IN THE NETWORKED SOCIETY PEOPLE, KNOWLEDGE, DEVICES, AND INFORMATION ARE NETWORKED FOR THE GROWTH OF SOCIETY, LIFE AND BUSINESS.
5 Key Insights
Driving Opportunity in Connected Devices & Applications 2015

Innovation Opportunities
Nimish Radia, Ph. D.
Director of Research
AGENDA

1. FORCES OF A NETWORKED SOCIETY
2. MULTIPLICITY OF CONNECTIONS DRIVING NEW GENERATION OF SERVICES
3. LEVERAGE THE MEGA TRENDS
4. NEW INTERACTION MODELS: A SOCIAL WEB OF THINGS
5. OPEN PLATFORMS AND OPEN INNOVATIONS
FORCES OF A NETWORKED SOCIETY
DRIVERS FOR NETWORKED SOCIETY

PEOPLE
Lifestyle
Health
Convenience
Safety

BUSINESSES
Productivity
Cost efficiency
Regulations
Assets

SOCIETIES
Sustainability
Safety
Security
Social cost

TECHNOLOGY
Broadband ubiquity
Cost of connected device

EVERYTHING THAT BENEFITS FROM A NETWORK CONNECTION WILL HAVE ONE
ANYTHING THAT BENEFITS FROM NETWORK CONNECTION WILL BE CONNECTED

Source: Ericsson
CONVERGENCE OF 3 MEGA TRENDS

MOBILITY + BROADBAND + CLOUD

NETWORKED SOCIETY

When one person is connected their life changes. When everything is connected our world changes.
MULTIPLICITY OF CONNECTIONS AND NETWORKS DRIVING NEW GENERATION OF SERVICES
TODAY: ~15 DEVICES, ~7 SCREENS

Storage: 7,5 units

Speakers: 9,1 units

Communication: 6,5 units

screens: 6,8 units

Other: 1,9 units

Source: Ericsson ConsumerLab, qualitative study (US, FR, DE, SE)
TOMORROW -- EVERYTHING CONNECTED

Consumer Electronics

Utilities & Home Automation

Automotive & Transport

... any many more ...
NETWORKING OF 50B THINGS ...
... AND THOUSANDS OF SERVICES ...
INTERSECTION OF NETWORKS CREATE OPPORTUNITIES FOR TECHNOLOGY AND BUSINESS MODEL DISRUPTIONS
Being connected is becoming a necessity

Convergence of Network, Devices, and Apps Changes interaction and usage model

Consistency

Like entropy, usage is always increasing

Flexible/Dynamic billing & payment evolution optimizing costs
LEVERAGE THE MEGA TRENDS
BUSINESS SHIFTS

PRODUCT TO SERVICE

MASS CUSTOMIZATION
WAYS TO ADD VALUE

NEW EXPERIENCES

CONVENIENCE
Enhancing user experiences by informing decisions, extending reach and closing the experience loop

PERSONALIZATION
Analysis of data to provide individually tailored experiences and/or products

EXTENDING HUMAN CAPABILITIES
Leveraging distributed sensors and access to information to exceed physical and cognitive limitations

FINDING THINGS
Identifying and locating artifacts, people and events

MONITORING
Spotting exceptions through the real time collection of data from networked devices

PATTERN IDENTIFICATION
Analyzing data for added value

DATA AND CONNECTIVITY
VALUE CREATION ENGINE: INTERACTION INFRASTRUCTURE

INTERACTION INFRASTRUCTURE

- AUGMENTATION
- OPEN SOURCE
- TRANSACTION
- PRESENCE
- IDENTITY
- DATA
- LOCATION
- INFORMATION
- ACTIVITY
- CONTEXT
- PREFERENCES

Value creation engine: Interaction infrastructure
ENABLING THE NETWORKED SOCIETY OPPORTUNITIES

INTERACTION INFRASTRUCTURE

COLLABORATION
INTERACTING
SECURITY & SAFETY
HEALTHCARE
EDUCATION
COMMERCE
GOVERNMENT
LEARNING
SOCIALIZING
INNOVATION
INTEGRITY
TRUST
COMPETENCE
MEDIA
TRANSPORT & LOGISTICS
UTILITIES
## Super-Duper Connectivity

<table>
<thead>
<tr>
<th>Faster</th>
<th>Broadband Experience Anywhere</th>
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<tbody>
<tr>
<td>More Responsive</td>
<td></td>
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<tr>
<td>Lower Cost</td>
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<tr>
<td>Added Capacity</td>
<td>Improved Business Proposition</td>
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<tr>
<td>Flexible</td>
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<tr>
<td>Global</td>
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</tbody>
</table>

- Indoor CPE
- MP3 player
- Handsets
- Pdas
- Outdoor CPE
- Meter
- Vehicles
- Digital cameras
- Set top boxes
- Video cameras
- UMPC Internet Tablet
- Laptops
- Televisions
- Gaming consoles

**Devices**

- Outdoor CPE
- Indoor CPE
- MP3 player
- Handsets
- Pdas
- Outdoors
- Metres
- Vehicles
- Digital cameras
- Set top boxes
- Video cameras
- UMPC Internet Tablet
- Laptops
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- Gaming consoles
DELIVERED FROM THE CLOUD

Consumer

Enterprise

Services & Apps

Cloud Delivery

Cloud Services

Aggregation Partnership Service Quality

Aggregation Integration Branding

Operator

Mobile Broadband

3PP/Developers

Commercial in confidence | © Ericsson AB 2011 | 2011-10-31
NEW PROVISIONING & REVENUE MODELS

Open/Global retail channels

Out-of-the-box connectivity

Select tariff & payment options

Use services and bundles
KILLER APPLICATIONS CATEGORIES

Streaming Video
Mobile/Portable Gaming
Cloud-Based Computing
Augmented Reality
Video Conf with Tele-Presence
Emergency Response & Telemedicine

MOBILE INTERNET ACCESS SERVICES WILL BE THE “KILLER 4G SERVICE ENABLER”

http://www.pcworld.com/article/195500/4g_killer_apps_a_top_five.html
NEW INTERACTION MODELS: A SOCIAL WEB OF THINGS
USER CHALLENGE
Social Web of Things
ENTREPRENEUR MODUS OPERANDI: OPEN PLATFORMS AND OPEN INNOVATIONS
NEW SERVICES & INTEGRATION CAPABILITIES

Third-Party Service Providers
(media companies, insurances, traffic centers, authorities, map providers, search engines etc.)

Open APIs

Service Network

Core & Service Enablers

Transport providers

Multi-Access Edge
Fixed Mobile

- AAA
- QoS
- Device & service presence
- Service delivery
- Charging

- Configuration
- Remote management
- Identity management
- Device capabilities
- Context information

Communication

Utility & Home automation

Gaming

IPTV

Remote Access

Residential Gateway

Smart Car Gateway

Phone Gateway

Information

Entertainment

Navigation

Infotainment

- CAN bus

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ENABLERS AND SAAS EXAMPLES
LABS.ERICSSON.COM, IPX, ...

- Mobile Java Location
- Mobile Java Push
- Media Converter
- Streaming Media
- Mobile Communication Framework
- Event Source
- Mobile Maps
- Cluster Constructor
- Group Voice Mixer
- Face Detector
- Tag Tool
- Mobile Location
- Mobile Web Security Bootstrap
- Web Connectivity
- Web Maps
- Web Location
- Mobile Network Lookup
- SMS Send & Receive
- 3D Landscape
UX-CENTRIC, OPEN PLATFORMS, & RAPID OPEN INNOVATIONS

Enhance The End-User Experience

LTE-enabled E2E User Experience Scenarios

Partnerships

Open Innovations

Working in Parallel in an Iteration

Rapid Iterations

Open Platforms & De-facto Stds

Innovation Programme

Venture Capital

Requirements
Analysis
Design
Implementation
Test
IN THE NETWORKED SOCIETY PEOPLE, KNOWLEDGE, DEVICES, AND INFORMATION ARE NETWORKED FOR THE GROWTH OF SOCIETY, LIFE AND BUSINESS.

What is your outrageous idea?