

THE NETWORKED SOCIETY

PER FREDRIKSSON PRINCIPAL





1 slide on Ericsson

The Networked Society – a Vision already in the making

The changing consumer & a new mindset

Opportunities & benefits for society



WORLD LEADING PROVIDER OF TELECOMS EQUIPMENT & SERVICES



- > 40 % OF THE WORLDS MOBILE TRAFFIC GOES THROUGH OUR NETWORKS.
- > 50 % OF ALL SMARTPHONES ARE ON AN ERICSSON NETWORK
- > THE NETWORKS WE SUPPORT SERVE MORE THAN 2 BILLION SUBSCRIBERS
- > BIGGEST SHARE OF R&D IN THE INDUSTRY
- > LTE CONTRACTS WITH 5 OF TOP 10 OPERATORS IN THE WORLD: VERIZON, AT&T, DOCOMO, VODAFONE





1 slide on Ericsson

The Networked Society – a Vision already in the making

The changing consumer & a new mindset

Opportunities & benefits for society



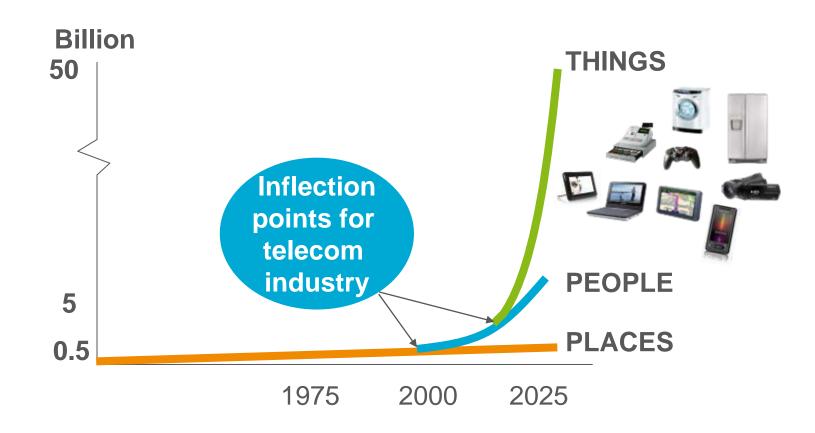


TODAY



EVERYTHING WILL BE CONNECTED AN INDUSTRY GROWTH STORY







EVERYTHING WILL BE CONNECTED

Drivers

- Entertainment, security, health
 - Productivity, new revenues
 - Sustainability, regulation





- Broadband ubiquity
- Declining cost of connectivity

Enablers



CONNECTED DEVICES



50 BILLION CONNECTED DEVICES 2020



3B middle class consumers x 10 connected devices 30B connected consumer devices



>100B embedded processors shipped (cumulative)



BUSINESS PROCESSES IN 2020

Self service applications, M2M communication and automation will transform business processes



ICT is critical to secure sustainable competitiveness







1 slide on Ericsson

The Networked Society – a Vision already in the making

The changing consumer & a new mindset

Opportunities & benefits for society





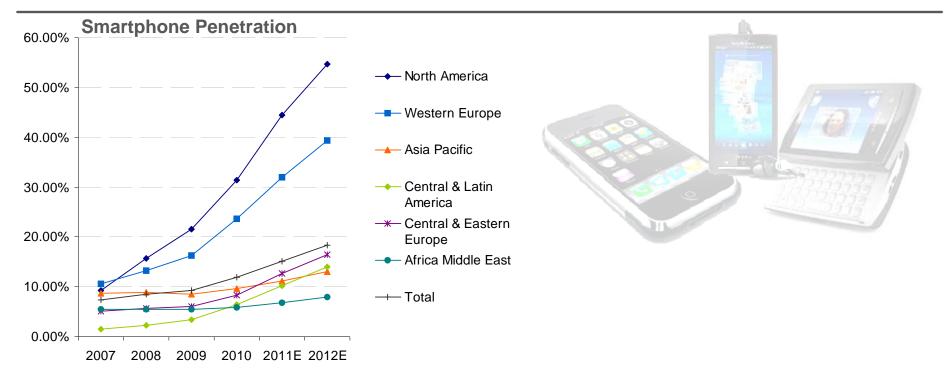
A REVOLUTION DOESN'T HAPPEN WHEN SOCIETY ADOPTS NEW TOOLS, IT HAPPENS WHEN SOCIETY ADOPTS NEW BEHAVIOURS.

Clay Shirky Associate Teacher for New Media at NYU



SMARTPHONE REVOLUTION

FLOODING THE MARKET AND BRINGING NEW CHALLENGES



In 2015 the smartphone penetration in Latin America will reach 35%.

VoIP applications over the smartphones constitutes a real challenge for operators.

THE APP PHONE EVEN MORE PERSONAL



THE OPPORTUNITY & CHALLENGE







"The App phone"

- Personal
- Vital functionality
- Metaphor
 - Keys
 - Wallet

- A reflection of self
- Access to my whole world
- Metaphor
 - Right hand
 - Mini-me

35 % of Smartphone users in US use apps before getting out of bed

18% check their Facebook status



CHANGING BEHAVIOR

DIGITAL NATIVES

CONNECTED 24/7

FAST DIFFUSION

ACTIVE

SHARING



MOBILE

TIME & SPACE INDEPENDENT

COLLABORATIVE

DIGITAL APPEARANCE



NEW MINDSET

MENTAL SHIFT

CHANGING BUSINESS

TECHNOLOGY













OPPORTUNITIES

NETWORKED SCHOOL

NETWORKED HEALTHCARE











NETWORKED UTILITIES





EXAMPLE: PROJECT K-NECT NORTH CAROLINA USA



- > Students are given smart phones with 24/7 Internet access which they can use at home or school.
- Students have full access to both the Project K-Nect curriculum, as well as the smart phone features including instant messaging, video and photo capabilities, calculators and Internet access

"The smart phone is like a teacher in my pocket." – Project K-Nect Student

"I can't go back to the way I taught before Project K-Nect." Project K-Nect Teacher







TELEFONICA EDUCARED

La Red de la Educación 2.0

Educación, Innovación, Colaboración







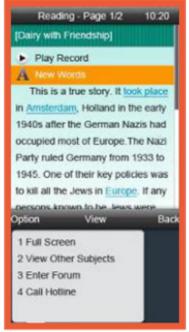
10.20

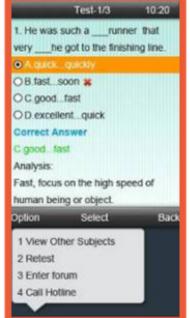
Back

EXAMPLE OF REACHING OUT

FOR STUDENTS







SCHOOL CURRICULUM

BRIEF COURSE

QUICK QUIZZES

FOR FARMERS



RELEVANT DOMAINS

SIMPLE SOLUTION

Full Screen

Page 1/2



WHEN AND WHERE MAKES A DIFFERENCE





1 slide on Ericsson

The Networked Society – a Vision already in the making

The changing consumer & a new mindset

Opportunities & benefits for society

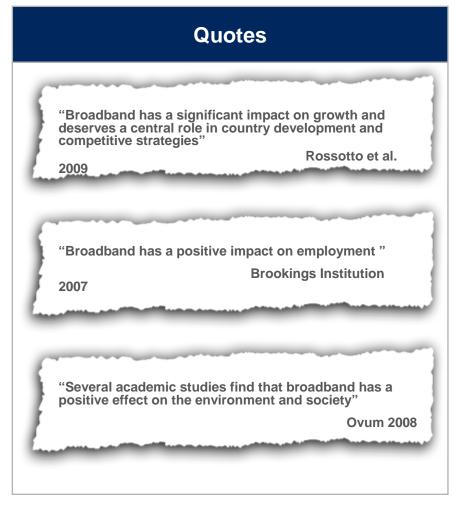


GENERAL CONSENSUS ON ICT BENEFITS



The vast majority of academic research points towards GDP growth partly contingent on broadband penetration





Source: Arthur D. Little research and analysis

ICT & TRIPLE-BOTTOM-LINE DEVELOPMENT



Main conclusions from the Ericsson study regarding ICT effects on society have been summarized in terms of economic, social and environmental gains

Not exhaustive

Economic benefits

- For every 10 percentage points increase in broadband penetration the isolated economic effect on GDP growth is around 1% of GDP
- For every 10 percentage points increase in mobile phone penetration the isolated economic effect on GDP growth is around 0,5% of GDP
- For every 1000 additional broadband users, roughly 80 new jobs are created
- Studies on government efficiency conclude that significant savings are made by transforming offline governmental services into online services

Social benefits

- Improved pupil attainment and educational performance
- Increased political participation
- Increased social interaction and communication
- Improved health (e.g. reduced infant mortality in developing countries)

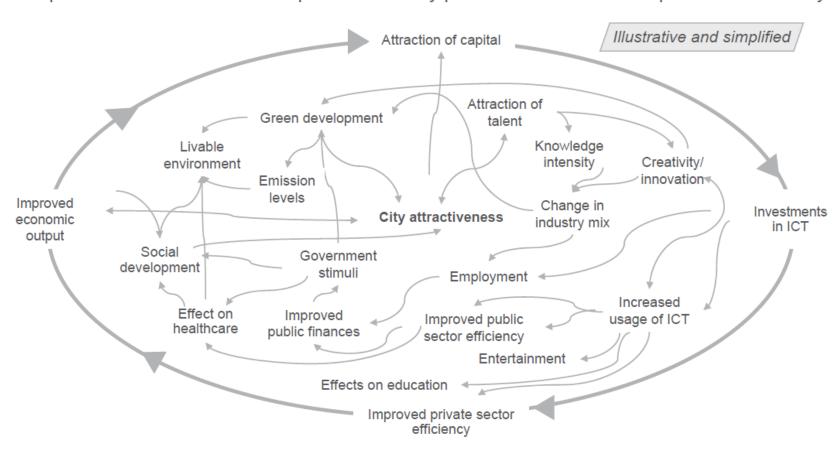
Environmental benefits

- Reduced energy consumption
 - E.g. Smart grid development for improved energy efficiency
- Reduced greenhouse gas emissions, pollutants and traffic congestion
 - E.g. intelligent traffic systems for congestion reduction
 - Improved possibilities for telecommuting

ICT & TRIPLE-BOTTOM-LINE DEVELOPMENT



The linkages between ICT and triple-bottom-line benefits form a complex web of interdependencies – effects in one part of a society produce effects in other parts of the society



JOINT FRAMEWORK ERICSSON & ARTHUR D LITTLE



A framework including three Networked Society Indexes has been developed – the "Networked Society City Index" is the first study performed in the series of three

City Index

The "Networked Society City Index" captures ICT maturity on a city level in combination with the triple-bottom-line leverage from ICT investments from an overall city perspective

2

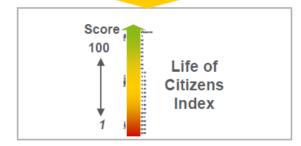
Life of Citizens Index

- The "Life of Citizens Index" captures ICT maturity on a city level in combination with the triple-bottom-line leverage from ICT investments from an individual perspective
- This Index is to be developed in a second step

Life of Business Index

- The "Life of Business Index" captures ICT maturity on a city level in combination with the triple-bottom-line leverage from ICT investments from a business perspective
- This Index is to be developed in a third step



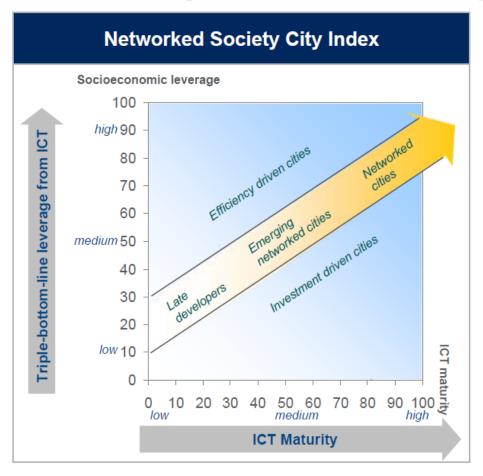






INDEX CONSTRUCTION

The Networked Society City Index is divided into five cluster groups where each city is classified according to its combination of ICT maturity and triple-bottom-line ICT leverage



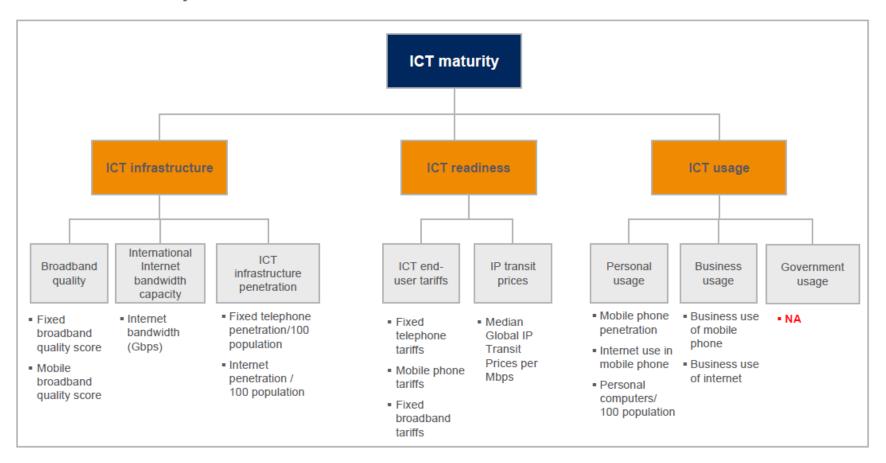
Comments

- The Networked Society City Index is divided into five cluster groups
 - Cities with high ICT maturity and high triplebottom-line leverage from investments are considered "networked cities"
 - Cities with lower ICT maturity, but with a balanced triple-bottom-line leverage are considered "emerging networked cities"
 - Cities with very low ICT maturity, but with a balanced triple-bottom-line leverage are considered "late developers"
 - A position above the trend line would indicate high focus on leveraging from ICT investments made ("efficiency driven cities")
 - However cities far to the left have probably underinvested in ICT
 - 5. A position below the trend line would indicate high focus on developing the ICT infrastructure as such ("investment driven cities")
 - Cities should as a next step focusing on leveraging from ICT development



MATRIX VARIABLES

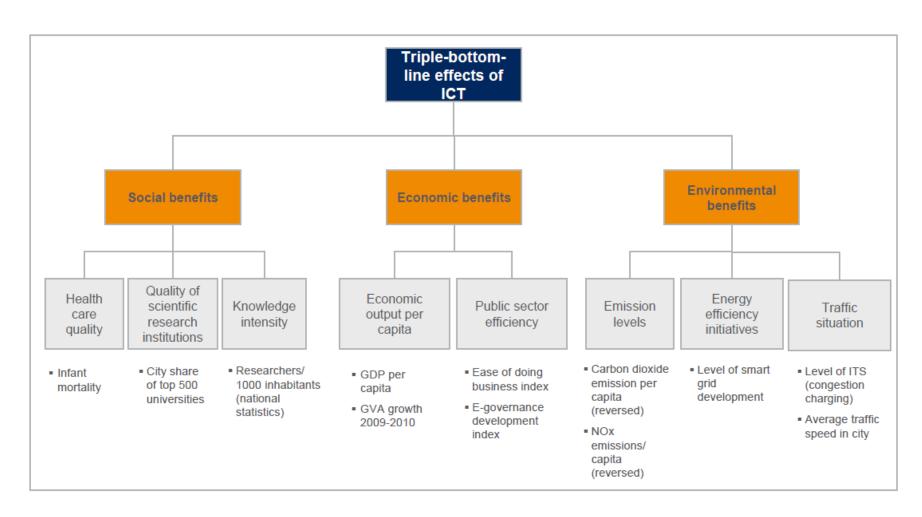
The basic ICT infrastructure index focus is based on a logic similar to the ICT development index on a country basis – however with increased focus on core ICT infrastructure indicators





MATRIX VARIABLES

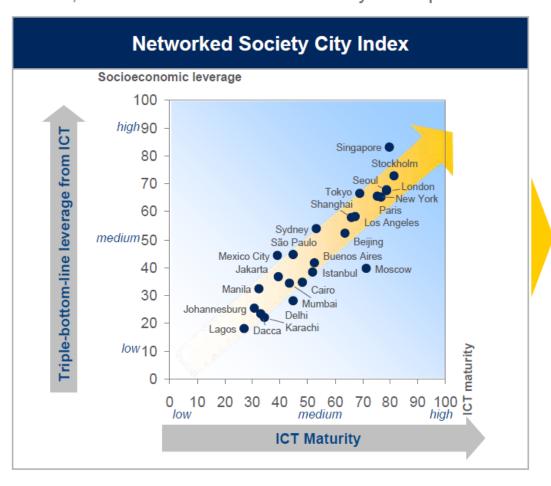
The City Index aims at measuring benefits for the entire city population



NETWORKED SOCIETY CITY INDEX RANKING



The results of the Networked Society City Index clearly shows that there is a strong, almost linear, correlation between ICT maturity and triple-bottom-line development



Conclusions

- There is a strong connection between ICT maturity in cities and their triple-bottom-line development
- The potential leverage from ICT investments is linear and does not decline with increased ICT maturity
 - This implies that even the most developed cities in terms of ICT maturity would benefit from continued investments in ICT

SINGAPORE : OBJECTIVE-> COMPETITIVE ADVANTAGE



in2015 < IMAGINE YOUR WORLD

Vision

5

Intelligent Nation and Global City powered by Infocomm

- innovation, integration and internalisation
- →enhanced National Competitive Advantage

THE IMPORTANCE OF STATE-OF-THE-ART INFRASTRUCTURE



in2015< IMAGINE YOUR WORLD

iN2015 Goals

V

#1 in the world in harnessing infocomm to add value economy and society

- 2 fold increase of the industry to S\$26 billion
- 3 fold increase in export revenue to S\$60 billion
- 80,000 additional jobs
- 90% home broadband usage
- 100% computer ownership in homes with school-going children



KEY FACTORS

in2015< IMAGINE YOUR WORLD

iN2015 Strategic thrusts

8

- Infrastructure
- 2. Industry
- 3. Pool of Talent
- 4. Cluster Transformation
- 5. Bridging Digital Divide



THE NEW ICT INDUSTRY



ERICSSON