However, to achieve a competitive advantage in a space dominated by only a few major brands, a deep understanding of what's driving product choice is critical."

To better understand why consumers select one baby food or diaper brand over another, and to determine what motivates brand-switching behavior, Nielsen polled online respondents in 60 countries who have made a baby care purchase in the past five years. The findings reveal important insights about the path to purchase and identify the online and offline sources most influential in the process. Finally, areas of opportunity and the strategies necessary to win in the global baby care market are identified.

ABOUT THE GLOBAL SURVEY METHODOLOGY

The findings in this survey are based on online respondents in 60 countries who have children in their household and have made a baby food/formula or diaper purchase in the past five years. 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. In developing markets where online penetration is still growing, audiences may be younger and more affluent than the general population of that country. In addition, survey responses are based on claimed behavior rather than actual metered data

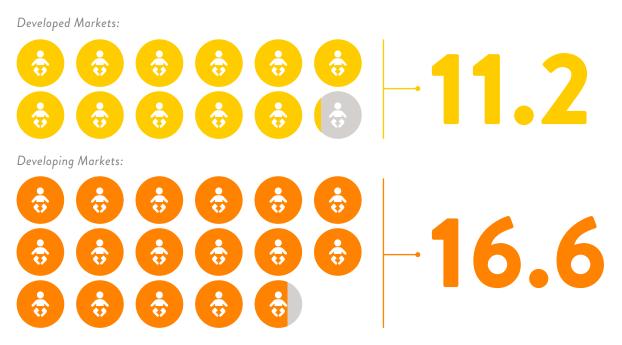
1 Based on Nielsen sales data for infant nutrition and infant cereal categories in 32 countries and infant formula in 36 countries, which cover an estimated 95% of global baby food and formula value sales.

2 Based on Nielsen sales data for baby diapers and wipes in 63 countries, which account for an estimated 90% of global value sales.



INCREASING PROSPERITY AND MODERNIZATION DRIVES BABY FOOD GROWTH

Over 80% of the world's population lives in the developing world, and while global birthrates have steadily decreased across all regions and economic levels over the past 55 years, they remain highest in developing countries, according to the World Bank. In addition, rapid urbanization, the growth of the middle class and rising rates of female participation in the labor force in many developing markets has encouraged the adoption of convenience-oriented lifestyles, making baby formula and prepared baby foods more desirable.



BIRTHRATES ARE HIGHER IN DEVELOPING MARKETS

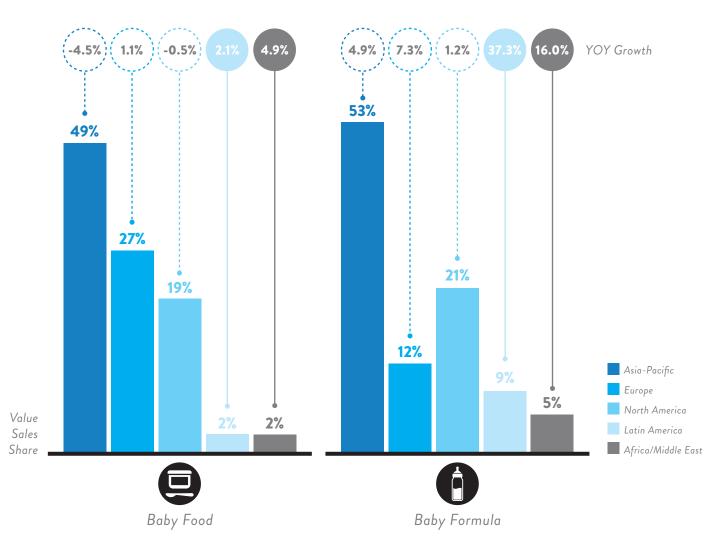
Average number of births per 1,000 people*

Source: World Bank, 2013

*Average for the developed and developing countries included in the survey. See Methodology section for listing of countries.

Today, 49% of baby food value sales come from Asia-Pacific, 27% from Europe and 19% from North America, but Latin America and Africa/ Middle East are growing faster. In the baby food category, over the 12 months ending December 2014, value sales grew 4.9% over the previous year in Africa/Middle East and 2.1% in Latin America. In Asia-Pacific, sales results were mixed. While value sales grew in Indonesia (4.6%), India (3.8%) and Taiwan (1.6%), they declined in China (-5.1%), driven primarily by consumers shifting to e-commerce and baby-specialty stores, which are not reflected in this data set.

BABY FOOD AND FORMULA SALES SHARE



Share of 2014 value sales and growth by region in select markets

Source: Nielsen Retail Measurement Sales data

Note: Growing-up milk is included in sales if a country includes it in their infant formula definition. If it's not included in the definition, then it's not included in the data.

Note: See Methodology section for list of countries included.

In the baby formula category, developing-market growth was even more impressive. In the 12 months ending December 2014, value sales grew by double-digits in Latin America (37.3%), though this figure does not take inflation into account, and Africa/Middle East (16%). These regions also have some of the fastest-growing markets in terms of formula volume sales. In Europe, value sales grew 7.3%, with double-digit growth in Germany, driven primarily by exports to China. As shown in the table on page 9, while several markets showed strong growth, more declined.

GROWING AND DECLINING BABY FOOD MARKETS (BY VOLUME)

GROWING (CAGR >8%, 2012-2014)	DECLINING (CAGR, 2012-2014)
	Greece (-10.6%)
	China (-8.1%)
	Thailand (-6.8%)
	Poland (-6.3%)*
	Italy (-5.7%)
	Belgium (-5.6%)
	Indonesia (-5.0%)*
United Arab Emirates (20.6%)	U.K. (-5.0%)
Taiwan (13.5%)	Portugal (-3.7%)
Russia (12.7%)	Ireland (-3.0%)
	Brazil (-2.8%)
	Hungary (-2.8%)
	Israel (-2.3%)
	U.S. (-2.1%)
	Turkey (-1.6%)
	South Africa (-1.6%)
	Venezuela (-0.7%)

Source: Nielsen Retail Measurement Sales data * Indicates change versus a year ago, as three-year data was unavailable

GROWING AND DECLINING FO	RMULA MARKETS (BY VOLUME)
GROWING (CAGR >4%, 2012-2014)	DECLINING (CAGR, 2012-2014)
GROWING (CAGR >4%, 2012-2014) Venezuela (20.5%) Germany (14.2%) Brazil (13.3%) Egypt (12.1%) Saudi Arabia (11.9%) Sweden (11.0%) Australia (10.4%) United Arab Emirates (8.2%) Slovakia (7.3%) Russia (5.7%) Belgium (4.3%)	DECLINING (CAGR, 2012-2014) Poland (-23.7%)* Ireland (-13.4%) Argentina (-12.7%)* Portugal (-11.0%) Korea (-10.1%) Hungary (-9.3%) Greece (-6.5%) Spain (-5.0%) Italy (-4.7%) Thailand (-4.1%) Israel (-4.0%) Czech Republic (-3.4%)* U.K. (-3.3%) Turkey (-1.6%) France (-1.4%)* U.S. (-1.2%) Canada (-1.1%)* Norway (-0.8%)

Source: Nielsen Retail Measurement Sales data

Note: Growing-up milk is included in sales if a country includes it in their infant formula definition. If it's not included in the definition, then it's not included in the data.

* Indicates change versus a year ago, as three-year data was unavailable

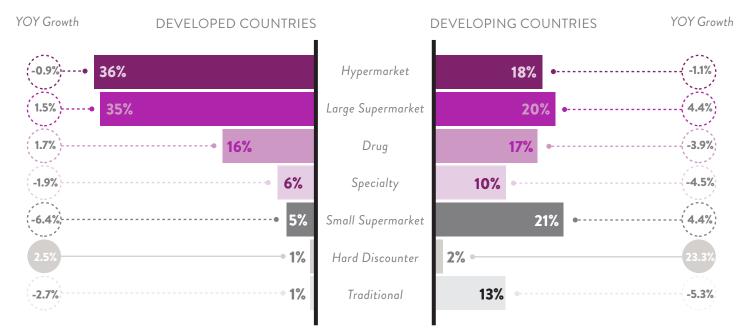
Growth in the baby food/formula market is also driven by rising numbers of women working outside the home. According to the World Bank, between 1990 and 2013, the percentage of women in the workforce grew more than four percentage points in the 60 markets included in the survey. As many working mothers return to their jobs shortly after giving birth, prepared baby foods and formulas provide an appealing alternative for working mothers, bridging their desires for healthy, nutritious food with their need for convenience.

"The rising middle class in the developing world has opened new opportunities in the baby care market, as the need for products that are compatible with a working mom's schedule is growing," said Buchanan. "And these opportunities include baby care products in the premium space. In fact, in many countries, the cache of premium products is an important symbol of one's social status."



BABY FOOD MARKET IS LESS CONCENTRATED IN DEVELOPING COUNTRIES

Share of 2014 baby food value sales and growth by channel in select markets



Source: Nielsen Retail Measurement Sales data

Â

Note: See Methodology section for a listing of developed and developing countries

BABY FORMULA IS GROWING MOST IN SMALLER STORE FORMATS

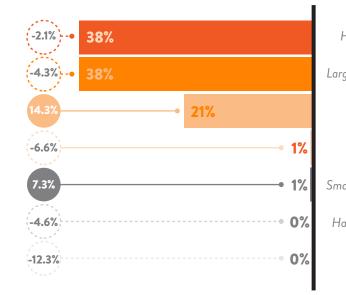
Share of 2014 baby formula value sales and growth by channel in select markets

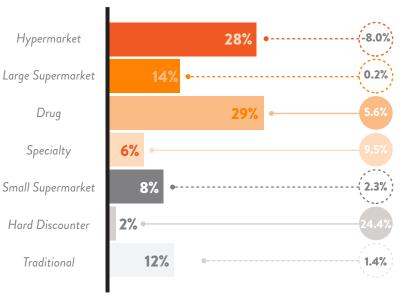
YOY Growth

DEVELOPED COUNTRIES

DEVELOPING COUNTRIES

YOY Growth





Source: Nielsen Retail Measurement Sales data

Note: See Methodology section for a listing of developed and developing countries

PACKAGING INNOVATION AND ORGANIC OPTIONS DRIVE SALES

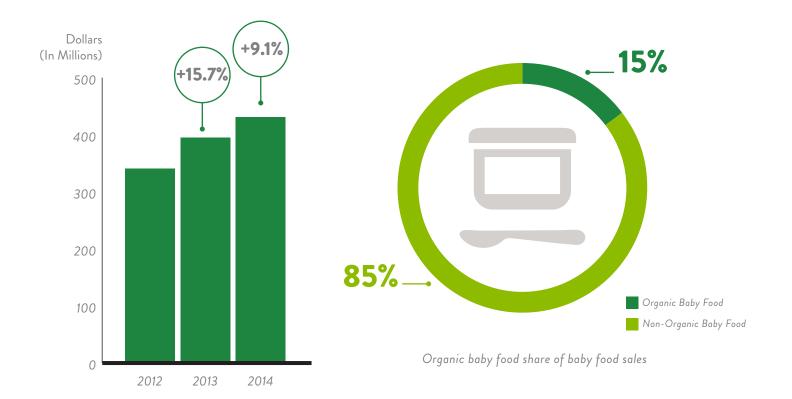
In terms of packaging, products in tubs or glass make up the vast majority of baby food value sales (87%) in 16 select markets (see Methodology for list of countries included). But when it comes to growth, pouches (containers with plastic spouts at the top from which food can be sipped) are all the rage, with value sales increasing 28% between December 2013 and 2014. In fact, pouches grew by triple digits in the Ukraine (916%), Brazil (528%), Portugal (316%), Russia (264%), the Netherlands (184%) and Spain (125%). In the U.S.—the largest pouch market in the study by a wide margin—sales grew 7% over the previous year. Sales for products packaged in tubs or glass, on the other hand, were flat worldwide and declined in the majority of markets analyzed, including the U.S. (-2%).

"The popularity of pouches is largely driven by their ease and flexibility," said Buchanan. "Pouches provide convenient, portable nutrition that's extremely compatible with consumers' on-the-go lifestyles, and they promote self-feeding and independence."

The organic sector is also experiencing strong growth. Value sales grew 26% over the past two years in the 16 markets examined, while nonorganic products declined 6%. North America is the largest organic market included, accounting for 72% of value sales over the past 12 months.

"Consumers are increasingly health conscious and looking for natural, minimally-processed foods, and the stakes are even higher when it comes to their babies," said Buchanan. "More parents are seeking foods that set their children up for a healthy life—even if it comes at a premium. We expect this segment will continue to grow as more parents can afford to trade up."

ORGANIC BABY FOOD IS SHOWING STRONG GROWTH



Share of 2014 value sales and year-over-year growth in select markets

Source: Nielsen Retail Measurement Sales data

Note: See Methodology section for listing of countries



THE VALUE OF TRUSTED ADVISORS

Becoming a parent can be a daunting endeavor, which is why guidance from trusted advisors is so incredibly valuable. When it comes to advice about the best baby food/formula information for their little ones, who do new parents turn to most? The short answer: family and friends, cited by 44% of global respondents. They were also the most influential. Nearly four-in-10 global respondents (38%) say recommendations from friends and family had the most influence on their purchase decisions.

Consumers aren't just relying on their circle of friends and family; recommendations of health experts are also highly influential. Thirtysix percent of global respondents say they learned about foods/formula from a baby health expert, and nearly as many (34%) say these opinions influenced their purchase decisions.

Recommendations from health care experts tops the list of most influential information sources in Latin America, cited by 42% of respondents, while their influence is significantly below average in North America, cited by only 18%.

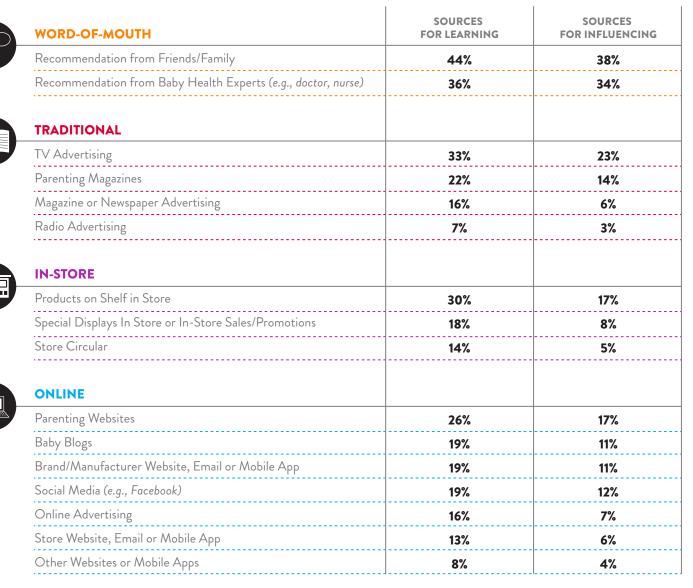
Marketers must prove their value not only to the shopper but to a broader network of trusted sources, said Buchanan. Product endorsements from doctors, hospitals and healthcare professionals can hold tremendous clout with parents. As parent's first introduction to baby food/formula is often from these trusted advisors, aligning offerings with affiliations can provide an instant gateway to firsttime users. But quality and good service will ensure customer loyalty.

> TV ads are also an important source of information, but their influence on decision-making is notably lower. One-third of consumers say they learned about baby foods through a TV ad, but less than onequarter (23%) say this source influenced purchasing, a 10-percentage point difference. The use of TV ads to learn about new products and to influence purchasing decisions is well below the global average in Europe (22% use, 13% say they're influential) and North America (20% and 13%, respectively).

Similar gaps between the percentage that use a source to learn about a product versus use a source to influence purchase decisions also exist for the other sources included in the survey. For example, the presence of a product on store shelves is a key source of awareness for nearly one-third of global respondents (30%)—including 36% in North America, where it is the most commonly cited source—yet only 17% globally say it influenced their purchase decision.

WORD-OF-MOUTH AND TRADITIONAL ADVERTISING ARE MOST IMPACTFUL BABY FOOD SOURCES

Sources used to learn about baby food products and for influencing purchases



GLOBAL AVERAGE

Source: Nielsen Global Baby Care Survey, Q1 2015

BRAND NAME, NUTRITION AND SAFETY ARE IMPORTANT PURCHASE CRITERIA

Three product attributes stand well above the rest when it comes to making a baby food purchase. Thirty-nine percent of global respondents say a trusted brand is most important when deciding what brand and type of baby food to purchase, followed by good overall nutrition (37%) and safe ingredients/processing (36%).

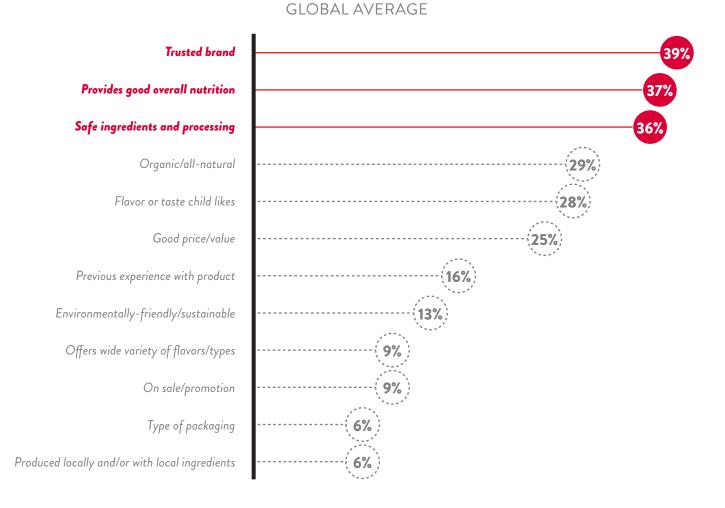
Trusted brand names are most important in developing markets where incomes can be lower and brands often provide an assurance of quality. Forty-two percent of respondents in Asia-Pacific, 41% in Latin America and 36% in Africa/Middle East say a trusted brand is the most important factor when deciding what kind of baby food to purchase, compared with 32% in Europe and 27% in North America.

Due to a number of food safety incidents in recent years, particularly in Asia-Pacific, respondents in this region value safety more than anywhere else. Forty percent of Asia-Pacific respondents say safe ingredients and processing is most important in their purchasing decisions; it doesn't exceed 32% in any other region.

"Manufacturers who fail to meet consumers' basic requirements for safety can risk significant long-term harm to their brand," said Buchanan. "Food safety issues can badly damage consumer trust and have created strong demand for foreign products with a trusted name and a strong safety record." The importance of organic/all-natural foods is also an important purchase consideration, particularly in Asia-Pacific and in Europe, cited by 31% of respondents in each region. In comparison, 26% of African/ Middle Eastern, 20% of Latin American and 18% of North American respondents say organic is an important consideration in their baby food purchasing decisions. While North Americans rate organics below the global average in importance, the region leads the way in actual purchasing, accounting for 72% of global organic sales.

TRUST, GOOD NUTRITION AND SAFETY ARE TOP BABY FOOD PURCHASE ATTRIBUTES

Most important baby food purchase attributes



Source: Nielsen Global Baby Care Survey, Q1 2015

PRICE IS A DOMINANT DRIVER IN WESTERN MARKETS

While the "big three" attributes (trusted brand, nutrition and safety) are also important in Europe and North America, another attribute comes out on top in these regions: price/value. More than one-third of respondents in North America (36%) and Europe (34%) say good price/value is most important when deciding what baby food to purchase. In Asia-Pacific, only 20% of respondents cite price/value as a top factor in their purchase decision.

Significantly higher percentages of North American respondents say they always seek the lowest price option when purchasing baby food. Three-in-10 North American respondents (30%) prioritize price over brand, compared with 13% globally. Forty-seven percent say they select the lowest cost option among a limited set of acceptable options, while only 23% say they buy whatever brand they want regardless of price (compared with 41% worldwide).

"In North America and Europe, the baby care industry is highly regulated, so consumers have come to expect the baby foods they buy will be safe and nutritious," said Buchanan. "Additionally, product choice is more ample in these developed regions. Therefore, for some consumers, price becomes an important differentiator between brands. In these regions, two very different groups of shoppers have emerged: the premium shoppers, who are willing to pay more for what they perceive to be a better product, and the value seekers, who are looking for the best deal."



Source: Nielsen Global Baby Care Survey, Q1 2015

BRAND LOYALTY IS FLEETING

Perhaps nothing is ever good enough for one's precious baby, as the vast majority of consumers are willing to switch baby food brands. Seventy percent of global respondents, including more than six-in-10 in every region, say they have switched brands.

While 40% of global respondents switch because of feedback from family and friends, consumers are also switching brands for health-related reasons. More than one-third of global respondents (34%) say they switched brands based on the recommendation of a health expert, and nearly one-quarter (23%) say they switched for a medical reason.

The strongest drivers of brand switching, however, differ around the world. Positive word-of-mouth is particularly important in Asia-Pacific (47%), but well below the global average in all other regions. Also, in developing markets, brand switching is more likely to be driven by medical reasons. Recommendation from a health care expert tops the list of reasons for switching foods or formula brands in Africa/Middle East (37%) and Latin America (39%), and it's the second highest reason in Asia-Pacific (37%). Africa/Middle East and Latin America also exceed the global average for switching based on a medical reason (cited by 31% and 30% of respondents, respectively).

Just as price is a critical purchase selection factor in developed markets, it is also a key brand-switching driver in these markets, particularly in North America. One-third (33%) of North American and 26% of European respondents say they switched because another brand was less expensive, compared with 18% worldwide. In addition, one-quarter of respondents in North America (25%) and just about that many in Europe (23%) say they switched because the brand was on promotion (versus 21% globally), and 19% of North American respondents switched after receiving a coupon, 10-percentage points above the global average.

WORD-OF-MOUTH COMMUNICATIONS IS THE BIGGEST SWITCHING DRIVER FOR BABY FOOD

	Global	North America	Europe	Latin America	Africa/ Middle East	Asia- Pacific
Feedback from family/friends	40%	26%	31%	26%	33%	47%
Recommendation of health care specialist	34%	15%	23%	39%	37%	37%
Medical reason	23%	12%	22%	30%	31%	21%
Promotion	21%	25%	23%	27%	15%	19%
Internet/blog information	19%	19%	9%	11%	15%	24%
Lower cost	18%	33%	26%	22%	21%	14%
Out of stock	17%	12%	25%	22%	26%	14%
TV advertisement	17%	14%	8%	13%	19%	21%
Product display	11%	7%	9%	11%	10%	13%
Coupon 60	9%	19%	10%	4%	7%	9%

Most important reasons for switching baby food brands

Source: Nielsen Global Baby Care Survey, Q1 2015

STRATEGIES FOR SUCCESS IN THE BABY FOOD AND FORMULA CATEGORY

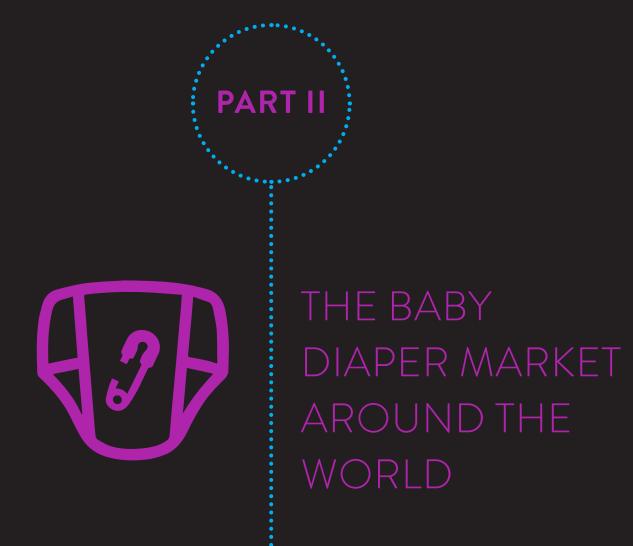
While the baby food and formula market has reached maturity in many markets, opportunities still abound. In developed markets, where birthrates are lower and baby care categories are highly saturated, growth will primarily come from innovation and premiumization. In developing markets, innovation will be important, but increasing demand will be the biggest growth driver.

How can manufacturers increase their likelihood of success?

- Cater to changing market demographics and tastes: Tastes vary around the world, and what's popular in one region doesn't necessarily hold true in another. For example, apple cinnamon flavor is popular in the U.S., but it doesn't resonate well in China, where red date is extremely popular. It's also important to recognize cultural traditions that impact food choices and common nutritional deficiencies. For example, in the Middle East, Agro-Food introduced the VitaMeal Baby range, the world's first range of halal baby food. Manufacturers who fill an unmet need are best positioned for growth.
- Consider partnering and leveraging individual strengths: Sometimes one plus one equals three. When introducing new product lines or entering new categories, a partner with a strong brand name can lend credibility and expertise. For example, a U.S., baby food manufacturer partnered with an established ethnic brand to create a range of baby food catering to Hispanic consumers (who account for one-quarter of births in the country). The relationship joined two strong brand names, and provided instant recognition among a growing demographic.

In addition, when entering foreign markets, a local partner who understands local tastes as well as nutrition, labeling, import and advertising/promotional requirements can greatly increase the odds of success.

- **Be transparent:** Parents want to know what is going into their children's mouths, so labels should detail all of the ingredients in the product. Including their relative proportions is even better. In May 2015 in the U.S., Beech-Nut became the first manufacturer to list the specific percentage of each ingredient in its products on its website, and the company plans to include this information on product labels within the next year. Gerber has also made it easier for parents to understand what's in a jar of baby food, using visual recipe equations on some products. The company has announced it will expand the practice to all of its pureed products in the next year.
- **Highlight safety first:** Consumers need to feel like a company values their children's health above everything and that they're willing to take action at the first sign of a problem. Particularly in markets where safety may have been an issue, manufacturers should highlight their safety record on packaging and in ads. And they should regularly engage with consumers through their websites and social media to address questions and concerns.
- **Go au naturel:** Simple is beautiful, and many consumers are looking for the simplicity of homemade without the fuss. Manufacturers should look for opportunities to remove or replace undesirable ingredients like added sugar, sodium and preservatives. There is strong potential for growth in the organic segment, particularly in Asia-Pacific, but manufacturers need to educate consumers about the benefits of going organic.
- **Highlight health:** Health claims can be a strong differentiator between brands and should be a key innovation pillar, with new product development focusing on benefits like improved cognitive and physical development, sleep quality and immune function. With food intolerances and allergies on the rise in industrialized countries in particular, manufacturers should look for ways to better serve this growing segment.

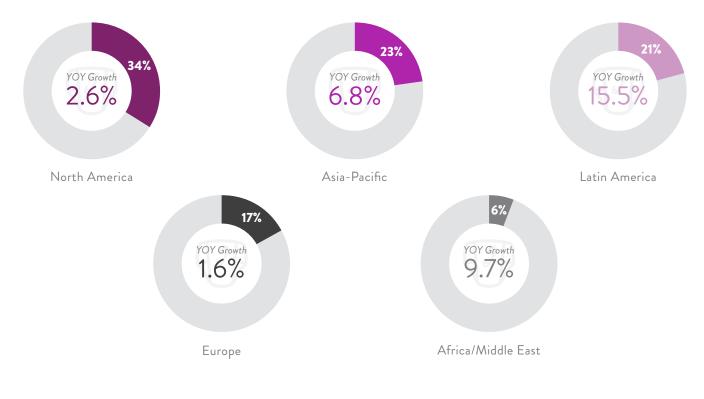


DIAPER GROWTH IS STRONGEST IN DEVELOPING MARKETS

Values sales in the diaper market are less concentrated than for baby food and formula. North America and Europe together account for 51% of sales around the world (34% and 17%, respectively), while Asia-Pacific and Latin America each claim more than one-fifth of sales (23% and 21%, respectively).

NORTH AMERICA LEADS THE WAY IN DIAPER SALES; GROWTH IS HIGHEST IN LATIN AMERICA

Share of 2014 value sales and growth in select markets



Source: Nielsen Retail Measurement Sales data Note: See Methodology section for listing of countries The fastest growth is happening in developing markets. In terms of value sales, between December 2013 and 2014, the category grew fastest in Latin America (15.5%), fueled by a combination of rising prices—which increased 4.4% over the previous year—and strong volume growth in Venezuela and Mexico. Growth is likely to continue in developing markets, but manufacturers also face a unique challenge in these countries. In many developing markets, the diaper market is still in its nascent stages, and manufacturers must convince consumers to not only buy their brand but to purchase diapers of any kind. For example, diaper use in India has traditionally been limited, primarily for special occasions outside the home (although this is changing).

Penetration rates (the percentage of households purchasing diapers) are also higher in developing markets. Of the countries examined (see Methodology section for list of countries), category penetration is highest in Brazil, where 26% of households purchased diapers during the previous year. Penetration is lowest in the U.S. (6.2%), but there's some good news for manufacturers: penetration actually increased (+1%) in the past 12 months.

"Penetration growth in the U.S. reflects the small uptick in births that occurred between 2013 and 2014, the first increase since 2007," said Buchanan. "As the economy has improved, consumers may feel more financially stable and confident in their ability to provide for a baby. We expect to see moderate growth in the diaper category as consumers who delayed having children during the recession play catch-up."



GROWING (CAGR >4%, 2012-2014)	DECLINING (CAGR, 2012-2014)
	Korea (-9.5%)
	China (-7.6%)
	Argentina (-5.6%)*
India (20.3%)	Israel (-5.2%)
Indonesia (19.1%)	Slovakia (-5.0%)
Venezuela (14.4%)	Poland (-4.7%)
Mexico (7.8%)	Malaysia (-3.8%)
Turkey (6.6%)	Canada (-2.8%)*
South Africa (6.1%)	Austria (-2.7%)
Thailand (4.4%)	Czech Republic (-2.7%)*
Brazil (4.2%)*	Hungary (-2.6%)
Russia (4.1%)	Italy (-2.3%)
	U.K. (-1.6%)
	U.S. (-0.5%)

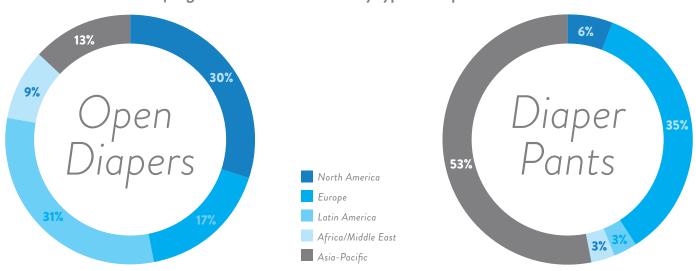
Source: Nielsen Retail Measurement Sales data * Indicates change versus a year ago, as three-year data was unavailable

DIAPER PANTS POPULARITY IS ON THE RISE

Within the diaper category, which segments are growing most? We analyzed a subset of countries to understand directional growth in the category. While open diapers (traditional taped diapers with high absorbency) are the largest segment and experienced strong growth in 2014, rising 7% over the previous year, the strongest growth came from diaper pants, which slide on, but have absorbency closer to an open (taped) diaper. The diaper pants segment increased 20% over the previous year, with sales largely concentrated in Asia-Pacific and Europe.

In Asia, the tremendous growth in the diaper pants category has been driven by their convenience, comfort and competitive prices. Diaper pants are extremely easy to use and they're also airier and can be more comfortable than regular diapers, which need to be taped and, hence, are tighter than pants. In addition, sales in traditional trade and smaller stores have been strengthened through the introduction of smaller packs of diapers (one or two diapers per pack). As these packs cost less, they are a popular option for consumers.

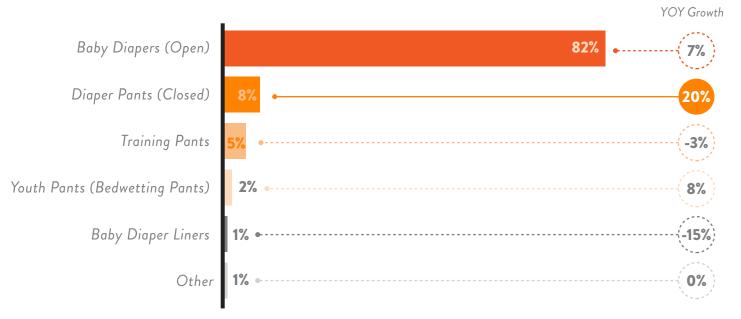
DIAPER PANTS SALES ARE HIGHEST IN ASIA-PACIFIC AND EUROPE



2014 regional value sales share by type of diaper in select markets

Source: Nielsen Retail Measurement Sales data Note: See Methodology section for listing of countries

OPEN DIAPERS DRIVE SALES, BUT DIAPER PANTS ARE GROWING RAPIDLY



2014 value sales share by type of diaper in select markets

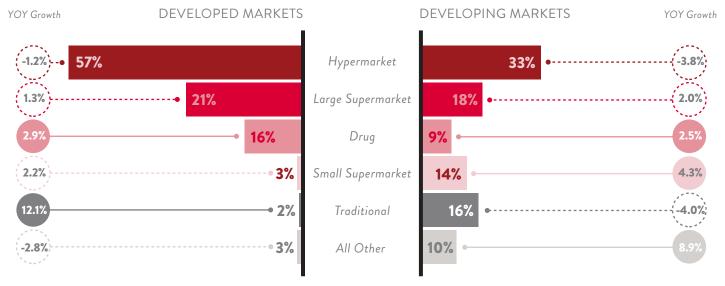
Source: Nielsen Retail Measurement Sales data

Note: "Other" includes swimming pants, child bed mats, undefined pants and baby changing mats

Note: See Methodology section for listing of countries.

DIAPER CATEGORY IS HIGHLY CONCENTRATED IN DEVELOPED MARKETS, BUT SMALL FORMATS GROWING FASTER

Share of 2014 diaper value sales and growth by channel in select markets



Source: Nielsen Retail Measurement Sales data Note: See Methodology section for listing of countries.

Note: See Methodology section for listing of countrie

TV + DIAPERS= STRONG INFLUENCE

Around the world, respondents rely on fewer sources to learn about diapers than baby food and formula, but the most commonly used source—by a wide margin—remains the same: recommendations from friends and family, cited by 44% of global respondents. This is the top source of information in every region, though it is well below average in North America (32%).

TV ads are the second most commonly cited source of information. More than one-third of respondents (35%) say they learned about diapers through a TV ad. This source is particularly important in developing markets, cited by 44% of respondents in Latin America, 39% in Asia-Pacific and 37% in Africa/Middle East. Not coincidentally, the money spent on TV as a proportion of total advertising costs has increased in each of these markets over the past two years. In Europe and North America, where spending has decreased, fewer respondents say they learn about diapers through TV ads (24% and 16%, respectively).

In the diaper category, recommendations from health care experts are rated third in importance as a source for awareness (they're second for baby food), cited by 27% of respondents—nine-percentage points lower than those who use them to learn about baby food.

In general, the risk associated with choosing the wrong diaper is much lower than it can be is for baby food, so the opinions of health care experts aren't relied upon as heavily, said Buchanan. Nonetheless, the medical community remains an important source of awareness, as many consumers often stick with the diaper brand they receive at the hospital after discharge. In-store activity is particularly important in North America. Nearly one-third of North American respondents (31%) say they learned about diapers by seeing them on store shelves, six-percentage points above the global average (25%). One-fifth say they learned about diapers through in-store displays or promotions, compared with 16% worldwide.

Only a small proportion of global respondents learn about diaper brands through online channels, but use is highest in Asia-Pacific. Nearly onequarter of respondents in this region (24%) say they learn about diapers on parenting websites, compared with 19% globally. Asia-Pacific also exceeds the global average in use of brand/manufacturer websites and emails (20% in the region vs. 15% worldwide), baby blogs (19% vs. 17%), online ads (17% vs. 14%), social media (17% vs. 14%) and store website/ app and emails (14% vs. 11%). Within the region, the use of social media is particularly high in Southeast Asia and India.

When it comes to the sources of information that are most influential for purchasing decisions, the same patterns reported for baby food emerge. Use is aligned with influence for word-of-mouth sources (recommendations from friends/family and health care experts), but for most other sources, use greatly exceeds influence.



V

WORD-OF-MOUTH AND TRADITIONAL ADVERTISING ARE MOST IMPACTFUL DIAPER SOURCES

Sources used to learn about diaper products and for influencing purchases

WORD-OF-MOUTH	SOURCES FOR LEARNING	SOURCES FOR INFLUENCING
Recommendation from Friends/Family	44%	41%
Recommendation from Baby Health Experts (e.g., doctor, nurse)	27%	25%
TRADITIONAL		
TV Advertising	35%	27%
Parenting Magazines	17%	11%
Magazine or Newspaper Advertising	12%	6%
Radio Advertising	5%	3%
IN-STORE		
Products on Shelf in Store	25%	19%
Special Displays In Store or In-Store Sales/Promotions	16%	13%
Store Circular	14%	8%
ONLINE		
Parenting Websites	19%	14%
Baby Blogs	17%	11%
Brand/Manufacturer Website, Email or Mobile App	15%	10%
Social Media (e.g., Facebook)	14%	9%
Online Advertising	14%	8%
Store Website, Email or Mobile App	11%	5%
Other Websites or Mobile Apps	7%	4%

GLOBAL AVERAGE

Source: Nielsen Global Baby Care Survey, Q1 2015

FUNCTION FIRST FOR DIAPERS

Above all, parents are seeking options that are gentle on their baby's skin. Forty percent of global respondents say this is most important attribute when deciding what diaper brand to purchase, seven-percentage points above the next highest attribute. This is the only attribute in the top five in all regions, although its importance is well below the global average in North America (25% say it's important).

One-third of global respondents say good fit/comfort is important, placing it second on the list globally. This attribute is particularly important in Asia-Pacific (38% say it's important).

Tied for third are trusted brand and leakage prevention, both attributes cited by 28% of global respondents. Brand name is less important in diaper purchases than food, 11 percentage points below the percentage who said it's important for baby food (39%). Leakage protection is particularly important in North America and Africa/Middle East. It tops the list of most important attributes in both regions, cited by 40% and 39% of respondents in each region, respectively.

SKIN PROTECTION AND COMFORT ARE TOP DIAPER PURCHASE ATTRIBUTES

Most important diaper purchase attributes



GLOBAL AVERAGE

Source: Nielsen Global Baby Care Survey, Q1 2015

PRICE IS A TOP PRIORITY

While consumers know what they're looking for when it comes to diapers, they're not opposed to switching brands if another product better suits their needs. Seventy percent of global respondents say they've switched brands, but their reasons for doing so are somewhat different than their reasons for switching baby food.

Positive feedback from friends and family tops the list again, cited by 35% of global respondents, but price is a more compelling reason for diaper switching. It is the top switching driver in four of five regions (Asia-Pacific is the exception). Twenty-seven percent of global respondents say they switched diapers because the brand was less expensive (18% for baby food) or on promotion (21% for baby food). In North America in particular, it's all about price. Forty-two percent of respondents in this region switched because another product was cheaper, and 34% did so because another brand was on promotion. In addition, 30% switched because they received a coupon (compared with 10% globally).

Price can be a powerful motivator to encourage trial, but functionality will always outweigh price, said Buchanan. If the less expensive product fails to deliver on basic expectations of leakage protection, gentleness, comfort and absorption, consumers will not likely buy it again.

> In addition, while many consumers will delay purchase or go to another store when their preferred item isn't available, a sizeable number aren't willing to be inconvenienced and will choose another option. Twenty-one percent of global respondents say they switched diaper brands because their regular brand was out of stock. Latin America and Africa/Middle East (28% each) both exceed the global average for switching for this reason.

"The potential costs of out of stocks for manufacturers go well beyond lost sales," said Buchanan. "They can also reduce customer satisfaction and brand loyalty. Therefore, it's critical that manufacturers collaborate closely with their retail partners and leverage the array of new technologies available to reduce these occurrences."

WORD-OF-MOUTH COMMUNICATIONS IS THE BIGGEST SWITCHING DRIVER FOR DIAPERS

	Global	North America	Europe	Latin America	Africa/ Middle East	Asia- Pacific
Feedback from family/friends	35%	24%	25%	22%	32%	43%
Lower cost	\$ 27%	42%	35%	29%	32%	22%
Promotion	SALE 27%	34%	28%	36%	22%	25%
Out of stock	QUT OF 21%	17%	24%	28%	28%	18%
Recommendation of health care specialist	21%	7%	11%	18%	22%	25%
TV advertisement	19%	20%	8%	16%	20%	23%
Medical reason	18%	9%	18%	20%	24%	18%
Internet/blog information	14%	8%	9%	11%	9%	17%
Product display	13%	13%	9%	13%	9%	15%
Coupon	10%	30%	10%	6%	7%	9%

Most important reasons for switching diaper brands

Source: Nielsen Global Baby Care Survey, Q1 2015

SPOTLIGHT ON PRIVATE LABEL

WHAT'S IN A NAME?

It depends where you're asking. In Asia-Pacific and Africa/Middle East, name brands are highly valued and carry significant weight. Two-thirds of respondents in Asia-Pacific say name-brand diapers are of better quality than store brands, and roughly the same percentage (68%) believe name-brand baby foods are superior. In Africa/Middle East, more than half of respondents believe name-brand diapers (57%) and baby food (54%) are better than private label. Not surprisingly, private label accounts for less than 1% of diaper sales in Asia (0.3%) and the Middle East (0.1%). And this isn't likely to change anytime soon.

Private label is still in its nascent stages in the Middle East, and, while these brands have been around for 25 years in Asia, they've failed to take off because retailers have not invested enough in marketing to persuade shoppers to trust their quality, said Buchanan.

> Private label is well established in the developing regions and purchasing patterns reflect this availability. Value-conscious North American consumers are the most open to private label. Store brands have a 19% share of diaper value sales in this region, the highest of any region (Europe is second highest at 16%). Private-label baby food is rated more positively than diapers in North America. Fifty-seven percent of North American consumers say store-brand baby food is just as good as name-brand options, while 47% say store brand diapers are just as good.

"North America and Europe are the most mature private label markets in the world, so comfort levels are high," said Buchanan. "In addition, these regions have the highest diaper prices in the world. Even in these markets, however, private labels do not necessarily have a growth advantage. Commitment to innovation, analytics and marketing are effective strategies for maintaining and growing share."

STRATEGIES FOR SUCCESS IN THE DIAPERS CATEGORY

Like the baby food and formula market, growth in the global diaper market won't come easy. How can manufacturers win in this challenging space?

- Innovate, innovate, innovate: It's a no-brainer, but its importance can't be overstated. Research and development efforts should be centered on the three key attributes identified by consumers: superior skin protection, comfort and absorption. Thinness is also an important objective because it is a way to ensure optimal comfort and minimize material and freight costs and environmental impact; plus, thinner products take up less shelf space, which is appealing for retailers.
- **Control costs:** Also obvious, but a critical goal in an intensely competitive category in which brands often compete on price. Innovation can help, but manufacturers should also look for ways to reduce operating costs by optimizing production and improving supply chain efficiencies.
- Understand and appeal to what drives consumers: Consumers' reasons for purchasing diapers differ around the world. For example, while convenience may be appealing in one region, marketers may need to focus on the sleep and developmental benefits diapers provide in another. In order to attract new category purchasers, marketers need to understand what challenges consumers face and what they value.

It's also important to recognize regional differences in product preferences and adapt product lines accordingly. For instance, diaper pants are popular in many Asian markets, so manufacturers looking to expand into these markets may want to devote more resources to innovation and marketing in this category than they would elsewhere.



ASIA LEADS THE WAY IN ONLINE PURCHASING

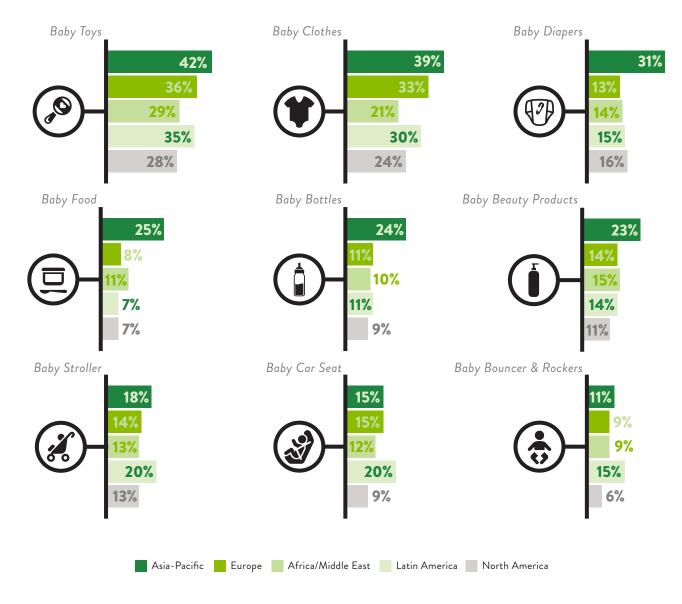
Global baby care consumers are more likely to purchase baby supplies in a physical store rather than online, but this trend is changing as more consumers are switching to online channels. E-commerce retailers are able to compete on price and convenience due to reduced capital investment in physical infrastructure and, in some cases, the elimination of links in the supply chain. And it offers a compelling proposition for busy parents: the convenience of shopping whenever, wherever they desire, often with free delivery to their front door.

What kinds of baby care products are consumers buying online? Global respondents are most likely to have bought baby toys (38%) and clothes (34%). From there, purchasing drops quickly. Twenty-three percent of global consumers say they've bought diapers online and 17% have bought baby food.

Asia-Pacific leads the way in self-reported online purchasing, especially for diapers and baby food. Thirty-one percent of respondents in this region say they've bought diapers online and one-quarter has bought baby food. Within Asia, Hong Kong and Korea lead the way in self-reported online purchasing.

ASIA-PACIFIC LEADS THE WAY IN ONLINE BABY CARE PURCHASING

Percentage who say they have purchased a baby care product online



Source: Nielsen Global Baby Care Survey, Q1 2015



E-commerce retail sales show impressive year-over-year growth in China. Between 2013 and 2014, online infant formula sales rose 32%, baby food grew 44% and diapers grew 60%. In Europe, online baby food sales rose 43%, fueled by strong growth in France.

E-commerce's strength in Asia has been driven by a few factors. Infrastructure improvements and increased smartphone and Internet penetration have brought more potential shoppers online, particularly in rural regions. Also, product assortment online is much broader than in traditional channels.

"E-commerce has been a key catalyst for consumption growth in China," said Buchanan. "In many rural areas, even small format stores are rare. The Internet has given these consumers access to a new world of goods that weren't previously available, without even leaving their home."

In addition, rapid urbanization and high population density have made home delivery models economically viable, and some retailers provide flexible payment options, allowing consumers concerned about security or without a bank account/credit card the option to pay with cash on delivery.

STRATEGIES FOR SUCCESS IN E-COMMERCE

While Asia-Pacific currently leads the way in online shopping, growth in other regions is anticipated. As e-commerce grows, there are a few strategies baby care manufacturers and retailers should keep in mind.

- **Go mobile:** Optimize mobile compatibility and consider developing a mobile app to take advantage of the growing m-commerce segment. India alone adds 5 million new mobile Internet users every month, shifting purchasing behavior from e-commerce to m-commerce.
- Innovative with delivery: To increase convenience and keep prices low, get creative with delivery. In India, Amazon has partnered with traditional trade stores to offer same-day delivery of food and other essentials.
- Offer flexible payment: The World Bank estimates that 2.5 billion people worldwide do not have a formal account at a financial institution. To reach unbanked consumers, retailers and manufacturers should experiment with innovative payment methods such as cash-on-delivery or mobile payments.
- Make it easy: The fewer clicks, the better. Provide links to dedicated baby care pages on the homepage and make it easy for customer to reorder a previous purchase. Many retailers have taken this a step further, offering online subscription models that automatically replenish an order at a specified time period.
- **Bundle baby care products:** Bulky item like diapers are expensive to ship and leave little in the way of profits. Therefore, online retailers should focus on increasing sales in baby care categories with higher profit margins like beauty products and bottles. They should also use technology to look for efficiencies in packaging and delivery as retailers such as diapers.com have done.

COUNTRIES IN THE GLOBAL SURVEY STUDY

	EUROPE
MARKET	INTERNET PENETRATION
Austria	87%
Belgium	90%
Bulgaria	59%
Croatia	71%
Czech Republic	78%
Denmark	97%
Estonia	83%
Finland	97%
France	83%
Germany	87%
Greece	60%
Hungary	75%
Ireland	79%
Israel	76%
Italy	59%
Latvia	75%
Lithuania	69%
Netherlands	96%
Norway	95%
Poland	67%
Portugal	65%
Romania	51%
Russia	61%
Serbia	65%
Slovakia	82%
Slovenia	76%
Spain	75%
Sweden	95%
Switzerland	89%
Turkey	57%
United Kingdom	90%
Ukraine	42%

ASIA-PACIFIC				
MARKET	INTERNET PENETRATION			
Australia	94%			
China	47%			
Hong Kong	81%			
India	20%			
Indonesia	28%			
Japan	86%			
Malaysia	67%			
New Zealand	95%			
Philippines	41%			
Singapore	80%			
South Korea	92%			
Taiwan	80%			
Thailand	30%			
Vietnam	44%			

LATIN AMERICA

MARKET	INTERNET PENETRATION
Argentina	75%
Brazil	54%
Chile	67%
Colombia	62%
Mexico	49%
Peru	42%
Venezuela	50%

MIDDLE EAST/AFRICA	
MARKET	INTERNET PENETRATION
Egypt	53%
Pakistan	15%
Saudi Arabia	67%
South Africa	52%
United Arab Emirates	96%

NORTH AMERICA	
MARKET	INTERNET PENETRATION
Canada	95%
United States	87%

Source: Internet World Stats, June 30, 2014

ABOUT NIELSEN RETAIL MEASUREMENT SALES DATA

Purchasing data was pulled from Nielsen's Retail Measurement Services database for the 12 months ending December 2012, 2013 and 2014. For this report, developed countries are defined as those in the top 50 of the U.N.'s Human Development Index, a composite statistic of life expectancy, education, and per capita income indicators. Developing countries are those outside the top 50. The following countries were included in the analysis for the data point noted:

- Baby food value and volume sales: Austria, Belgium, Brazil, China, Czech Republic, France, Germany, Greece, Hungary, India (not included in volume analysis), Indonesia, Ireland, Israel, Italy, Mexico, Norway, Poland, Portugal, Russia, Saudi Arabia, Slovakia, South Africa, Spain, Sweden, Switzerland, Thailand, Taiwan, Turkey, U.K., United Arab Emirates (UAE), U.S., Venezuela
- **Baby food retail format share:** Brazil, Germany, India, Italy, Mexico, Russia, Saudi Arabia, South Africa, Thailand, Turkey, UAE, U.S.
- **Organic baby food and pouches:** Brazil, Canada, Chile, Denmark, France, Italy, Mexico, Netherlands, Norway, Poland, Portugal, Russia, Spain, Sweden, Ukraine, U.S.
- **Baby formula value and volume sales:** Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Czech Republic, Egypt, France, Germany, Greece, Hungary, India (not included in volume analysis), Indonesia, Ireland, Israel, Italy, Korea, Mexico, Norway, Phillipines, Poland, Portugal, Russia, Saudi Arabia, Slovakia, South Africa, Spain, Sweden, Thailand, Turkey, U.K., UAE, U.S., Venezuela
- Diaper value and volume sales and segment analysis: Argentina, Austria, Belgium, Brazil, Canada, China, Czech Republic, France, Germany, Greece, Hungary, India, Indonesia, Ireland, Israel, Italy, Korea, Malaysia, Mexico, Norway, Poland, Russia, Saudi Arabia, Slovakia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, UAE, U.K., U.S., Venezuela
- **Baby formula retail format share:** Argentina, Germany, India, Italy, Korea, Mexico, Russia, Saudi Arabia, South Africa, Thailand, Turkey, UAE, U.S.

- **Diapers retail format share:** Argentina, China, Germany, India, Indonesia, Italy, Korea, Malaysia, Mexico, Russia, Saudi Arabia, South Africa, Thailand, Turkey, UAE, U.S.
- **Diaper penetration data:** Brazil, Germany, China, Singapore, Thailand, U.S.

ABOUT THE NIELSEN GLOBAL SURVEY

The Nielsen Global Baby Care Survey was conducted between Feb. 23-March 13, 2015, and polled consumers who have made a baby care purchase in the past five years in 60 countries throughout Asia-Pacific, Europe, Latin America, the Middle East, Africa and North America. The sample has quotas based on age and sex for each country based on its Internet users and is weighted to be representative of Internet consumers. It has a margin of error of $\pm 0.6\%$. This 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. The Nielsen Global Survey, which includes the Global Consumer Confidence Index, was established in 2005.

ABOUT NIELSEN

Nielsen N.V. (NYSE: NLSN) is a global performance management company that provides a comprehensive understanding of what consumers Watch and Buy. Nielsen's Watch segment provides media and advertising clients with Total Audience measurement services across all devices where content — video, audio and text — is consumed. The Buy segment offers consumer packaged goods manufacturers and retailers the industry's only global view of retail performance measurement. By integrating information from its Watch and Buy segments and other data sources, Nielsen provides its clients with both world-class measurement as well as analytics that help improve performance. Nielsen, an S&P 500 company, has operations in over 100 countries that cover more than 90 percent of the world's population.

For more information, visit www.nielsen.com.

Copyright © 2015 The Nielsen Company. All rights reserved. Nielsen and the Nielsen logo are trademarks or registered trademarks of CZT/ACN Trademarks, L.L.C. Other product and service names are trademarks or registered trademarks of their respective companies. 15/9110





