The Emergence of the Networked Society

The one of the most important trends facing our planet, the emergence of the Networked Society.

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Abstract : We are on the brink of an extraordinary revolution. A world connected in real time will place many new requirements on all of us while opening up opportunities beyond our imagination. Our new Networked Society Essentials kit explores the emerging possibilities of a connected world.

I. INTRODUCTION

A Connected world is just the beginning..

In the Networked Society, connectivity will be the starting point for new ways of innovating, collaborating and socializing.

- **"The world is getting smaller"** –
  It took 100 years to connect 1 billion places and 25 years to connect 5 billion people.

- **"Connecting people is just the start"** –
  By 2020 there will be 50 billion connected devices – 6 for every connected person.

It's about creating freedom, empowerment and opportunity.

- **"Its about bringing us closer to our nearest and dearest"** –
  25% of smartphone traffic and 40% of tablet traffic is video

- **"..reuniting loved one.."** –
  185,000 people have registered on refugees United's family-tracing platform

- **"..redefining learning and education.."** –
  Coursera hosts over 200 online courses for nearly 1.3 million students.

- **"..and creating a world of conversations"** –
  Each minute, 100,000 tweets, 48 hours of youtube video, 680,000 items shared on Facebook.

It's about transforming industries

- **"..by disrupting established business models"** –
  Then: $10 = 1 CD, Now: $10 = Over 20 million songs streamed to your mobile device using spotify.

  Why shouldn't the car be connected? It's the ultimate mobile device.

- **"..and by creating new job opportunities"** –
  For every 1,000 connections, 80 new jobs are created.

- **"Broadband = Business"** –
  A 1 percentage point increase in broadband penetration increases new business registration by 3.8%.

The term Network Society describes several different phenomena related to the social, political, economic and cultural changes caused by the spread of networked, digital information and communications technologies.

The Networked Society will bring significant economic, social and environmental benefits to hundreds of millions of people.
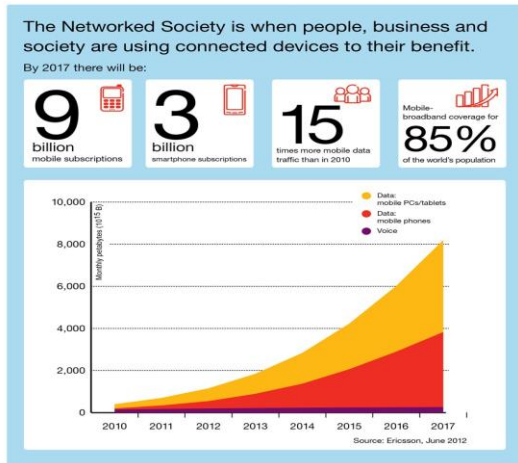
- **"It's about kick-starting economies.."**
  Doubling connection speeds yields a 0.3 percentage point increase in GDP.

- **"..banking the unbanked.."** –
  Up to one-third of Kenya's GDP passes through the mobile banking platform M-PESA.

- **"and helping solve some huge global challenges"** –

In 2020 ICT could reduce oil consumption by 21.6 billion barrels.
The Millennium Villages project has brought connectivity to over 500,000 people in 11 countries in Sub-Saharan Africa.

Transforming Our Society

It took 100 years to connect 1 billion places and only 25 years to connect 5 billion people.

Today, 91 percent of the world's communications, video dominates Smartphone and tablet traffic, and in a few short years more than half the world's population will benefit from LTE coverage.

So what does this mean for you? The Networked Society is about new ways for us to collaborate, share and get informed. It's about innovative ways of doing business and shaping the future together, as well as a renewed approach to global challenges such as education, healthcare, climate change and our use of natural resources.

Today, individuals and communities empowered by connectivity are driving fundamental change. Technologies such as broadband, mobility and the cloud are bringing us closer to our nearest and dearest and redefining established models for learning and education. Connectivity is transforming whole industries, creating new jobs and disrupting established business models. And by 2020, the Networked Society will have brought about significant economic, social and environmental progress to hundreds of millions of people.

Capturing opportunities

In the Networked Society everyone, everything and everywhere will be connected in real time. Our role is to help capture the opportunities that arise as a result of these developments. Whether it is through solutions for mobile broadband, managed services, operations and business support systems or the cloud, our platforms are driving innovation and sparking new consumer and producer behaviors, functionalities and even new business models.

Today, we are on the brink of an extraordinary revolution. A world that is connected in real time will place many new requirements on us while opening up opportunities beyond our imagination. Those who have the ability to rethink, reinvent and innovate will be winners in this new value-creating ecosystem.

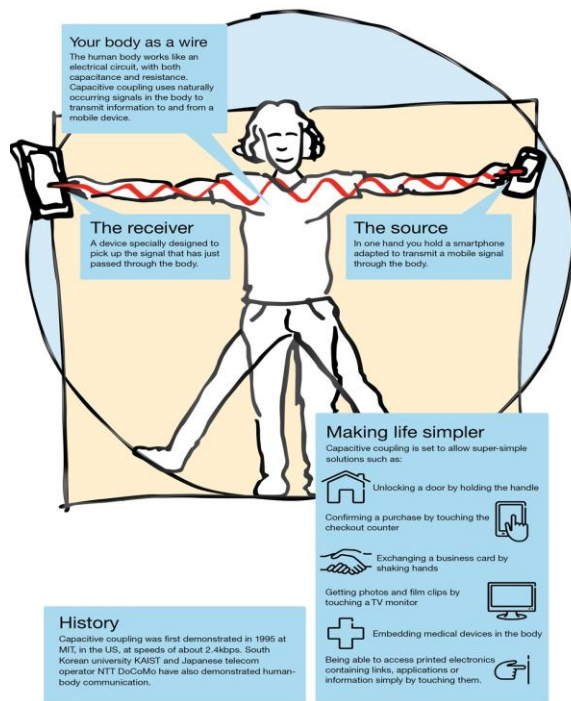## II. VISIONARY IDEA OF NETWORKED SOCIETY

A.   *Connected Me*

Imagine that your body is part of a network – able to transmit information, images and codes – simply by touching an object. This ability is now possible through a technology known as capacitive coupling.

The human body works like an electrical circuit, with both capacitance and resistance and through capacitive coupling it becomes possible to transmit data to and from a mobile device using the body as a cable. **Connected Me** is a concept for human body communication that will make life a whole lot simpler. Imagine unlocking a door by holding the handle, confirming a purchase by touching the check-out counter, exchanging business cards by shaking hands or connecting to a printer simply by touching it.
The ability to transfer data through touch represents the ultimate in super-simple connectivity.

Get to know how connected we are?

When the Body Becomes The Network..

The human body can be part of a communications network. Using a technology known as capacitive coupling, it is possible to transmit data from a Smartphone to another device instantly, and at high speeds.

B.   Window of Opportunity

We live in a world of glass. There are windows everywhere connecting you to the view outside, but how they were also a part of your networked life. **If today's ordinary windows became a part of the high-speed mobile broadband highway, making it easy for you to connect to your social network wherever you are? Imagine the opportunities…**

Window of Opportunity is an exploration project where ordinary windows are connected and act as connectors. **Using a transparent antenna, an ordinary window could easily become part of the mobile broadband network, boosting indoor coverage for a great mobile experience inside buildings**.

For commuters, public transport – say when riding the bus – is a time when we want super surf**. By connecting the bus windows, our commute to**

work becomes an effective, extended office or a haven where we can unwind with entertainment on our way home.

But why stop there? Clearly connected **windows offer a spectrum of new and exciting possibilities such as automated blinds and cloud control for ventilation, lights, and other household appliances**. The connected window presents opportunities to reduce building energy consumption and by adding transparent solar cells to produce electricity, these applications can power themselves and deliver excess energy into the smart grid. **Windows could be used as a whiteboard that captures what you have written and emails you the notes and much more.**

We are not talking about a distant future. This is about the ordinary windows all around us, connected by transparent antennas, unleashing numerous possibilities.

III.   DRIVING BUSINESS AND ENTERPRENEURSHIP THROUGH NETWORKED SOCIETY

"Connectivity in the future will change behaviors of people, society and business." - Hans Vestberg, Ericsson President and CEO, from the company's 2011 Annual Report

What does the Networked Society mean for business? From consumer behavior to new business models and processes, technologies such as broadband, mobility and the cloud are transforming many aspects of the global marketplace – in both developed and emerging economies.

The future of business

The landscape that our customers operate in is changing dramatically. In addition to managing and expanding their existing business, many organizations will increasingly need to engage in new business areas, such as cloud services and service ecosystems, as well as evolving toward serving enterprises in new markets. **Over the next five years, many sectors – including technology, telecommunications, entertainment, media, banking, retail and health care – will continue to be reshaped by the application of ICT to their business**. Fuelled by high-growth economies and new technology, the speed of business activity from product development to customer response has accelerated in the constantly changing global marketplace. **Real-time business intelligence and predictive analysis is required, not only for faster decision-making but to cope with unexpected market risks and opportunities**.

Examples:

- *M2M CONNECTIVITY BOOSTS BUSINESS*

Mobile broadband and machine-to-machine (M2M) connectivity are helping SCA – Europe's largest private forest owner and biggest hygiene and Paper Company – transform its business. With M2M connectivity, SCA is optimizing efficiency across its wide-ranging, forest-based operations with direct business benefits such as lower costs, higher productivity and better working conditions for its employees. SCA has also realized significant environmental benefits, including improved fuel efficiency, reduced waste and minimized use of chemicals.

- *FLEXIBLE CHARGING PUTS ELECTRIC CARS IN THE FAST LANE*

Rapid digitization has implications that go beyond the borders of traditional industries. Digitization of charging infrastructure, for example, is making it easier to deploy electric cars around the world, while at the same time optimizing the use of the power grid. Together with Volvo Car Corporation, Göteborg Energi and Viktoria Institute, we are building an ecosystem that allows drivers to control charging while their cars are plugged into any ordinary power outlet. Additionally, this system directs energy costs to the car owner's bill and allows a driver to set the time and amount to charge either on a console in the car or remotely via a Smartphone or tablet.

IV. CONCLUSION

When one person connects, their world changes. With everything connected our world changes.
Fear is an essential ingredient for change. As much as it can be a hurdle, the truth is fear is a big motivator.

V. REFERENCE

[1] Networked Society: Ericsson Blogs, Ericsson Docs
[2] Ericsson Mobility Report.
[3] Networked Society Essential Booklet

VI. ACRONYMS

ICT: information & communication Technology
SCA : Svenska Cellulosa Aktiebolaget