

Harnessing the power of shifting global flows

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Here's what countries and executives need to know to benefit from the next—and markedly different—wave of globalization.

There has been a steady drumbeat of reports in the press and elsewhere that the heyday of globalization is over.¹ Since the financial crisis, growth in global trade volumes has slowed. Global financial flows are hanging at levels almost 70 percent below their peak.² Meanwhile, rising wages in China and shifting energy dynamics have challenged lengthy global supply chains.³

These crosscurrents are real, but our research suggests that they won't undermine globalization's long-term trajectory.⁴ Cross-border flows of goods, services, finance, people, data, and communication will expand in all plausible scenarios during the years ahead (Exhibit 1). What is changing dramatically is the *mix* of flows. Their networks and structures are evolving rapidly and will be radically different from those of the past.

Foreign direct investment and trade in goods used to account for the greatest volume of flows, which mostly streamed between advanced economies. Trading partners were primarily neighboring or nearby countries. Today, this trend is being upended: emerging markets are

¹ See, for instance, Ian Bremmer, "The new rules of globalization," *Harvard Business Review*, January–February 2014, Volume 92, Number 1–2, hbr.org.

² For more, see *Global flows in a digital age: How trade, finance, people, and data connect the world economy*, McKinsey Global Institute, April 2014, on mckinsey.com.

³ See Katy George, Sree Ramaswamy, and Lou Rassey, "Next-shoring: A CEO's guide," *McKinsey Quarterly*, January 2014, on mckinsey.com.

⁴ For more, see footnote 2.

swiftly closing the globalization gap with advanced economies, and emerging players are now sources of consumption and innovation as well as production. New regional hubs are coalescing around the world to facilitate flows of goods, services, and money in an expanding global network. And new types of flows are growing rapidly: information is now gushing to often-underserved areas (such as western Africa, which is part of a network of new international undersea-cable routes), while knowledge-intensive goods have become the fastest-growing traded flow across the globe.

Digitization is at the heart of these changes because it enables new business models using cheaper and modular cloud storage, video

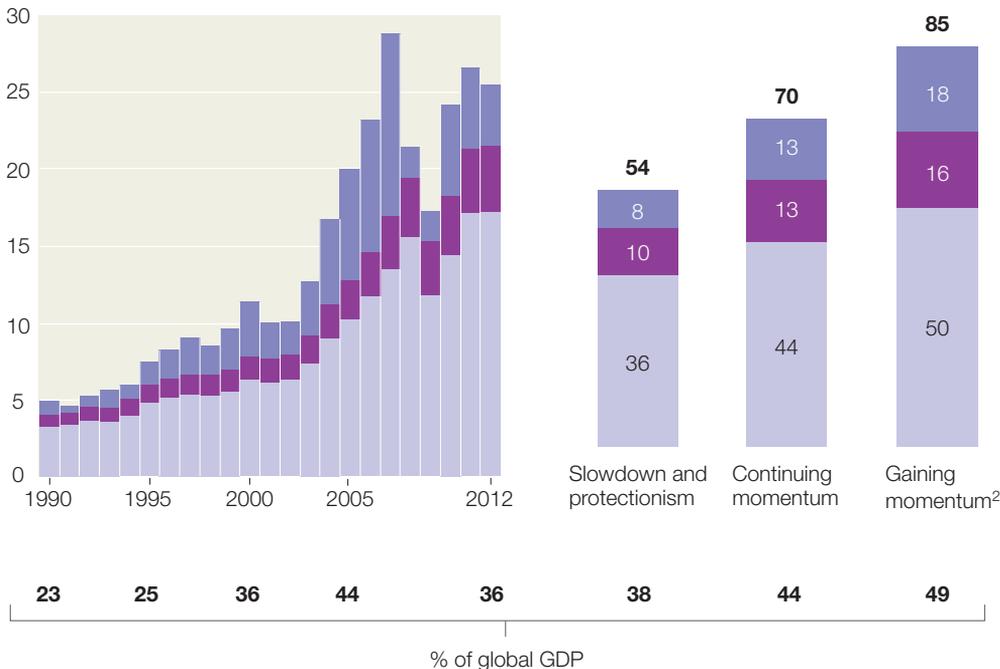
Exhibit 1

Global flows of goods, services, and finance reached nearly \$26 trillion in 2012 and could triple by 2025.

■ Flow of goods ■ Flow of services ■ Financial flows

Flows of goods, services, and finance, 1990–2012, \$ trillion¹

Scenarios in 2025, \$ trillion¹
(not to scale with chart on the left)



¹In nominal dollars.

²Figures do not sum to total, because of rounding.

Source: International Monetary Fund Balance of Payments; UN Comtrade; World Trade Organization; McKinsey Global Institute analysis

streaming, or talent-sharing services. Digitization enables some companies to grow quickly into what we call hyperscale businesses, extending their reach to global markets at low cost. (For more, see “Competition at the digital edge: ‘Hyperscale’ businesses,” on [mckinsey.com](https://www.mckinsey.com).) Digital technologies, meanwhile, transform flows of physical goods into digital flows that can not only be traded farther and faster but also tracked precisely, which will bolster global supply chains. Finally, cheaper computing power and communications technologies are becoming the building blocks of robust digital platforms that increase the global participation of otherwise excluded small and midsize companies (see sidebar, “The new shape of globalization”).

Governments (which are responsible for shaping trade policies) and companies should take close note of the shifting landscape and move quickly to adapt. The winners in the new era of globalization will be organizations that can reallocate resources while quickly adopting strategies and policies to take advantage of the trends.

The globalization gap

Globalization boosts GDP growth and opens avenues to rising corporate profits. We examined this dynamic and discovered that when countries increased their level of globalization by 1 percent (as measured by the scale of flows of goods, services, finance, people, and data relative to the size of their GDPs or populations) the rate of GDP growth rose by about 10 to 15 basis points, a material figure. Overall, we estimate that as much as one-quarter of global GDP growth comes from global flows. It’s important for leaders of companies and countries to understand their relationship with the shifting nature and pace of globalization.

Advanced-economy multinationals

Companies from advanced economies have thus far been globalization’s leaders. Some generate more revenue outside their home countries than within them. But greater changes are looming. Despite a leading position in globalization, most such multinationals are still underweight in emerging markets, which represented only 19 percent of their revenues in 2013 (Exhibit 2). Trade in developing markets

The new shape of globalization

Globalization has transcended the exports and the lightning-quick global flows of money that characterized it until recently. To understand the changes under way, we created a database of inflows and outflows of five types of cross-border flows—goods, services, finance, people, and data and communications—for 195 countries from 1980 to 2012. Then we conducted an econometric analysis of the link between global flows and economic growth, and we created an index that measures each country’s participation in global flows.¹ Finally, using case studies and microeconomic data, we identified how participation in global flows is evolving for countries and companies of all sizes. Five major findings emerged from our analysis:

- 1 Global flows are rising rapidly in value**—and will grow further in all economic scenarios over the coming decade. In 2012, flows of goods, services, and finance across borders reached nearly \$26 trillion, or 36 percent of global GDP, up from \$5 trillion, or 23 percent of global GDP, in 1990. Even using conservative assumptions, our scenarios show that global flows could be double or even triple their current size by 2025.
- 2 Digitization is transforming and sharply accelerating global flows.** Cross-border Internet traffic has grown by nearly 1,800 percent since 2005 and could increase almost eight times further by 2025. This rise is transforming the other types of flows in three ways: by transforming flows of physical goods into new digital ones, by making it possible to track physical goods digitally, and by creating digital platforms (such as Amazon and eBay) that enable small companies and even individual entrepreneurs to play on a global stage.
- 3 Knowledge-intensive flows are growing faster than labor- or capital-intensive ones.** The common perception of globalization is that it is driven by low-wage labor arbitrage or the need to access resources. But knowledge-intensive goods and services—embedded with technology and know-how—already account for half of all cross-border flows and are growing faster than any of the others.
- 4 New dynamics in the structure of flows.** Flows used to occur mainly between advanced economies. Today, emerging economies account for 38 percent of the global flows of goods, services, and finance—more than triple their share in 1990. Trade in goods between emerging economies is now nearly 25 percent of overall world trade, up from just 6 percent in 1990.
- 5 Global connectedness promotes GDP growth.** Global flows account for 15 to 25 percent of world GDP growth every year. We find strong evidence that they speed it up. In addition, countries with more connections to other nations in global-flow networks will see a 40 percent greater impact on GDP growth than will countries on the periphery, with fewer connections.

¹ The index ranks countries by the size of their inflows and outflows of goods, services, finance, people, and data, adjusted for the size of the country. Each of the five types of flows is weighted equally.

will continue to swell—by 2025, it will represent 47 percent of global consumption. Multinationals should accelerate their inroads to secure a strong position in global commerce. And they’ll need to do so quickly because they face a new breed of competitor: multinationals that are rising in emerging countries and hope to win their own place on the global stage.

Traditional global companies took years to deploy resources on a global scale. They will need to accelerate that pace not only to keep up with players from emerging markets but also because digitization is ratcheting up the global economy’s clock speed. Consider how digitally born companies, such as Facebook and Google, now earn more revenue from global markets than from the United States.

Multinationals from emerging markets

A number of companies in emerging markets are embracing globalization—swiftly expanding abroad and gaining market share, particularly in other emerging economies. A telling signpost: the value of cross-border goods flows between emerging markets increased from 6 percent of all global trade in 1990 to 24 percent in 2012. Even so, only 40 percent of the revenue of the 100 largest listed companies in emerging markets comes from overseas, versus 51 percent for the largest listed companies in advanced markets. Moreover, while multinationals from emerging markets have expanded into the United States and Europe, they have done so largely through M&A. Such companies have yet to distribute their operations globally, and the data show that their supply chains are more local than those of their peers in advanced economies (Exhibit 3).

Small and midsize companies

Smaller enterprises add a new dimension to global competition as they begin expanding across borders. Internet platforms are empowering these “micromultinationals,” enabling them to find customers, suppliers, funding, and talent around the world at lower cost. One data point: digital platforms can cut the cost of exporting by 83 percent as compared with traditional export channels.⁵ Even small companies can access international markets: in 2013, eBay analyzed a sample of its small sellers and found that more than 95 percent exported to other countries, compared with an average of less than 25 percent of traditional small businesses—and eBay merchants

⁵ See *Commerce 3.0 for development: The promise of the Global Empowerment Network*, eBay, 2013, ebayinc.com.

export to customers not just in one market but in dozens. Still, most smaller companies today haven't taken full advantage of digital capabilities in developing their global reach. Across the world, they consistently account for a smaller share of exports than of value added.

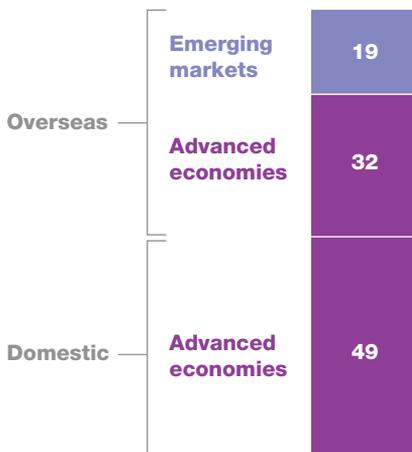
Countries

Open, developed economies have been both the rainmakers for globalization and its largest beneficiaries. The case of Belgium illustrates the challenges they face going forward. The country is globally connected, with trade flows three times greater than its share of world GDP, and globalization is responsible for a third of GDP growth. According to our research, the country's central position in the network of flows makes it more likely to capture benefits from trade than other countries are. Yet Belgium is trending toward

Exhibit 2

Large multinational corporations in advanced economies are missing out on the opportunities arising in emerging markets.

Share of overseas and domestic revenues for multinational corporations,¹ 2013, % of total



¹For companies with headquarters in advanced economies; largest 100 companies from the 2013 Fortune Global 500 list that reported revenue by geographic segment in that year and had revenue from overseas markets.

Source: Annual reports; Fortune 500; McKinsey Global Institute analysis

a current-account deficit, and in recent years, it may have under-invested in areas that would take advantage of that position—not only in traditional trade, but also (and particularly) for new flows. Furthermore, while Belgium’s physical port infrastructure in Antwerp still compares well with that of neighboring Rotterdam, the Netherlands has invested dramatically in a virtual-port infrastructure in Amsterdam, which is now a leader in cross-border data flows.

New strategic options

Progress toward globalization’s new era will be uneven for economies and companies alike. Since many types of organizations could deepen their cross-border activities, the priorities include combining a more intense kind of digitization with a network view of the global landscape, seeking opportunistic positioning in hubs bursting with talent and capabilities, taking full advantage of intangible assets that can help companies differentiate themselves among new customers and markets, and becoming better attuned to the emerging new cross-border competition.

1. Nurture global ecosystems

Digital platforms enable companies to expand rapidly and profitably to customers far beyond home markets, while nurturing new ecosystems that span borders and connect clusters of suppliers, distributors, and after-sales services. The benefits will include lower-cost procurement and better preemptive maintenance for plants, reducing downtime. Boeing’s Edge offering, for instance, brings together the vast amounts of data the airline business generates, thus creating a real-time information network linking aircraft assets with maintenance groups, operations staff, suppliers, and passengers.

Other global ecosystems are facilitating innovation by linking researchers, financiers, and even customers to crowdsource new ideas. AstraZeneca’s digital open-innovation platform, for instance, aims to connect the company with scientists and academics at research institutes worldwide. German equipment maker Bosch uses its innovation portal to connect with individual and institutional researchers in key business areas, such as power tools, new materials and surfaces, and the automotive aftermarket.

2. Locate in the best hubs

Many countries and cities have established themselves as hubs for specific types of flows. Locating within these vibrant centers can buttress a competitive advantage. Amsterdam, for instance, with some of the world's fastest and cheapest broadband connections, has become a magnet for Internet companies. Another hub, not far from Amsterdam, is Eindhoven's Brainport, which boasts a concentration of expertise for broadband deployment, applications, and other skills. With 8,000 researchers, developers, and entrepreneurs scattered among small and midsize companies and global players, Brainport accounts for a third of private R&D outlays in the Netherlands.⁶ In density of patents, it is one of Europe's top three regions.

People flows will continue to be an important source of growth and innovation, and here the United States is top ranked. Immigration has long enabled US businesses to strengthen their competitive advantage by attracting global talent from every nation. The impact of foreign entrepreneurs in Silicon Valley is legendary: from 2006 to 2012, immigrants founded over 40 percent of all high-tech and engineering start-ups there.⁷ Global flows also allow pockets of specialization to develop beyond high tech. In 2012, Switzerland—a global hub for knowledge on watch manufacturing—produced 95 percent of luxury watches (those priced at over 1,000 Swiss francs).⁸

Companies without a strong presence in influential hubs should consider moving operations to one or more of them. A leading example of the trend is Singapore, where many multinationals have located to be at the nexus of Asian flows of goods, services, and finance. Singapore has the world's highest density of regional head offices relative to GDP: more than half of all large foreign subsidiaries in emerging Asia outside China are located there. P&G, for example, chose it for the global headquarters of its beauty and baby-care divisions. Rolls-Royce moved its marine business from London to Singapore for the city's advantages as a shipping hub.

⁶ "Science hubs: Brainport Eindhoven," EURAXESS The Netherlands, January 21, 2013, euraxess.nl.

⁷ Vivek Wadhwa, AnnaLee Saxenian, and F. Daniel Siciliano, *America's new immigrant entrepreneurs: Then and now*, Kauffman Foundation, 2012.

⁸ Julie Mégevand, "Swiss watchmaking: Key figures," *Montres Le Guide*, Number 10, 2013–14, wthejournal.com.

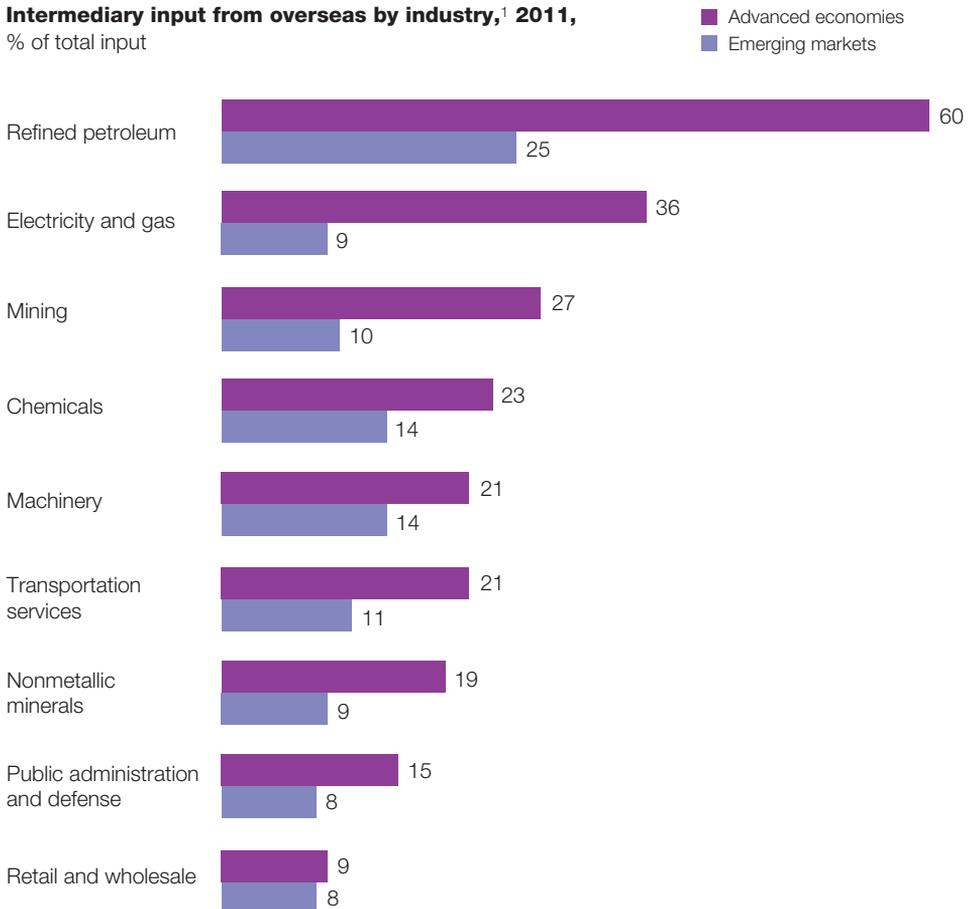
3. Build digital platforms and exploit proprietary assets

Digital platforms are connecting companies and customers, suppliers and companies, talent and jobs, and entrepreneurs and funding—and in ways that were all but impossible only a decade ago. Effective platforms benefit both the participants using them and the companies operating them.

Exhibit 3

In many industries, emerging markets' supply chains are more local than those of advanced economies.

Intermediary input from overseas by industry,¹ 2011,
% of total input



¹ Data for advanced economies = average of Germany, Japan, South Korea, and the United States; for emerging markets = average of Brazil, China, India, and Russia.

Source: World Input-Output Database; McKinsey Global Institute analysis

E-commerce sites that connect businesses to consumers are signature examples of the new platform power. Global e-commerce sales reached over \$1.2 trillion in 2013, nearly 2 percent of global GDP.⁹ E-commerce provides new access to consumers for companies of all stripes and offers buyers more choice (and often lower prices). Alibaba, China's leading e-commerce platform, includes B2B, B2C, and P2P (peer-to-peer) marketplaces. It posted merchandise worth approximately \$248 billion in 2013. (For further information on the evolution of China's digital economy, see "China's rising Internet wave: Wired companies," on mckinsey.com.) These online platforms are highly profitable as well.

Other platforms now channel flows of knowledge and expertise to companies around the world. One well-known example is InnoCentive, an online innovation-crowdsourcing site that has reported a membership of 300,000 registered "solvers" in over 200 countries. Today, it has helped large R&D-intensive companies (in industries such as pharmaceuticals, biotechnology, and consumer products) to crack as many as one-third of a sample of knotty problems they had previously considered unsolvable.¹⁰ Meanwhile, the staffing websites launched by oDesk and Elance, both based in Silicon Valley, connect employers with freelance professionals around the world. The two companies merged in 2013, creating a platform used by 2 million businesses and 8 million freelancers.

Many companies have assets that could be deployed more effectively to build such platforms. These may be tangible assets, such as routers and servers, logistics networks, or distribution centers. But they can also be intangible brands, data, and knowledge. The brand position of companies such as Citigroup and Nike undergirds their global reach, as do their data and knowledge of customer preferences around the world. Starwood Hotels & Resorts, the global hospitality group, is brandishing its digital expertise to expand its brand and customer loyalty. Its mobile app books rooms in any of the chain's hotels, offers personalized suggestions for dining and entertainment, and even allows users to check in and to open the doors of hotel rooms remotely (for more, see "Redefining service innovation at Starwood," on mckinsey.com.)

⁹ "Worldwide ecommerce sales to increase nearly 20% in 2014," eMarketer, July 23, 2014, emarketer.com.

¹⁰ Karim R. Lakhani, Lars Bo Jeppesen, Peter A. Lohse, and Jill A. Panetta, "The value of openness in scientific problem solving," Harvard Business School working paper, number 07-050, January 2007, hbs.edu.

Digital assets are especially important to the new wave of globalization. Our research shows that tangible and intangible digital assets will account for roughly a third of total global GDP growth in the future.¹¹ Consider the extent to which Google’s search algorithm or Amazon’s recommendation engine underwrites global knowledge and bolsters commerce.

4. Be ready for new competitors and challenges to business models

Along with helping smaller businesses everywhere and companies from emerging markets increase their participation in global flows, digitization will put tremendous pressure on business models (for a sector-specific view, see “A road map to the future for the auto industry,” on page 42). To succeed in the new environment, companies will need to define and choose their businesses, their customers, their suppliers, and their ecosystems quite nimbly.

Already, we can see how Internet-enabled lower barriers to entry are creating new twists in competition: companies that initially disrupted entire industries with first-stage digital technologies are now being disrupted themselves. Web-based travel companies launched in recent decades, for example, now face tough and growing competition from a new digital business model represented by app- and web-based Airbnb. The peer-to-peer hospitality site, launched in 2008, now offers rooms in more than 34,000 cities worldwide. Airbnb’s customers research, reserve, pay for, and review their lodgings—bypassing traditional digital travel sites.

New forms of competition will arise from three sources. First, established companies from emerging markets will expand to operate on a global scale. Second, smaller companies around the world can now compete in niche markets globally, thanks to digital platforms. Finally, new competition will come from players outside traditional industries—as is the case, for example, with e-commerce companies, like Alibaba, which are disrupting banking and payment systems.

The potential for disruption shouldn’t be underestimated. According to research by the McKinsey Global Institute, the number of Fortune

¹¹ See Jacques Bughin and James Manyika, “Measuring the full impact of digital capital,” *McKinsey Quarterly*, July 2013, on mckinsey.com.

Global 500 companies with headquarters in developed economies will fall to less than 55 percent by 2025, from almost 75 percent in 2013.¹² Seven out of ten new large companies will come from emerging markets over the same period.

Small entrepreneurial companies from emerging markets already are joining the fray and showing the potential to grow. One of the new breed is Jumia, a Nigerian e-commerce company that now operates in seven other African countries, including Egypt, Ivory Coast, Kenya, and Morocco. M-Pesa, a now-famous mobile-money service that started in Kenya, currently has 19.3 million users.¹³ What's less known is how M-Pesa is disrupting banking and payment businesses in a growing number of countries: it has expanded across Africa and South Asia and in 2014 entered Eastern Europe. Start-ups active in peer-to-peer lending are another potentially disruptive segment in finance. Chile's Cumplo, China's Pandai, and Germany's Auxmoney all facilitate P2P loans, challenging a host of traditional financial institutions.

5. Create new businesses that combine and transform global flows

In the new era of globalization, pressure to create new business models and redefine the borders of companies and markets will increase because digital technologies make it possible to transform and recombine flows.

Many physical goods are now virtual thanks to digitization. Books and movies, for example, once moved from country to country solely by ship, truck, or train. Today, they can digitally whiz across the globe in an instant. This pattern of transformation may be only in its infancy. In some areas of manufacturing, for example, 3-D printing will probably have the same profile: product design files can be sent across the Internet, and goods will be “printed” locally rather than manufactured in one country and shipped to another. This development will create space for new business models and for companies that will become the Amazons or Alibabas of 3-D printed goods. (For more, see “Are you ready for 3-D printing?” on mckinsey.com.)

¹² For the full McKinsey Global Institute report, see *Urban world: The shifting global business landscape*, October 2013, on mckinsey.com.

¹³ *Frontiers*, “Kenya’s Safaricom to slash M-Pesa transaction fees,” blog entry by Matina Stevis, *Wall Street Journal*, August 19, 2014, blogs.wsj.com.

Digital “wrappers” that embed information within a good or service can also increase the value of physical flows. Radio-frequency identification (RFID) technology is the best-known example. From 2005 to 2012, the use of tags to track shipments of goods has grown nearly three times faster than global goods flows.¹⁴ These tags improve the efficiency of global supply chains by reducing losses in transit (in some cases, by up to 14 percent)—and they may cut inventory costs by up to 70 percent.¹⁵

In the growing global peer-to-peer arena, Etsy is an example of a company creating a new business model by straddling digital and physical flows. Its online global marketplace connects over 40 million buyers and sellers of artisanal goods and handicrafts. The company also wraps knowledge and other services into its distribution channel: it offers entrepreneurial education to artisans and has a partnership with the crowdfunding site Kiva to help finance the growth of their businesses.



Companies that have seen their global activities struggle in the wake of the financial crisis can take heart that what they have witnessed is likely to be only a pause and not a break in the progress of globalization. Yet they’ll need to up their game—and quickly. Traditional competitive engines are proving ill adapted to a world of flows moving at digital speed. ○

¹⁴ Raghu Das and Peter Harrop, *RFID forecasts, players, and opportunities, 2014–2024*, IDTechEx, 2013.

¹⁵ Aysegul Sarac, Nabil Absi, and Stéphane Dauzère-Pérès, “A literature review on the impact of RFID technologies on supply chain management,” Ecole des Mines de Saint-Étienne working paper, number 2009/2, March 2009.

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For more on this research, download the full report, *Global flows in a digital age: How trade, finance, people, and data connect the world economy*, McKinsey Global Institute, April 2014, on mckinsey.com.