WORLD ECONOMIC FORUM

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Retail, Consumer Goods and Lifestyle
Dynamic Briefing

Generated 05 May 2017 for the University of Southern California

Retail, Consumer Goods and Lifestyle

Co-curated with **University of Southern California (USC)**

Mapping Global Transformations

By drawing on the collective intelligence of the Forum network, Transformation Maps allow users to explore the interconnections between industry, regional and global issues, and thus better understand the forces shaping our world. Dynamic briefings provide an overview of these issues, highlighting the key issues for each topic. They are continuously updated with the latest thinking of leaders and experts across the Forum network, and with insights gleaned from Forum meetings, projects communities and activities.

Executive summary

The 21st century consumer landscape is remarkably different from its 20th century predecessor. While once material goods in retail stores defined the consumer market, today consumers desire and expect more. The wealthy are much more inclined to spend on luxury experiences (and expect as much in their retail shopping as well). They are also spending more and more on long term, intergenerational investments such as education and retirement. The middle class also looks different. Material abundance is limited due to median wage stagnation, which has gripped the US and UK. Today's global middle class consumer is as likely to come from Mumbai as it is from the Midwest of America. These changes have put pressure on retailers to rethink how they position goods and services, and what exactly those products might be.

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1. The Global Luxury Market

Despite geopolitical and currency upheaval, Bain & Company estimated the global luxury market to be EUR 1.08 trillion in 2016, a stable or modestly growing number by most estimates. Luxury car sales and luxury experiences are a significant driver of this figure.

2. Immaterial Consumption

The recession of 2008 brought many changes to the consumer economy. One of the most salient examples is that of the United States' economy. The post-recession period has resulted in significant new trends in spending across different socioeconomic groups in the United States.

3. Artisanal Production

In the 1970s and 1980s, mass production manufacturing exited many Western urban centres for cities and regions around the world that offered greater resources and cheaper labour, and this practice continued through the early years of the 21st century. From 1990-2012, for example, employment in American textile and apparel sectors contracted by 76.

4. New Patterns of Consumption

In the post-recession era, many of our notions of consumption must be rethought. The consumption of retail goods is still omnipresent and an important driver of the global economy. Today however, new forces are at work and challenge us to think differently about retail and consumption patterns.

5. The Global Middle Class

As capitalist production processes expand into new markets, many experts point to the emergence of a rising global middle class. Some economists measure the global middle class by the ability to purchase a car.

The Global Luxury Market

Shifts in the consumer base are pushing towards experiences and individualized processes

Despite geopolitical and currency upheaval, Bain & Company estimated the global luxury market to be EUR 1.08 trillion in 2016, a stable or modestly growing number by most estimates. Luxury car sales and luxury experiences are a significant driver of this figure. Growth of the luxury consumer market has slowed down from previous highs on account of Brexit, terrorism and declines in local spending, particularly within the realm of personal luxury goods. Sanctions have impacted Russian luxury spenders, while the decline of continental Europe's economy has slowed down luxury purchasing power for several countries, according to a 2016 Deloitte report on the Global Powers of Luxury Goods. These economic and political realities, along with the changing demands and desires of the luxury consumer, are forcing luxury retailers to rethink not just about the goods they sell but how they sell them. Luxury retailers and brands face pressure to be innovative in what they offer and how they present it. For example, the lower value of the British pound has made consumer goods – particularly luxury goods and services - far more expensive for the British. A decline in tourism across the globe is impacting traditional luxury spending. In 2016, Bain & Company estimated that digital, e-commerce and discounted luxury goods are the key growth areas in the global luxury market.

According to Deloitte, the luxury goods market is still growing but there are changes afoot in the actors and locations driving consumption. For example, Deloitte's already-cited 2016 report predicted millennials will become increasingly important to the luxury market, and China can no longer be relied on as the world leader in luxury consumption. As most luxury brands have an online presence, and many e-commerce sites have become leaders in luxury sales, retailers need to rethink how they use digital capabilities and how online shopping experiences can be maximized. Consumers seek a shopping experience rather than simply buying a product.

Like artisanal manufacturing, luxury brands will need to justify the value of their products on more than just their appearance and immediate utility. Increasingly, luxury consumers are seeking experiences in the form of travel, hotels, restaurants and rare trips or bespoke opportunities, a concept first advanced by B. Joseph Pine and James Gilmore in a 1998 Harvard Business Review article on the “experience economy.” By extension, many luxury goods are also creating more specific and experience-driven retail. Because much of what the wealthy do tends to influence macro consumer trends, the role of experience and individuation will influence many different parts of the global retail market. What starts as a luxury of the elite often becomes mainstream, as has been observed with handbags, air travel and now customer experience. To that end, luxury and high street retailers alike are finding ways to establish uniqueness in their products and the experience of buying them.

Related insight areas: Future of Consumption, European Union, Cities and Urbanization, United Arab Emirates, United States, Emerging Multinationals, Future of Digital Economy and Society

Caixin

Traditional Retailers Begin to Rebound After Years of Decline

12 April 2017

Brick-and-mortar stores latch onto growing online-to-offline trend to boost sales

World Economic Forum

We don’t trust the internet. And it’s putting our digital future at risk

13 April 2017

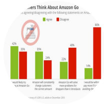
This year, the Edelman Trust Barometer, an annual survey that measures global levels of trust in institutions, revealed the steepest drop ever seen in the public’s trust in governments, businesses, media and NGOs. This broad trend of mistrust encompasses digital media, where it crops up in ways that will be familiar to some readers. The top reason driving this belief: end users don’t trust that the controls work the way they are supposed to. However, digital media tends to be more global than traditional media, and personal data and privacy matters are highly complex. Andy Cheema, Project Manager, Shaping the Future Implications of Digital Media for Society

The Economist

Primed: Are investors too optimistic about Amazon?

06 April 2017

Amazon, which went public 20 years ago, is now the world’s fifth-largest company by value, worth over $400bn (see chart 1). Its cloud-computing business, Amazon Web Services (AWS), is larger in terms of basic computing services than the three closest competing cloud offerings combined. Amazon has always emphasised the value of long-term growth (presumably with some bigger profits down the line), and investors have come to accept this. As well as focusing on customers, Amazon has proved rather good at treating itself as one; making something it wants and then selling it to others. In 2016 Mr Trump said Mr Bezos was using the _Post _to attack him because Amazon has “a huge antitrust problem”.



World Economic Forum

As shops go cashier-free, are retail jobs checking out?

22 March 2017

For a long time it looked as if online shopping would gradually replace the high street. But the same digital development that was considered to be the end of physical shops may have brought a new beginning. How? Over the past two years a number of cashier-less stores have emerged in Europe and the United States, including the digital check-out test shop opened by Amazon in Seattle last year. The innovative grocery store with no checkout line was called Amazon Go. But it wasn’t a new idea: some 15 years ago the German Metro Group, one of the world’s largest retailers, experimented with something called the Future Store, where radio frequencies and electromagnetic fields were applied to identify and track the tags attached to products. The concept was never commercialized. Fast-forward to today, and Amazon Go uses sensor fusion, historic customer data and artificial intelligence; it connects to customer accounts via an app on their mobile phones.

Immaterial Consumption

Consumers are increasingly spending to burnish their human capital for generations to come

The recession of 2008 brought many changes to the consumer economy. One of the most salient examples is that of the United States' economy. The post-recession period has resulted in significant new trends in spending across different socioeconomic groups in the United States. While general trends in food and housing remain relatively constant across socioeconomic groups and across years (before and after the recession), top income groups are spending less on material goods and more on services and experiences that drive quality of life and intergenerational mobility, according to professor of urban and regional planning and public policy Elizabeth Currid-Halkett's 2017 book The Sum of Small Things: A Theory of the Aspirational Class.

Currid-Halkett reports that since 1996, spending on material goods has declined for the top and low-income groups, while middle class consumers have seized upon cheaper consumer goods, spending more today relative to their total income than they did in 1996. Except during the crisis years, the recession had little if any impact on middle class material consumption. The top income groups, on the other hand, are demonstrating relative restraint in material spending while at the same time dramatically increasing their spending on immaterial "key human capital investments". Retirement, health insurance and education drive a significant part of the top income groups' spending, according to research published by a team from the University of Southern California in the Journal of Economic and Social Measurement.

Currid-Halkett explains these consumer patterns as a function of three macro trends. First, due to the mass production economy, material consumption is cheaper and more accessible to many people. This omnipresence of material goods simultaneously reduces their luxury appeal. Second, the larger meritocracy ethos of the world economy places a greater emphasis on goods and services that increase upward mobility. The increased spending on education reflects this reality and value system. The increased productivity that goes hand in hand with the current world economy also places a premium on consumption that facilitates leisure time for workers. Thus, increased spending on housekeeping, gardeners or childcare replaces handbags, televisions and other material goods.

However, such immaterial consumption generally costs much more than conventional material goods. Thus, the ability to spend on retirement, college or housekeeping is limited to top income groups. Or as economist Raj Chetty and his colleagues reported in a 2017 Equality of Opportunity Project paper, children in the top 1% income group are 77 times more likely to attend an Ivy League university. The implications of these consumer trends are unsettling as they will likely increase socioeconomic inequality and reproduce privilege amongst a small and mighty few.

Related insight areas: Future of Economic Growth and Social Inclusion, Values, Future of Information and Entertainment, Future of Consumption, Education and Skills

The Atlantic

The Silent Crisis of Retail Employment

18 April 2017

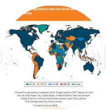
So, how has the retail bloodletting been so much quieter than the decline in mining and manufacturing? The decline of clothing-store jobs has something in common with the demise of manufacturing and mining jobs, too. The economist Michael Mandel estimates that since the Great Recession began, the e-commerce sector has created 355,000 new jobs, compared to about 50,000 total jobs lost in physical retail stores. Fulfillment centers pay 26 percent better than general retail jobs, and warehouse wages are currently growing twice as fast as the national average. It is easier to build a coalition through demonization, the establishment of an evil _them_—like, Democrats and their environmental regulations—to crystallize a politically motivated _us_—like, West Virginia mining towns.

MIT Technology Review

We Need More Alternatives to Facebook

10 April 2017

Zuckerberg doubtless means well, but the problem is not that we need a slightly better Facebook. Zuckerberg's latest ideas probably won't create a more "informed community." The structure of Facebook works against that. As Facebook advises, your Facebook friends are generally people you already know in real life. Having many more niche alternatives to facebook could be exactly what we need. As Zuckerberg wrote in February, "History has had many moments like today."



World Economic Forum

3 ways the new Trade Facilitation Agreement will transform Latin America

27 March 2017

The newly-minted Trade Facilitation Agreement (TFA) is a game-changer for the way goods cross borders and move around the world. In Latin America, customs agencies are limited in their ability to efficiently and effectively guard against corruption and illicit goods because of a lack of transparency. This is particularly critical to micro, small and medium-sized companies in Latin America who want to market internationally, but are often deterred by complexity. The costs to trade in Latin America are most than twice as high as in North America, according to a WTO analysis, and nearly 50% higher than in the Middle East.

Harvard Business Review

Your Business Is Going to Depend on Connected Spenders, So You'd Better Understand Who They Are

08 February 2017

Today connected spenders count for about 19% of the global population, and that is projected to grow to 37% by 2025. Cumulatively, over this decade they will spend $260 trillion — 46% of the world's consumer spending. In markets such as the U.S., where internet access is just shy of 90%, only 36% of the population are currently connected spenders, a number that will grow to over 50% by 2025. Connected spenders are the heaviest purchasers in categories including electronics, travel, and dining out, and they're likely to be early adopters of new ways to buy in any category. How should companies approach the connected spender opportunity?

Artisanal Production

Consumers are increasingly turning away from mass-produced goods to those rooted with a strong sense of place

In the 1970s and 1980s, mass production manufacturing exited many Western urban centres for cities and regions around the world that offered greater resources and cheaper labour, and this practice continued through the early years of the 21st century. From 1990-2012, for example, employment in American textile and apparel sectors contracted by 76.5%, according to US Bureau of Labour Statistics data. However, changes in consumer and retail preferences have prompted a new type of specialized, small batch artisanal manufacturing that is bringing manufacturing back to major urban centres, and reflects different values and preferences for consumers and a new role for consumption tastemakers. For the first time in decades, American manufacturing has expanded, and most of this growth is in small manufacturing firms which employ 20 or fewer workers.

A part of the "maker movement", much of this new type of artisanal production emerges from consumers' desire for more unique and curated goods. More broadly, this type of production and its accompanying consumerism is a return to the local, the self-made and more individualized mode of producing goods and services. Transparency of production and production practices, point of origin and uniqueness of product (less standardization) become key measures of value on the retail market. Consumers seek goods for reasons that transcend utility; rather their purpose is to suggest values and cultural capital. The importance of fair trade, direct trade, humanely-treated animals and sweatshop-free clothing are a part of the value of products in today's consumer economy, instead of simply what the product looks like, which is why these qualities are an important part of their marketing strategy.

Not unlike William Morris' Arts and Crafts movement, artisanal manufacturing and its consumers eschew the globalization and standardization inherent in mass production. Instead, these new goods embrace the return to more taste-specific retail and artisanal, local production. The human and environmental costs of mass-produced goods have sparked conscious consumerism. Where things are made and how they are made has both practical and stylistic implications.

From the consumption side, artisanal production does not fulfil a specific unmet need, other than aesthetic and social desires. The desire to buy from Etsy, an online vintage and handicraft emporium; eat organic; wear made-in-(local town) or drink fair trade coffee has social and cultural consequences rather than unique utility for food or clothing different from previous versions. Part of discerning which of the artisanal goods are worth consuming rests heavily on the curation by key gatekeepers – editors, journalists, social media stars and others who will cultivate taste and status around particular goods. These goods are not, by traditional luxury goods standards, necessarily monetarily expensive. Artisanal goods' value is due to what they stand for and where they come from.

Related insight areas: Values, Future of Production, Circular Economy, Sustainable Development, Fourth Industrial Revolution, Innovation

Medium

UN and e-Residency join forces to empower entrepreneurs in the developing world

24 April 2017

UNCTAD's groundbreaking new initiative to ensure more entrepreneurs in the developing world can access e-commerce is called e-Trade For All and Estonia's e-Residency programme is a founding partner. Jack Ma predicts that 90% of all business will be online in the next 30 years. At present, however, a large proportion of the world's population is unable to benefit from that growth — often just because of where they live. People in developing countries, women and other marginalised groups currently have the greatest challenges accessing e-commerce. The financial and administrative barriers to establishing and managing a business may be too high, their business may not be trusted online or they may have difficulty accessing all the tools they need, such as international payment providers.

The Conversation

'Sustainable tourism' is not working

19 April 2017

Sustainable tourism comes from the concept of sustainable development, as set out in the 1987 Brundtland report. ## What is sustainable tourism? According to the UN World Tourism Organisation, sustainable tourism is: Following on from Monbiot's criticism, we might ask if efforts are directed at "sustaining tourism", or instead harnessing tourism for wider sustainable development goals. Harnessing these essential stakeholders in a rigorous agenda for sustainable development, rather than sustaining tourism, would make the UN's "year" more meaningful.

Industry Week

Manufacturing Faces a Bright but More Demanding Future

30 March 2017

As Mark Twain experienced, the death of manufacturing has been greatly exaggerated. Until evidence suggests that materialistic values and modern conveniences are being rejected worldwide, my belief in the survival of manufacturing will remain firm. The what, where, how, who and when will continue to change drastically, but "if" is not a question.

World Economic Forum

We don't need to consume less - we just need to design better products

15 February 2017

_The world doesn't have a consumption problem, it has a design problem, says Lewis Perkins, President of the Cradle to Cradle Products Innovation Institute and a member of the Global Future Council on Consumption. Instead of consuming less, we need to design products that are less harmful to our environment and the labour force that creates them, he argues in this interview. There's widespread acceptance now that we need to retool the economy, to change the equation around each of those components of design. The first one is the circular economy: we are paying more and more attention to the materials that go into products. The second is the sharing economy: we are shifting from models of ownership to models of service.

New Patterns of Consumption

The geography of the global consumer economy is shifting, and the goods and services that define the rich and the middle classes are changing, too

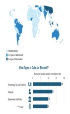
In the post-recession era, many of our notions of consumption must be rethought. The consumption of retail goods is still omnipresent and an important driver of the global economy. Today however, new forces are at work and challenge us to think differently about retail and consumption patterns. Consumer Expenditure data from the United States Bureau of Labour Statistics suggests that top income group spending has shifted in the post-recession period, with less emphasis on material goods. Instead, consumers in this group are more interested in experiences and key human capital investments like retirement and education. While the middle class is still spending on material goods, economists point to median wage stagnation as a significant setback to the UK and US middle classes. These economists find that median wage has not grown in 40 years.

Others have noted the importance of the global middle class and their spending on cars and other material goods. Given median wage stagnation for America's middle class, this global middle class may be central in replacing North American and European middle class consumers. While in 2015, North America was responsible for 18% and Europe 31% of middle class consumption, Homi Kharas of the Brookings Institution argued, in a 2017 update to his 2010 study on the expansion of the global middle class, that by 2020 the Asia Pacific market will generate 43% of the world's middle class consumption, rising to 57% by 2030, with China replacing the United States as the largest contributor to the consumer economy.

Along with a rising global middle class, the rise of elite spending in the form of experience-driven and luxury spending by a small but mighty elite is present across the world, as recounted in Chrystia Freedland's 2012 book Plutocrats. The rise of luxury spending by Middle East consumers is a new form of retail and lifestyle consumption not previously exhibited with such enthusiasm in this part of the world.

Across all types of retail consumption, new regions are emerging as the key players in global consumerism. This change in the economic geography of consumption puts an emphasis on new and different tastes and products which change the retail landscape and the global consumer economy.

Related insight areas: Future of Consumption, European Union, United Kingdom, Future of Economic Growth and Social Inclusion, United States



Information Technology and Innovation Foundation

Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost?

01 May 2017

In addition, Argentina's National Directorate for Personal Data Protection issued Provision no. 18/2015, which stated that cloud storage is considered an international transfer of data, so that software application that send data abroad must comply with the Data Protection Act. Furthermore, there are concerns that Colombia's National Procurement Office (NPO) may include data localization requirements or other barriers to data flows as part of a cloud services procurement project for government agencies. Europe has taken a hardline toward the United States about data transfers; however, when its own studies into data protection in other major countries, such as China, show that other countries have little or no level of data protection, it refrains from taking any action. Furthermore, for data processed by public bodies, there does not seem to be a provision which expressly requires data to be held in Germany. In 2015, Russia enacted a Personal Data Law that mandates that data operators who collect personal data about Russian citizens must "record, systematize, accumulate, store, amend, update and retrieve" data using databases physically located in Russia. Korea is the only significant market in the world that maintains data localization requirements for mapping data.

The Conversation

Can blockchain technology help poor people around the world?

01 May 2017

Big Wall Street companies are using a complicated technology called blockchain to further increase the already lightning-fast speed of international finance. Major aid agencies, nonprofits and startup companies are working to extend blockchain systems across the developing world to help poor people around the world get easier access to banks for loans or to protect their savings. The best-known example of blockchain technology is the electronic cryptocurrency called bitcoin, but the concept can be applied in lots of different ways. A pilot project in Pakistan is using a blockchain system to help needy families get cash and food. Usizo is a South Africa-based blockchain platform that lets anyone help pay electricity bills for community schools.

World Economic Forum

Digital Transformation Initiative: Aviation, Travel and Tourism Industry

06 March 2017

The aviation, travel and tourism industry has been at the forefront of digital disruption, changing the way people travel. Nonetheless, World Economic Forum research suggests it should brace itself for another wave of digital transformation. There are a series of industry, customer and technology trends converging to redefine operating and business models in the travel ecosystem. New entrants – especially digital natives such as online travel aggregators (OTAs), meta-search engines and travel service platforms – are shaking up the value chain. Growing demand for travel, particularly in emerging markets, represents a significant opportunity for these new entrants, as they challenge incumbent businesses to rapidly adapt their own strategies to capture growth. Travel providers are seeking stronger interactions with customers, while drastically changing operations, in pursuit of better insights around customer preferences and operational performance. Connected devices and artificial intelligence (AI) will provide ample opportunities to make those operations more effective, and enable collaboration and asset-sharing between enterprises. Technology will also have an impact on the industry workforce, with employees empowered by real-time information and decision-making support from AI to focus on their core strengths.

The Global Middle Class

The geographically-shifting middle class is raising new opportunities for brand penetration alongside new questions about the nature of consumerism

As capitalist production processes expand into new markets, many experts point to the emergence of a rising global middle class. Some economists measure the global middle class by the ability to purchase a car. The United Nations and the Organisation for Economic Co-operation and Development define membership in the global middle class as a person who has the ability to spend, earn or purchase between $10-100 per day.

By any measure, the global middle class appears to be a significant contributor to the global economy. According to Homi Kharas' 2017 update to his 2010 study on the expansion of the global middle class, by 2030, nearly two-thirds of the global middle class will come from Asia Pacific. Europe's and North America's contributions are projected to decline to 14% and 7%, respectively.

The impact on consumer markets is great. Homi Kharas and Geoffrey Gertz' 2010 study on the new global middle class provided evidence: in 2000, China accounted for just 1% of global car sales, while the United States accounted for 37%. By 2010, China was home to the largest car purchasing economy. Similarly, in 2008, Nokia generated more than three times more revenue in China than in the United States. A more recent example: in January 2017, the new Nokia 6 smartphone sold out in China in under one minute.

More generally, companies and retailers have much to gain from quickly tapping into the rising middle class. As the McKinsey Quarterly observed in 2010, consumers tend to remain loyal to brands they adopt early. In the United States, for example, Kraft, Del Monte and Wrigley remain brand leaders over one hundred years after initial adoption. The same publication reported in 2012 that "initial consideration" of a brand is central to long-term success because brand leaders remain in that position for decades to come. In-store experience and word-of-mouth play even more of a role in emerging markets than in developed ones.

Middle class consumers from developed countries are also increasingly asking new questions – for instance, to what extent does our consumer experience reflect and enhance our quality of life? Some research suggests that economic development and happiness are often at odds. Known as the Easterlin paradox, named for Richard Easterlin, a professor of economics who first advanced this theory in 1974, this research finds that our increased economic options actually hinder our quality of life. As Easterlin indicated in subsequent studies, China is perhaps most emblematic of this seeming contradiction where, since 1990, the emergence of the free market corresponds with a declining feeling of well-being in individuals. Thus the emergence of a global middle class consumer economy must be considered alongside equally important measures of success.

Related insight areas: India, Future of Economic Growth and Social Inclusion, Workforce and Employment, Automotive, China, Latin America, Inclusive Growth Framework, Emerging Multinationals

Bloomberg.com

Inside China's Plans for World Robot Domination

24 April 2017

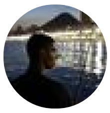
Scenes from China's quest to dominate the robotic future: At startup E-Deodar, a human-looking droid serves coffee to employees who are building $15,000 industrial bots that are about a third cheaper than foreign brands and are being used to automate assembly lines across the Pearl River Delta manufacturing hub. Some 1,900 kilometers (1,200 miles) to the north, inside a lab at Beijing-based e-commerce giant JD.com Inc., a spider-like robot plunges down from its frame, seizes a book on a conveyor belt with its suctioned claws and hurls it into a crate. The machine can sort 3,600 objects an hour, four times as many as a person -- just one piece of the robotic technology the company's developing to automate warehouses.

World Economic Forum

4 trends that will shape Latin America's economies in 2017

04 April 2017

The global economy is looking stronger in 2017. Will Latin America be swept along by this wave of growth? That remains to be seen – but these four trends could hold some clues. At least two more US Federal Reserve interest rate rises are expected this year, as the United States has a stronger near-term growth outlook, with the economy nearing full employment and inflation heading towards its target level. The first Fed rate rise this year was well-telegraphed and barely rippled markets. As a result, the dollar is expected to continue strengthening, raising the risk of capital outflows from emerging markets in Latin America.

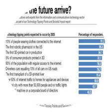


Inter-American Development Bank

Accelerating Digital Trade in Latin America and the Caribbean

14 March 2017

The Internet roared to the scene in Latin America and it is transforming the way Latin Americans interact, shop, bank, and spend their time. The Internet is changing regional consumption patterns, the landscape of regional companies, and the region's economic prospects. Disruptive digital technologies riding on the web -cloud-based services, e-commerce, 3D printing, Internet of Things, and so on- are empowering LAC companies of all sizes to dramatically cut costs, improve customer service, and create brand new products and services. The region is also home to innovative digital companies run by intrepid entrepreneurs, some of whom have accessed significant investments from Silicon Valley and grown into some of the leading digital companies. The Internet, in short, has opened tremendous new opportunities for LAC economies to become more productive, expand opportunities for entrepreneurship, and drive inclusive economic growth.



World Economic Forum

How automated delivery vehicles will transform your city

01 March 2017

From Amazon's delivery drones to self-driving cars, autonomous factory equipment to Elon Musk's vacuum tubes that transport items at 760 miles per hour – automated vehicles are on the rise. Another startup, Parcelhome, has developed intelligent lockers and boxes to complete the autonomous supply chain. Almost 90% of policy-makers expect autonomous vehicles to gradually become reality within the next 10 years, according to a recent study by the World Economic Forum and BCG. Many of the cities interviewed consider goods delivery as one of the key applications for autonomous transportation in their city. The realization of the autonomous supply chain requires close collaboration between manufacturers, operators, retail and developers as well as policy-makers and citizens.

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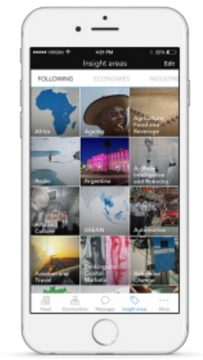

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WORLD ECONOMIC FORUM

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