Fujitsu Laboratories of America
Technology Symposium 2013
Welcome and Opening Remarks

Yasunori Kimura
President and CEO
Fujitsu Laboratories of America, Inc.
June 5th, 2013
Agenda

FLA 20th Anniversary
A look back

Sensor Networks and Ambient Intelligence
The Future

Fujitsu Laboratories of America
Overview

Example Case Studies

Today's Program Outline
Fujitsu Laboratories are Leading the Innovation Charge

Fujitsu Laboratories of Europe Ltd. (FLE)
Fujitsu Research and Development Center, China (FRDC)
Fujitsu Laboratories Ltd. (Estab. 1968)
Fujitsu Laboratories of America, Inc. (FLA) (Estab. 1993)

15+ R&D projects
70 Researchers from 15 countries

Stanford University
Massachusetts Institute of Technology
Berkeley University of California
Parc, Palo Alto Research Center

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FLA History and Accomplishments

- > 750 patents filed in last 10 years
- > 500 technical papers published in last 10 years
- Contributions to Fujitsu solutions:
  - CAD (Assure)
  - 40 GBPS optical transmission system
  - 10G Base-CX4 switch chip
  - Interconnect technologies for servers
  - Packaging material and design
  - Security: Cloud and devices

- April 1993: Establishment of Fujitsu Laboratories of America in Silicon Valley, CA
- 2002: Richardson, TX Office opened
- 2001: College Park, MD Office opened
- 2002: "FLA 2.0: Networked & Open" Vision started
- 2006: "Data-Driven Healthcare" R&D Project started
- 2009: Fujitsu "Human-Centric Intelligent Society" Vision
- 2010: "Open Education Platform" R&D Project started
- 2012: "Smart Energy" R&D Project started

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20 Anniversary – A Retrospective Video
Today’s Theme: Ambient Intelligence

- A vision for 21st century and beyond
- Matches with Fujitsu’s “Human-Centric Intelligent Society” vision
- Variety of technologies will be needed to enable Ambient intelligence environments including sensors, AI, HCI, context-aware, biometrics, nanotechnology, etc.

Fujitsu’s vision: Human-Centric Intelligent Society
Sensor Network Services

Anonymized data collection and analysis

“Aging in place”
- Alternative to nursing home
  - Better quality of life
  - Dignity, safety, & connectedness
  - Lower cost

“Patient in hospital”
- Targeted treatment
- Earlier detection (e.g. sepsis)
  - Earlier release

Crowd-sourcing data
- Collective awareness informs individual behavior
- Collective awareness informs broader policies

- Track self & family
- Lifestyle feedback
- Compare self to others
- Pro-active role in own wellness
- Stress tracking

Other online data

User with bio-sensors

- Collect
  - Alert
  - Predict
  - Notify
  - Socialize
- Advise*
- Summarize

Smart phone

- Alertness detection
- Morale & productivity improvement through stress awareness and reduction
- Health improvement via fast feedback

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Advanced Metering Infrastructure (AMI)

- Based on Fujitsu WisReed Mesh Network
- Including Demand Response, Distribution Automation, meter data storage, data analysis, device maintenance, billing, etc.

Benefits to utilities and consumers

- Remote and automated reading
- Accurate billing & fraud detection
- Flexible pricing options
- Outage detection and management
- Better management of usage

AMI deployment in a harsh environment
<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda</th>
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<tbody>
<tr>
<td>8:00 am – 9:00 am</td>
<td>Registration and Continental Breakfast</td>
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<tr>
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<td><em>Master of Ceremonies:</em> Matt Goldman, SVP of Strategy, Fujitsu America, Inc.</td>
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<tr>
<td>9:00 am – 9:15 am</td>
<td>Welcome and Opening Remarks</td>
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<td>Yasunori Kimura, President and CEO, Fujitsu Laboratories of America</td>
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<tr>
<td>9:15 am – 9:45 am</td>
<td>Fujitsu North America Keynote</td>
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<td>Bob Pryor, President and CEO, Fujitsu America, Inc.</td>
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<td>9:45 am – 10:45 am</td>
<td>Panel Session #1: <em>Roadmap to the Future: Clouds, Pervasive Computing and M2M</em></td>
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<td>10:45 am – 11:05 am</td>
<td>Networking Break</td>
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<td>11:05 am – 12:05 pm</td>
<td>Panel Session #2: <em>Solutions in Healthcare, Automotive and Smart Cities that Leverage Sensor Networks and M2M</em></td>
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<td>12:05 pm – 1:30 pm</td>
<td>Lunch and Presentation on  <em>Mobile Music: Breaking Barriers with Sensors and Sound</em> by Ge Wang, Asst. Professor, Stanford University and Co-founder of Smule (12:45 pm - 1:15 pm)</td>
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<td>1:30 pm – 2:30 pm</td>
<td>Panel Session #3: <em>Pervasive Computing Challenges: Systems, Data and Design</em></td>
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<td>2:30 pm – 3:30 pm</td>
<td>Panel Session #4: <em>The BRAIN Initiative: the Big Yottabyte Data Challenge</em></td>
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<td>3:30 pm – 3:50 pm</td>
<td>Networking Break</td>
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<tr>
<td>3:50 pm – 4:10 pm</td>
<td>Fujitsu Laboratories Keynote</td>
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<td>Tatsuo Tomita, President of Fujitsu Laboratories Ltd.</td>
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<td>4:10 pm – 5:10 pm</td>
<td>Industry Keynote</td>
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<td>Andy Bechtolsheim, Founder, Chief Development Officer and Chairman of Arista Networks</td>
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<td>5:10 pm – 5:20 pm</td>
<td>Wrap up and Closing Remarks</td>
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<td></td>
<td>Matt Goldman and Yasunori Kimura</td>
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<td>5:20 pm – 7:00 pm</td>
<td>Networking Reception</td>
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