

# Contact

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RANKINGS  
The biggest  
brands  
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Theme: ICT and education

# The school of the future

Digital solutions, changing roles for teachers, and increasing parental influence

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"I'm really excited"**

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M-HEALTH**

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Hilda Ericsson  
in a new light

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**ERICSSON**

# USER-DRIVEN BUSINESS

In some industries, companies have to persuade their users to adopt their innovations. For operators, it's the other way around.

We understand the complexities involved in mobile networks. With that expertise, our customers can continue to satisfy the demands of their users.

x10  
MOBILE DATA TRAFFIC WILL GROW TENFOLD BY END OF 2016.



Skolkovo Innovation Center  
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## Contact

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## Embracing our natural role

**A**t the end of March, I had the privilege of being one of the judges for the Boston University Business Case Competition. In this annual contest, 64 students from 16 prestigious business schools have 24 hours to come up with a business case based on a specific topic. This year, the participants had to prepare a proposal for how Ericsson could help develop and improve education in the Networked Society. We were also looking for specific examples of how the company could generate income from education-related solutions and products.

It was no easy task, particularly given the tight time frame. But I was amazed by the students' enthusiasm and their knowledge of Ericsson, our vision and the Networked Society. Several of the business cases were well thought through, and provided valuable input we can build on.

The ease with which young students use smartphones, tablets and notebooks in their studies always impresses me. The technology gives them the opportunity to find information and interact with teachers and fellow students in a completely new way. This also requires a stable and powerful mobile network – just one of the reasons I see a natural and obvious role for Ericsson in the society of the future.

I have just returned from this year's Leadership Summit, during which the company's new strategies were set. The September issue of Contact will come complete with a special supplement summarizing Ericsson's goals and how we will reach them together.

But you can already find out about some of the most important messages delivered. Watch the latest Contact Play video on the intranet that summarize this year's Leadership Summit. It will only take you a few minutes, and will be time well spent. Work becomes more meaningful and more fun when we all understand the direction in which the company is heading.



**Helena Norrman**,  
Head of Group Function  
Communications

## Have your say

E-mail us your questions, opinions, reflections or work-related images. We will publish a selection of the material on this page. [contact.comments@ericsson.com](mailto:contact.comments@ericsson.com)

### CORRECTION

In #1/2012 on page 5, there is an error in the second diagram, MPLS Domain, where it states that "The packets arrive at their destination quicker and in the same order as they were sent." However the order of the colored boxes (packets) is wrong: it is shown as yellow, brown, pink when, I assume, the correct

order should be brown, yellow, pink (as they were sent entering the MPLS domain).

Pravind Menon, Germany

**ANSWER** Thanks for your comment. You are correct.

Editorial

### PHOTO COMPETITION

How can I participate in the Best Photo competition?

Shailesh Kumar Verma, India

**ANSWER** Just send your photo to: [contact.comments@ericsson.com](mailto:contact.comments@ericsson.com).

Tell us where and when you took the

photo and describe what we see on the image.

Editorial

### CHALLENGE US!

Would you like to test your colleagues on their knowledge of telecoms? Then get in touch with us. We would like you to contribute with innovative and tricky quizzes for the back pages of the magazine. The rules are simple. Read more here: [http://internal.ericsson.com/page/hub\\_inside/news/magazines/contact/readers\\_quiz.jsp](http://internal.ericsson.com/page/hub_inside/news/magazines/contact/readers_quiz.jsp)

Anders Milén, Sweden

Editorial

### Readers' pictures



I took this picture from a bridge, Stallbron, in Stockholm one evening in February on my way home from work. You can see Stockholm City Hall and the Vasabron bridge.

Anders Milén, Sweden



Snow at Ericsson. Photo taken at the Ericsson building in Jorvas, Finland.

Kiran Kumar Bathula, Finland



Picture taken with my X10 while leaving home for a bike training ride at 5:30am in Montreal. Funny how we forget to look up at the sky.

Fabio Testte, Canada

PHOTO: SUSANNE LINDHOLM

## Welcome ...



### to Ericsson, Sara Sandberg

... who began working at Ericsson Research in Luleå in September 2011 and works with LTE signal processing. She came to Ericsson from Luleå University of Technology, where she worked as a research assistant after successfully defending her thesis on error-correcting codes the previous year.

#### How was it, getting started in your new job?

I've had plenty of new things to learn, but I've enjoyed it a lot, and it's all related to what I've done before. And here, unlike at the university, a lot of people are working with similar things, and that means there's always someone I can discuss things with so

progress can be made.

#### Why did you choose to work at Ericsson?

I was made a very interesting offer to work here, and I have a friend who has worked here for a while and highly recommended it. That was an important factor too.

### Web poll

# 75.5

... percent of 281 Ericsson employees consider video-conferencing to be an appropriate alternative to physical meetings.

Source: Intranet

## Have you been asked ...

## ... ABOUT M-HEALTH?

### Mobile healthcare

Such services can help detect early signs of deteriorating health, which means people with serious illnesses such as heart failure, chronic obstructive pulmonary disease (COPD) or diabetes can avoid time-consuming hospital visits. Here are some m-health solutions and applications that can make life simpler for patients and health-care staff.

#### Example: m-health for patients with heart failure

**1.** To improve heart-failure care, patients can take several physiological readings on a daily basis and answer simple questions about how they feel.

**2.** To avoid daily visits to the hospital, patients are given blood-pressure monitors, scales and electrocardiographs (ECGs). All of the devices are mobile and are connected to enable transfer of data straight to the hospital.

Data can be transferred from the medical devices:

- via Bluetooth or ZigBee over a smartphone or another connected gateway
- via built-in mobile-communications modules
- by patients entering their health readings manually.

Patients can communicate with the health-care provider in several other ways, such as via:

- a web interface
- tablets
- TV
- special home terminals for m-health.

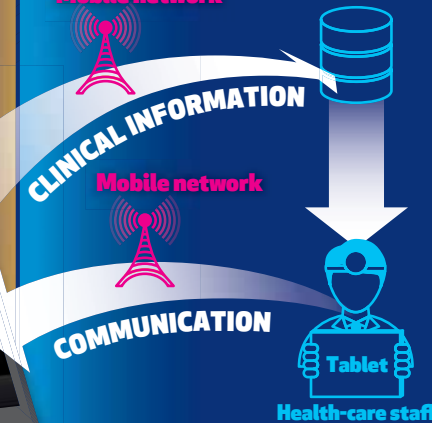
#### IN THE HOME

**3.** Patients use smartphones to view their health readings and to communicate with the care provider via a voice or video call.

#### AT THE HOSPITAL

**4.** Information about the patients is stored in the health center's electronic health record system. Data can also be stored in patients' personal health records.

Mobile network Database



**6.** A nurse or doctor contacts the patients via telephone or video if their condition changes, or if the level of health-care provision needs to be changed.

**5.** Health-care staff check patients' health readings regularly via a web interface.

#### Other m-health applications include:

##### Connected medication packages and pill organizers

- these remind the patients to take their medicine, and they produce audible alerts if the patients forget

##### Examples of smartphone applications:

- "doctor in your pocket" services, which allow patients to get advice and help from a doctor who can give medical advice electronically

- fitness and wellbeing apps that are designed for preventive health care, working out and fitness training in general
- apps and programs facilitating behavioral changes, such as giving up smoking, changing diets or exercise programs.

#### Advantages of m-health

- + Improved care and quality of life
- + Reduced health-care costs and increased productivity

09.30am, May 29, Ericsson Studio, Kista, Sweden



### Winners check their health

Isabel Hernqvist, Josefine Myrberg and Anna Olsson were among the winners of this year's Finn Upp innovation competition for schoolchildren, for which the main sponsor is Ericsson. Part of their award was a guided tour of the Ericsson Studio. Here, they are seen trying out the Withings app, which involves using a blood-pressure cuff and a tablet or smartphone to quickly check your blood pressure or pulse rate, for example.

PHOTO: PER MYREHED

► Read more about the Finn Upp winners and their entries on page 8.



PHOTO: MERVE KARAHAN/ISTOCK

## Facebook opens App Center

**WORLD WATCH** Facebook will soon open its app store, called App Center. With this initiative, Facebook will be competing for the first time with Apple's App Store, Google Play (the former Android Market) and Microsoft's Windows Phone Marketplace. Unlike these stores, App Center will offer apps for both the Apple iPhone and for Android mobiles, reports the Swedish IT newspaper Ny Teknik.

## Veteran heads Europe digital executive

**ASSIGNMENT** Ericsson's Peter Olson, head of the European Affairs Office in Brussels, has begun a two-year term as president of the executive board of digital industry body DIGITALEUROPE. Olson, a 25-year Ericsson veteran, has worked in senior positions in Sweden and around the world, particularly in product portfolio management, and sales and marketing.

## App awards a hit

**COMPETITION** Healthcare, painting and chatting apps garnered the top prizes in the 2012 Ericsson Application Awards (EAA), for which the winners were announced on May 22. In all, 143 teams from more than 50 countries took part, and a total of 242 ideas, videos and apps were submitted—twice as many as last year.

Source: internal.ericsson.com



PHOTO: PER MYRBERG

Isabel Hernqvist, Josefine Myrberg and Anna Olsson won Ericsson's prize in this year's Finn Upp innovation competition, and part of their award was a guided tour of the Ericsson Studio. Here, Mats Guldbrand at Ericsson Studio is demonstrating how you can run your home from a distance, switching off the lights remotely, for example.

# Young inventors solve everyday problems

**Smart ideas have won three young people the Ericsson award in the Finn Upp competition. Their inventions include a lead that transfers battery power between mobile phones and a solution that makes it safer for people to cross busy roads.**

**COMPETITION** Isabel Hernqvist, aged 13, from the Carlsson School in Stockholm, Sweden, came first in the competition with her solution that enables people to cross roads more safely.

"I came up with the idea when I was coming home from a visit to my grandmother with my family one evening," she says. "It was dark and hard to see people who were trying to cross the road. I thought

something needed to be done about that."

Her idea involves attaching movement detectors to signs beside crosswalks. When someone approaches the crosswalk, a light comes on warning motorists to reduce their speed. The solution is powered by batteries that are solar-charged during daylight hours. If the solar power gives off insufficient energy, a reserve battery does the job instead.

The other two winners, 15-year-olds Josefine Myrberg and Anna Olsson from the independent Ebba Petterson School near Gothenburg, Sweden, came up with a lead that makes it possible to transfer power from one mobile-phone battery to another.

"We heard about Finn Upp during a technology lesson, and we knew at once what we were going to do," Myrberg says.

### Fully-charged

"Many times when we've gone into town, one of us has had a mobile phone that hasn't been sufficiently charged, while the other has had a fully-charged phone. We'd thought about someone inventing a lead so you can

charge a mobile phone via another mobile. Finn Upp gave us the opportunity to do this ourselves."

On May 29, the three winners visited Ericsson's headquarters in Kista. The program included breakfast with Ulf Wahlberg, Vice President of Industry and Research Relations, a guided tour of the Ericsson Studio and a visit to Ericsson's Master and Industrialization Center.

☒ Maria Nilsson

**FINN UPP** is organized by the Swedish Society of Engineers and the Swedish Inventors' Association with the aim of raising interest in technology among young people. The competition is held every three years and is aimed at young people between the ages of 12 to 16. The awards ceremony was held in Stockholm on May 28. Ericsson handed out its own award as the competition's main sponsor.

# Hackathon a success

**The first Ericsson India Global Services (EGI) Hackathon proved a success, with more than 300 employees taking part.**

**EVENTS** A hackathon, drawn from the words "hack" and "marathon," is an event for intense collaboration on software development. The 24-hour hackathon, held on April 26-27, was conducted across the two Business Unit Support Solutions (BUSS) R&D centers in India (part of EGI), at their offices in Chennai and Gurgaon. The initiator of the event, Paul Mathews, Head of Systems Technology and Research at BUSS R&D India, says it was a great success.

### Many ideas

"We had an overwhelming tally of 95 ideas, 80 of which were success-

fully demoed at the end of the event," he says.

A pillar of BUSS' strategy is software house transformation, and that was the starting point when planning the event, Mathews says. "I looked into what the characteristics are of a modern, cutting-edge software company, such as Google and Facebook, and found that the key is giving people the license to experiment."

### Nervewracking

Gopinath T Panneerselvam, a systems leader who took part in the hackathon, says: "It was an intense and nerve-racking experience to meet the deadline and bring ideas to life. It's a wonderful way to encourage new thinking. I'm looking forward to it again next year."

The Hackathon was launched on April 2 with



PHOTO: MANIVANNAN

More than 300 people took part in a hackathon held by Ericsson India Global Services on April 26-27, 2012.

a "flash mob" event, staged as a fire drill, which, to the bystanders' surprise, suddenly broke into a group dance. The days following the launch, up to the actual event, were packed with activities to

encourage the spirit of innovation. These ranged from daily quizzes and inspirational videos to short daily tutorials on multiple technology topics.

☒ Benny Ritzén



PHOTO: HANS BERGGREN

## Three top inventors named

**COMPETITION** The Inventors of the Year were honored with flowers, certificates and EUR 5,000 (about USD 6,500) each in Ericsson shares at Ericsson's Annual General Meeting 2012, held in Kista, Sweden, on May 3. From left: President and CEO Hans Vestberg; Thomas Cheng from Ericsson Research in San José, US; Iana Siomina from Ericsson Research in Kista; Paul Schliwa-Bertling from Ericsson Product Development Unit GSM RAN in Linköping, Sweden; and Chief Intellectual Property Officer and Head of IPR & Licensing, Kasim Alfalahi.



PHOTO: SAMSUNG.COM

## Samsung takes mobile-phone top spot

**HANDSETS** Samsung became the world's largest mobile handset vendor during Q1 of 2012, knocking Nokia out of the top spot that it had held since 1998, Gartner reports. Samsung sold 86.6 million phones, up 25.9 percent on the same period last year, and snatched the smartphone lead back from Apple. Apple and Samsung, the top two in smartphones, held a combined share of 49.3 percent.

### WORLDWIDE MOBILE DEVICE SALES (THOUSANDS OF UNITS)

Samsung	20.7%
Nokia	19.8%
Apple	7.9%
ZTE	4.2%
LG	3.5%
Huawei Device	2.6%
Motorola	2.5%
Research in Motion	2.4%
Sony Mobile Comm	1.9%
HTC	1.8%
Others	33.3%



... percent of 15- to 69-year-olds living in cities around the world own a smartphone, according to City Life, a new report from Ericsson ConsumerLab. The statistic is based on a survey conducted in 13 cities, from Los Angeles in the west to Tokyo in the east.

# 3 HAVE THEIR SAY

At NEST (The Networked Society Forum), held in Hong Kong November 11-13, we asked these people the following question: would you like to see the internet used more in classrooms?

► Sunny Misun Jo, Seoul, South Korea



"Our society is built on the internet. Young people

are online all the time and this can be a great way for teachers to engage them. But it all depends on the networks – for example, streaming educational videos is a much more positive experience if the right infrastructure is in place."

► Jack Mikrut, Brisbane, Australia:



"The internet means that kids can learn more outside

the classroom, too. They can take classes from anywhere and assume more responsibility for managing their own time. Internet makes it easier for learning to be more in tune with everything else."

► Marcia Goraieb, São Paulo, Brazil:



"There are questions we need to answer before we bring the

internet into every classroom. How do we structure internet-based learning experiences, and how can we teach children to discriminate between useful and useless information?"

☒ Nick Smith



PHOTO: AMY PARTON

Anita Newman will carry the Olympic torch on the 300m stretch through Riverhead in Kent on July 20. She is pictured here, in front of the Olympic Park in London.

## All set to carry the Olympic flame

**Chosen by her colleagues, Anita Newman will take up the Olympic torch on July 20 and carry it through the village of Riverhead in the county of Kent in the UK, ahead of its final destination – London's Olympic Park.**

**PORTRAIT** When Ericsson in the UK asked its employees to nominate colleagues for the honor of carrying the Olympic torch, the response was outstanding. Anita Newman, Head of Portfolio Management, Engagement Practice, Region Western & Central Europe, received the most votes. Despite having endured grueling treatment for breast

cancer, she has not only continued to work – she also inspires her colleagues with her boundless energy and positive approach to life.

"I'm really excited," she says. "Since my cancer diagnosis in 2010, I've just tried to carry on as me, the strong-willed, sometimes stubborn person I've always been."

### Inspire others

Immediately after her diagnosis, Newman decided to carry on working while receiving treatment, to give herself something other than her illness to think about. She took part in a conference call the day after she left hospital, and is pleased that she

has been able to schedule almost all of her hospital visits outside working hours.

Because of her experiences, Newman was inspired to raise money for charity by organizing and taking part in various events and activities – and her colleagues have joined her in these efforts. For example, she plays the trumpet in the March for Life Band with about 50 other female musicians, and so far, they have raised more than GBP 25,000 (USD 40,000).

How do you feel at the moment?

"Really well. I am now being treated by a large team of medical professionals who

regularly monitor my body for all the main cancers, since I was recently diagnosed with Cowden syndrome, a rare disorder that means my body is more likely than others to produce tumors."

Newman is grateful to her manager and the Ericsson HR department for the fantastic support she has received.

"When we fall ill or have major problems, we often worry about sharing these with our employers, wondering if they will have an adverse effect on our jobs," she says. "But from the moment I told my boss and HR, I've had nothing but support."

☒ Maria Nilsson

# Zhiming Xu tackles fraud

**Fraudulent mobile services are a major problem in China. Zhiming Xu, from Global Services Center China, developed two software packages that helped one of Ericsson's most important customers.**

**SECURITY** "Hello! This is not a solicitation. We have an important message for P-I-N-G Wu (first name spelled out). If this is P-I-N-G Wu, Press 1 now!" (After pressing 1)

"For your security, please enter the last four digits of your identity number!"

It sounds official, but it's not. Welcome to the world of mobile-phone phishing, a problem which unfortunately is a familiar one for many mobile subscribers in China, often in various other forms than the one above.

Xu, a Senior Services Engineer at Ericsson says that everyone in China is suffering from this kind of traffic.

"Sometimes their mobile phone rings once or twice, then it stops, and when you call back



PHOTO: GETTY IMAGES

Zhiming Xu in Beijing, China.

there is some kind of trick. I was interested to see if there was something that could be done."

### Cloned SIM cards

Xu contacted China Mobile with a view to developing software that could detect the kind of abnormal traffic that bears the hallmark of phishing attacks. This software could then

identify the subscribers who generated this activity.

But Xu's contribution to fighting mobile-phone fraud doesn't stop there. He has also developed software to combat another kind of crime, cloned SIM cards, which enable criminals to make phone calls at the expense of the registered SIM-card user.

Xu developed this

software in collaboration with Guangdong Mobile Communications Co. Ltd GMCC, a subsidiary of China Mobile. The software specifies certain conditions connected with cloning, and when these are breached, triggers an alarm. The operator can then investigate whether or not the card has been cloned.

For Xu, who has been working at Ericsson since 2000, neither of these projects fell within his job description.

"I was just interested in these kinds of issues and tried my best to help the operators, our customers," he says.

☒ Simon Richardson

► Also read the article "Watch out for the cyber-criminals" on the intranet.

### Phishing

**PHISHING** is a way of attempting to acquire information (and sometimes, indirectly, money) such as usernames, passwords, and credit card details by masquerading as a trustworthy entity in an electronic communication.

Source: Wikipedia

## IPV6 IS HERE TO STAY

**INTERNET** IPv6 is now here, and here to stay. That is the message from the Internet Society, which organized the World IPv6 Launch on June 6.

The launch follows up on worldwide IPv6 Day last year, when leading vendors such as Ericsson, operators and ISPs demonstrated that their systems supported the new internet protocol. The Internet Society billed this month's event as the moment IPv6 was permanently enabled

across the world's networks.

IPv6 was largely developed to address the fact that the world is running out of IP addresses. The old IPv4 emerged at the birth of the internet in the early 1980s, when the pioneers decided to use a 32-bit system that allowed 232 addresses – around 4.3 billion of them. That was thought to be more than enough. But even by the end of the 1980s, it was becoming clear that it was not enough.

While IPv4 uses 32 bits, IPv6 uses 128, providing 2128 addresses – about 3.4 × 1038.

Both protocols will be in operation in parallel, with translation required to bridge between the two.

IPv6 is now going live around the world. For example, T-Mobile announced in late April that it had turned on IPv6 for good in its US mobile network.

☒ John Ambrose

## Tablets take over

**GADGETS** Tablet computers will overtake smartphones as a source of website traffic by early next year, a new study predicts. The new Adobe Digital Index report says tablets' share of website visits grew 300 percent over the past year, and around 10 times faster than the growth in smartphone traffic within two years of market introduction. It credits this growth to higher rates of tablet shipments and a higher number of website visits per tablet than smartphones, adding that tablets are set to account for 10 percent of total website traffic by early 2014.

Source: marketwatch.com

## NBC chooses Ericsson

**SUMMER OLYMPICS** American broadcaster NBC will use Ericsson video processing solutions to deliver top-quality HD content from the London Olympics. The Ericsson solution will ensure the highest picture quality from the Olympic venues to millions of viewers in the United States. Products include MPEG-4 AVC encoders, professional receivers, multiplexers and satellite modulators as well as a team of support engineers in London and New York.



... USD was the offering price of one Facebook share in the IPO on May 18. That price valued the company at USD 10.4 billion. When this magazine was sent to print the price for the Facebook stock was USD 32.

Source: Nasdaq



## Text your guardian angels

**DAY-TO-DAY SERVICES** A new smartphone app uses text messages to make sure people get home. WalkMeHome, available for Android and iOS, combines GPS and text messages. When activated, the system sends messages, giving the user's location to up to five "guardian angels", then updates as the user travels home. On arriving home, the user deactivates the service, sending an update to the "angels".

## Recycling: a data danger

**SECURITY** Remember this: pressing "delete" does not remove data from a hard drive or memory stick. Britain's Information Commissioner's Office found that one in 10 secondhand drives could contain traces of personal information. Examining 200 hard drives, 20 USB memory sticks and 10 mobile phones bought via online auctions and trade fairs, the ICO found 34,000 files with corporate or personal information, including client and staff information from four organizations.

Source: The Inquirer

**130**  
... percent predicted mobile penetration in Latin America by the end of 2015, according to Pyramid Research. The figure was 100 percent at the end of 2009.



PHOTO: JOHAN-GABRIEL FRITZ

By developing smarter ways of working, and having more control interventions work in parallel, Milan Basic, who is Head of the efficiency program COFFEE, and his colleagues have reduced the verification time spent on a number of products.

# A brisk mug of efficiency

**Product Development Unit (PDU) Hardware in Ottawa, Canada has cut its product development time by 20 percent in projects started after December 2011. The secret is Change Operations For Future Excellence (COFFEE).**

**SAVINGS** The program, now under way at PDU Hardware, Business Unit Networks, is an initiative to improve efficiency in radio development. The aim is to reduce development time by 30 percent by the end of 2012. However, substantial time savings have already been made in ongoing pilot projects. The fundamental idea behind the program is to eliminate waste in the product development process, says Milan Basic, Program Manager for the COFFEE Program.

"In other words, we stop using work processes or design elements that do not provide any value to the customer." Work is guided by a concept called "critical requirements," which means that the developers start with a minimum number of requirements at the beginning of product development, without compromising on quality. Specific employees and managers are designated as "change agents," to evaluate ongoing projects with an eye on whether or not work processes add value. Teams regularly gather in an area known as "the coffee corner" to visualize progress as well as the next steps in the program.

**Small PDU** Basic says that one reason the program has been so successful is that

the PDU is relatively small, so changes have been easy to implement. "And since the unit was transferred to Ericsson from Nortel Networks relatively recently, there is a general openness to change," he says.

In concrete terms, the program has been used to reduce the total verification time for a number of

products by developing smarter ways of working and having several verification units work in parallel.

Participants in the COFFEE Program are now sharing their ideas with employees in design centers at Ericsson product development sites around the world.

Johan-Gabriel Fritz

## THE COFFEE PROGRAM

**ABOUT 130 EMPLOYEES** at PDU Hardware at BNET are located in Ottawa, Canada. The unit was transferred to Ericsson from Nortel Networks about two years ago. Its main activity is the development of hardware for RBS. The COFFEE Program started in December 2011 and is being applied to radio development programs on the site. The program incorporates elements from lean and agile ways of working, and includes the following guiding principles:

- ▶ active leadership and active follow-up
- ▶ tangibility
- ▶ commitment
- ▶ simplicity
- ▶ ... and a lot of fun.



PHOTO: BUKOWSKIS

## The phone that fetched a fortune

**LOOKING BACK** One of Lars Magnus Ericsson's first telephones with a signal trumpet receiver was recently sold at auction for SEK 196,000 (about USD 28,400). The seller was a private individual who once worked for Ericsson.

Just over 20 phones with a signal trumpet were manufactured in 1878. The newly sold phone is one of those. According to Erik Ingare, who is a specialist at the auction house Bukowskis, it is very rare to come across these phones on the open market.

"This is part of Sweden's technology history, as well as a beautifully crafted piece to look at," he says. "Back in those days, the phone was regarded as a status symbol, and was made of exclusive materials such as mahogany and gilt work.

Källa: Centrum för näringslivshistoria/Bukowskis

## "We would rather keep the customer than lose them to other products and services."

Telefónica announces TU Me, an app that lets smartphone users call and send messages using their data allowance, not their call minutes or texts.

## COMPETE AND WIN A PRIZE!

**COMPETITION** How carefully do you read Contact? The answers to the three questions below can be found in this issue of the magazine.

1. What's the name of the program that will help a product development unit in Ottawa, Canada to cut its product development time by 20 percent?
2. What's the name of the Ericsson-led forum that focuses on ICT and education and was held in Hong Kong last year?
3. What's the name of the place where Russia is building its answer to Silicon Valley?

**Write your** answers after each question in an e-mail, put "competition" in the subject field



and send your entry to contact.comments@ericsson.com no later than August 20. The winner will receive a copy of the Ericsson book Changing the World. If we receive several sets of correct answers, the name of the winner will be drawn from a hat. Good luck!

**The winner** of the last competition was Berit Ladra, Sweden. Answers to last month's quiz:

1. To give employees a smooth introduction to the company
2. Internet use has quadrupled since 2004
3. 1981

## Collaborations with universities

- **Ericsson collaborates with institutions and researchers all over the world to study mobility and connectivity and their impact on people, business and society.**
- **Live online learning.** Coventry University in the UK and Ericsson will make it possible for teachers to give live lessons to up to 500,000 students online.
- **Reflect on patterns.** Ericsson and Massachusetts Institute of Technology's (MIT's) SENSEable City Lab aim to reveal patterns of human behavior by looking at volumes of mobile-data traffic. The collaboration will show that networks are among the tools that can be used to help us reflect on and better understand ourselves.
- **Innovating education.** The annual International Tech Strategy Business Case Competition, which is hosted by Boston University School of Management and sponsored by Ericsson, challenges students to help solve real issues that face global technology leaders.
- **Co-funding research.** Service innovation is becoming increasingly important for business growth and competitiveness. Over three years, Ericsson will co-fund and participate in research at Karlstad University that focuses on innovation in long-term customer relationships in Sweden.

## Hello...



PHOTO: BUKOWSKIS

... **Erik Ingare**, Specialist at the Stockholm auction house Bukowskis, who recently sold a phone with a signal trumpet made in 1878 for SEK 196,000 (about USD 28,400).

### How common is it for old phones to be sold at auction?

"Fairly common, but these tend to be mainly simpler models such as wall-mounted phones from the late 1800s and early 1900s."

### Which phones are the most valuable?

"The slightly earlier models. The 'coffee grinder', which was patented in 1895, can cost up to SEK 100,000 (about USD 14,500) if it's in good condition. The Skeleton Type or 'Dachshund' with an angled arm that could be pivoted will usually sell for SEK 40,000-50,000 (about USD 5,800-7,200). Among the foreign models there are expensive, sought-after early phones from Canadian Bell (Canada), Siemens & Halske (Germany) and desk phones from Elektrisk Bureau (Norway)."

### Who buys them?

"Collectors all around the world. Some of the main collectors are in Sweden." **What's the most expensive phone you've ever sold?**

"An extremely rare 'Dachshund', which we sold in 2006. Made in 1892, it is embellished with details in gold, silver and ivory. It went for SEK 300,000 (about USD 43,400)."

© Maria Nilsson

Geoff Hollingworth is Head of IP Services Strategy for Region North America, and one of seven Networked Society evangelists from across the company. Their mission is to spread information and knowledge about the Networked Society internally and externally.



**INTERVIEW: GEOFF HOLLINGWORTH**

**The Networked Society** is Ericsson’s vision of the future, and it will change the way people think and do everything. **Geoff Hollingworth**, who is one of Ericsson’s Networked Society evangelists, says the company is now at the center of a revolution.

**“We will rethink everything”**

**How would you explain the Networked Society to someone who has never heard of it?**

Like the Industrial Revolution, the Networked Society is one of those major societal shifts that fundamentally change the way we live and work. It is hard to get your head around this, because we tend to believe that today’s world is already quite advanced. However, even if we are doing things today that were possible only in Star Trek just a few short years ago, we still haven’t seen anything yet. A world where everything is connected, in real time, is a very different world from the world we live in today.

**So, how far have we come in this development?**

Right now we are at a turning point. It took 100 years to connect 1 billion people, but only 25 years to connect 5 billion people. We believe that by 2020, more than 50 billion things will be connected – and all of them will be “speaking” and “listening” to each other. What if your car could tell you it wasn’t feeling well before it had its “heart attack”? What if your own body could do the same? In the Networked Society, we will rethink everything and revisit all our subcon-

scious habits, that perhaps should no longer exist.

**What is Ericsson’s role in this?**

Our role is the same as it was when the company started: to power and scale the performance architectures and operations that are required for an all-communicating world. At the start of the mobile revolution we were able to ensure, end-to-end, that you could place a call on your mobile phone and it would go through to the person you called. It was magic and it worked. In the Networked Society, everything will communicate and again it will be magic and it will work – and everyone there with us will share in new business models and new opportunities.

**Who benefits from these opportunities today?**

Today, we are enabling our customers to deliver and scale high-performance services on a level that wasn’t possible before. We need to continue to maintain a close dialog with them about their business models and the possibilities that the future will hold. Take our cooperation with Maersk and A.T.T., for example. This is a case where we are helping the shipping industry use mobile communications to employ

new and efficient ways of addressing fleet management and even improving energy efficiency.

**What investments has Ericsson made in building the Networked Society?**

To a great extent, the reason we play such a central role in this change is due to our investments in mobile broadband. And if you cannot manage mobility and the cloud together, the foundation of the Networked Society will not work. This is why our partnership with Akamai and our recent acquisition of Telcordia are so important. Our leadership in Operations and Business Support Systems and our Global Services capabilities mean that we are well positioned to build, support and optimize future, network enabled clouds.

**Why is it important for us to talk about this?**

The Networked Society is one of the best visions in the industry, and even though it has not really started yet, it still gives us a platform to rethink what is possible and to create new ways of doing things. By engaging in this dialog, we can discover the future before the future discovers us.

Text: David Francisco Photo: Getty Images



# ICT & EDUCATION

Schools are facing a **paradigm shift**, according to a new Ericsson ConsumerLab report called the Future School Project. The **Networked Society** has given rise to a completely new approach to knowledge, the increasing influence of parents, and a change in the role of the teacher.

## Schools enter a new age



SANTIAGO, CHILE,  
SOUTH AMERICA

**C**hildren are kicking a ball around in the schoolyard at Colegio y Centro Comunitario San Luis Beltrán in Santiago, the capital of Chile. The school lies in the western outskirts of the city in the district of Pudahuel, which is perhaps best known to the rest of the world for its international airport. But in educational circles, San Luis Beltrán is well-known for having integrated ICT into children's education for many years.

Inside the two-story brick school building, groups of students make their way to their respective classrooms. One class has gathered outside the

biology lab, while inside the robotics lab, teacher Hector Reyes is helping his students build and program a robot that uses computers and webcams to move about and avoid obstacles.

**Farther along** the corridor, another teacher is pushing along a cart that can hold 50 notebooks, and be moved easily from one classroom to another. Shared notebooks are necessary because the school can't afford to assign each student their own device. The alternative is to make efficient use of limited resources, while placing priority on having advanced network technology. Whatever direction you look ▶

The Colegio y Centro Comunitario San Luis Beltrán has 50 **notebooks**, which students can take with them from one classroom to the next.



The Colegio y Centro Comunitario San Luis Beltrán regularly hosts visiting study groups from other schools, wanting to see how the school integrates IT in their studies, says Assistant Principal Patricia Alvarez, shown here surrounded by students from the school.

## “An ambitious government initiative has led to the rapid expansion of broadband in the past three years” Patricia Alvarez

**Did you know...** that Connect to Learn, is a collaboration between Ericsson and the Earth Institute? It was launched in 2010 to leverage the power of ICT to bring high-quality education to students everywhere. So far, it has reached more than 5,000 students, and it is being extended in 2012 to India, Djibouti, and Chile.

► in at San Luis Beltrán, you'll find state-of-the-art computers, interactive whiteboards, tablets and smartphones. An antenna that provides the neighborhood with free Wi-Fi access has been installed on the roof of the school.

The school's Assistant Principal, Patricia Alvarez, says that a conscious and strategic decision was made to invest in ICT. The students get to familiarize themselves with computers early: from the age of four. One of the goals set by the school is for students who lack internet access at home to become experienced computer users. The school works with individual goals and follow-ups to compensate for any differences in ability. Students who need additional support get extra lessons once the regular school day is

over, and those who have the best understanding of computers help their classmates.

“An ambitious government initiative has led to the rapid expansion of broadband in the past three years,” Alvarez says. “This is especially true in the big cities. But some families still don't have internet access, and we have to keep that in mind.”

The school's efforts have clearly paid off. San Luis Beltrán opened its doors in 1994 with the aim of offering high-quality education in this underserved community. The local church community was among the stakeholders behind the initiative; people in the congregation wanted to improve the prospects of children living in one of the municipality's most deprived areas.

Today, about 1,100 students aged four to 18 attend the school. And even though many of the students in this district come from homes where money is tight, 80 percent of the school's graduates go on to study at college or university. The remaining 20 percent graduate with sufficient qualifications to work with technology or telecom.

Alvarez is proud of the fact that San Luis Beltrán regularly hosts visitors from schools in other parts of Chile. More and more people are realizing that the successful integration of ICT into teaching can add value to children's education and thereby also improve students' future prospects on the job market.

Marcus Persson, Consumer Researcher at Ericsson ConsumerLab

and one of the initiators of the Future School Project, says: “Basic skills such as reading, writing and arithmetic will always be important. But integrated new technology is creating the need for new, 21st century skills, such as information and ICT literacy; communication; collaboration; and critical as well as analytical thinking.”

The Future School Project confirms the significance of investments that increase students' access to computers. One alternative is what's known as a 1:1 program, in which each student has their own computer. In schools where school resources are more limited, this program can involve the use of carts with computers that the students can borrow – a solution that's in use at San Luis Beltrán.

“Whether the school of the future uses laptops, tablets, mobile phones or something in between, the future will demand individualized, mobile, easy-to-use devices,” Alvarez says. “Having said that, it is interesting to see that several schools are also making great use of interactive whiteboards.”

## NEST puts learning on the agenda

IN NOVEMBER 2011, Ericsson gathered nearly 80 leaders from business, politics and academia to discuss how ICT can help bring learning to everyone, everywhere. The first-ever NEST – The Networked Society Forum – concluded with the announcement of an agreement between Ericsson and the Earth Institute at Columbia University in New York, which

works to find solutions for sustainable development. The two organizations are developing metrics to describe the relationship between education and ICT, just as Ericsson has previously measured connectivity's impact on GDP and jobs.

NEST participants included the CEOs of major Ericsson customers, and speakers such as former US President Bill Clinton and

Facebook cofounder Chris Hughes. Ericsson President and CEO Hans Vestberg told participants that NEST was an essential first step toward putting ICT-based learning on the global agenda: “We have come closer to experts in academia, the public sector and our industry colleagues so that we can understand the challenges and opportunities before us.”

Persson says that the new technology is also expected to improve the ways of working used in schools. For example, project-based work will become more common, at the expense of the traditional teaching style in which the teacher leads the learning process through lectures and demonstrations and by asking questions. The methods used to gather information and report on schools' results will also change. This in turn will probably also change the role of the school teacher, he says.

“Teachers will clearly continue to play a central role in students' learning process,” Persson says. “However, with new tools and changed ways of working, a new role for teachers is emerging. Teachers will have to accept being more of a ‘guide by the side’ instead of a ‘sage on the stage.’”

Hector Reyes, who has taught robot technology at San Luis Beltrán since early 2012, shares this view. “In the past, we had all the knowledge, and ►

## A NEW USE FOR OLD COMPUTERS



► IN ONE OF the San Luis Beltrán school's ICT projects, students rebuild computers that they then sell to local households. The school receives the computers from companies and private individuals, and the buyers are guaranteed an internet connection from the school's Wi-Fi network. The project helps increase the rate of internet access in the school's catchment area, which ultimately improves the overall socioeconomic development of the district. It also gives students the opportunity to put their knowledge into practice in a way that both strengthens their self-esteem and gives them the chance to contribute to a good cause.

## ERICSSON HELPS LIFT EDUCATION IN CHILE

ABOUT 90 PERCENT of Chile's rural population now has 2G or 3G connectivity, thanks to a joint project involving Ericsson, Chilean operator Entel, and the country's Ministry of Telecommunications. Launched in 2009, All Connected Chile has extended mobile broadband to millions of residents of far-flung rural communities.

In Chaca, a farming community about 1,630km from the Chilean capital, Santiago, Hugo Cerola Meoline teaches the

12 pupils who study at the area's only school. Mobile broadband is becoming a window to the world for his students, as well as a motivator. “They long to get connected, not only for education but also for the enjoyment,” he says.

EVEN MORE significantly for Cerola, it changes the way he teaches.

“As a teacher, connectivity brings me greater possibilities,” he says. “A video can show much more than I can explain with words.”

The connectivity will

also support the Connect to Learn initiative, which is being introduced this year to three schools in the community of Ninhue in Chile's Biobío region. Connect To Learn is a collaborative effort between Ericsson, the Earth Institute at Columbia University in New York, whose mission is to provide solutions for sustainable development, and Millennium Promise, a US non-profit organization aimed at realizing the UN's Millennium Development Goals.

**“The teacher has become more of a guide than the main player in the knowledge-transfer process”**

Hector Reyes



New technology will fundamentally change the role of teachers, says Hector Reyes, a teacher of robotics technology at the Colegio y Centro Comunitario San Luis Beltrán.

With help from a computer, Richard Rivas and his classmates at San Luis Beltrán seek information on their own.

► the students didn't have any other source of information," he says. "Today, students can find information on their own in other ways. That enables a student-teacher dialog in which both parties have a more equal starting point. As I see it, the teacher has become more of a guide than the main player in the knowledge-transfer process.

"The traditional teaching strategy was based on reading text. Today, tech-

nology has made it possible to spread knowledge using multimedia. Students and teachers alike have benefited from that development. We have access to more sources of information, which helps us teach in a more holistic way than we did before. Eventually, I think we will also see a trend toward the increased use of distance education."

How can a teacher adapt to these developments?

"I think our ability to adapt will

depend on how flexible and how curious we are," Reyes says. "When we see that reality is changing, it's important that we constantly renew ourselves and what we choose to do. Otherwise, it can be difficult to live up to others' expectations of us."

Text: Michael Masoliver Photo: Martin Adolfsson

► Note: The Ericsson ConsumerLab Future School Project report is available here: [www.ericsson.com/consumerlab](http://www.ericsson.com/consumerlab)

**ACADEMY SHOWCASES DIGITAL LEARNING**



Petter Andersson

Ericsson was an early adopter among companies offering recorded Harvard Business School lectures to all employees via video.

PETTER ANDERSSON, Head of Learning, says: "We selected lectures with relevant themes for Ericsson; packaged the video, supporting material, models and tools;

and made it available online for everyone, not just a selected few." The series also included access to transcripts, related resources and study material.

Because technology evolves so rapidly, adaptability and agility are needed when delivering a curriculum for corporate learning, Andersson says. The

Ericsson Academy Leadership Core Curriculum (LCC) has shown how a purposely and continuously redesigned program can effectively build in the latest and best teaching approaches and content. Part digital and part classroom-based, the LCC involves collaborative work on real business objectives and discussions about

topics such as innovation and situational leadership. The program's original requirement of 15 classroom days has since been shortened to five through the use of digital tools - while, according to Andersson, maintaining quality and even expanding the content and results.

David Callahan

FOTO: PER MYREHED



In the future, education will be adapted to the individual more than it is today, says Marcus Persson, Researcher at Ericsson ConsumerLab.

►► The gaming world meets the world of education ►►

# Gaming gets serious



**“By using 3D games technology, we are able to catch the students’ attention – they learn more because they are immersed in an interactive computer game”**

Tim Luft

COVENTRY  
ENGLAND, EUROPE

**Coventry University is breaking new ground in online learning with help from the Serious Games Institute (SGI). New education initiatives that incorporate gaming technology and cloud-based services are providing teachers with new tools and students with stimulating learning methods.**

**I**magine you’re back at university and you’re taking a business class. What if you could become a character in a 3D game in which you could choose the industry you wanted to work in, your business and its location? Then imagine that, during more than 70 hours of gaming, you had to react to changes in a variety of conditions such as the weather and the competitive situation – as you would in the strategic life-simulation game series, *The Sims*, but in a more realistic way.

The Serious Games Institute (SGI), which is based at the university, was established to conduct research and development into future solutions in education. But the staff at SGI weren’t content with the modern online learning tools available, so they’re taking the concept a step further. “A lot of the online learning courses that are available today are only text-based,” says Tim Luft, Operations Director at the SGI. “Many of the classes are just share points for publishing content, but they’re not interactive, they’re not live and they’re definitely not fun.”

**A technologist** at Coventry University since 1999, Luft set up the Science and Technology Park there in 2007. With a background in digital media and experience in the games sector, he then went on to set up the SGI in 2008. Soon after, the SGI came up with a whole new way of learning and of training students – as well as professionals already working in the field. “We created 3D simulation games for training and made

them accessible on students’ PCs and phones,” Luft says. We learned that, through games, we could be extremely innovative to enhance education and teaching.”

“By using 3D games technology, we are able to catch the students’ attention – they learn more because they are immersed in an interactive computer game. Students become excited and energized.”

**With an institution** that’s this cutting-edge, it’s not surprising that Coventry University has even more technology innovations in its sights.

In early January 2012, Ericsson and Coventry University announced a partnership in bringing live online learning to students. “In the past 12 to 18 months, we have seen phenomenal growth in mobile technology, and we wanted to embrace this opportunity,” says Luft. “We had the interactive 3D animated bite-sized training as well as the ability to pre-record lectures, but what we didn’t have was the competence to stream live lectures – that’s why I went to Ericsson.”

The In-Game Communication solution is based on Ericsson’s IMS product portfolio, so services can be scaled for a potentially unlimited number of users, with telecom-grade availability and security. “Ericsson then walked us through its technology, and we said this is what we want, but we want to use it for educational purposes,” Luft says.

Because the lectures are streamed live over an Ericsson network, anyone in the world with a smartphone can download the Coventry University apps. “This is a huge opportunity for Coventry University because it gives us the full package,” Luft says. “We can deliver live lectures and live audio and video, as well as our 3D animation and remote testing.”

Luft says that if the trial, which began in March 2012, is successful, Ericsson

## “YOU LEARN MORE THAN YOU REALIZE”

**To gain experience in business-related variables as part of her degree, Aleksandra Knobloch, former**

**Coventry University student, took on the Serious Games Institute’s 3D animated simulation training.**

### What did you enjoy most about game-based learning?

Serious Games are valuable because they combine the real and important aspects of learning and make them more engaging.

It’s entertainment for non-entertainment purposes. By simulating different business environments I was able to learn important strategies to handle cost and time management, effective outsourcing solutions and so on.

### How does it compare with traditional classes?

There is no comparison to a traditional classroom lecture – I am educating myself, with the support of my teacher, in a 3D collaborative environment, experimenting with different situations in different realities. Not only is it fun, but you learn more than you realize. The information really stays with you and helps prepare you for real-life situations, rather than just listening to successful business cases in an auditorium.

☒ Sophie Bennett

and SGI will replicate the app for use at other universities. “I really believe that it will change the way universities deliver distance learning,” he says.

☒ Text: Sophie Bennett Photo: Amy Parton

# The VGo robot: a hero to homebound students

## Did you know...

that there are about 20 students around the US who use the VGo-robot for health reasons? The VGo robot is also used by business people when they are unable to attend meetings and conferences.

Source: VGo Communications



Cris Colaluca with his telepresence robot by his side.

**Circumstances beyond Cris Colaluca's control have prevented him from attending school for more than six years. The 14-year-old boy from Pennsylvania was born with spina bifida and struggles with seizures and other health issues.**

**T**hanks to his new telepresence robot, developed by visual communications solutions developer VGo Communications, Cris can navigate the halls and classrooms on his own from home via a laptop, on-screen keyboard, clipboard and mouse pad.

Cris's mother, Terry Colaluca, says that the VGo-robot has had a positive effect on Cris's life. "There was an old Cris, the boy that existed before the seizures hit. The seizures changed his health and his personality... Because he had no peer interaction, he became subdued. When VGo came into his life, some of that spark came back. Some of his personality is back. It's an enthusiasm I haven't seen in a long time."

**VGo's unique** capability is in its remotely controlled mobility solution combined with two-way video and audio communications. The solution

comprises two primary elements: the VGo – the remote-controlled mobile device that represents you in a distant location – and the VGo App – the software application that is downloaded to your computer that you use to initiate connectivity, operate the VGo and see and hear the things surrounding the robot.

**Cris** uses the scroll wheel on his mouse to change camera angles on his VGo, so that he can look in different directions – via his robot. Students come up to him and talk about classroom assignments and what is happening at school and classroom assignments. They see Cris's face in real time.

The data connection between the VGo and its user runs over the internet with the help of VGoNet, a special cloud-computing network that manages everything. The network was especially designed to handle the complexities of a solution that requires real time audio-visual communications and simultaneous robotic remote controls.

"I really like that Cris is able to do things other than just school," says teacher Ben Edward. "He's able to go to the activity fair... he's able to go to a club meeting. He can go to an assembly, and those are things Cris hasn't been able to do for a long, long time."

Text: Sophie Bennett Photo: VGo Communications



During the school day, the robot is constantly present in the classroom.

Footnote: The VGo robot is manufactured by the American company VGo Communications.

## 'Start with a problem..'

**F**ounder of kiwanja.net and creator of Frontlines MS, a mobile messaging application aimed at the grassroots nonprofit community, Ken Banks argues that development issues such as education require us to start with the problem, not the technology. In developing countries most high-tech solutions just don't work.

*What role can mobile technology play in development?*

Mobile networks open up the possibility of reaching communities that would otherwise miss out on any meaningful connection with the rest of the world, and allow them to engage, make themselves heard and to be empowered by information.

Mobile phones are, of course, the main drivers here. This is the first time in history that billions of people have had a real-time, immediate digital communication channel that is cheap, portable and easy to use. And for development projects designed to widen public access to education, to give just one example, mobile phones can enable them to reach out to people who would previously have been beyond reach.

*You have been involved in many fruitful mobile-centered development initiatives. What separates the successful projects from the unsuccessful ones?*

The single most important thing is starting with a problem and not a technology. It is quite common for people to grab the latest smartphone or tablet or whatever happens to be hot at the moment and try to figure out how it could be used in a development context. This approach can work, but most of the time it is destined to fail. If you go in with technology as your main objective, you will end up shoe-horning it into contexts where it will not always work. The solution to a development question could be pencils or notepads – it does not

necessarily need to have anything to do with ICT.

*What role can operators play in rolling out these initiatives?*

Operators are doing a better job than anybody else of meeting the insatiable demand for mobile technology, and the development sector has many more opportunities to make a positive difference as a result. In fact, there is probably space for operators to get even more involved in development issues. Traditionally, their approach has been "put the masts up, sell the phones and then let people get on with it." But now that we know that mobile technology can have a real impact on learning and health care and agriculture, operators should think about taking a bigger role in helping these projects get off the ground. It certainly wouldn't hurt for operators and nonprofit organizations to speak with each other more regularly.

*What role can social media play in supporting development?*

Everybody has an opinion to share. It makes no difference where you live or what you do – your views are an important part of who you are, and social media make it possible to share them in a very interesting way. In the West, social media are used mostly for fun, but there are huge opportunities to use them for more meaningful things in developing countries, particularly when there are not many other options.

Text: Nicholas Smith Photo: Amy Parton

kiwanja.net was founded by Ken Banks in 2003 and helps social innovators, entrepreneurs and nonprofit organisations make better use of information and communication technologies in their work.



Ken Banks, founder of kiwanja.net



SKOLKOVO

# Russia's ICT dream

A brand new **ICT city** is being built on the outskirts of Moscow. Skolkovo Innovation Center will be Russia's answer to **Silicon Valley** – and of course, Ericsson will be a part of it.

SKOLKOVO  
RUSSIA, EUROPE

**S**kolково is located a few kilometers south west of central Moscow. Today, the site looks quite deserted; it consists of just a few buildings that are still under construction. But in just a couple of years, 30,000 scientists and entrepreneurs will live and work here.

“We’ve been operating in Russia for 130 years, and when the Russian government decided to invest in Skolkovo we recognized it as a good platform to further grow our presence in Russia and to broaden our collaboration with Russia on ICT modernization,” says Jörgen Rhodin, General Manager for Ericsson Innovation Russia and the one who will be responsible for Ericsson’s operations in Skolkovo.

The plans for Skolkovo Innograd, as the development is called in Russian, were first hammered out about two years ago. The idea is to modernize the country’s industry through R&D, and ultimately reduce its dependency on natural resources such as oil and gas. The Skolkovo Foundation will develop the city on behalf of the Russian government. The foundation’s partnership operation is being led by Conor Lenihan, Ireland’s former minister of innovation, science and technology, who is also taking care of Skolkovo’s communication with Ericsson. He doesn’t feel Skolkovo should be seen as a competitor to Silicon Valley. On the contrary, he says: “The purpose of

the project is to expand the opportunities for those working with R&D in Russia to communicate with the rest of the world, and to facilitate the commercialization of Russian research.”

Lenihan and his colleagues are working hard to encourage world-leading companies to get involved in the project. So far, 19 corporations have agreed to be a part of it, including Ericsson, IBM, Nokia, GE, Cisco and SAP.

“It feels like we’ve really got things underway now,” Lenihan says.

**The Skolkovo Foundation** has also signed agreements with about 30 venture capital companies from around the world. Together, these companies are investing a lot of money in the project. The Russian government has also agreed to contribute but much more funding will be needed, Lenihan believes. “Building the infrastructure will require major investments, and we expect all of the companies that have signed research agreements with us to contribute in some way. Ericsson, for example, participates in the Skolkovo Smart City Expert Council, where they are contributing with their knowledge from similar projects around the world.”

In September 2011, Ericsson announced the establishment of Ericsson Innovation Russia, the unit that will be responsible for the company’s

“The whole region will benefit from what we do in Skolkovo”

Jörgen Rhodin (left). Here together with Conor Lenihan

# “The purpose of the project is to expand the opportunities for those working with R&D in Russia to communicate with the rest of the world”

Conor Lenthian



This is what the center of Skolkovo will look like. The “Cube,” in the bottom-left of the picture, will house the Skolkovo Foundation. The area will also contain housing, R&D centers, universities and companies. Skolkovo Dome, pictured in the top right, will form a transport network hub.

operations in Skolkovo. The first six people have already been employed, but when the construction is complete in about two years, the unit will employ between 20 and 25 people. Ericsson Innovation Russia will focus on project-oriented R&D, and it will adapt its work to correspond with Skolkovo’s prioritized areas of research (see fact box). Initially, these areas will be machine-to-machine communication and smart grids. The exact location of the work team’s office in Skolkovo has not yet been determined, but there’s no doubt that the move to Skolkovo and the involvement in the project will mean a lot for Ericsson in Russia.

Rhodin says: “We’ll be closer to the local ecosystem, including customers, start-ups, universities, and so on, and we’ll be able to carry out innovative

activities in collaboration with them. At the same time, we expect to cooperate much more closely with other parts of Ericsson, such as Ericsson Research, the business units and other regions. The whole region will benefit from what we do in Skolkovo.”

**A recent example** of this phenomenon is a smart-grid project that Ericsson Innovation Russia is driving in collaboration with Business Unit Networks and with Ericsson Research within the framework of the project for the Stockholm Royal Seaport, a suburb that is designed to be an international model for sustainable city development.

“This is an excellent example of a research engagement of global interest, related to LTE for utilities, where we will contribute to the ecosystem of

## SKOLKOVO INNOVATION CENTER

- ▶ **Completion of first phase:** 2014
- ▶ **Total area:** about 400 hectares
- ▶ **Housing:** more than 190,000sq km of housing (apartments and owner-occupied houses)
- ▶ **R&D offices:** more than 90,000sq km for 4,500 people
- ▶ **Five prioritized areas:** energy, biomedicine, space, IT and nuclear energy.
- ▶ **Investment in education** is a key concept in the Skolkovo project. One example is the establishment of the Skolkovo Institute of Science and Technology (Skolkovo Tech), a research institution that will be run by the Massachusetts Institute of Technology (MIT). The university, which will open in 2014, will provide research opportunities for 1,200 postgraduate students.
- ▶ **The Skolkovo project** also includes an ambitious program to help Russian start-ups. Many of these have now received funding and have begun operating.

internal and external stakeholders and also be able to build up competence and share insights about specific Russian needs,” Rhodin says. “The next step will be to locate customers and suitable partnerships in Russia.”

Text: Benny Ritzén Photo: Getty Images



Building of “the cube” where Skolkovo Foundation will be located.

## THREE VOICES ON SKOLKOVO

We asked three employees at Ericsson in Russia: What do you think Skolkovo Innovation Center will mean for the country?

**Yulia Shershneva, Strategic Sourcing Specialist, Russia**



“I think Ericsson’s participation will help to drive innovation and development in the country’s science and technology sectors. The center will make science fashionable and attractive, and people will associate science with innovations in their daily lives rather than just theories.”

**Artyom Korolev, Price Manager, Russia**



“It is too early to talk about short-term results, and a project as ambitious as Skolkovo will take time. Russia is developing very fast, and above all, Skolkovo will change our minds about innovation, understanding and future development in general. I hope the children starting school this September will dream about Skolkovo.”

**Natela Hanelia, Communications Special Project Manager, Russia**



“The Skolkovo Innovation Center project shows considerable promise in allowing Russia to leap ahead and utilize the most advanced technologies. Offering its global leadership and expertise, Ericsson can play a significant role in enhancing the success of the project and developing an innovative ecosystem.”



This is a picture of **workers digging up the streets near the Swedish parliament building** to prepare for the installation of telephone cables. The image is also a good illustration of the industrialization of Sweden, a process that gained momentum in the late 1800s and in which Ericsson played a leading role in industrial development both at home and abroad.

Source: ericssonhistory.com



# Hilda was the common thread

**Women in business** have not always received the attention they deserve. One example is Hilda Ericsson, the wife of Ericsson founder Lars Magnus Ericsson. A new study shows that she was considerably **more involved** in Ericsson's operations than was previously realized.

**A**t Ericsson, 1876 is almost a holy year, because that's when Lars Magnus Ericsson opened his mechanics workshop in central Stockholm. But maybe 1878 was an even more important year in the young entrepreneur's life.

That was when Ericsson began manufacturing its own telephones. The first phase involved the production of 22 magnet telephones. But 1878 was also the year when Lars Magnus Ericsson married Hilda Simonsson.

He was 31, and she was just 17. Despite the age difference, their marriage – judging by the letters and diaries that have survived – appears to have been a success. Right from the beginning, the couple worked unusually well together, and despite her youth, Hilda soon became a vital factor in the development of the company.

**Lars Magnus**, who preferred to spend his time developing the company's products and strategy, gladly assigned a variety of important tasks to his young wife. Hilda not only ran the family home and looked after the couple's four children – Johan, Lars Magnus, Gustaf and Anna – she also took care of orders, negotiations and contact with the company's customers.

Hilda also took responsibility for the company when her husband was away on his many overseas business trips, and occasionally she was directly involved in production. For a

period of time, she stayed at home and wound electromagnetic coils with satin-coated copper wire for telephones and electrical appliances. Eventually she became the supervisor of the female employees in the coil-winding division of the company.

**At times**, then, the telephone-manufacturing company was a true family firm. But despite this, Ericsson's otherwise excellent archives reveal little about the wife of the company's founder. Those who want to learn more about Hilda's working life must instead consult the couple's private letters and diaries.

In one of her letters to her husband, Hilda writes about production difficulties: "I am ... winding an inductor, but the wire seems made of real waste, as there is a break in nearly every 20th one, followed by long pieces that cannot be used at all."

Thanks to the correspondence that has survived, we also know that Hilda was extensively involved in a major order from the Swedish city of Gävle for an entire telephony system including telephones and switchboard equipment. It was Hilda who kept Lars Magnus informed about deliveries, production and payments. On August 7, 1881, Hilda wrote to her husband: "We have not yet received any payment from Gävle, but we hope it will have arrived by the time you get this letter; I wrote a friendly

reminder to the wholesaler Andersson."

As the company grew, Hilda's involvement in LM Ericsson & Co declined. In 1901, Lars Magnus resigned as CEO. A few years later he sold his remaining shareholdings in the company and instead started a farm in Alby, south of Stockholm. It was a sort of new family firm, in which Lars Magnus once again took responsibility for the innovations while Hilda took care of the home and the children, keeping track of money and other practicalities. The couple's surviving letters and diaries suggest that this division of labor was maintained throughout the rest of their marriage. Lars Magnus died in 1926 and Hilda in 1941.

Text: Michael Masoliver  
Illustration: Ebba Berggren

► You can read the letters that Hilda and Lars Magnus Ericsson wrote to each other at [www.ericsson-history.com](http://www.ericsson-history.com).



Wednesday, August 17, 1881

**"My beloved Magnus!**

Just a few quick lines to release you from unneeded worry over the contents of my letter from Sunday. Money has come in at just the right time, arriving from both Gefle [Gävle] and Norrköping. Malm's workshop is still idle. Overall, Andersson's Norrköping trip was a success. [...]"



**“The work that women did winding coils clearly didn’t count in the company, or at least it went unnoticed”** Birgitta Wistrand

## Unraveling the mystery of Hilda Ericsson

**Five questions to Birgitta Wistrand, a Doctor of Philosophy and Researcher at the Centre for Gender Research at Uppsala University in Sweden. She has just published a new study about Hilda Ericsson and her role as a business partner to her husband, Lars Magnus, founder of Ericsson.**

### **1. Who was Hilda Ericsson?**

Born Hilda Simonsson, she was the daughter of a saddler and harness maker at the Swedish Royal Mews, and she and her family lived in a small apartment in the Royal Palace of Stockholm. They had limited means, but Hilda was still able to attend a fee-paying girls’ school. We also know that she was an extrovert who was good at taking care of things, and incredibly energetic. Throughout her life, she was always busy with a variety of projects. She also seems to have appreciated the best things in life, especially good food and big parties.

### **2. What do we know about her importance to Ericsson?**

Unfortunately, we don’t know very much. The Ericsson archives include a couple of photos that suggest she was involved in production. Otherwise, we have to rely on private sources in the form of letters and diaries. From these,

we learn that she took care of orders and met with customers. Eventually, she also became the supervisor of the female employees in the company’s coil-winding division.

The archives don’t say much about what Lars Magnus was like in his private life or as a father either. The material merely confirms the romanticized picture of a poor but hardworking tenant-farmer’s son who became a world-class inventor and craftsman.

### **3. How did you carry out your research about Hilda?**

I had to put the pieces together from a puzzle of certain letters and diaries that survived, even though Hilda wanted everything to be burned. Her diaries from 1912 to 1936 have been preserved in a safe. They are now stored at the Centre for Business History in Stockholm. The diaries are both comprehensive and concise, because each page is divided into five sections and written in Hilda’s small, neat handwriting. She was very conscientious and rarely missed more than a day of entries.

### **4. What was the situation like for women in business at that time?**



Birgitta Wistrand

It was very limited by laws and regulations. For a long time, women had small-scale businesses to support themselves. They sold things like milk in the market square or worked as seamstresses. When LM Ericsson & Co first hired women to work in production, female workers were relatively rare in industry. Hilda supervised a number of female workers for a period of time, but despite this, neither she nor any other woman is included in the collection of portraits that the company had printed in 1889. That says a lot. The work that women did winding coils clearly didn’t count in the company, or at least it went unnoticed.

### **5. What do you think Hilda would have worked as if she had lived today?**

Considering her social skills, she would probably have worked in some kind of service-oriented job. Maybe she would have been the CEO of a travel or tourist company, or an information officer. She would probably have been a good leader. When she lived on the farm, she was responsible for tasks such as purchasing and salary payments, and we know that she was valued as a manager.

Text: Michael Masoliver Illustration: Ebba Berggren



0.3 PERCENT GDP INCREASE WHEN BROADBAND SPEED DOUBLES.



# SHARE INSPIRE GROW

As network speeds increase, their users find better, richer ways to share. This inspires new ideas and fresh thinking.

In turn, this stimulates economic growth – creating more opportunity for everyone.

# Point to Point Communication

**Instructions:** Read the subject category and question. Start with the five-point question and continue to the right until you have an answer. When you have gone through all six categories and guessed a year for the picture below, calculate your total score and compare it with the maximum tally, which is 35.

Subject/Points	5 points	4 points	3 points	2 points	1 point
<b>Geography</b> Which country?	Mămăligă, a maize-flour porridge, is often used in dishes in this country.	The local currency is called the leu.	National hero Vlad Țepeș inspired the 1897 Bram Stoker novel Dracula.	Its General Secretary Nicolae Ceaușescu was executed in the 1989 revolution.	Ericsson's main office in the country is in the capital, Bucharest.
<b>History</b> Which year?	In football, Spain wins the European Championship for the first time.	Björn Lundvall becomes Ericsson's 10th president.	Jean-Paul Sartre wins the Nobel Prize for Literature – but turns it down.	Richard Burton marries Elizabeth Taylor – for the first time.	Beatlemania is rife as the group embarks on its first world tour.
<b>Business</b> Which company?	It is the current sponsor of the International Cricket Council – until 2015.	Founded in 1958 as GoldStar, it is headquartered in Seoul, South Korea.	The company is the world's third-largest producer of mobile phones. The CEO is Koo Bon-joon.	The company began a joint venture with Ericsson in 2005.	It is a subsidiary of LG Group.
<b>Culture</b> Which film?	It premiered in 2010 and was nominated for eight Academy Awards.	The film was adapted from Ben Mezrich's book The Accidental Billionaires.	Director David Fincher also directed Alien 3, Fight Club and Seven.	Eduardo Saverin's character uses a Sony Ericsson P900 phone in the film.	It portrays the founding of Facebook and its CEO, Mark Zuckerberg.
<b>Communications</b> Which operator?	It is headquartered in the small town of Worblaufen.	Its CEO is Carsten Schloter and it has almost 20,000 employees.	In 2007, it acquired 82.4 percent of Italian broadband company FASTWEB.	In December 2011 it signed a five-year network-modernization deal with Ericsson.	It is Switzerland's largest mobile and fixed operator.
<b>Famous person</b> Which icon?	He was named TIME magazine's Person of the Year in 1992 and 1998.	He graduated from Georgetown University, Washington, D.C., in 1968.	He was born William Jefferson Blythe III, in Hope, Arkansas, in 1946.	Ericsson is a member of his Global Initiative, which was founded in 2005.	He became the 42nd US president in 1993.

## The picture

Which year was this photo taken?  
 5 points for the right year  
 4 points for the year +/- 1 year  
 3 points for the year +/- 2 years  
 2 points for the year +/- 3 years  
 1 point for the year +/- 5 years



**TURN THE PAGE FOR THE RIGHT ANSWER.**

Geography: Romania; History: 1964; Business: LG Electronics; Culture: The Social Network; Communications: Swisscom; Famous person: Bill Clinton; What year (the picture): 1955. An ad for the Ericsson.



PHOTO CENTRE FOR BUSINESS HISTORY