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Business & the Economy

## Where will the jobs come from?

By Mark Purdy, Ladan Davarzani and Athena Peppes

Contrary to more doom-laden views, there are ample opportunities for new growth and jobs in the mature economies of North America, Europe and Japan. But without significant cooperation between policy makers and business, a decade of stagnation could ensue instead.

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For the world's developed economies, the Great Recession of 2008–2009 has exposed the fault lines along which the consumption-led, debt-fueled growth of recent years has been built—and has underlined the need to rebalance and lay new foundations for long-term growth.

The crisis has also ushered in an epoch of change for these economies. Externally, it has accelerated the shift to a multi-polar world in which economic activity and power are gravitating away from the core developed economies of the last century toward the powerhouse economies of the emerging world.

Domestically, Western economies must not only grapple with the legacy of the recession and financial crisis—including constrained public finances and debt-saddled households—they must also confront the longer-term realities of rapidly aging populations, energy scarcity and climate change.

Against this backdrop, many commentators are already painting a bleak economic future for the West over the next decade. Economist Paul Krugman has talked of a lost decade for some developed economies, caused by a lethal combination of high debt levels and aging populations. Investor George Soros has warned that many years of low growth loom for the United Kingdom and the United States.

### **Wellsprings of growth**

But are the developed economies of North America, Europe and Japan really condemned to a decade of stagnation, hemmed in by emerging-market competition externally and financially embattled households and governments domestically? Or can they tap into new wellsprings of growth to avert

the dismal scenarios depicted by many commentators?

In looking for answers, Accenture's approach was to consider key economic and social trends shaping economies, and identify the implications these trends have for patterns of aggregate demand—consumption, investment, government spending and trade. Such an exercise can help policy makers and business leaders in developed countries identify important shifts in demand, understand where they can be competitive globally and place some strong bets in terms of investment for future growth and job creation.

Although our research focused on the United States and the United Kingdom, we are confident that the findings are equally valid for other parts of the EU and Japan. And they suggest that, contrary to more doom-laden views, there exist ample opportunities for new growth and jobs in mature economies.

However, these growth opportunities are far from assured and could easily be lost. The challenge? Developed economies lack many of the essential supply-side elements—the right type and mix of skills, technology, innovation focus and models of government provision—that are necessary to ignite sustained growth in these areas. Policy makers and business leaders, often acting in tandem, will need to secure these necessary foundations for longer-term growth in their economies (see “Igniting new sources of growth,” page 6).

Our analysis highlights five major areas that provide fertile ground for new growth and jobs within developed economies over the next decade.

## 1. The new demographic map

The world's population is growing older, a trend that is particularly pronounced in advanced economies, where the United Nations estimates the median age will rise from 39.7 years today to 45.6 years by 2050. Our analysis indicates two important aspects to this graying trend.

### The Baby Boomer bulge

Aging populations will change the levels and patterns of spending in an economy. According to Accenture research, aggregate spending by the 65-plus age group—aging Baby Boomers in the West—is set to double in the United States, from \$1 trillion today to nearly \$2 trillion by 2030, and outpace the spending by the 35–44 age group. This estimate assumes that average spending by age groups stays unchanged in real terms. However, if the greater wealth enjoyed by Baby Boomers translates into higher levels of spending in old age than has been seen previously, consumption by these age groups could actually be higher.

But treating older people as a homogeneous group risks overlooking the fact that each age group has specific needs and will demand different goods and services. Better analytical capabilities to segment demand, coupled with improved marketing techniques, will be critical to identifying and capitalizing on these opportunities.

### The elongated tail of the age distribution

The second aspect of population aging is that there will be an increasing number of older “old people.” The average life span has been extended, thanks to continuous improvements in standards of living and medical care. Someone born in Japan today, for example, can expect to live to 83.

As a result, the tail end of the population distribution will be extended. The number of people aged 85 and above will more than double in the United Kingdom over the next 20-plus years.

Thus health care will be a significant source of jobs in the future. The US Bureau of Labor Statistics predicts that half of the 20 fastest-growing occupations in the economy will be related to health care.

The dramatic increase in life expectancy will also spawn growth in social and residential care provision. Demand for domestic services such as shopping and housework is also likely to grow. Traditionally, a considerable part of old-age care has been provided within families. However, trends such as increasing female labor-force participation mean that in the future, a significant proportion of this activity will be provided as part of the formal economy.

## 2. The low-carbon opportunity

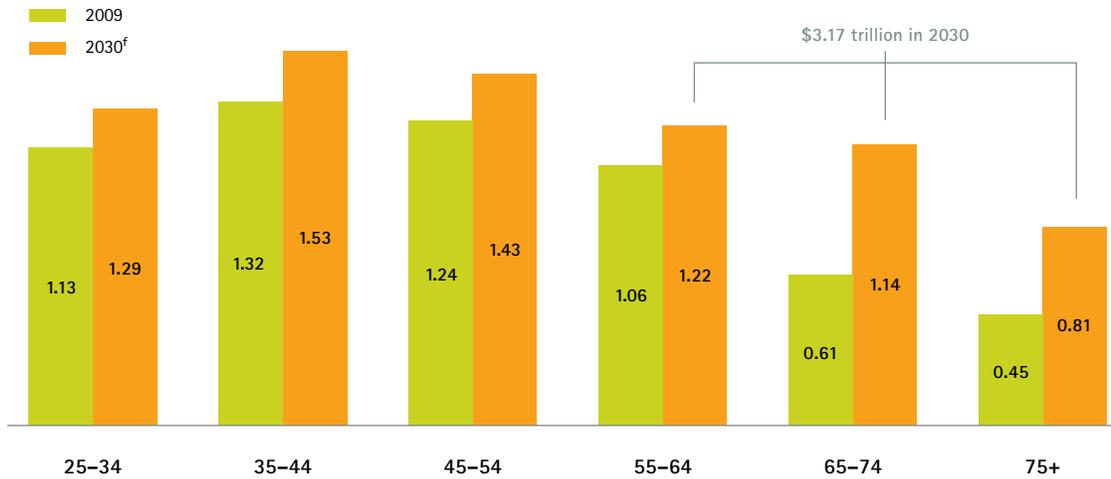
Volatility in commodity prices and political factors are stoking concerns about energy security and efficiency. Natural disasters and apparently freak weather events are becoming increasingly visible reminders of the human

and physical impact of climate change. Such considerations are changing preferences and behavior among consumers, employees and investors. There will be at least three areas of growth as a result.

## Elder power

Between 2009 and 2030, Americans 65 and older will see their power as consumers grow more dramatically than that of other age groups.

US current and potential spending by age group (\$ trillions)



### Demand for low-carbon products and services

Consumers are becoming increasingly conscientious, preferring goods and services that have been produced in ethically and environmentally responsible ways. An Accenture survey found that 90 percent of consumers would probably (56 percent) or certainly (34 percent) switch to products manufactured or designed to reduce their environmental impact.

### Investment in green infrastructure and technology

The shift toward a low-carbon industrial future will necessitate dramatic shifts in the infrastructure of economies—buildings, transport networks, energy sources and power generation systems will all need to be upgraded. Policy Exchange, a public policy think tank, estimates that the United Kingdom would need to spend a minimum of £434 billion on new and refurbished infrastructure by 2020 to adequately address “underinvestment and kick-start the transition to a low-carbon economy.”

The trend toward the low-carbon economy will also accelerate the growth in intelligent solutions for electric grids, commercial buildings and electric meters. This will facilitate the introduction of new ways to provide smaller-scale energy to cities. It will also increase the efficiency of energy systems, reducing cost and increasing reliability and transparency. Morgan Stanley Research estimates that the worldwide market for intelligent grid technologies will increase from roughly \$22 billion in 2010 to \$115 billion in 2030, an average annual growth rate of 8.8 percent.

Intelligent grids will also aid the emergence of other low-carbon initiatives, such as electric cars and distributed generation. Moreover, much of the opportunity in intelligent solutions lies beyond the domestic market. There is potential to export these solutions to other economies affected by climate change and rapid urban expansion, particularly emerging markets.

### New markets in carbon finance

New opportunities will also arise in the field of carbon finance and derivatives, though these are still in an embryonic stage today. ABI Research, an emerging-technology

market specialist, estimates that by 2014, the global carbon emissions trading market could reach \$395 billion—more than three times the \$118 billion value of allowances traded in 2008.

## 3. Changing shape of demand for public services

Trends such as aging populations, migration and the greater use of technology are changing the shape of demand for public services. For instance, citizens want the public sector to become more responsive and relevant to their individual needs, with citizen-facing functions that are professional and accountable.

This includes providing services in a more interactive way. And citizens expect these changes despite the fiscal challenges facing governments. In a 2009 Pew Research survey, a plurality of Americans wanted more government spending on

most programs, including education (67 percent), health care (61 percent) and energy (41 percent), despite limited public finances.

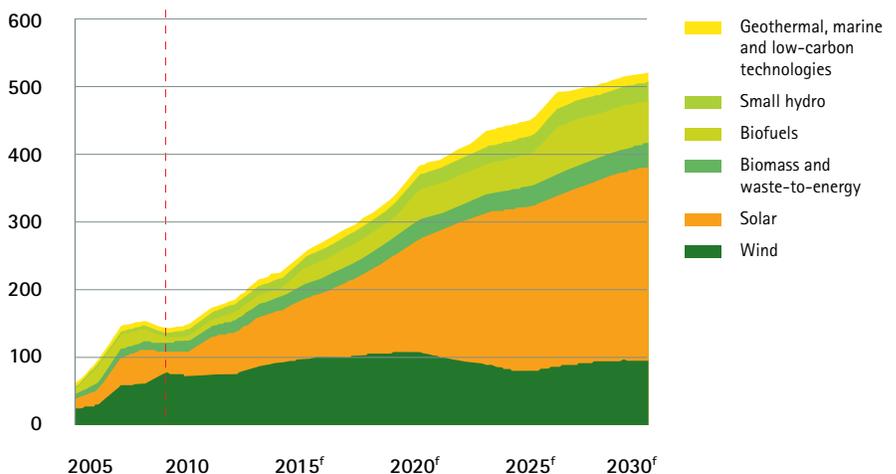
So while many developed economies have undertaken efforts to reduce their deficits through cost cutting, governments will need to deliver public services in new, innovative ways, thereby creating jobs that require new skills. Adopting new, interactive technologies, for example, will create jobs in the digitization of health records, educational services and library content.

(Continued on page 8)

## Green jobs

Clean energy investments are expected to more than triple by 2030, with most of the investments being directed to solar power.

Expected clean energy investment, 2007–2030 (\$ billions)



## Igniting new sources of growth

Our analysis of key trends has highlighted an array of new growth opportunities open to the economies of the developed world (see story). But without significant intervention by policy makers and business, a decade of economic stagnation is likely to ensue.

There are five critical levers that will be important in putting developed economies onto a higher growth trajectory.

### 1. Get the right skills mix: Minds and hands

The most recent employment projections by the US Bureau of Labor Statistics for 2008–2018 identify a growing bifurcation of skills requirements: Management, financial, professional and related occupations are expected to account for 6.9 million new jobs by 2018, and services occupations for an additional 4 million jobs. By contrast, production activities (for example, manufacturing) are expected to shed about 349,000 jobs. This distinction matters because the ways in which these various skills are formed, developed and deployed are very different.

Developed economies are facing shortages in critical high-end skills in such areas as science, technology, engineering and mathematics. In the case of what the OECD calls "non-routine manual skills" (which will be critical in future growth sectors like nursing, family services and tourism), the supply constraints are potentially even greater. Ensuring a sufficient supply of workers with the necessary non-routine manual skills will require putting a premium on vocational education and apprenticeships.

### 2. Harness new forms of public provision

Governments will need to reconcile intensifying citizen demands for more and better public services against the need to drastically rein in public-sector budget deficits and debt levels over the next decade. Three possibilities stand out.

First, governments can seek to draw on the productive capacities of their citizens through forms of coproduction, underpinned by new technologies such as social computing. For example, the District of Columbia in the United States has developed a Digital Public Square that enables citizens to access government information and use social networking technologies to shape responses to policy issues.

Second, governments can harness new technologies such as cloud computing to yield significant efficiencies and innovation in service delivery across a range of government departments and agencies. Third, governments can seek to involve the business and nonprofit sectors much more actively in partnership models, both to reduce costs and spur innovation in public-service delivery.

### 3. Reinforce the digital landscape

New technologies underpinning a number of growth opportunities require a fertile terrain in which to take root. Some of the important elements to consider in reinforcing that digital landscape will include:

- coverage and penetration of superfast broadband networks;
- rules on data protection and privacy that can at the same time facilitate flows of information, technology innovation and economic growth;

- systems of intellectual property protection that reward innovation while reflecting the growth of new business models built around free and peer-created content, as well as the commercial possibilities afforded by the digitization of content; and
- a dynamic, comprehensive approach to IT skills curricula.

#### **4. Manage the new geo-economics of trade**

Access to the significant growth opportunities in emerging economies is often hindered by factors such as restrictions on trade and investment, inadequate infrastructure or distribution systems, or cultural and social differences affecting the nature of consumer demand.

At the market level, multinational businesses can unlock growth opportunities by creating a broad portfolio of geographic markets, with market-entry assessment based on metrics such as levels of consumer spending and projected growth rates. High performance in emerging markets also depends on being authentically local in approach.

At the macro level, developed economies need to maintain momentum toward economic openness in trade and investment flows. Developed economies can also strike bilateral deals to free up flows of trade and investment, and deepen their economic integration with regional trade areas. Regional economic cooperation will also often extend to areas such as public infrastructure investment.

#### **5. Pioneer a new approach to innovation**

Developed economies can no longer take their lead in innovation for granted. While emerging economies have made rapid gains by commercializing existing technologies, they are also making forays into pure research. To keep their edge, developed economies need a more nuanced and strategic approach to innovation that plays to their competitive strengths.

Service innovation will be central to the growth prospects of developed economies over the next decade. Yet innovation in services, which account for about two-thirds (63 percent) of GDP and about 40 percent of jobs in developed economies, barely registers in national and international innovation programs. Putting services innovation at the heart of a revitalized innovation strategy will be critical to securing growth for developed economies.

But it would be futile to focus on new innovation sectors without creating a supportive policy environment. Developed economies need much better methods of accounting for the intangible assets created by innovative activity and tracing what those assets contribute to national income. Better methods of valuing intangible assets related to innovation could also induce increased capital-market funding of innovation, which has become even scarcer following the global financial crisis.

Another way to promote services innovation is to strengthen the links between the science base and services companies. Such links are widely thought to be weaker than for manufacturing firms. Businesses need to forge links with universities, as they are a vital source of science, engineering and technology information for innovation.

## 4. Pervasive new waves of information and communications technology

The maturing and convergence of a range of information technologies—mobile, social computing, superfast broadband, cloud computing and advanced analytics—has brought us to the cusp of a new wave of IT-enabled growth, embodied in new business models and market interactions. Information technology will buttress all the growth sectors we identify in this article, but there are three further growth areas centered around IT itself.

### IT as a growth sector

Businesses have the chance to profit from the provision of software, hardware and IT support and administrative services as well as the implementation of these new technologies.

A key growth market will be in cloud computing, providing access to computing power and software from a remote provider on a pay-per-use basis, without the high upfront infrastructure investment. Depending on the forecast and precise industry definition, the market for cloud computing is expected to grow anywhere from \$8.1 billion to more than \$150 billion by 2013.

The continuing proliferation of the Internet, including the popularity of online social networking and the growth in e-commerce, will also increase demand for faster and more reliable broadband infrastructure. Mobile technology is another large high-growth market. The uptake of the iPhone and other smartphones has already demonstrated that consumers have moved beyond “cell phone as phone only” thinking, and the appetite for new apps continues to grow. The use of mobile technol-

ogy for remote payments is likely to become more common.

Further large areas of demand are also opening up in IT services that can facilitate new digital exchanges, such as the processing of online transactions (PayPal) and the distribution of digital content (Netflix).

### New adjacent industries related to IT

As IT becomes more pervasive and new issues surface, various ancillary services will emerge. For example, the increasing digitization of information will make cyber security more pertinent. At the same time, the volume and types of digital data are also mushrooming, creating demand for advanced analytics that enable businesses to gain competitive advantage by turning raw quantitative data into actionable insights.

### New economic relationships enabled by IT

The transformative potential of newly mature information technologies is enabling individuals and businesses to connect and communicate to create value in new and different ways.

First, these technologies are enabling new modes of consumption, such as microselling. At the time of this writing, Google was planning to roll out a micropayments system in 2010 and hopes that newspapers will use it as they look for new ways to charge users for their content. It is also apparent in peer-to-peer networks, which are providing products and services outside the realm of the traditional company.

Second, new forms of business-to-business commerce emerge as IT increases the capabilities and reach of companies. For example, cloud computing can open up the digital economy to many more small and medium-sized enterprises. As the previously fixed costs of IT become variable, more businesses can access computing power over the Web and improve their productivity.

New specialized services are being enabled as cloud computing and related technologies make possible the aggregation of what had been small, uneconomic pockets of demand for business services in areas such as procurement, human resources and data analysis.

## 5. Rise of the middle class and urbanization in emerging markets

According to the Economist Intelligence Unit, emerging economies in 2009 accounted for more than 50 percent of global GDP at purchasing power parity, up from 29 percent in 1980, and their share of global output is expected to rise still further, to 61 percent, by 2030. The ascendancy of emerging-market powers is characterized by the twin dynamics of a growing global middle class of consumers and rapid urbanization, each of

which will create new growth opportunities for developed economies.

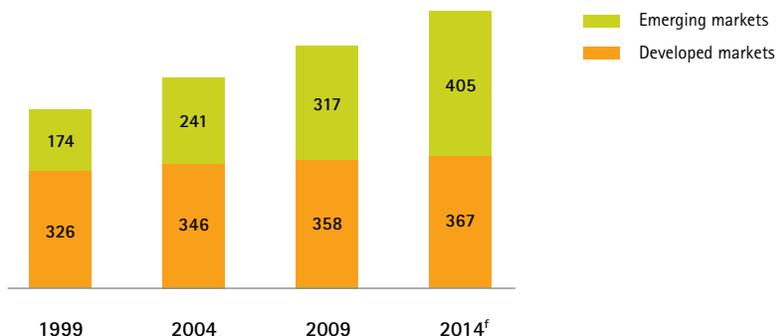
### Burgeoning consumer markets in the East

Rapid growth is fueling rising employment and incomes in emerging economies. With rapid growth in consumer spending, emerging markets represent a tantalizing growth opportunity for developed economies seeking new outlets for their products.

## New consumer markets

In 1999, developed economies had almost twice as many households with annual incomes greater than \$5,000 as emerging markets. By 2014, however, emerging markets are expected to have more households passing the \$5,000 mark than developed markets.

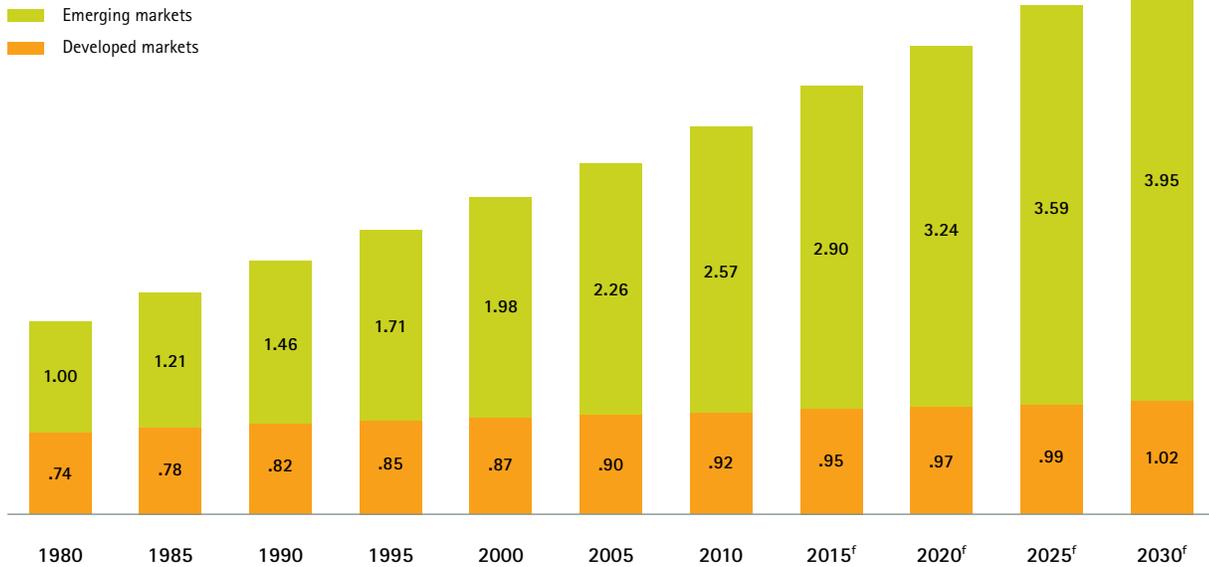
Number of households with annual incomes greater than \$5,000 (millions, at constant prices and PPP)



## Booming cities

In emerging markets, the urban population is expected to almost quadruple its 1980 size by 2030. And in 2030, those populations will be about four times larger than the urban populations in developed markets.

Urban population (billions)



Source: United Nations

Initially, much of that demand will be in low-cost products, and developed-economy firms will struggle to compete effectively against their emerging-market competitors. But as incomes rise in emerging markets, consumer preferences will shift from basic needs toward discretionary and more sophisticated items. Developed economies can compete more effectively if they tailor their exports and investment to areas of demand that emerging markets cannot readily meet by themselves.

One area of demand that stands out is in “soft goods” related to fields such as education, health care or culture. Many British universities, for example, have capitalized on emerging-market demand by establishing satellite campuses in China, Malaysia and the Middle East.

Developed economies can also think inventively about ways to capitalize

on demand for cultural goods and services. Abu Dhabi, for example, has signed deals to develop permanent local offshoots of both the Louvre and the Guggenheim museums, while Singapore has imported cultural attractions such as the Royal Shakespeare Company and Cirque du Soleil.

### Rapid urbanization

The total urban population of the developing world will more than double between 2005 and 2050, increasing from 2.3 billion to 5.2 billion, according to the United Nations. Furthermore, the size of cities in emerging markets is growing by the day. The number of cities with 1 million-plus inhabitants is set to rise from 300 in 2005 to 479 in 2025, and the number of people living in such cities will rise from 863 million to nearly 1.5 billion.

The rapid influx of new residents is placing a strain on such basic

## For further reading

"Gearing up for the two-speed global recovery," *Outlook*, October 2010

"From Global Connection to Global Orchestration," Accenture, January 2010

"The Springboard Project: Getting Ahead—Staying Ahead, Helping America's Workforce Succeed in the 21st Century," US Business Roundtable, December 2009

"The Rise of the Multi-Polar World," Accenture, 2007

services as public transportation, roads, electricity and water, creating a pressing demand for investment in infrastructure.

Governments in emerging markets will have to address these challenges in order to continue attracting foreign investment and remain competitive.

The demand for, and growth of, infrastructure spending across the globe, and in emerging markets in particular, offers unrivaled growth opportunities for developed economies. Credit Suisse estimates suggest that infrastructure spending in

emerging markets could reach more than \$1.2 trillion in the next two years alone—and \$3 trillion over the next 10 years.

Developed economies can also do much more to capitalize on their expertise in niche technologies relating to infrastructure. Japan, for example, is seeking new growth markets overseas by looking to export its Shinkansen (bullet-train) technology to emerging markets. And Germany could potentially sell its sophisticated electrical and electronic capital goods to emerging markets, including China.

The findings of Accenture research, going against the grain of the more pessimistic scenarios, show that economic stagnation need not be inevitable for developed economies. Policy makers and business leaders can mine rich seams of growth through imaginative responses to oft-perceived challenges around aging populations, the transition to a low-carbon future, rising demands for public services, new information-based services and growing demands in the emerging world for social and physical infrastructure.

But such growth is not assured, and the failure to act now may well condemn these economies to the decade without growth predicted by some commentators.

First and foremost, developed economies must have a strong strategic direction, based on a clear-eyed view of comparative advantage. What can they do best? They need to play to their competitive strengths, and recognize that they cannot sustainably maintain growth and jobs in goods or services that other economies can supply more cheaply. They need to remedy gaping deficiencies in skills, infrastructure, the use of technology and innovation that currently risk impeding sustained growth in these areas.

Governments and businesses can each play separate and important roles in creating, and pulling, the right levers. But given the complexity and scale of the action required, this new approach will also call for the creation of more powerful models of cross-sector collaboration, marshaling critical resources, thinking and expertise across government, business and the nonprofit sector.

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