

IoE in Action: Are You Ready?

Joseph Bradley Vice President, IoE Practice, Cisco Consulting Services @JosephMBradley

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Convergence of Mobile, Social, Cloud, and Data Is Driving Digital Disruption



Delicious Profits



10 Every company is a technology company



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Change isn't constant, it's instant

The Ultimate Platform Company?



Every company is a technology company

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The majority doesn't rule...but you do



Every company is a technology company

- Change isn't constant, it's instant
- Value is in the platform, not the product
- The majority doesn't rule...but you do
- Experience trumps functionality



Don't be afraid to change your stripes



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 - Digitization...the gift that keeps on giving
 -) Fail fast and often to win



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- Insight is the new currency



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-) Data is everywhere, insights are scarce
- Insight is the new currency

) Context is king

Are You Ready?

Value Is Not in the Number of Things, But the Connections of People, Process, Data, and Things

People

Connecting people in more relevant, valuable ways

Data

Leveraging data into more useful information for decision-making



Process

Delivering the right information to the right person (or machine) at the right time

Things

Physical devices and objects connected to the Internet and each other for intelligent decision-making; often called Internet of Things (IoT)

Nice City Increased Parking Revenue 40–60% without Raising Taxes





- Increase compliance by 30%
- Parking Revenue increase 40 60%
- City data sales
- Reduced congestion, time-to-park
- Dynamic pricing revenue increase

IoE Drives \$19 Trillion In Value Over 10 Years



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IoE Is Already Here



IT-Driven Industries Capturing Greatest Share of IoE Value Value At Stake



Mexico Has Greatest Opportunity To Benefit from IoE



 At 47.1% of value realized, Mexico has the greatest opportunity to benefit from IoE

- Firms in Germany, Japan, and France have realized the most of their share for 2013 VAS
- High level of parity across companies in different geographies

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IoE Value at Stake for Key Verticals in LATAM

Total IoE Market Value for LATAM - \$870B



Private Sector in Mexico: Implementing IoE Could Generate \$163B of Value

\$163B

Verticals: \$114B

- Smart factories
- Connected marketing / advertising
- Smart grid
- Innovative payments

Cross Vertical: \$49B

Supply chain efficiency

Time-to-market

Future of workTravel avoidance

Public Sector in Mexico: Implementing IoE Could Generate \$34.3B of Value

\$34.3B

Citizen: \$5.2B

- Payments
- Counterfeit drugs
- Chronic disease
- Telework
- Gas monitoring

City: \$29.1B

- Cyber Security
- Travel avoidance
- Smart Grid
- Mobile Collaboration
- Chronic disease

IoE in Manufacturing, Retail, and the Public Sector

IoE Is Here Today - The Connected Retailer



Retailer Value at Stake: 12% Higher Profits / 0.8 Percentage Point EBIT Margin Gain



Next-gen workers

\$182M contribution to EBIT driven by higher employee productivity and lower real estate rentals (telecommuting)

Innovative payments \$28M contribution to EBIT due to lower merchant processing fees

Connected marketing and advertising \$60M contribution to EBIT resulting from more targeted, location-based advertising

Reduced out-of-stocks \$20M contribution to EBIT generated by reduced out-of-stock occurrences

Increase in IT costs IT connectivity cost of \$41M to enable IoE

IoE Is Here Today - The Connected City



Smart Street Lighting: Each Opportunity Can Create Multiple Benefits Across Stakeholders



What role can SPs play in accelerating Smart Cities?

Barcelona: Smart City Creates \$3B in Value

Smart Lighting Sma

Smart Buses

Smart Water

Smart Bus Stop

p Smart Parking

Smart Waste

- Reduced costs, more revenues, better productivity and citizen experiences
- Created 47,000 jobs

Smart Water: \$58 million Smart Parking: \$53 million Smart Lighting: \$47 million Smart Buildings: \$124 million Connected Learning: \$170 million

Revenue

Citizen Experiences

Jobs

Smart citizens

Productivity

Cost Avoidance

Beyond Nice and Barcelona...



- **Objective:** Improve environment
- Solution: 13 Smart Work Centers
- Impact: 64 agencies / 71 public organizations increase productivity, save costs, improve job satisfaction



- **Objective:** Economic development, investment, quality of life
- Solution: Smart grid, lighting, parking, work centers, Wi-Fi, buildings
- Impact: 9-14% energy savings; fewer electrical outages



- Objective: Improve infrastructure and quality of life
- Solution: Management systems for waterway, train, and road traffic
- Impact: Smarter decisions reduce traffic congestion

IoE Is Here Today - The Connected Manufacturer

Remote sensing of objects and environment

Subscribe to my status updates

Cameras deployed for monitoring and security

7100kWh of energy used today

Just plug me in! I am online and ready for configuration with the line. Here is my configuration.

My yield will meet today's production needs

Everything has a URL

Clean me next shift

Sensors



Intelligent Motor Control







IoE - Automation

Increase **OEE** (equip. utilization) by 7-12% (1% OEE = 3-4% profitability)

10-25x improvement in BTO (Build-to-Order) cycle times (e.g 18 months → 2 weeks)

Connected Factory Automation

- Faster diagnostics = lower downtime
- Flexible manufacturing = higher revenue
- Converging motion, safety, data, video and wireless = higher productivity

IoE - Wireless

Connected Factory Wireless

- Workforce enablement
 - 82% faster retrieval time
 - 80% faster decision making
- Wireless tools/assets → reduced cabling costs and set up time
- Continuous asset management

Reduce **cabling and other costs** for machines that move 95%

7% production throughput increase

IoE – Energy Management

Avoid peak energy charges (up to 10X base load cost)

Reduce energy consumption 10-20%

Connected Factory Energy Management

- Reduce variable costs (Energy is the largest variable cost)
- Monitor machine level energy consumption
- Demand response get alerted and take action to avoid peaks
- Optimize energy by matching machine energy utilization with activity (e.g. idle machines)

Keys to Success
Launching IoE

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IoE Methodology

Rapid Prototyping and Realtime Results

Smart Ideation Know-How

What We've Learned: Innovation, Apps, and Insights



1. Successful Companies Build Innovation Bridges Elance **KICKSTARTER** freelancer.com Worker **Open Your Four Walls** INDIÉGOGO. Quirky aluth CISCO Cisco Entrepreneurs in Residence ululu CISCO. COLLABORATION ENTERPRISE **Freelance Digital Personas** (34% of today's workforce)

A Proven Process for Smart Innovation Ideation



2. Apps Are the Oxygen for Business

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	restured Products	Mercadolibre para Android y Blackberry
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Mercado Libre Mobil App

Mobile Apps in Mexico

WEBINAR

Accelerate your Mobile Delivery Series Meet the Mexican Nearshore Mobile Experts

As many companies in the U.S. are moving toward the hugely opportunistic mobile market, they are finding that their old partnerships with traditional Offshore IT companies need to be re-aligned.



- iTexico, one of several firms helping companies "go mobile"
- Provides resources, expertise, experience

- Search and buy where ever you are
- Available in Argentina, Brazil, Chile, Columbia, Costa Rica, Ecuador, Mexico, Panama, Peru, Portugal, Dominican Republic, Uruguay, and Venezuela

3. Big Data Is Nothing Without Big Judgment



Trust Must Be Earned

What every business should tell consumers about their data collection?



Exactly **what** data is being collected



How the data collection technology works.



How the data is being secured



Why the data is being collected



How the data is being analyzed and reported



Who is seeing the data.



The **consumer benefits** of data collection



Source: DataInformed, September, 2013

Expand Your Security Perimeter

Expand Security Perimeter Protect against advanced malware and threats across all infrastructure and the entire security continuum; detect and quarantine cyberattacks

Improve Visibility

Through analytics, increase visibility around threats, users, behavior, and infrastructure

Respond Faster

Use identity- and context-based information and behavior to improve security response



Imagine...



Thank you.

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