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CEO Briefing 2015

From Productivity to Outcomes

Using the Internet of Things
to drive future business strategies



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73% of companies have yet to make any concrete investments in the Internet of Things.¹

Foreword



I am delighted to be able to share with you our latest report, produced in collaboration with The Economist Intelligence Unit, reflecting the views of C-suite leaders across the world on the Internet of Things.

Our work with global organizations, together with extensive Accenture research, has found that failure to take tangible action around the Internet of Things could hinder organizations from capitalizing on long-term revenue gains. In fact, the Accenture Institute for High Performance discovered a strong economic argument for the Internet of Things with estimates showing it could lift real gross domestic product by 1.5 percent in 2030 over trend projections for 20 major economies studied.²

When I first reviewed our own survey findings, I was reminded of the old proverb "seeing is believing" with respect to C-suite opinions on the Internet of Things—they certainly know it is there and acknowledge its importance, almost to the point of being overconfident about their readiness to embrace it.

Indeed, recognizing the benefits and seeing the potential for growth is one thing; taking steps to seize the opportunity and deliver the outcomes is another. Our survey among 1,400 C-suite decision makers, half of whom are CEOs, found that while they might see and believe in the Internet of Things, this is not necessarily translating into effective moves to exploit it.

So how can business leaders close the gap between understanding and action? The survey shows that while the majority of C-suite leaders see the Internet of Things as a net creator of jobs³ and expect to be able to reduce operational expenses using it,⁴ only seven percent are matching strategy with investments⁵ and nearly three-quarters say they have yet to make concrete progress with the Internet of Things.⁵

Is it caution or complacency that is hindering the C-suite from harnessing the Internet of Things? This study shows that senior leaders cite multiple reasons why they have not made inroads—from constrained access to capital, to insufficient access to technology or poor information and telecommunications infrastructure.

Of course, as with all digital developments, there are barriers to remove and issues to overcome. From government regulations to the cultural implications—new jobs, different skills—the conditions have to be right. And those conditions need to flex in response to a changing world. Small wonder that some C-suite leaders seem to be waiting for the merry-go-round to stop before they climb on board.

I believe the conditions are ripe for the widespread adoption of the Internet of Things; a proliferation of data-rich sensors and devices that open up connectivity and a universal demand for faster, more efficient ways to work and live.

Market leaders should embrace these disruptions, whether related to technology or the fluctuations of the market. They must recognize that while process efficiencies and cost cutting are worthy goals, they need to adopt a broader, more strategic spectrum. The Internet of Things is game changing. Leaders should seek out the best outcomes—to benefit their businesses, their countries and the worldwide economy.

I encourage you to read this report to find out more about current C-suite leaders' thinking. Please do not hesitate to reach out to me about how the Internet of Things can drive growth in your business.



Bruno Berthon
Managing Director—Accenture Strategy,
Digital Strategy Lead

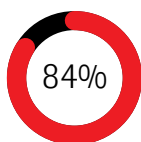
Key findings



C-suite executives recognize the significant potential of the Internet of Things (IoT) to deliver long-term job growth (87 percent) and long-term revenue growth (57 percent).³



However, only a minority of C-suite executives (38 percent) think their company's senior leaders fully understand the IoT, overshadowed by those with some understanding (57 percent) or little at all (4 percent).



The vast majority of C-suite executives (84 percent) believe that their organizations have the capability to create new, service-based income streams using the IoT.



Despite this, a mere 7 percent have developed a comprehensive strategy and committed investments accordingly. Nearly three-quarters (73 percent) of the C-suite have yet to make any concrete investments in the IoT.⁵



In 2014, less than one-third (31 percent) of C-suite executives emphasized the revenue opportunities presented by digital investments, whereas this year fully 61 percent cited digital initiatives as a tool for growth.



This shift in emphasis has yet to happen with respect to the IoT as companies see improving productivity (46 percent)⁴ as the key benefit of the IoT, despite their longer-term expectations of revenue growth.

2. The Growth Game-Changer: How the Industrial Internet of Things can drive progress and prosperity, Accenture, 2015
 3. Figure 1 on page 7
 4. Figure 2 on page 8
 5. Figure 3 on page 8

Written by:

**The
Economist**

Intelligence
Unit

Many recent technological advances have been distributed in nature, producing a world where existing objects—from industrial machines to cars, refrigerators, and even people, plants or animals—can be connected to the Internet to collect and receive data. This developing frontier, known as the Internet of Things (IoT), is generating a multitude of new opportunities.

Consumers will be able, for example, to adjust their heating remotely or track their health in real time. Cities can use infrastructure such as smart street lamps to monitor traffic or pollution levels. Warehouses and shelves equipped with smart sensors that can collect and convey information in real time can reduce the cost of inventory checks, tracking and losses. Sensors in the soil that detect moisture and heat can help agri-businesses irrigate more effectively, increasing yields while cutting water consumption. And sensor-enabled infrastructure can provide information to improve operations and maintenance before things break down.

For businesses, the IoT presents an array of changes and new revenue possibilities and, as our survey of the C-suite reveals, executives have their eyes on this prize. The question, however, is which companies will be able to capitalize on this opportunity and who will emerge successful.

A disruptive environment

More disruption is on the horizon. Looking ahead to 2015, C-suite executives expect greater competition in their industry (79 percent), with pressure coming from competitors changing their business models (68 percent) and releasing game-changing new products and services (62 percent).⁶

In this cut-throat environment, the IoT presents a means for businesses to build competitive advantage. And it is seen as benefiting industry broadly. While retail (39 percent), manufacturing (39 percent) and healthcare (37 percent) are highlighted as the sectors most likely to benefit, respondents cite a wide range of industries as beneficiaries.⁶ Most C-suite executives also recognize the long-term potential of the IoT to drive revenue growth (57 percent rising to 73 percent among Asia Pacific-based respondents) and to increase employment (87 percent) (Figure 1).

Such revenue growth is expected to materialize as the IoT enables new ways of delivering services or incorporating service delivery into more traditional product sales. "If your car gives off data about what's happening with it, you can imagine having a Formula One-type pit crew show up at your home and fill up the gas and change the tyres," says Tim Armstrong, CEO of AOL, a New York-based media technology company. Technology, he argues, will create a "reverse economy" in which consumers do less of the work.

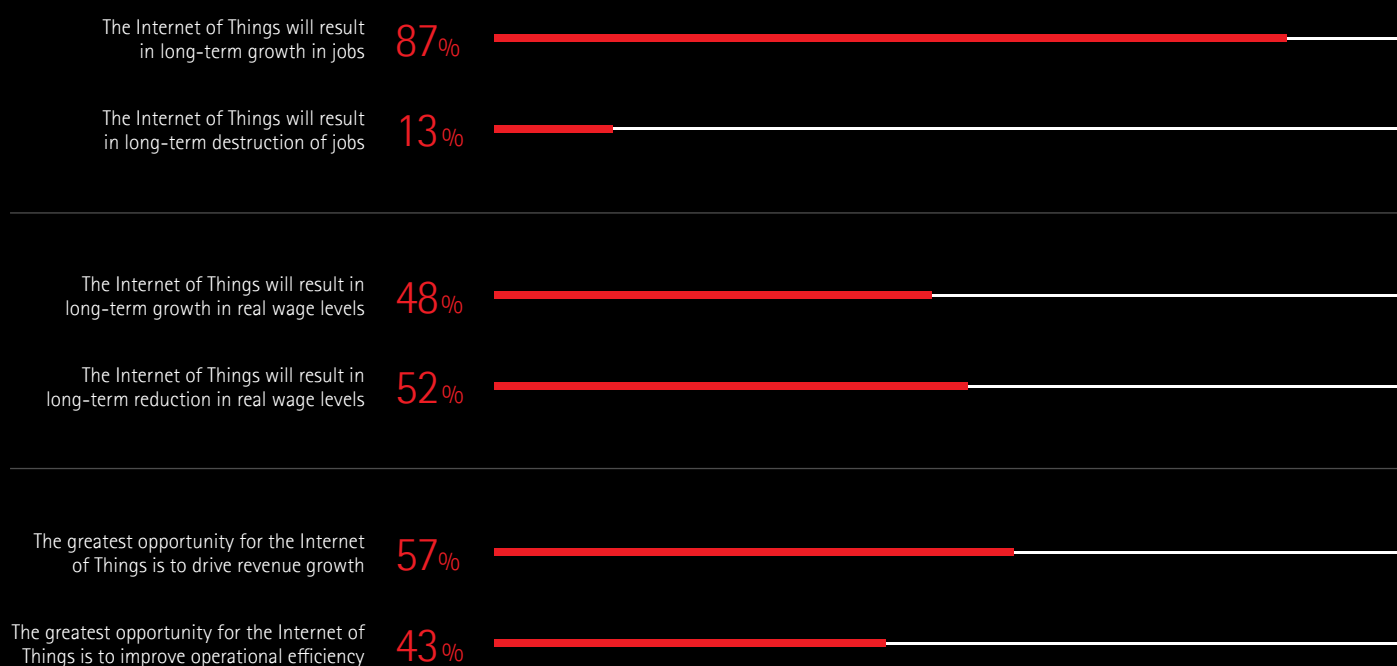
Frank Bisignano, chairman and CEO of FirstData, a US-based payment solutions firm, looks forward to a world in which, say, a refrigerator equipped with sensors can contact the local store to automatically order whatever needs to be restocked and have it delivered.

Mr Bisignano sees opportunities for FirstData. "People are acquiring goods in a different manner," he says. "Where we sit—at the intersection of finance, technology, information and payments—we see a tremendous opportunity to help our clients get enabled in this environment."

In the survey, executives are remarkably confident that the top leadership grasps the nature of the IoT: more than 96 percent of respondents believe their senior leaders have at least some level of understanding of the IoT.⁶ And most (84 percent) say their organization has the capability to create new service-based revenue streams using the IoT.

Clearly, the IoT has captured the corporate imagination; but companies are rarely taking action to capitalize on the opportunities they see emerging.

Figure 1. Which statement most closely reflects your view on the Internet of Things?



6. Accenture CEO Briefing Study 2015 in collaboration with The Economist Intelligence Unit (EIU).

Figure 2. What key benefits do you expect the Internet of Things will deliver for your business?

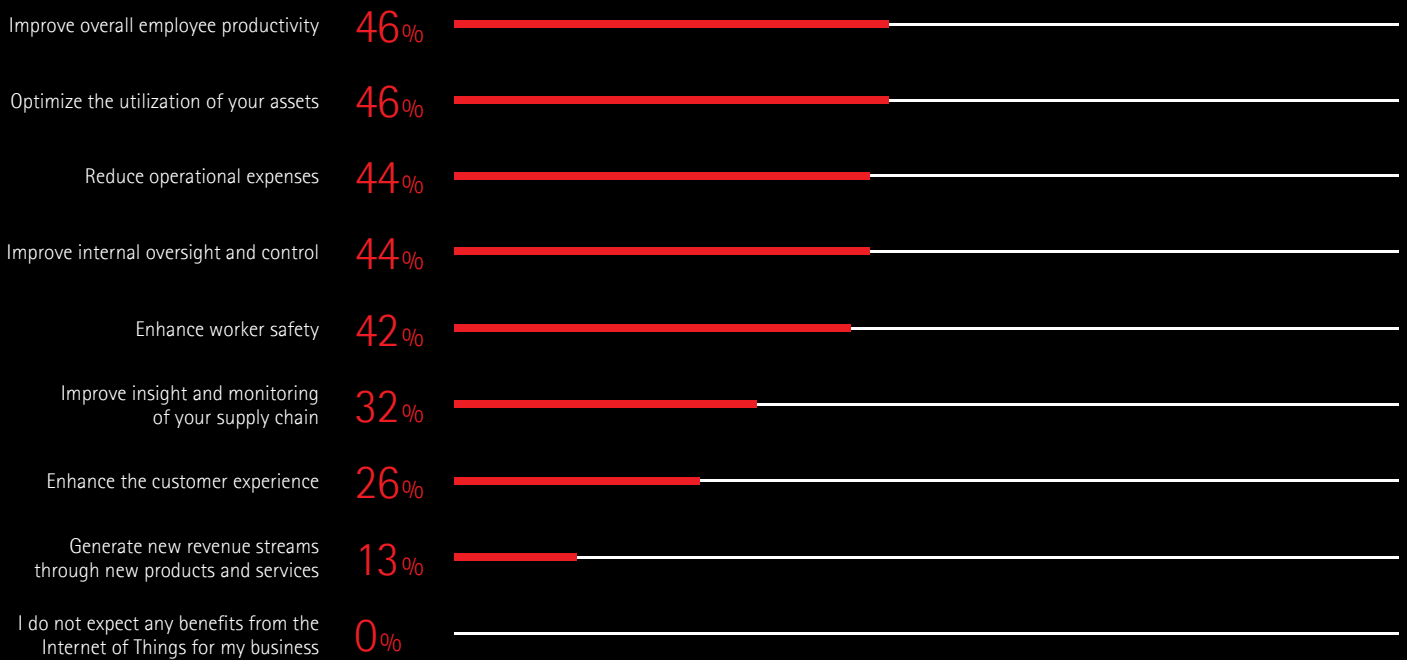
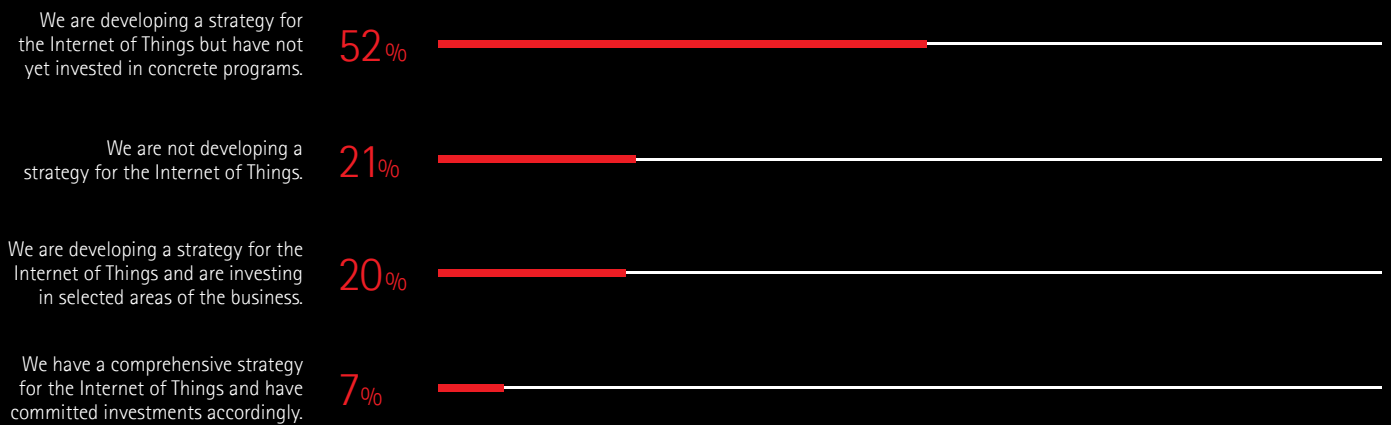


Figure 3. Please select the statement that most closely matches your business' approach to the Internet of Things?



A gap between aspiration and investment

Beneath the confidence expressed in the IoT's potential lies a different story. Companies are not prepared to match sentiment with investment dollars or simply lack a strategy to capitalize on the IoT's opportunities, creating a disconnect between long-term growth expectations and how the C-suite believes the IoT will benefit their business today (Figure 2).

First, while most respondents acknowledge an understanding of the IoT among their senior leaders, only 38 percent say they "fully" understand it, while a majority (57 percent) say it is "somewhat" understood. As the IoT has become a business buzzword, some level of understanding of its implications is now required. Yet there remains a yawning gap between complete understanding and the much lower bar of "somewhat" understood.

When asked about concrete investments or strategies for capitalizing on the IoT, most companies are sitting on the fence.

Just 7 percent have developed a comprehensive strategy with investments to match, while 73 percent have yet to make any concrete investments. A further 20 percent have begun investing in some selected areas of their business (Figure 3).

AOL's Mr Armstrong believes companies will need to build capacity to capitalize on the opportunities. "The strategic direction of where technology is going is clear," he says. "What's going to be the next forcing function is whether companies have the capability to take advantage of that."

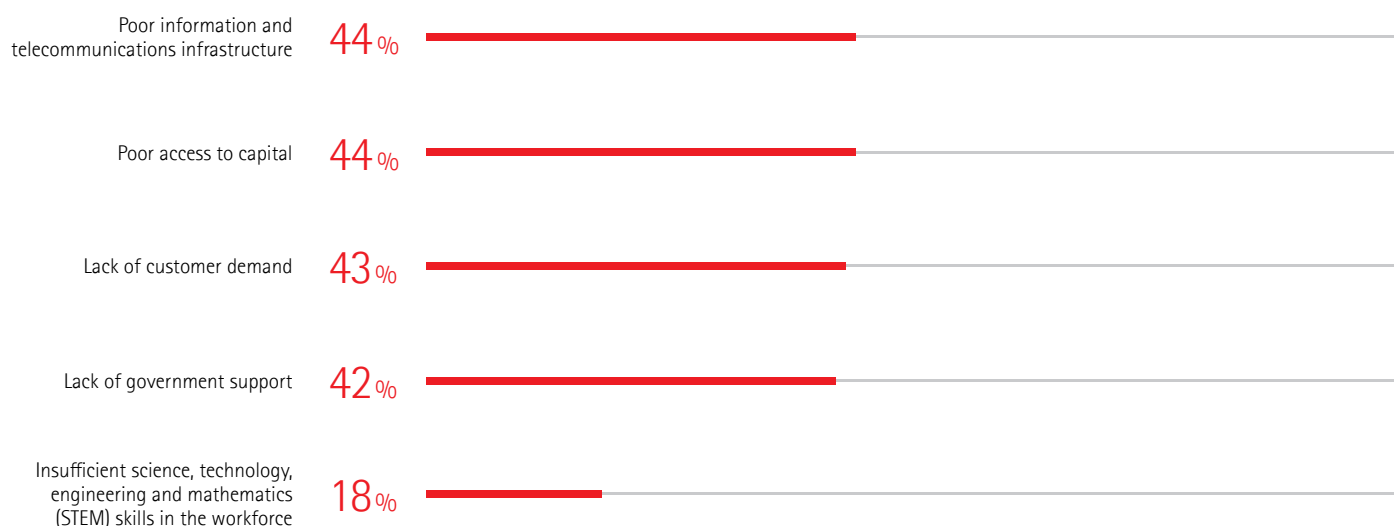
For Mr Armstrong, mobile devices remain one of the leading tools for revenue growth in AOL's business, allowing for customized marketing campaigns based on consumers' location as well as the infrastructure and services around them. "Ads are not just based on demographics but the different functionality in those two markets based on the data," he says.

As a next step, providing sensor-enabled products that directly interact with browsing consumers could leverage the IoT for new revenue sources.

Moreover, respondents cite a range of obstacles to developing the IoT, with weak information and telecommunications infrastructure (44 percent) and access to capital (44 percent) seen as the biggest constraints, followed closely by poor access to technology and lack of customer demand (43 percent). Weak government support (42 percent) is also a factor (Figure 4).

Surprisingly, respondents overall do not appear overly concerned about the lack of STEM (science, technology, engineering and mathematics) skills, with only 18 percent citing this as an obstacle. This rises to 28 percent in Latin America and 42 percent among Middle-Eastern respondents.

Figure 4. What are the most significant obstacles to developing the Internet of Things?



The short-term efficiency agenda

Despite recognizing the long-term potential for the IoT to drive increased revenue and employment, the emphasis changes when executives assess the advantages within their own organizations. Operational efficiency is most frequently cited, with cost cutting (44 percent), employee productivity improvements (46 percent) and asset optimization (46 percent) seen as most likely to benefit.

Efficiency remains key. "Integration with customers is expanding rapidly as digital moves so fast across the business—from inventory controls to servicing in the plant through online monitoring," explains Peder Holk Nielsen, CEO of Novozymes, a biotechnology company based in Denmark. "It doesn't change the business model but it means we can help customers better and faster."

However, as two-thirds (68 percent) of C-suite executives expect competition to increase in 2015, providing the same, more efficiently, may not be enough. A mere 13 percent of C-suite executives expect the IoT to generate new revenue streams through new products and services for their own business. This stands in sharp contrast to the 57 percent who expect long-term revenue growth.

The tendency of survey respondents to focus on efficiency and cost reduction when considering investments in the IoT echoes a pattern observed in 2014, when less than one-third of C-suite executives (31 percent) emphasized the revenue opportunities offered by digital technologies. This year, by contrast, 61 percent of the C-suite surveyed cited digital technology investments as a tool for growth.⁷

The key benefits C-suite executives expect the Internet of Things to deliver for their business:

46%

employee productivity improvements

46%

in asset optimization

44%

in cost cutting

7. Accenture CEO Briefing Study 2015 in collaboration with The Economist Intelligence Unit (EIU).

Conclusion

Given the dramatic shift over the past year in recognizing digital technology investments as a revenue driver, a similar shift may be on the horizon for the IoT.

Companies are exploring the opportunities. For example, Bosch Group, the German manufacturer, has established an Internet of Things and Services Lab in partnership with the University of St Gallen in Switzerland to explore the potential for the IoT to change business models.

And some industries are exploring how the IoT can generate not only operational efficiencies but also new revenue streams. In cars, for example, on-board diagnostics ports that monitor driving patterns are paving the way for pay-as-you-drive insurance products. Remote monitoring allows health companies to offer a wider range of home-based care services.

Yet the survey responses indicate that while executives see the possibilities, for most companies, concrete strategies have yet to emerge. When it comes to the IoT, the data results suggest that most C-suite executives want to follow the trend rather than lead it.

In some sectors, that might be a sensible approach. However, various trends point to a future in which the IoT will be an increasingly influential force, including the falling costs of technologies such as sensors, data storage and computing power, as well as the increasingly ubiquitous presence of wireless connectivity.

The combination of these technologies, with the disruptive pressures that most respondents already see emerging across the business landscape, means that some companies, while waiting to embrace technological change, will find themselves cornered by competitors entering their markets with new operating models and game-changing services.



Accenture Strategy

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About the Research

CEO Briefing is an Accenture report written with The Economist Intelligence Unit (EIU). It analyses the views of 1,400 C-suite executives globally on the prospects for the global economy and their companies' business strategy in addition to the role of digital technology, with particular focus on the Internet of Things. To complement the survey findings, the EIU conducted interviews with business leaders. We would like to thank all survey respondents as well as the interviewees quoted in this report.

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