## Internet of Everything (IoE)

Top 10 Insights from Cisco's *IoE Value Index* Survey of 7,500 Decision Makers Across 12 Countries

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### Introduction

With the increased pace of change worldwide, many executives are asking, "How can I create value for my company both now and in the future?" and "How can I take advantage of the Internet of Everything (IoE) to increase innovation and strengthen our competitive position?"

In early 2013, Cisco determined that IoE – the networked connection of people, process, data, and things – will create \$14.4 trillion in total Value at Stake over 10 years (2013 – 2022). To help executives realize as much of this value as possible, Cisco just launched new, groundbreaking research – called the IoE Value Index – that shows \$1.2 trillion of value is "up for grabs" in calendar year 2013.

The loE Value Index is driven by a survey of approximately 7,500 business and IT decision makers from private-sector firms in 12 of the world's largest global economies (Australia, Brazil, Canada, China, France, Germany, India, Japan, Mexico, Russia, United Kingdom, and United States). In addition to sizing the opportunity by calendar year, the Index provides valuable insights that enable executives to transform and position their businesses to capture more loE Value at Stake both this year and in years to come.

## **Insight No. 1:** The Internet of Everything is poised to generate at least \$613 billion in global corporate profits in calendar year 2013.

These profits stem from corporations around the globe leveraging the Internet of Everything to make their operations more efficient and provide new and/or improved customer experiences.

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#### **Insight No. 2:**

#### Corporations could potentially nearly double those profits by adopting business practices, customer approaches, and technologies that more fully leverage IoE.

While IoE is driving a huge number of corporate profits, an additional \$544 billion could be realized in calendar year 2013 if companies adjust their strategies to take better advantage of IoE.

### **Insight No. 3:** Traditional business advantages are evaporating quickly.

- Firms in developed markets are now realizing the greatest share of IoE value.
  For example, among the countries studied, German companies are capturing the highest percentage of value at 62.3 percent, followed by Japan at 57.3 percent.
  In contrast, firms in emerging markets are generally realizing a lower percentage of IoE Value at Stake. For example, companies in Mexico are the lowest in the study at 47.1 percent on average. The narrow range (15.2 percent) between the top and bottom countries, however, highlights the parity among firms worldwide.
- Many companies in developed countries have invested heavily in IT for decades, and have extensive experience implementing the kinds of technologies – such as collaborative tools, industrial automation, sensors, and analytics – that create the foundation of IoE. To stay ahead of competitors in emerging markets, however, firms must continue to invest in the technologies, and in the people and process enablers, that will fuel future success in the IoE economy.

#### **Insight No. 4:** Competition will intensify as IoE evens the playing field between large and small companies around the globe.

Given the level of evident parity, there is real potential for a shakeup of the competitive landscape in nearly every industry. Midsize firms and companies from emerging economies pose a formidable and growing challenge to market incumbents.

- Midsize firms (500-1,999 employees) are actually capturing slightly more Value at Stake on a percentage basis than large enterprises with at least 10,000 employees – 54.1 percent versus 52.4 percent.
- Companies in emerging markets are more confident in their ability to realize IoE value. On a scale of 1–10, where 10 is "extremely confident," executives from emerging markets scored a 7.8, in contrast to 6.7 for executives in developed markets. Many of these countries, such as Brazil, China, and India, have increased their IT investments in recent years at a rate that far outpaces the global average. In addition, IoE technology drivers such as cloud services and mobility have made it possible for emerging-market firms to close ground quickly on those companies in developed markets that have not remained on the leading edge of technology innovation and adoption.

Cisco's analysis reveals the quality of a company's technology infrastructure and tools is the single most important factor in determining the amount of value realized.

## **Insight No. 5:** IT-intensive sectors are capturing a higher percentage of IoE value.

- Companies in high tech and telecommunications (65.4 percent) and financial services (60.5 percent) are realizing a higher percentage of IoE Value at Stake in 2013 than firms in industries that are less IT-intensive.
- Companies in manufacturing, energy, and retail have captured the smallest share of Value at Stake so far, but also have the greatest potential to gain competitive advantage.

### **Insight No. 6:**

# Executives in surveyed countries anticipate job growth and wage increases as a result of IoE.

- Forty-seven percent of executives think loE will lead to higher wages at their companies, while only 6 percent think wage cuts are likely. This is particularly evident in emerging markets.
- Thirty-three percent of executives believe IoE will lead to higher employment levels in their firms, versus 28 percent who think job losses are more likely. In developed countries, executives, while still positive, were somewhat more reticent about the prospects for job creation.

### Insight No. 7:

### Executives believe IoE will make their firms more secure.

- Information and physical security are seen as the primary downsides associated with the increased connectedness that comes with IoE.
- Still, 50 percent of respondents think IoE will make information more secure, while just 19 percent fear it will be less secure.

## **Insight No. 8:** While technology is pivotal, people and process make the difference.

While data analytics is an important enabler of IoE, "data" has become ubiquitous, and is not in itself a differentiator.

- Cisco's analysis reveals the quality of a company's technology infrastructure and tools is the single most important factor in determining the amount of value realized. A strong technology foundation, while insufficient on its own, is required for companies to capture Value at Stake.
- However, the combination of "people" and "process" enablers represent more than half of the total value realized. These are the competitive levers that executives must address. Specifically, people-centric management practices and strong information management loom large as the top priorities.

With more and more companies gaining access to technology and innovations that level the playing field, such as cloud computing, what really matters is how executives harness these innovations to maximize value realized from IoE.

### **Insight No. 9:** The key challenge: harnessing innovation for business gain.

With more and more companies gaining access to technology and innovations that level the playing field, such as cloud computing, what really matters is how executives harness these innovations to maximize value realized from IoE. To that end, the top three challenges cited by respondents in realizing IoE value were:

- 1. Investing in the right technology infrastructure and capabilities
- 2. Integrating new technologies with legacy IT environments
- 3. Updating processes to absorb new technologies

## **Insight No. 10:** Firms must invest in the right IoE capabilities to improve competitiveness.

Cisco identified several key areas of opportunity for firms in sectors that have the greatest potential to benefit from IoE. To capture the most value, these companies should focus on the following IoE-driven capabilities:

- Manufacturing firms: real-time, multidimensional data analysis; integrated video collaboration; remote tracking of physical assets; intelligent robots
- Energy firms: integration of sensor data; ability to locate experts when vast distances are involved between experts and energy-production sources; predictive analytics
- Retailers: data visualization and predictive analytics; BYOD; location-based marketing

For more information about the IoE Value Index study, please contact:

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