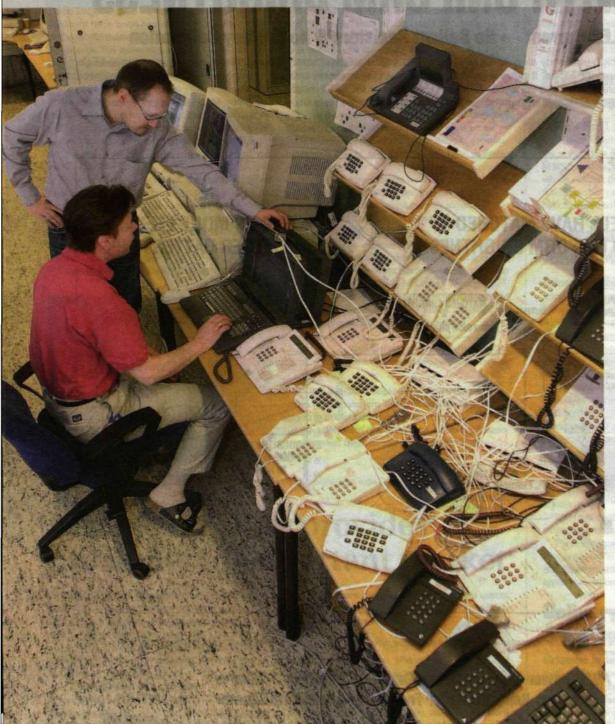
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More efficient use of test equipment 12-13



Energy source for better service



Providing help in all cases



Long process for Rights Offering

Cash flow game breaks record

Simple ways to save money

for 3G operators

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HIGH-EFFICIENCY SOT23 STEP-UP CURRENT SOURCE POWERS WHITE LEDS WITH UNIFORM BRIGHTNESS

Matched LED Current \rightarrow No Ballast Resistors & No Factory Calibration

The MAX1848 is the first high-efficiency step-up DC-DC converter that regulates current instead of voltage to power white LEDs for backlights in cell phones and PDAs. It powers two or three white LEDs in series, instead of in parallel, to eliminate brightness mismatch caused by different threshold voltages. An internal N-channel MOSFET switch provides 85% efficiency, which is 40% points better than traditional doubling charge pump solutions. Battery life is up to two times longer. The MAX1848 is priced at \$1.25, 2.5k resale[†].

SERIES LEDS HAVE MATCHED **40% POINTS MORE EFFICIENT** CURRENT AND UNIFORM BRIGHTNESS 1.8x LONGER BATTERY LIFE LOWER INPUT RIPPLE MATCHED CURRENT THAN CHARGE PUMP OUTPUT INPUT Up to 13V 85 UNIFORM BRIGHTNESS 2.6V to 5.5V 80 NEW 75 **MAX1848** LX: 70 WITH 3 LEDs MIXIM 100 65 IN SERIES BATTER MAX1848 GND 60 CNTL 100 55 50 45 DOUBLING CHARGE 40 **PUMP WITH 3 LEDS** OUT = 15mA 35 **PROGRAMMABLE** IN PARALLEL NO CALIBRATION: BRIGHTNESS **5% CURRENT TOLERANCE WITH** 45 STANDARD LOW-COST INPUT VOLTAGE (V) **CHIP RESISTOR**

†Price provided is for design guidance and is FOB USA. International prices will differ due to local duties, taxes, and exchange rates. Not all packages are offered in 1k increments, and some may require minimum order quantities.



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news

GSM facilitates aid to refugees

Three large refugee camps in northwestern Tanzania have been hooked up to the rest of the world thanks to the efforts of Ericsson Response. The networks simplify the work of aid organizations, while also benefiting the local population.

Ericsson Response installed three base stations, containers and masts. The containers in the villages of Kigorna and Kasulu are connected to the national network via a satellite link provided by local operator Mobitel. The third container is connected via MINI-LINK

There are several hundred thousand refugees from the war-torn neighboring countries in the area - mainly Burundi and the Democratic Republic of Congo. The project is a joint effort between Ericsson, the International Red Cross and the Red Crescent, the UN High Commission on Refugees (UNHCR) and the operator, Mobitel.

The network provides data and telecommunica-



tions to aid workers and organizations in the area, and the operator offers a discount to these groups. However, the network is also a step forward for the area itself and for the people living there.

'The project is unique in that it has created a commercial network in an area that is actually devoid of commercial potential. Now, even the local population will benefit from our technology. In Kigoma, for example, there are a couple of hundred thousand inhabitants who will now have access to GSM technology and all the possibilities of communication it offers," says Dag Nielsen, head of Ericsson Response.

"We feel it's important to be able to assist people who have been forced to flee from their countries and enable the local population to partake of the benefits of technological development," says George Held, president of Mobitel.

The UNHCR estimates the total number of refugees in Tanzania at slightly more than 500,000. Of these, 350,000 are from Burundi and 125,000 from the Democratic Republic of Congo. During April, about 5,500 Burundians returned to their homeland under the supervision of the UNHCR, although the situation there is still considered unstable.

LARS-MAGNUS KIHLSTRÖM

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About half a million people are living in refugee camps in northwestern Tanzania as a result of the wars in the neighboring countries. It is expected that the installation of a GSM network from Ericsson Response will facilitate the coordination of aid efforts.

PHOTO: SVEN-ERIK SJÖBERG/PRESSENS BILD

New R&D center provides proximity to important market

On June 12. Sony Ericsson will open a new research and development center in Beijing, China. The objective is to gain proximity to a constantly growing market with specific needs. The same day also marks the official inauguration of all Sony Ericsson's activities

The center will open as soon as the Chinese authorities have approved all of the formalities, but the creation of the new operation is already fully under way. Ted Ericsson is responsible for the new center. He describes why proximity to the Chinese market is important.

"The needs of Chinese users are in many ways unique in comparison with users in other parts of the world. Consequently, a product designed for this market differs in design and functionality, but also, for example, in terms of user interface and the way menus are struc- Ted Ericsson tured," he says.



Design, sound and a display using the written Chinese language are other examples of adapta-

"With the new research and development center, we can create product series that take into consider-

ation, down to the smallest detail, the way in which Chinese consumers want to use their phones," says Staffan Söderqvist, head of Sony Ericsson in

China has the world's largest population, 1.3 billion people, which is about one-fifth of the total global population. According to the Chinese Ministry for

the Information Industry, the number of mobile users increased by 5.6 million during March.

Today, there are a total of 161.5 million mobile subscriptions in China. The use of SMS is an example of a service that has increased significantly during the past two years. During the second half of 2001, 800 million SMS messages were sent every month.

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Vodafone launches MMS in Portugal

Portuguese wireless operator Vodafone Telecel Communicações Pessoais SA is the first operator in Portugal to launch a multimedia messaging service (MMS). Ericsson is the supplier of this MMS solution. On May n, the T68i mobile phone, made by Sony Ericsson, became available in stores in Portugal. Subscribers may use MMS services free of charge until the end of July. After that, it will cost approximately USD 0.45 per message of up to 30 kilobytes.

MMS interoperability demo carried out in China

China's No. 1 mobile operator, China Mobile, and SmarTone Mobile in Hong Kong have jointly carried out the world's first demonstration of the interoperability of MMS. Ericsson provided support for the demonstration, which utilized the T68i telephone from Sony Ericsson. Interoperability enhances the potential of MMS in that it cuts though barriers between operators and regions.

Microcell becomes new EMP customer

Ericsson Mobile Platforms (EMP) has acquired yet another key customer: Finnish mobile design company Microcell. Microcell is an "ODM" - Original Design Manufacturer - meaning that the company designs, develops and manufactures telephones in accordance with other customer's preferences. The contract includes the entire Mobile Platforms range of GSM, GPRS and EDGE solutions with triple-band functionality.

The mobile-phone market is expected to become considerably more fragmented than it is at present. It is believed that operators and well-known consumer brands will sell mobile phones under their own brand names. These phones may be developed by ODM companies such as Microcell.

"One of our strengths is our ability to develop new products quickly, while Ericsson is the leading supplier of wireless technology," says Microcell president Anders Torstensson.

EMP has earlier contracts with telephone manufacturers Sony Ericsson, LG Electronics, Benefon and GVC.

There are many indications that Ericsson will be the first in the world to provide platforms for both 2.5G and 3G. Dissemination of the technology is expected to ignite the market for third-generation mobile telephony.

Delivery to No. 1 **Asian mobile portal**

Ericsson is in charge of content and system integration for Taiwanese operator Chungwa Telecom's mobile portal, emomeTM. The Mobile Internet is growing rapidly in Taiwan, and emomeTM is the first and the largest mobile portal in Asia. The Ericsson systemintegration solution automatically gives subscribers optimal access to the Mobile Internet, regardless of what

Lower prices for wireless service

Ericsson Shared Services has successfully implemented a 50 percent price reduction per active wireless subscription in Cellular Phone Registration (CPR) as a result of higher volumes and more efficient administration. In Sweden, about 17,000 wireless subscribers are currently connected to CPR.

Rationalization is an ongoing process, effected by connecting more subscriptions to the system and improving administrative routines.



Ericsson is listed on the NASDAQ in the US and has many American shareholders, who will now also be able to subscribe for new shares

PHOTO: PRESSENS BILD/STEVEN MICROS

Wheels rolling in Rights Offering

The Rights Offering process has taken another step forward with the official filing of a draft to the United States Securities and Exchange Commission (SEC) in Washington, D.C. The filing sets in motion a long process that requires approval from the SEC, Stockholm stock exchange, and from Ericsson's shareholders at the Extraordinary Shareholders' Meeting on June 6 in Stockholm.

As Ericsson is listed in the US (NASDAQ) and has a large US shareholder base, the company has chosen a fully registered SEC offering structure in the US. Without doing so, Ericsson would not be able to make the offer to retail shareholders in the US.

The filing of "Form F-3," which is 250-plus pages long, is a formal matter that is carried out on paper only at this point.

The SEC examines the document for several weeks and is entitled to comment and request clarifications from Ericsson. The Commission does not, however, make recommendations on the business transaction itself.

Form F-3 does not contain any information regard-

ing the terms and conditions for the proposed rights offering. Once the document has been cleared by the SEC, Ericsson's Board of Directors will decide upon the terms and conditions for the rights offering.

The document contains information made public with Ericsson's first-quarter financial results for 2002. It offers reasons for the rights offering, among them:

- improving the equity/assets ratio closer to our long-term target of 40 percent;
- maintaining payment readiness at a high level;
- · being flexible in repayment of debts;
- managing financial risk if market conditions remain poor; and

being able to fully leverage market-leading position.

A long section of the document lists risk factors. Due to SEC requirements and US litigation risks, this section is more prominent and more detailed than is usually the case in prospectuses aimed at the Nordic market.

It is designed to disclose all material risks that could face the company and inform the investor of the risks associated with an investment in the company. However, similar disclosure can be found in most prospectuses in the US and in those issued by large Nordic companies.

These risk factors do not change Ericsson's view of the market situation, which still stands as stated in the Q1 financial report.

The document is a preliminary draft in the long legal process of the Rights Offering. Once the prospectus is final, it will be published on the intranet. Meanwhile, Inside will keep employees informed on the process. A new site, especially about the Rights Offering, will be launched shortly.

DODI AXELSON

corporate

Dialog essential in long process



Nina Macpherson is vice president, General Law and Competition and in charge of the Rights Offering.

PHOTO: ECKE KÜLLER

One of the next steps in the Rights Offering process is the Extraordinary General Meeting in Stockholm on June 6, 2002. It is expected that the Board will receive authorization from the shareholders to make final decisions regarding the terms and conditions of the offering, and to set a timeline.

"With the filing of Form F-3, we have passed a milestone in the Rights Offering process," says Nina Macpherson, vice president, General Law and Competition. "However", she cautions, "it's important to understand that this is a long process involving a dialog between us and the SEC."

The draft is expected to change several times during the process.

"Theoretically, the F-3 can continue to be amended as long as the SEC have issues which they require to be addressed," continues Nina Macpherson. "An offer document will also be filed with the Stockholm stock exchange where we have our primary listing."

Once Ericsson has obtained approval with the SEC and the Stockholm stock exchange, Ericsson intends to register the prospectus in London, Paris, Frankfurt, and Zurich/Geneva. The prospectus will serve as the offering document in all jurisdictions where Ericsson can offer shareholders to subscribe.

"There are different rules for each stock market," explains Nina Macpherson. The prospectus needs to be amended for non-US purposes and it also has to be approved by the Stockholm stock exchange.

"After the Stockholm stock exchange has approved the prospectus, we expect that it will be approved in all other countries where we have a listing, and in the EU pursuant to mutual recognition principles."

A subscription period follows the approvals. As Ericsson has some 700,000 shareholders in Sweden alone, this step is expected to take another fairly large chunk of time. Swedish shareholders Investor and Industrivärden have already indicated their support. They stated their intention to exercise their entire rights allocation, totaling about seven percent of the offering.

The Rights Offering is expected to be completed before the end of the third quarter.

DODI AXELSON

KEYWORDS

Debt/Equity Ratio: A measure of a company's financial leverage, calculated by dividing long term debt by shareholders equity. Indicates what proportion of equity and debt that the company is using to finance its assets.

Final prospectus: A document containing information on a new issue, including the terms and conditions, delivery date, and financial information about the company. It is distributed to all investors who wish to purchase the issue.

Issue: A stock or bond which has been offered for sale by a corporation or government entity, usually through an underwriter or in a private placement.

Preliminary Prospectus: A draft of a prospectus for a rights offering or the like. It is understood that the

document will be modified significantly before the final prospectus is published. In the United States, it is also called "red herring," because of the warning, printed in red, that information in the document is still being reviewed by the SEC and is subject to change.

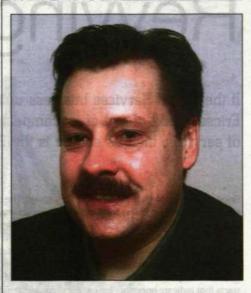
Rights offering: An offering of common stock to investors who currently hold shares, entitling them to buy the new shares at a discount from the offering price.

SEC: The Securities and Exchange Commission is the body that regulates the securities industry in the United States.

www.investorwords.com.

For more questions, see Inside.

hello there ...



Rainer Herzog, who works at

Ericsson Consulting in Munich and is project coordinator for "MobiHealth," an EU project, which started on May 1.

What is the goal of the project?

"The EU has approved sponsorship of ten projects in new technology for wireless communication, one of them being MobiHealth. The goal of our project is to introduce new mobile services in healthcare. These services are based on 2.5 and 3G technology – that is, GPRS and UMTS.

"We will also be using other technology, such as Bluetooth. Body sensors will be connected to a wireless "Body Area Network," and these sensors will measure and transmit certain physiological values to a physician, hospital or district medical center.

"For those with, say, heart problems, asthma or diabetes, it means enhanced quality of life in that they no longer need to stay in a hospital, but can be at home instead, or in some cases, go on a trip. The project is also intended to result in reduced costs for medical care."

How many companies and other organizations are involved?

"In addition to Ericsson, which plays a key role, the project involves Philips, CMG, Compaq and operators Telia in Sweden and Telefónica Móviles in Spain. Universities in Spain, the Netherlands and in the Swedish city of Luleå are also involved, and various contributions have been made by healthcare organizations, including hospitals."

When is MobiHealth to be completed?

"We have just had a kick-off in Barcelona. The project is to continue for 18 months. After 12 months, the technology is to be ready for beta testing. The clinical tests are scheduled to start in June next year and expected to take between six weeks and six months.

How many people at Ericsson Consulting are working on the project?

"Apart from myself, at first there will be one project employee. Later on, a technical project person will be added. As the coordinator, part of my job is to ensure the smooth running of the project. Another task is to market the project to the right interests."

GUNILLA TAMM

Revving up the service

If the Global Services business unit is the vehicle that will help Ericsson pull ahead of its competitors when it comes to the sale of services, then its engine is the Services Growth Program.

Ericsson's service operations have picked up speed. The most recent interim report shows that sales of services account for 24 percent of the company's total system sales. Approximately half of those sales consisted of system integration and outsourcing of network operations and consulting services. A comprehensive network operation contract recently reached with Dutch operator Telfort is the latest in a series of contracts that indicate operators are paying serious attention to Ericsson's service offerings.

One of the primary reasons that sales of Ericsson's services are increasing is the Services Growth Program being conducted within market units with active support from the Global Services business unit.

"The program was developed in order to support the KAM and service organizations within the market units and to find and develop business opportunities related to Ericsson's service offerings. You could say that the program is the driving force helping market units jumpstart their service sales," says Catriona MacLean, manager, Services Growth Catriona



Increasing awareness of services

Over the past five years, Global Services has been working to create a clearly defined service organization within the market units. Ericsson's new organizational structure, which includes fewer market units, is highly compatible with Global

Currently, there are Services Growth managers in 31 of Ericsson's 35 market units. These individuals are responsible for implementing and developing service growth within their

market units, based on business opportunities that have been identified by customer account organizations and Global Services in the various market units, with the help of the Services Growth Program.

"The intention is for Services Growth managers to support the local service organizations which, in cooperation with the KAM organization, implement business deals with customers," says Catriona MacLean.

"Certain market units have made exceptional progress, which means that they have been very active in their efforts to ascertain just what assistance customers need and then developing solutions to help them. We have to consult and be engaging and invent solutions for customers that contain both products and services. Only then are we a reliable business partner," she says.

Managerial support important

She emphasizes the importance of market unit managers supporting their local service organizations and envisioning the sales potential that exists for services and solutions.

"This is an absolute prerequisite for a market unit to succeed in increasing their service sales. Services should be part of the customer account plan, not something alongside it." says Catriona MacLean.

JENZ NILSSON

To find out more about the Services Growth Program log on

globalservices.ericsson.se/ongoing/globprog/growth/

sales engine

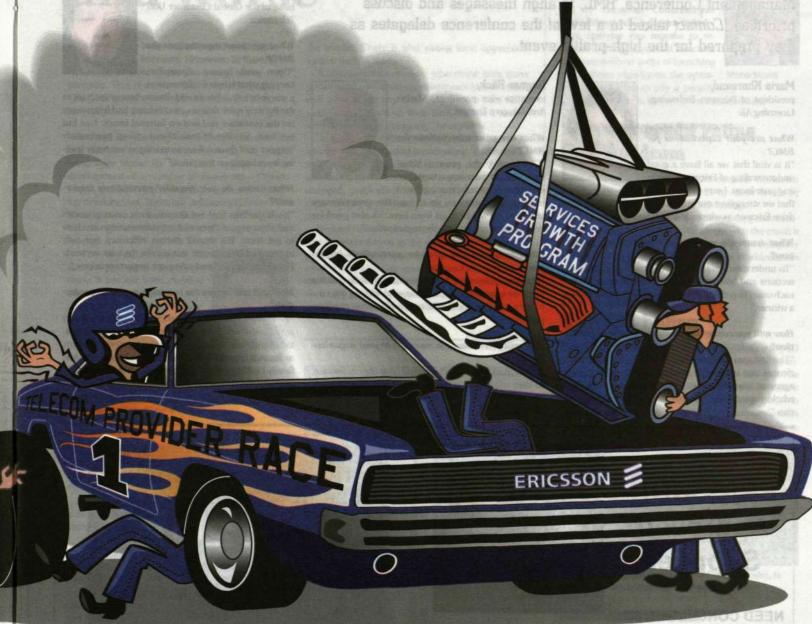


ILLUSTRATION: BJÖRN HÄGGLUND GEVAERT

Benelux goes one step further

Ericsson in Benelux has taken the Services Growth Program one step further. In order to stimulate service growth within the market that the service organization has. It is also an unit, special marketplace days have been arranged where representatives from the KAM and service organizations meet and share ex- opportunities the service organization can periences and develop new service solutions

Marketplace days are held three times a year and are something like a contest among local service groups. The various customer accounts present their account plans to the six different ous business areas within Global Services. Ser- to the growth of service sales. vice groups then go to work developing proposals for new business opportunities with op-

They have the support of the product development units (SPDU) within Global Services. Once the work is completed, all of the parties involved meet to debate and discuss which are the best business opportunities.

nize customer account plans with the plans opportunity to gain mutual insight into the various needs of customer groups and what offer," says Tom Vos. Services Growth manager

The goal of every marketplace day is to develop at least one new service-related solution per customer account that is of interest to the customers, as well as one business opportunity service groups, who in turn represent the vari-

"These days, we include as much service and support as we can in our customer offers. This is possible because our customer account organization works and trust them," says Tom

JENZ NILSSON



Three times a year, Ericsson in Benelux organizes a marketplace day managers now understand how the service in order to stimulate continued growth of service and support-related offerings within Benelux. The photo is from a marketplace day held in February, during which the Vodafone KAM group discussed which service offerings were most suited to their customer.

PHOTO: TOM VOS

Brazil prioritizes service and support

the furthest using the Services Growth Program, As operators within the country have cut back on their investments, the program has helped Ericsson find new business opportunities to help customers create more efficient networks, saving them money.

In recent years, Brazil has experienced tremendous expansion of its telephone networks. The fiscal year 2000/2001 was actually a record year in terms of the creation of new AXE lines by operators. This situation changed dramatically about six months ago, however. Today, all Brazilian operators have made significant cutbacks in their investments. Now they are in desperate need of solutions that can help them reduce their network operating costs.

"We have been conducting the Services Growth Program since last year and as a result we have gained a structured way of evaluating opportunities for service growth. The program model is entirely correct - evalu-

ating an operator's operations and breaking them down into pieces to see what sort of needs there are." says Peter Källberg, head of the Brazil market area

For him, the highest priority is growth in sales of network support and service-related products.

"Service growth is an absolute prerequisite for us to remain a successful market unit and I see this as an obvious com-

plement to system sales," says Peter Källberg. All parts of Ericsson's organization in Brazil are involved in the Services Growth Program. Representa-

tives from the KAM organization, the financial depart-

ment and the services organization meet regularly in order to find new business opportunities in cooperation with customers. This has resulted in the creation of a large number of service-oriented programs in Ericsson's product portfolio that have attracted customer

"We must remember that a significant portion of telephone traffic in Brazil is still voice oriented. It is an area in which we have a great deal of experience when it comes to revenue-increasing activities for operators," says Peter Källberg.

"Providing service and support is our opportunity to satisfy customers. By this I mean service within all categories, from network optimization and operation to purely consultative business development.

JENZ NILSSON

Getting the message at BMC

This week Ericsson's management meets at the Business Management Conference, BMC, to align messages and discuss priorities. *Contact* talked to a few of the conference delegates as they prepared for the high-profile event.

Maria Khorsand,

president of Ericsson Technology Licensing AB:

What are your expectations for BMC?

"It is vital that we all have a good understanding of Ericsson's vision and pure focus. I very much expect

that we strengthen our ammunition at BMC to further drive Ericsson as winner in this industry."

What issues do you consider particularly important?

"To understand and sharpen our company goals, directions and how we work together and complement each other in order to drive towards Ericsson's vision as a winner."

How will you convey the messages to your organization?

"The first step will most probably be to share my experiences and knowledge from the BMC with my management team. Needless to say it is vital to enrich the whole organization towards Ericsson's winning position."

Ragnar Bäck,

executive vice president, Market Area Western Europe:

What are your expectations for

"Considering the present situation, BMC is more important than ever. It's a chance for management

to meet and make sure we all have the same message and view on where to go from here. It's also good for getting some energy into the organization."

What issues do you consider particularly important?

"One important issue is our product portfolio and the focus we must have when it comes to serving our customers. Another one is efficiency and how we can keep driving this."

How will you convey the messages to your organization?

"All my market unit managers will be at the conference, so they will get the messages first-hand. Then we will discuss implementation and follow-up at our regular meetings."

Eduardo Restuccia,

president of Ericsson Portugal and head of the Global Customer Unit Telefónica:

What are your expectations for BMC?

"Open and honest discussion, keeping what is best for Ericsson as

a whole in mind. We should discuss how to get back to the fighting spirit that we used to have, and focus more on the customer and less on internal issues. Last but not least, we should look at our values, particularly 'respect' and discuss if we as managers are really leading by example on this point."

What issues do you consider particularly important?

"It's important that we discuss short-term priorities and objectives, actions and implementations and how to get there. We should discuss efficiency, not only in terms of head count, but also in the way we work. Finally, motivation and values are important issues."

How will you convey the messages to your organiza-

"I will draw conclusions from BMC together with my small team, and they will then cascade the information. I will also use the GCU intranet to my virtual team, as far as it is possible considering confidentiality. And finally I will do a thorough follow up on the progress."

TONYA LILBURN

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Quality by Design

Managing Iterative Development



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world watc

3G delay for better and worse

Most countries have completed the distribution of their 3G licenses. However, in the US, spectrum disputes have put a stop to the process. This is a delay that is both negative and positive, according to Michael Doherty, an analyst at Ovum, in the US.

When mobile telephony was introduced to the US. free market forces were allowed to decide which technology would be used. This resulted in the development of a number of standards - CDMA, TDMA and GSM, fracturing the market and inhibiting development. Spectrum deficiency is now starting to become an acute problem and, as if this were not enough, the distribution of 3G licenses is also delayed.

"The US has not held a 3G auction yet, quite simply because it has not been decided which spectrum is to be auctioned," says Michael Doherty, an expert on the US mobile market.



The US Department of Defense holds the spectrum that Michael Doherty was intended for use. The hope

was that it would release the unused spectrum for commercial purposes, but that decision was never

Defense vindicated

Then, after the turbulence of September 11 and the focus on national security, the Defense Department had the political weight to bolster its desire to retain the frequency band.

But the fact that 3G is being delayed does not need to be a disaster for the mobile industry, according to Michael Doherty.

"There is no tradition of using mobile data in the US and no enormous demand. If 3G is delayed, the market will have an opportunity to become accustomed to this innovation."

In addition, all of the largest US wireless operators are fully occupied with upgrading to so-called 2.5G and 3G technologies that utilize existing spectrum -GPRS, EDGE and CDMA 1x. AT&T Wireless and Cingular Wireless, for example, are each investing billions of dollars in this. With the delay to migration to yet another level of technology, they can focus on recouping their expenses, instead of immediately adding new ones, according to Michael Doherty.

US may fall behind

However, the delay also brings a negative aspect.

"The longer the delay to the distribution of 3G licenses, the more the US will fall behind the rest of

The US government's hands-off approach to regulations in the mobile area has definitely not favored

> In the US, there is strong resistance from landowners to release land for base stations, which is a contributory factor to mobile coverage often being insufficient. However, one important reason is the absence of political decisions in the mobile area.

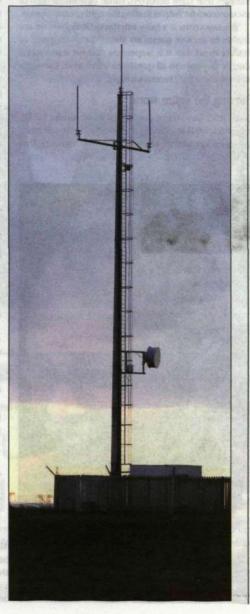
the market. There is also strong local opposition against mobile masts.

"Colleagues from Europe who come here don't understand why coverage disappears just ten minutes outside the city. But many people here don't want base stations on their land. This is a matter with which we are struggling," he explains.

Despite all the difficulties, the gap between the US and the rest of the world is narrowing. Traditionally, mobile telephony in the US has been regarded more as "nice to have," rather than a necessity. This has changed, particularly following September 11. In 2002, mobile penetration will actually exceed 50

Michael Doherty also believes that the market will find its own solution to the spectrum deficiency. To gain access to more spectrum, operators will acquire smaller operators or even consolidate with their direct competitors. At Ovum, it is believed that the six major mobile operators could be reduced to a maximum of three or four within two years.

ELIN DUNĂS



Deutsche Telekom threatened by penalties

Deutsche Telekom is charging too much when leasing its land network to competitors, at least according to European Commissioner Mario Monti, who has given the telecom operator two months to respond to the accusation. If Deutsche Telekom is found guilty of breaching competition regulations, the operator may be have to pay a penalty corresponding to 10 percent of its sales revenues.



Mario Monti

Reduced credit rating for Worldcom

Data and telecommunications operator Worldcom has had its credit rating reduced by three levels by Moody's Investors Service and Fitch Ratings.

The company's banks are now demanding new securities in return for providing Worldcom with the credit it requires and Worldcom may need to apply for company reorganization to get out of its debt trap. Worldcom has operations in more than 65 countries.

NTT loses **USD 6.5** billion

Despite a loss of JPY 812 million, corresponding to USD 6.5 billion, for the fiscal year that ended in March, Japanese operator NTT is forecasting a profit for this year. The loss was the operator's largest to date, but it did match expectations. Both NTT and its subsidiary DoCoMo issued profit warnings in April. The company's sales increased by 2.3 percent to approximately USD 94 billion.



Brazil, including the metropolis of Rio de Janeiro, is one of Telefónica Móviles' strongest markets.

Excellent result for Móviles

With its enormous profit of about USD 250 million for the first quarter of 2002, Telefónica Móviles spread joy throughout the mobile industry. The profit was an improvement of 85 percent compared with the yearearlier period and better than the market had anticipated. The average revenue per subscriber fell by 7 percent, but the number of customers increased by 21 percent to 30.8 million. Revenues in Spain increased most, but Móviles also reported favorable results in Brazil.

US mobile phones go warm

Americans use their mobile phones more and more. The average monthly usage rose 45 percent to 385 minutes last year, according to the Cellular Telecommunications & Internet Association. The average bill, however, rose just 4.6 percent to about USD 47.

Another area of growth has been revenue from wireless data services such as people logging on to computer networks using wireless cards plugged into their laptop computers. This more than doubled to USD 545 million

Got a question? ASQ the experts



Ericsson's helpdesk, ASQ, provides round-the-clock service to customers, employees and the public. For two and half years, ASO has been developing its operations and expanding its network of experts who help answer questions.

"People can contact us for help with all kinds of questions. We support the company in the effort to be perceived as one Ericsson - a single company," says Anders Ödman, head of operations at ASQ.

ASQ stands for Answer Sales Related Questions. The operations acquired this name when its staff only handled sales-related questions for GSM systems. The manager, Elisabeth Lindblad, explains that much has happened since the startup in September 1999. There are 14 employees and a handful of consultants working at the office in Kista. The operations are under way 24 hours a day, and students of Stockholm's Royal Institute of Technology help out on the night shift, thus gaining valuable knowledge of Ericsson's structure and products. While most of the employees have an engineering background, some are also experienced in

"We handle three contact interfaces: we take in internal queries via the intranet and queries from the public via ericsson.com. We also have the section called the "Extranet," through which we receive questions from the e-business portals open to Ericsson and its client operators for the purpose Elisabeth of improving and simplifying their Lindblad business relationships. In this area,



information exchange is key," says Elisabeth Lindblad.

Important to respond

With such extensive interfaces, ASQ receives all manner of questions. Questions from Ericsson employees are sales-related and often of an advanced technological nature, Questions that come through ericsson.com can be anything from questions from the general public about employment applications and the share price to more complicated, product-related questions from existing and potential customers.

Anders Ödman, the head of operations, says that the most difficult questions arise where key account managers have customers demanding a particular network

"These are hardly yes-or-no questions, but rather issues that are decided by the relevant prod-

Ericsson.com is an increasingly important means of strengthening the Ericsson brand, since nowadays the company has no con-

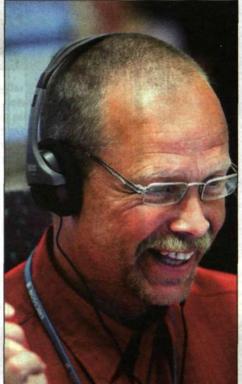


sumer products. In the wake of the organizational changes that have occurred, some customers turn to ericsson, com for help in finding the right contact person.

"Ericsson.com is a busy interface. Obviously we are unable to answer questions about the share price or market trend, but it is important that we make some kind of response to all questions we receive. Everyone who contacts ASQ receives a reply."

Serving the entire world

Once ASO has sent a confirmation of receipt to the requestor, staff start trying to find the answer or route the question further along the contact network that



received via the intranet is three working days, Regarding e-business questions from client operators, 75 percent are answered within 24 hours. For questions from the general public, the median response time is 20

ASQ is staffed 24 hours a day. Elisabeth Lindblad explains that this is because ASQ provides service on a global basis. Many inquiries come from other time zones, and the same applies to the contact network.

"There is a feeling of security in being able to provide an answer directly. Operating 24 hours a day also enables us to start working on the questions as soon as they come in, and thus minimize our response time," says Elisabeth Lindblad.

To be able to re-use information, ASQ uses a casemanagement system that stores all questions and all answers. Ericsson.com questions recur frequently. Elisabeth Lindblad explains that a database from which employees can retrieve information is under construction.

Expert knowledge

ASO has developed a network of about 400 employees, based in product units, business units and market units, and within the corporate staff functions. These people possess expert knowledge in their various areas.

"The most important thing is that Ericsson is clear about who to contact for help. It is also a cost-effecient way of working," says Elisabeth Lindblad.

About 80-90 percent of e-business questions can be answered by ASQ staff. The corresponding figure for ericsson.com is 50-60 percent.

As for questions received via intranet, about 10-20 percent are answered by ASO, while the remainder are ent further into the contact network.

JESPER MOTT

All questions receive a response. Although it is not possible to comment on certain questions, such as the share price, everyone who submits a question receives a confirmation of receipt of the question. Photograph on left: Staffan Borg taking a call.



The team at ASQ in Kista responds to questions from all over the world, 24 hours a day. The employees come from various backgrounds - however, most of them have engineering qualifications.

Cancelled trips and cancelled courses:

How you can make room for learning in hard times

Learn about alternative ways to knowledge and learning in the new issue of YOUnique. In this edition you will also read about Product Management, Sony, and how to achieve effective meetings.





Ericsson's testing equipment is worth a lot of money and is employed at more than 100 sites around the world. A special business unit, Ericsson Test Environments, will now take a comprehensive approach to this, ensuring that the equipment is utilized in the most efficient way possible.



A large number of the AXE switches manufactured are used by Ericsson for testing. Most systems and solutions are adapted according to customer requirements and are carefully tested and verified prior to delivery.

Improved efficiency is the goal

The primary goal for Ericsson Test Environments is to ensure that Ericsson's testing equipment is used more efficiently than it has been to date. At the moment, various business and development units own their testing equipment, making it simple to plan operations but also meaning that the equipment is not used to its full capacity.

"In a purely financial perspective, the new company will certainly lead to savings. However, more planning will be required to ensure that our internal customers have access to the necessary equipment as and when they need it," explains Björn Ilhammar, who works with Test Support at Business Unit

The testing facility, which is one of the largest within Ericsson, contains many rows of AXE and AXD cabinets and advanced testing and control equipment. Soon, the unit, which currently Bjorn Ilhammar forms part of the Business Unit Systems, will be incorporated within Ericsson Test Environments.

"In June, we will complete the testing and verification of Engine Integral, the entirely packet data-based solution for the transmission of speech, text and images. To date, we have belonged to a common business unit, which has allowed those of us on the project to work rapidly and informally. The new organization will put increased demands on forward planning and clarity in specifications from users," says Carl Hornstrand project manager for the Engine Integral 1.0 project.



MARKUS FISCHER

Money to save on

"We are currently conducting extensive stock-taking to obtain a clearer view of the testing equipment at Ericsson's many units," explains Susanne Lithander, head of Ericsson Test Environments.

Most of the consolidation process will be completed in the third quarter and will result in costs for Ericsson being reduced by at least 20 percent annually. This will be accomplished through greater concentration of the equipment and a higher degree of utilization.

"To free up capital, some of the equipment was sold last year to a syndicate of banks and has since been leased back. This was equipment in Sweden and the US that was sold for USD 770 million," says Susanne Lithander.

The new unit is operated in Sweden as a separate company, Erics- Susanne son Test Environments AB. The in- Lithander



ternational section of the organization reports as an independent business unit, Ericsson Test Environments

A substantial amount of the equipment is to be found in Sweden, although there are large units with test equipment located in the US, Japan, Canada, Germany and some 20 other countries. This includes equipment for support, training and verification of software, as well as for operation and maintenance (O&M), configuration, software loading, testing tools and testing equipment in LAN environments.

Smarter use

According to Susanne Lithander, it is just as natural to view testing equipment as a shared resource as is currently commonplace for IT and financial functions.

"We must use all shared equipment in a smarter

example, it is often possible to work in simulated test environments and to use equipment remotely," she explains.

Besides increasing efficiency in the utilization of existing equipment - both hard- and software - the company also has the task of ensuring that the correct testing equipment is available for Ericsson's future needs.

By taking a comprehensive approach and being able to plan at a general level, the idea is to become both better and less expensive for users.

"Currently, there is quite a lot of duplication in various testing laboratories. By coordinating testing needs at a global level, we will be able to offer greater flexibility and access to advanced equipment that may be needed only occasionally. In this way, many smaller units will also gain access to larger test laboratories," says Susanne Lithander.

"There will be fewer decision-making levels when it way, since this provides substantial opportunities to comes to investments, for example. However, it is imreduce costs. When it comes to testing equipment for portant that we introduce a professional interface, with

sharing equipment

clear requirements and forecasts, between our users and ourselves as suppliers."

The first task for the company will be to chart all of the testing equipment within Ericsson and to ensure that it is used more efficiently within the company at an international level. At the next stage, Ericsson will also offer external customers a certain amount of the testing

"Increasingly, our customers want to assume responsibility for their networks. In such cases, it is natural and profitable for customers to avoid the necessity of investing in their own testing equipment. Instead, they can rent equipment as needed or it can be included as part of the operational agreement," says Susanne Lithander.

kontakten@lme.ericsson.se



Costin Bica and Goran Matovic monitor tests of equipment at Ericsson's large test laboratory at TN, the Telefonplan facility in Stockholm. Thorough tests are conducted both within the development project and prior to the delivery of systems to customers.



With help from graphics and music inspired by 1950's comic books and films, David Ekberg and the others behind the cash flow game are breaking the record for the number of persons trained in the shortest time.

Virtual detective reveals better cash flow

In only ten weeks, 12,500
Ericsson employees have been schooled in the principals of cash flow through "The way cash flows." This makes the game one of the world's most successful net-based training courses ever.

David Ekberg, manager business control in Europe, the Middle East and Africa, is one of the game's initiators. He is reluctant to talk about a world record, but to his knowledge nobody else has achieved anything of this kind.

"As far as we know, this is the training course that has reached most people in the shortest time," he says.

He sees many reasons for the game's huge success.

"At Ericsson, there is an enormous enthusiasm for training and many also feel that they are a part of the company's future and want to contribute to improved cash flow. Naturally, it is not a bad thing that the game is also fun."

The idea for the game, or the training course, as David Ekberg prefers to call it, came from Ericsson's Young Advisory Team. The intention is to create a better understanding of the importance of cash flow.

"It is about rather simple measures, such as sending out invoices immediately instead of at the end of the week," says David Ekberg. David Ekberg believes that net-based training is in keeping with the times, since it is a fast, flexible and cost-efficient method.

"The cost of 'The way cash flows' is now USD 4 per employee and the cost continues to decline as more people play. The training session takes 25 minutes and can be done from your own desk," he says.

"The investment is profitable in itself even if it only generates a marginal improvement to Ericsson's cash flow, but we believe that the impact will be greater than this."

David Ekberg adopted rather unorthodox methods to increase participation. Each week, all of the managers in his market area were told how many employees at each unit had participated. As expected, friendly competition soon emerged, resulting in increased participation in the units.

"It was really effective," says David Ekberg.

ELIN AHLDÉN

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Play "The way cash flows" at:

university.ericsson.se

Africa wins competition

The Southern Africa market unit was the first to achieve 100 percent participation in "The way cash flows."

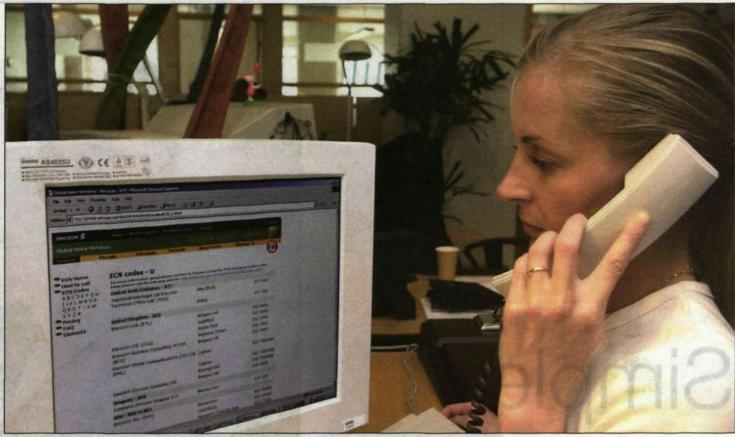
"We informed all of the employees about the existence of the game, where it could be found and why it is important. The interest was huge," says Jan Embro, market unit manager for Southern Africa.

"We established a target participation of 85 percent, but this was quickly achieved. Then we thought that if we can't achieve 100 percent for something fully under our control, how would we handle competition in a business situation in which we don't have the same level of control."

Success was achieved a short time later. The competition aspect made the exercise more fun, but the task itself is sufficiently important to have major impact.

"I played it on the first day and found it to be important training, even at a higher level. Cash flow has never been a problem at Ericsson and this is why it has never been in focus. I think it is now," says Jan Embro.

ELIN AHLDEN



By calling the ECN number - Ericsson's global internal number - Ericsson employees can save large amounts of money. The number can be found in Outlook or on the intranet. (see Fact box).

Work smart and save money

Computers, programs and telephones cost Ericsson several hundred USD each month per employee. However, there are simple ways in which everyone can save money.

Outlook, the Internet, PowerPoint, portable computers, faxes, computer support, telephones and mobiles - for many of us, these are indispensable aids we cannot manage without. Technology certainly helps us conduct our work in a more efficient and smarter manner today.

But of course this all costs money too. For the entire Ericsson organization, with tens of thousands of employees, it amounts to several hundred million USD each year.

There are certain costs that individual employees can affect directly and in quite simple ways.

Gunilla Ahrens works within IT Solutions Management with the task of getting employees to work smarter by using IT aids, such as computers and telephones in a more efficient manner.

"There are many useful ways to save money without causing any particular inconvenience. Take something like our internal ECN number when making phone calls. With this, a ten-minute conversation between Sweden and Australia costs USD 0.4 rather than



Gunilla Ahrens

USD 12. Telephone conferences also work out far less expensive if we use our own system, that can be ordered via the intranet, rather than using the local operator," Gunilla Ahrens explains.

Another major cost is for data storage. In certain parts of the company, the quantity of data has increased by 100 percent annually, resulting in huge costs. However, we can also affect these costs quite easily.

"It is a matter of all of us trying to change our attitudes and doing without things that are not absolutely necessary. When updating to a new version of PowerPoint, it is not necessary to keep the old version."

Further savings can be made if people review their e-mail boxes. Without thinking carefully about the matter, many have ordered e-mail boxes larger than the 50 MB originally provided. This costs Ericsson major sums each year.

"If we are to reach our savings targets, everyone must help as best they can. And it is not so difficult to contribute," says Gunilla Ahrens.

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SIX WAYS TO WORK SMARTER

. Make phone calls using the ECN number

You can find your colleagues' ECN numbers in the Outlook address book under the Phone/Notes tab. Ensure that your own ECN number is also updated.

Discard or archive old e-mail

A large e-mail box costs money. If you can manage with 50 MB instead of 150 MB, you can save approximately USD 23.5 per month.

· Save data storage space

Send links rather than attachments where possible. Condense large documents using the WinZip program. Remove old versions of files.

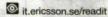
Connect your laptop less expensively

When on trips, usie the local Racom number. Order Racom Dial-up client free of charge via your local helpdesk.

- · Use videoconferencing rather than making a trip
- Use standard programs

This reduces maintenance costs significantly.

All information regarding Ericsson's IT environment, ECN numbers, telephone and videoconferencing services, can be found at:



Simpler with e-mail to mobiles

Salespeople and other employees who are often on the move can now use their mobiles and the same formula to the same formula t to gain direct access to e-mail, time-planners and Ericsson's global Outlook address book. This is all made possible by Ericsson Mobile Mail, a new GPRS-based application that will make working outside the office more efficient and flexible.

internal e-mail system and other Outlook functions," work," he continues. explains Ronny Johnsson, product manager at Ericsson Global IT Services.

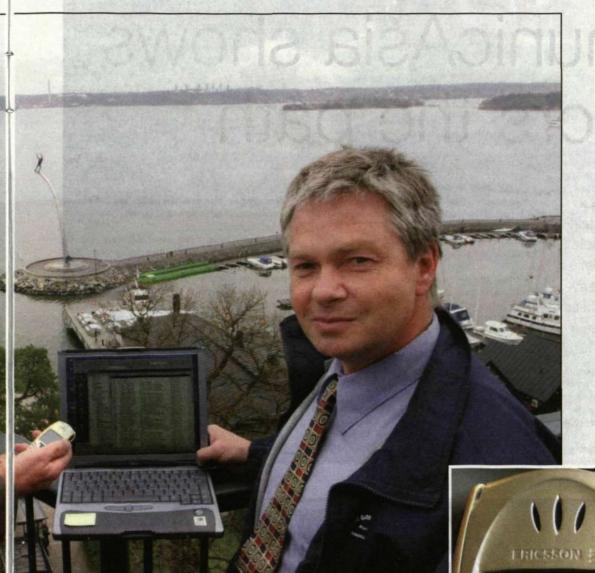
and cooperative partners that we practise what we build-out of this mobile standard, 2.5G, has progressed

"Ericsson is one of the first companies in the preach. The service is an excellent example of how new world now able to offer secure and easy access to its GPRS applications contribute to increased efficiency at

In the initial phase, 2,000 users will have access to Ericsson Mobile Mail. The service is primarily "Using Ericsson Mobile Mail, our employees are able intended for salespeople and others marketing GPRSto be more efficient, while also showing our customers based systems and applications in Europe, where the

MOBILE MAIL

- Currently, more than 20 million e-mail messages are sent or received by Ericsson's e-mail servers during a normal working week.
- Ericsson Mobile Mail can be ordered via the
- global ordering system, GORDON, at: https://gordon.ericsson.se
- The subscription fee for EMM is USD 15 per month. The connection fee is USD 10.



Lars Thorwall, project manager, and Ronny Johnsson, product manager for Ericsson Mobile Mail, demonstrate how the new service provides access to e-mail, time planners and the Outlook address book via a GPRS telephone.

furthest. If there is sufficient demand, the service may also be made available later in Asia and the US.

To be able to use the Ericsson Mobile Mail service, a GPRS telephone is needed (currently, a T68, T65, T39 or R520) and the corresponding subscription, an e-mail box in Ericsson's e-mail system (ESGP Mail) and a Racom subscription.

"The system offers a high degree of security through 'end-to-end' encryption and identification in accordance with Ericsson's security standard. It provides direct access to the user's own e-mail box and requires no complicated duplication of e-mail or data," explains Lars Thorwall, project manager at Ericsson Global IT Services.

WAP reader

The application is based on a WAP (wireless application protocol) interface. Due to the small displays on the phones, the service is currently not developed for reading attachments.

A supplementary "Telematic Service" allows e-mail to be forwarded and for most attachments to be print-

"In the future, the system may support handheld computers, PDAs, both via the Internet and WAP interfaces. Using a web browser and a sufficiently large screen, it would naturally be possible to view attachments, such as Word documents, Excel spreadsheets or PowerPoint presentations. In the long term, the system may also be adapted for secure identification, without a Racom unit," says Lars Thorwall.

When a new e-mail arrives at the inbox, a function is available that can send an SMS to the mobile phone with the text "New message. Read now?"

The subscriber can also request SMS notification only for certain e-mails with high priority.

Limited roaming

A current limitation is that European operators offer only roaming to date. During a transitional period, this

may mean that the service will not function if the sub scriber is abroad.

Most GSM operators in Europe have roaming agreements with other foreign operators, but these are lacking in many areas when it comes to GPRS.

In the introductory user tests, the Ericsson Mobile Mail service was highly appreciated. Following the test period, more than 90 percent of users were satisfied with the service and 85 percent wanted to continue

The development of Ericsson Mobile Mail has proceeded in collaboration between Ericsson Global Services and Ericsson Global IT Services. The project has involved staff in both Stockholm and Kuala Lumpur in Malaysia.

Logging in involves users

first selecting Ericsson Mobile Mail on their

To access the service,

it is then necessary to identify yourself again

mobiles and then identifying themselves

CommunicAsia shows operators the path

Once again, it is time for Asia's most important datacom and telecom trade show, CommunicAsia.

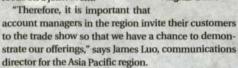
"The most important thing for us is to show customers the way forward," says Ragnar Bäck, head of the Asia Pacific market area.

CommunicAsia, which will be held in Singapore between June 18 and 21, is a trade show for customers and industry representatives. It has been in existence for 14 years and has become a major meeting place for suppliers, operators and others within the industry.

"CommunicAsia is very important for us because senior representatives from our most important clients are in attendance. The trade show is highly appreciated in this part of the world and it is important for us to

show what we have to offer," says Ragnar Bäck, executive vice president of the Asia Pacific market area.

This year, the trade show is especially significant since many countries have cut back on local marketing activities to instead focus on a joint event.



Several Ericsson spokespeople will be on hand to give presentations during the trade show, including CEO Kurt Hellström, Singapore manager Claes Ödman and Asia Pacific head Ragnar Bäck. In addition, a number of seminars are being organized. According to organizers, the trade show had almost 50,000 visitors last year, including over 30,000 from outside Singapore.

Ericsson's primary emphasis this year will be on GPRS. In conjunction with local operator Sing-Tel, a number of GPRS applications will be demonstrated live. MMS, streaming video and streaming multimedia are some of the applications that will be demonstrated.

Other products to be showcased during the trade show include the CDMA2000 and WCDMA 3G systems, the Engine multimedia solution, WLAN, Bluetooth and more.

"The most important thing for us to do is show customers that we have confidence in the future and that we believe in Mobile Internet. We will show operators how they can move forward," says Ragnar Bäck.

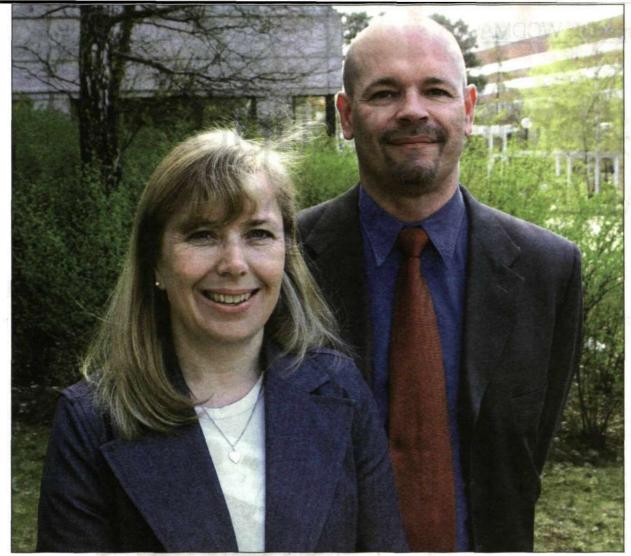
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In 2001, almost 50,000 visitors attended CommunicAsia according to trade show organizers. It is a place to make important contacts with customer representatives from throughout the Asia Pacific region.

PHOTO: LARS BERNAING



Eva Sparr and Jonas Lihnell have regular contacts with about a dozen industry research companies.

PHOTO: ECKE KÜLLER

Analysts take center stage

We tend to think of industry analysts as a pretty anonymous group of professionals, who are rarely in the limelight. They have their regular contacts with companies in the telecom industry, write reports on market trends and give their customers advice regarding technology investments, and their profession has a strong influence on the market.

"It is nothing new for Ericsson to engage in contacts with industry analysts. What is new, however, is that for about the past year we have been interacting in a more structured manner with various industry research companies. Certain business units have been pioneers in their way of interacting with industry analysts," says Eva Sparr.

She and her colleague Jonas Lihnell at the External Relations unit of Corporate Communications, are in charge of Ericsson's relations with industry analysts.

In the US, it is customary for companies to deliberately cultivate relationships with this type of analyst, and this is considered key in any company's PR work.

An industry analyst advises companies – for example, operators preparing to make strategic technological choices or invest in specific equipment. Financial analysts also provide advice, but their advice would generally apply to companies that are financially worth investing in. Ericsson's relations with financial analysts are managed by the Investor Relations unit.

"We have regular contacts with about a dozen industry research companies. Apart from individual meetings, we also invite industry analysts to various arrangements at which Ericsson participates," Eva Sparr explains. She mentions this year's GSM trade show in Cannes as an example.

That was the first time that Ericsson held a special conference specifically for industry analysts. Previously, analysts and journalists have been invited to the same event. Analysts are more interested than journalists in the long-term outlook for the industry and are therefore keen to have more in-depth information.

"As a follow-up to the meeting in Cannes, we recently held a teleconference at which we presented further information about EDGE. Moreover, for some time now, we have been holding monthly teleconferences for industry analysts on specific subjects. Sometimes we have up to 70 analysts calling in," says Eva Sparr.

"It's a matter of cultivating long-term relations with the profession. One of our jobs is to route the analysts to the right people at the company. The employees who meet the analysts have broad-based knowledge in a specialized area, and are of course trained in message projection and media relations," Jonas Lihnell explains. One of the industry analysts with whom Eva Sparr and Jonas Lihnell have regular contact is Jason Chapman, industry analyst with Gartner. Before becoming an analyst, he spent twelve years working in the telecom industry, in both the operator and the supplier areas. Gartner, one of the world's largest industry research companies, has had contact with Ericsson for several years. At Gartner, the feeling is that relations between the companies have developed favorably since Ericsson introduced its industry analysis program.

"As industry analyst, I have two tasks," says Jason Chapman. "In order to prepare independent reports, I collect and compile data from several companies. Press releases and lists of references are essential sources for me. I also visit large companies in the industry, to interview their key personnel,"



Jason Chapman

"The other task is to prepare reports on specific topics for companies in the industry. Topics might be, for example, GPRS, the current market scenario, or current trends. Through my contacts with finance institutes, I also find out about their views about the market and the outlook for the future."

When Contact interviewed Jason Chapman, he was at Ericsson's Kista site and had just concluded a presentation entitled "Mobile Market Outlook."

"Giving presentations is also one of my jobs," he adds.

GUNILLA TAMM

Customized support for WCDMA operator

This is the second of three articles about WCDMA. It describes Ericsson's methods of providing support and training for new 36 operators.

There is much that is new when it comes to the rollout of 3G systems around the world. Not only the technology, but also the relationship between operators and suppliers. When it comes to customer support, Ericsson has numerous roles to play depending on what each individual customer needs.

Once Ericsson delivers a fully tested WCDMA system, a large service force is prepared to lend support and provide training to customers. 3G systems are much more complex than 2G systems, both technically and especially in terms of services. It was much easier for operators to market person-to-person voice services than the host of new services that now include positioning, Mobile Internet and other online services. Customers are in the midst of an enormous process of change and they are in considerable need of assistance once their systems have been installed.

"Our policy is to assist customers as much as possible at the local level," says Erik Nordling, head of marketing, business development and communications at Ericsson's Global Services business unit. "We should be where the customer is, and more than 80 percent of our resources are devoted to this end. We can accomplish this due to the fact that we're located throughout the world and in proximity to all major customers."

Delivery and support centers

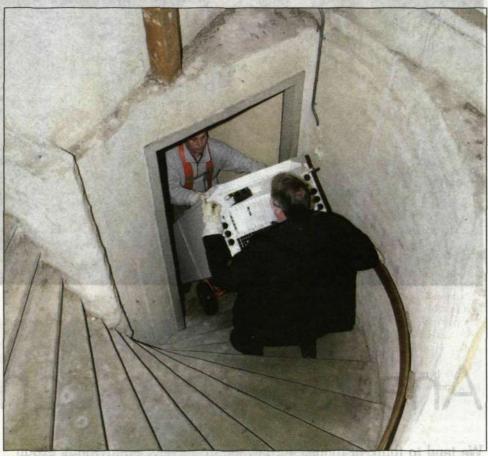
In addition to the company's global presence among its customers through local offices, Ericsson operates six regional delivery and support centers and five expertise centers. The regional centers are a vital part of the support organization for daily customer operations and the handling of problems that cannot be solved through the local organizations. These centers are located in Stockholm, Jorvas, Madrid, Dallas, Beijing and Melbourne.

Questions and data that require specialized expertise, and which cannot be motivated from a financial standpoint through the local organization, are overseen from five global centers in Stockholm, Gothenburg, Athlone, Kuala Lumpur and Montreal.

"However, the emphasis is on the local presence," says Erik Nordling. "We should provide customers with what they need, even in their own facilities, if that is what is required to have a satisfied customer. Flexibility and efficiency are our catchwords," says Erik Nordling.

Ericsson serves several types of customers who have differing needs. Major global operators, who can either be centralized or decentralized, require different responses. Traditional telephone companies are now facing entirely new problems with exacting efficiency demands. A third group is all of the newly started companies who, in theory, can come in with "a license and a sack of money and want to have help", as Erik Nordling says.

"Customers are carving out what they consider to be their core operation and contemplating out-sourcing everything else to others, such as Ericsson. Some customers want assistance with traditional GSM in order to devote all their energies on new WCDMA systems,



The full-scale rollout of 3G networks is now occurring and operators need plenty of assistance. Ericsson has the ability to provide customized support. Here, a WCDMA base station is being installed in Sweden.

PHOTO: ECKE KÜLLER

GLOBAL SERVICES

Ericsson Global Services is an area that is increasing in importance. The business unit employs approximately 17,000 people in the following areas: network rollout, customer services and education, systems

integration and professional services. Global Services is an integral part of Ericsson's customer market units.

while others want to do just the opposite. It's up to us to focus in on customer needs and customer values," he says.

Ericsson can, for example, develop training programs for a customer's entire organization, as well as design and put into operation support systems to help operators in their work with end users. Nothing is out of the question in the new telecom world. Ericsson views itself as a general contractor that keeps track of the requisite expertise and ensures quality.

Also operates networks

In the past, it was inconceivable that Ericsson would oversee the operation of an operator's network. It did occur, but only during network startups. This has changed in the aftermath of the economic downturn that affected the telecom sector, with the result that operators are reviewing their operating expenses.

"Over the past year, we have been in discussions with several operators about taking over their operations and we now have contracts for operation of 27

networks," says Johan Wibergh, head of professional services at Global Services. "That includes both network planning as well as operation, optimization and expansion. We're able to accomplish all of these at a lower cost, saving operators money."

The first real example of this trend within the telecom sector was Ericsson's transaction with Telfort of the Netherlands'. Ton aan de Stegge, CEO of Telfort, commented on the deal saying that, "we're able to focus more on offering our customers the services they want, rather than having to operate an increasingly technically complex network."

LARS CEDERQUIST

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Footnote: Ericsson also has several support tools for new 3G operators. The most important are RANOS, which helps in the operation and maintenance of radio networks, and the TEMS planning tool, which is described in greater detail on the adjacent technology page.

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technology



The three important phases for TEMS in mobile networks. First of all, the network is designed to fulfill license requirements, then the operational network is optimized and, finally, there is continuous monitoring of network quality

TEMS tools for optimal WCDMA networks

For approximately ten years, Ericsson has had tools to assist operators in planning, optimizing and building out their mobile networks. The product portfolio, called TEMS, which is being developed to become increasingly automatic, is an important part of the rollout of new WCDMA networks.

No mobile operator can manage without effective tools for planning how networks are to be dimensioned and built up with radio base stations and switches and how they are to be installed to give the best possible capacity and quality. Ericsson TEMS is a portfolio of such tools, including everything from the stage at which the network is to be planned and built out to network optimization and expansion.

TEMS is not the only portfolio in the market; some competitors have their own tools and several small niche companies offer corresponding solutions. Ericsson's portfolio, however, is a strong concept combined with networks and services, and Ericsson is unique in having automatic support that continuously monitors network performance.

Already on the market

TEMS consists of a number of products that are already available or will soon be available on the market for the new WCDMA networks.

TEMS Cell Planner is used to plan the network for the way in which the base stations are to be located to fulfil the license demands for the network. Digital maps provide information about where elevations, buildings and so on are situated and how the radio waves spread out. There are several prediction models that calculate the propagation of the radio waves, "9999" for rural areas and "Urban" with a higher resolution for developed city areas.

For WCDMA, a substantial number of parameters must be taken into consideration. Different services burden the network in various ways and in WCDMA – which is based on codes as opposed to GSM's time-slots – is used to plan coding schemes and effects.

TEMS

TEMS consists of products that help wireless operators plan, optimize and expand their networks. The portfolio addresses every phase of a network's lifecycle and was developed for GSM, GPRS, CDMA2000 and WCDMA.

A total of approximately 300 persons at Ericsson work with TEMS and the head office is located in Washington D.C.

The latter is related to the fact that a cell in a WCDMA network "breathes", that is, it changes size depending on the extent of the traffic load. The higher the number of users, the smaller the cells. By increasing the effect, it is possible to direct more traffic to a certain cell.

There is also a planning tool for microwave links, TEMS Link Planner.

TEMS Investigation WCDMA surveys networks in operation. This means that the operator, or Ericsson, for example, if the operator decides to outsource the work, drives around with mobile stations to measure network performance. The data is fed back to Cell Planner. There is now a scanner version for WCDMA and a small WCDMA terminal will be launched in the autumn.

Optimizing the network

TEMS Investigation is used to optimize the network. Like other TEMS tools, Investigation is also used internally at Ericsson for research. Linked with this is TEMS Desk Cat, which provides clear reports over the network for analyses and follow-up. This is a Windows-based program.

An area in which Ericsson is alone to date is TEMS Automatic, which is under development for WCDMA and will be released next year. The tool is last in the operations cycle and is used to monitor quality 24 hours a day. A mobile test unit is placed on buses or in taxis and follows a scheme to automatically call up a computer center, which stores and analyzes the details.

"TEMS largely consists of indispensable tools, but the components that solely increase quality are also clearly profitable for an operator, since every percentage point of increased traffic means large sums in terms of revenue," says Kari Korkala, head of Global Sales, support and marketing for TEMS.

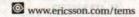
"The difference between efficient and less efficient networks can be as much as 5 percent of the total capacity usage and, ultimately, it is not only a matter of good tools, but also training. Common faults in GSM networks have been that they are wrongly configured, which results in interference. These typical faults can be corrected by TEMS."

In addition, it is estimated that 10-20 percent of churn, that is, when subscribers switch operator, is attributable to low network quality.

LARS CEDERQUIST

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Read more at:



Contact No 3:2002

Suppliers successfully test header compression

Ericsson successfully completed testing in Sweden, together with other manufacturers, of robust compression of IP-headers in 3G systems. The purpose of the testing was to check compression interoperability between various suppliers' systems. Participating in the test were Ericsson, Nokia, Siemens/Roke Manor Research, Effnet and Panasonic.

The IP header contains information about addresses, content and more and is attached to every data packet so that it ends up at the correct recipient. The problem that compression has solved is to reduce to a fraction of its size without affecting secure transmissions through the sensitive radio medium. That means that operators are better able to utilize their spectrum.

The standard that companies are now rallying around for 3GPP is ROHC, Robust Header Compression. It is largely based on the ROCCO algorithm. ROCCO is able to shrink IP headers from 40 bytes down to one byte (octet) and ROHC is expected to be able to provide a 75-percent reduction for IPv6. This will mean approximately 50 percent better performance for all IP services on 3G systems such as WCDMA, EDGE and CDMA2000.

Joint product plan launched internally

When Ericsson held its annual product planning meeting at the beginning of May, it marked the first time that 2G and 3G combined forces for a joint message. The meeting, which focused on radio access networks, was aimed primarily at local companies where the sales force would receive product support. A positive effect was the preparations prior to the meeting, during which all product managers had to unite around a joint plan. The seminars also included discussion of values and monitoring of competitors.

Participants expressed their greatest enthusiasm for seminars pertaining to WCDMA and the migration from GSM to WCDMA, which is to be expected as 3G networks are now being rolled out onto the market. The meeting was convened by Urban Fagerstedt, head of Core Unit Radio Network Design. Swedish operator Telia was an interesting participant, providing views on the new roles that have been created between operators and suppliers and the support that they expect to receive from Ericsson. Among other things, they expressed the desire for Ericsson to be able to see things from the operators' point of view and be able to assist operators in reducing their costs.

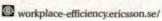
The tin

We are inundated by "need to know" information, and items that we are expected to respond to can easily disappear in the huge volume of read and unread e-mails. Here are a few good e-mail etiquette tips to reduce inbox stress.

Include headings in the Subject line that help recipients more easily prioritize and sort their e-mail:

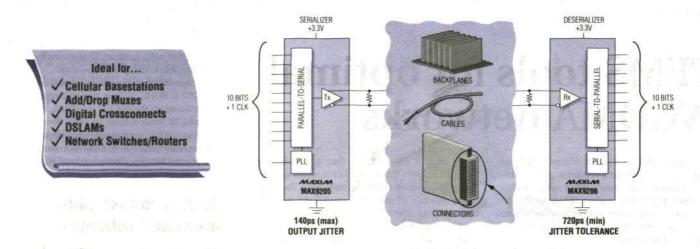
- · Action: Requires that some action be taken
- Decision: Requires a decision or a decision has been made
- · Question: An inquiry
- Info: Merely information, does not require any action

Always write a complete sentence in the Subject line. Sometimes, just a short message to the recipient is all that is necessary. In those instances, the message can be written entirely in the Subject line. So that the recipient knows that no additional text is to be found in the body of the message, end the Subject line with the characters // – that way the recipient will know not to open the message. Include a due date if such is required.



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SERIALIZERS		MALIS AND A STATE OF						
MAX9205	3.3	10	16 to 40	400	23	28-SSOP	DS92LV1021	7.50
MAX9207	3.3	10	40 to 66	660	32	28-SSOP	DS92LV1023	7.35
DESERIALIZE	RS					,		
MAX9206	3.3	10	16 to 40	400	30	28-SSOP	DS92LV1212A	7.95
MAX9208	3.3	10	40 to 60	600	55	28-SSOP	DS92LV1224	7.65

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23 Contact no. 10 around ericsson

Fixing the focus on the brand

The parents are world-famous, but the child requires further introduction. This is one of the reasons why Sony Ericsson is now launching its first worldwide marketing campaign.

"First of all, we want to create new habits of use in consumers. We want to make sure they understand the possibilities inherent in imaging and messaging," says Martin Blomkvist, who is responsible for global campaign development at Sony Ericsson. "Moreover, we really have to cultivate the Sony Ericsson brand, because we're not as well known as we think."

The campaign will be conducted on television, in the press, in theaters and on posters, in over 25 countries over the next three to four

ELIN DUNAS

elin.dunas@lme.ericsson.s

"Take color photos with a T68i and a CommuniCam and show your friends what you're doing" - this is one of the messages of the global Sony Ericsson campaign.



from the archives

Ericsson started manufacturing the "Ericofon" telephone in 1954, and the device quickly acquired the nickname of "Cobra" in many parts of the world. Ericsson chose not to give special names or designations to the various models of the Ericofon - it was left up to individual phone companies to name them. This picture, published in Contact in 1962, shows that native American women were among the fans of the Cobra.

Mobility puts horses on right track

A new mobile device may be able to tell horse-owners when a pregnant mare is about to foal.

According the news site Ananova.com, a Dutch company, Robor Electronics, says the invention may save the lives of horses in diffi-

How does it work? Pregnant mares are fitted with a type of girdle, to which a mobile phone is attached. As soon as the horse assumes a foaling posi-



New alarm device enables safer foaling.

tion, the phone automatically calls the owner. If there is no response, the phone then sends the owner an SMS message instead.

new assignments

As of May 1, Zen Tung is the new head of Operational Development at Business Support Center (BSC). Prior to this she was director of Corporate Projects at BSC.

As of May 1, Francisco Luque is the new head of the Business Support Center for Southern Europe. The Zen Tung support center covers all the activi-



ties of BSC's operational hubs in Madrid and Rome. Francisco was previously hub manager for Iberia (Spain and Portugal).

appointments

Per Beming has been appointed expert in Radio Access Architecture at Ericsson Research.

Göran Rune, at Ericsson Radio Systems, has been appointed expert in UTRAN Architecture and Signaling Protocols.

Sven Fischer has been appointed senior specialist in "Mobile Positioning and Spatial Channel Estimation Algorithms". Sven Fischer has helped to create and market mobile positioning since 1996.

contact

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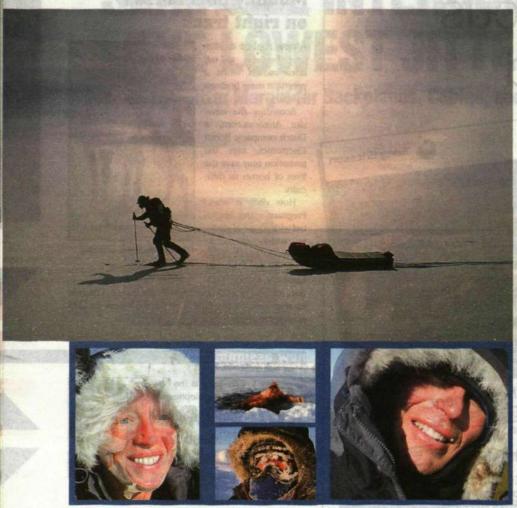
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http://www.ericsson.se/ SE/kon_con/contact



You can read about Tomas and Tina Sjögrens' adventurous journeys on their website. Their latest expedition is to the North Pole on skis.

Towards the poles and the Triple Crown

They defeated Mount Everest and they conquered the South Pole. Now the Ericsson-sponsored couple Tomas and Tina Sjögren are battling ice ridges and sub-zero temperatures on the toughest expedition possible — reaching the North Pole on skis.

Not long ago it was considered impossible to reach the North Pole on foot. Therefore, rigorous preparation was called for before Tomas and Tina Sjögren set off on the last of three expeditions that will earn them the coveted "Triple Crown" distinction. For weeks they trained in the harshest of conditions – Nunavut in the north of Canada, learning to cope with pressure ridges and ice rubble, obstacles that they would meet on their way to the North Pole.

Now they have been on their way for over a month, and the training has proved useful. Ridges, sometimes more than 15 metres high, must be climbed. The ice moves against the expedition, pushing them back sometimes more than ten kilometers a day. They are also weighed down by heavy sledges, packed with supplies and technical equipment.

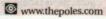
Tomas Sjögren writes on the couples website:

"The sledges are still heavy and we bury our feet deep in the snow when they come catapulting downhill behind us. We must be steadfast as they come to an abrupt halt in the pulling line. On one occasion Tina was getting ready to cross an open lead when (the sled) Arctic Spirit came rushing at her from behind, hitting the back of her knees and nearly threw her into the water."

If the couple reach the North Pole, Tina Sjögren will be the first woman in the world to receive the Triple Crown.

TONYA LILBURN

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An unusual silence

Ericsson's corporate editorial desk is an exciting place to work: here, you're in the midst of the news flow, at the very hub of everything happening in and around Ericsson. If anything's happening, that is. At the moment, things are quieter than they have been for a long time.

For more than a year, the dynamism of the telecom industry has seemed like a historical phenomenon. Most market players seem to have gone into hibernation or otherwise placed themselves in some sort of stand-by mode. It seems no-one wants to be the first to step forth and say: "Look, we've got to get some business momentum going, expand our networks so they can cope with the steadily increasing traffic, and enhance our customer service." It is certainly undeniable that it is increasingly difficult to use a cellphone in many places, and much could be done to improve service to subscribers.

Within Ericsson, the past year was marked by cut backs and an inward focus on the company's operations. It has kept us at Contact busy supporting these processes in various ways, but this type of writing job is not as exciting as writing about new advances in the marketplace, or times when there is a steady flow of news of new orders as there was a couple of years ago. This issue of the magazine is a good example of its current role – with more articles about how we can work more intelligently and more effectively and how we can save even more money for the company. These are important messages that must not be underplayed, of course. But as I said, we Contact editors are longing for better times!

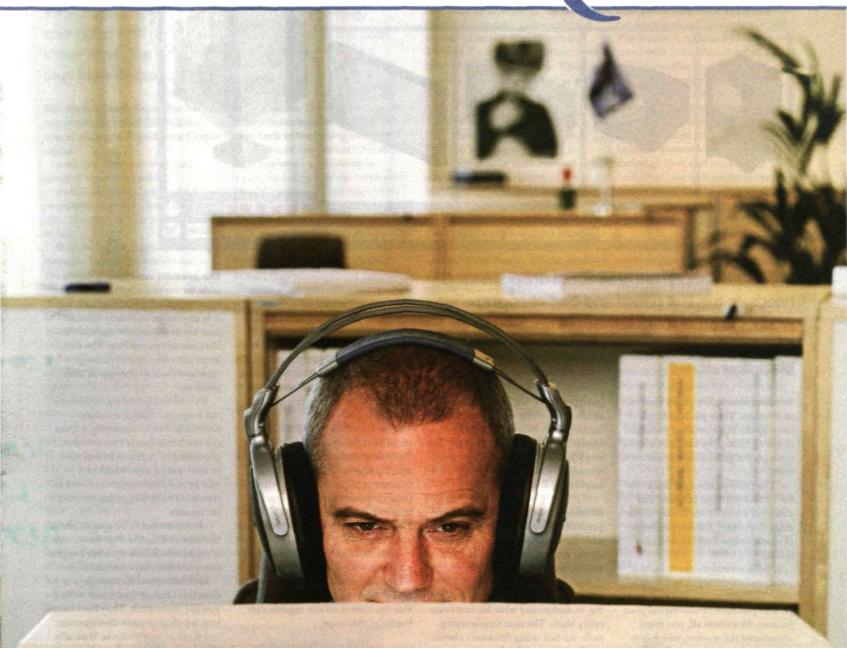
And here we are, facing a so-called quiet period that will continue long into the autumn. It will be a period during which we must be even more careful about what we write and what we talk about – at least as regards everything that is disseminated outside the company.

Since Contact is also distributed externally, to newspapers and news agencies, for example, this means a few months of even quieter and more inwardly focused communications. The situation is frustrating for those of use whose job is to communicate. We'll just have to grit our teeth and remember that "perseverance" is still one of Ericsson's fundamental values.



For additional information, access the website: http://inside.ericsson.se/convertibles

YOUNIQUE



Cancelled trips and cancelled courses

How you can make room for learning in hard times

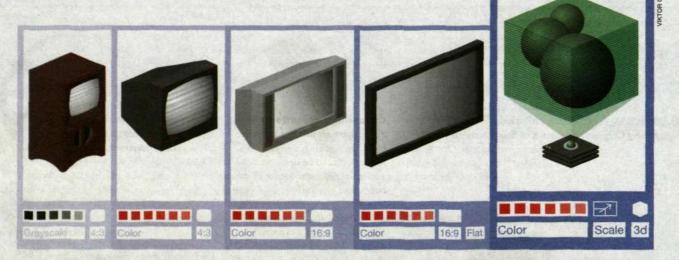
The publication about your knowledge and how you achieve it.

Ericsson University

Business Focus on Prod Mgmt p2 Sony A recipe for greatness p3 Time-savers
The effective
meeting p6

ERICSSON =

The origin of new products by means of natural selection



Product management is all about understanding needs. In this fast paced and ever changing world, the art of making the right decision at the right time makes the difference between red and black figures.

Product managers play a vital role at Ericsson. Their job is to help develop the right product packaged in the right way, by carefully sorting through the general flow of information.

The product manager must not fall in love with the product. The customer's needs have to take center stage, says Mark Ritson, professor of marketing at London Business School.

It takes several things to make a good product manager, in Ritson's view. You have to be good with people and you have to understand your product. But above all, you must understand the market, which is to say, understand what customers want.

People buy products that meet their needs. One mistake is to worry about the product and not about what the market wants. A successful product manager will know how the product is going to change over time.

Ritson believes there are always enough resources available within the company to determine just what future needs will be. There is a lot of knowledge to be found there.

One useful thing Ritson suggests is spending a day with your client, just listening. That will also let you ask the questions you need answers to, such as how the client compares their product to that of the competition.

- The challenge is making the customer happy, not manufacturing

good products. It's about satisfying needs. That's why a product manager cannot fall in love with his products. Herein lies also the danger of getting stuck on everything that's new even when the customer doesn't think it's important, Ritson says.

Gunnar Strömme is one of four product managers in Mölndal responsible for Ericsson's Mini-Link products, which connect base stations to switches via microwave radio.

Strömme spends a lot of time listening to his surroundings and trying to understand what his customers really want. The next step is trying to fit the bill using Ericsson's chosen product strategy for that sector.

– My job is to communicate and define our goal internally, between the customers and Ericsson. My responsibility is to create the groundwork for this shared goal, to make it possible to visualize. I use a lot of educational text and pictures, and simple, clear directives.

Strömme says he singles out a handful of clients with whom he develops an especially strong and direct relationship. He analyzes their questions and answers to get an idea of how their needs will develop.

— My big challenge is to boil down the information into a well-structured picture that everyone involved at Ericsson can sincerely back up... Because it's easy for different customers' market needs to pull in different directions. It's important to show the way toward a common goal for the whole organization.

Gunnar Strömme points out that the difficulty lies not so much in coordinating the various information regarding what Mini-Link might need in the future, but in being able to sort through all the information in order to get the entire organization on board.

That means that he listens to more than the demands made by Ericsson Business Managers and Solution Managers. These are often tied to some product or idea that the customer happens to need right at the moment, and that is often a feature already offered by the competitor's product.

But in order to have a noticeable profile as a company, we have to figure out how to solve our clients' future needs for innovation, needs that the clients do not express very loudly at this stage.

Håkan Andersson, Director of Corporate Product Portfolio Strategies at Ericsson, sees product managers as the hub of the entire network. Their role is very important, he emphasizes.

Like Mark Ritson, Andersson says it is important not only to understand the customers' needs on a technical level, but to understand why they need that particular solution, and also to define the product's most important sales arguments.

— A product manager should make sure that Ericsson's products are profitable on a long-term basis. That includes redirecting profits from existing products to investments in future products. And something that is easily forgotten is the importance of phasing products out, Andersson says. The product manager is responsible for maintaining the model, or basic template, of the product, and it is important to closely monitor how needs change throughout the life cycle of the product. The challenge is to take responsibility for that, and react to changes in sales patterns.

The difficulty lies not in phasing out a product that is no longer profitable, but in removing it from the market before it ever becomes unprofitable. It has to be replaced in time with a new model or a new product, whose investments in research and development give better returns.

— It's more fun to be a strategist at the start and have a wide focus, but it's harder to follow up what happens down the line, says Andersson.

He likens product managers to directors of small businesses with a specific framework. They have to capture trends and place development resources in new projects. Basically, they keep "their own" product portfolio together and make sure it is profitable.

They make certain that Ericsson products stay competitive.

Andersson would prefer to call this important group of people "lead managers" or "opportunity managers," since the job comes down to sorting through many different needs and singling out the ones that will be most profitable to Ericsson.

Timothy Hebb

To meet the demand for competence whitin this area Ericsson recently created the **Product Management Curriculum**, as a base for learning and support. More information is available at: university.ericsson.se

It's a Sony - it's a success

What makes Sony so special? The ability to keep coming up with new household electronics, the customer focus, the attitude towards learning? All of it, says Mark Wilcox, at Sony.

Not many people know that Sony was originally called Tokyo Telecommunications Engineering Corpo-

And that their first electronic product was a rice cooker.

In the beginning, 1946, the firm employed 20 people. Sony has more than 180,000 all over the world

But the big question is how Sony manages to be so innovative and at the same time customer oriented, year after year.

We don't use think tanks or focus groups in general. We hire internal teams instead, teams that can be made up of employees from various Sony divisions. The understanding we gain helps us to come up with creative solutions, says Mark Wilcox, Senior Manager, Human Resource Development.

- And employees from different areas of Sony have been encouraged to make contact with one another. If a team working on one idea needs other skills, nothing should prevent them from contacting the department that can help.

- There are no 'Ten Sony Steps to Innovation.' It's the informal and flexible situations that result in creativity for us. And I also think it has a lot to do with being very risktolerant, Wilcox says.

Aldo Liguori, Director of Corporate Communications for Sony Europe, goes back to Sony's origins to find the source of inspiration. One of the founders wrote a manifesto in 1946, declaring that the employees should 'embrace a firm cooperative spirit and unleash their technological capacities without any reserve.' The goal was to 'establish an ideal factory that stresses a spirit of freedom and open-mindedness,' and to 'rapidly commercialize superior technological findings in universities and research institutions that are worthy of application in common households.

He believes the desire to see the complete picture and not the parts alone is one reason for Sony's success.

The different parts of Sony are encouraged to work horizontally with each other to find growth possibilities and synergies, says Aldo Liguori, who today works in Berlin at the European head office for electronics and has previously worked in USA, Japan, Mexico, France and Eng-

The different divisions of Sony are electronics, film, music, computer games and financial services. Electronics brings in about 70 percent of total income, so it is the core business. Many synergies are found through intra-group alliances. Lig-

uori takes as an example the fact that Sony Ericsson cell phones will soon be able to receive film from Sony Pictures Entertainment. Music from Sony Music Entertainment. These services are being developed as we speak.

Concerning education within Sony, there are advantages to be found in working together. If a workshop is to be held over two days about, let's say, the future of broadband, and is considered too expensive for the Sony organization of one country, the workshop can be purchased by the European offices together. Which also improves the quality of the course. All the participants then travel to the city where the course is being held.

Last year Sony Campus Europe's web-based e-learning platform was launched. The platform has a discussion group, so when a Sony employee has participated in a seminar - New Businesses and Leadership, or Communicate Better in Sales, for example - he or she can email the professor who led the course via the site.

- There are in all ten different programs to choose from, Wilcox says. To take yet another example, one course is called Program for Developing Potential. It contains one part called From Innovation to Design, and another part that focuses on seeing and identifying market

One priority for the future is broadband. CEO Noboyuki Idei talks about Sony becoming a 'knowledge-

emergent enterprise in the broadband network era.' For example, the PlayStation 2 console is already prepared with a broadband outlet. It will be possible to play network games that require much faster transferring than today's Internet. There are more Sony products that are already network-ready.

The different research and development divisions are encouraged to exchange ideas and impressions with each other, via such events as trade fairs in Japan that are only available to Sony employees. These are called Sony Technology Exchange Forums.

Another factor behind Sony's sensitivity to customer desires, according to Liguori, is that Sony constantly reviews its organization in order to adapt to a changing market.

- A research team can include researchers that are not from Sony. That is an effective way of bringing in knowledge needed quickly, and generating new levels of competence. We have a program that allows us to employ them for one year or more, Liguori says.

And then there is what makes Sony Sony: the design. Liguori takes the example of a television.

Our philosophy is that it should be designed so it doesn't have to be hidden when it is not being watched. A Sony television should be so pleasing that it can stand alone, it should almost remind you of a piece of art. We try to make life more pleasur-

Timothy Hebb



From technology to content. Sony is a major player in the world of entertainment although the core business is electronics.



Some Sony Milestones

1950 Japan's first tape recorder

1955 Japan's first transistor

1960 World's first transistor television

1963 World's first transistor. compact size, VCR

1968 Trinitron colour TV

1975 Betamax VCR 1979 Walkman

1982 CD player

1985 8mm video camera

1987 DAT tape deck

1990 HDTV Trinitron

1992 MiniDisc (MD) system

1995 Digital Handycam

1997 DVD Video Player

1999 The Entertainment

Robot AIBO

When times are hard, like right now, it's important that you take a good look at your own situation. The financial reality may narrow your chances of attending a certain course, but don't let it spoil your will to learn. You can learn in your everyday work and you can learn on your own. Here's how.

Everyday learning

CLAUS: "80 percent of what I learn happens at work"

Close the door, reroute your calls and listen to calming music. That is Account Manager Claus Caspers' recipe for achieving good study results.

– Ericsson is the largest university in the world. Today I meet people from Sweden, England and Germany, and through them I receive many different kinds of information, says Claus Caspers.

He is an account manager at Ericsson in Germany. He works with infrastructure questions and UMTS contracts. For him, work is a constant learning process.

— I would say that 80 percent of what I learn happens directly at work and 20 percent in the form of courses, many of them Net-based.

Caspers has noticed how the company is gradually shifting more and more of the employee learning to the Internet, and he doesn't mind at all.

– To go away for a course session takes time, and I'm away from the office for several days. But I can concentrate on Net-based courses for a few hours at a time. Claus Caspers knows all courses are not alike. He finds technically oriented courses are best studied at the office on the computer, but says that leadership training demands that the participants meet.

 It's better to meet face to face for talking about responsibility issues, he explains.

He believes that Ericsson offers a wide range of training, but underlines that the employee must take the initiative.

– Everyone employed in Germany has a skill plan. According to the plan, I decide together with my boss what kind of training I need, both short and long term. We also discuss whether I am prepared to take more responsibility, or perhaps to specialize.

When the skill plan is settled, it is up to the employee to implement it and follow it through, and at the same time learn more about all the working groups he is a part of.

 You have to be a little tough on yourself. Once you've decided to



Make time for learning, and make your collegues know that you will be occupied. Don't let constant interruptions ruin your most valuable learning time.

study, just close the door, turn off the cell phone and reroute your calls. Otherwise people will come after you all the time, says Claus. - If I'm in a room with other people when I'm doing a lesson, I listen to quiet music on my Walkman to shut out the noise from other people.

JOSÉ: "You have to keep your brain fit"

Each new day brings new challenges to Ericsson employee José Melchor, Brazil. In order to meet these demands, he makes a point of learning new things – every single day of his working life.

Learning is a natural part of the job for José Melchor Santos Moure, who works for Ericsson in São Paolo, Brazil. Learning as he sees it can actually be all kinds of things – keeping up with what is happening in his field, taking courses, going to trade fairs, expositions and seminars to keep an eye on the competitors.

- If you want to sell your brain

power, you have to keep your brain fit. A lot of the responsibility for learning more is on me, says José Melchor.

- There are many learning tools, but I have to find them myself. I take classes and participate in conventions in order to keep abreast of what is happening in the market.

Melchor feels Ericsson offers good learning opportunities.

– For my group and I, the Internet and our intranet are the most important sources of information. Ericsson makes it possible for me to learn new things every day. José Melchor works as a consultant and his title is Manager, Customer Solutions. His job is to find good solutions for new and old customers. New knowledge is part of what he sells to his customers.

– Since we are a group that is supposed to provide solutions to customers, our working days tend to be very dynamic. Each new day makes new demands, we have to suggest new solutions, understand the products and how to use them the best way. So we always have to be aware of our company's entire range of products, he says.

— It is extremely important to have a good learning climate in our working group. We must learn together, and we must do it every day.

José Melchor was one of a group that attended a pilot course on the new IP standard, version 6, that Ericsson University organized in the fall of 2001. The course combined self-studies with real time, online lectures.

— I like to try new things, and this worked out great. Being able to chat with colleagues from other parts of the world was really valuable, says Melchor.

...by using your network

Networking is about making contact, keeping in contact, and daring to approach new people. Johny Alm, networking expert, shares his top tips for expanding a static network.

 It takes three things to become a networker: Practice, practice, and practice, says Johny Alm.

His approach is based on this: When we need to learn or know something new, the answer is often within reach. The problem is that we are not aware of it. The answer is in our network – which is not used enough. Many people are simply not used to talking about what their needs are and shy away from simply lifting the receiver, or sending an email with a question.

Johny Alm began to get interested in networking seven years ago. Today he is an authority in the field.

- The most successful people are the ones who network. They make contact easily, and in turn offer contacts and information of their own.

This is where the training comes in. Many people have a built-in resistance to approaching unknown people, sometimes it can be both shyness and a sense that it is wrong to 'exploit' people you know. You have to pick up the telephone in order to be a good networker, and you must participate in events and activities where people meet. You must also chat with people you do not know,

and give them your business card.

Alm has created a business idea for his network – he wants contacts with others who are interested in networking issues. A good networker remembers people and where they met. Alm uses Microsoft Outlook to keep note of his network. He goes through the whole list a few times a year and drops a line or makes a phone call.

It is not enough to pass around business cards and listen politely to one another. For something to happen in encounters between people you must expose your needs, tell others what you are looking for. And it is crucial to listen and learn from the answers.

 Asking questions is good, but listening is better! By listening and asking follow-up questions you will allow your contacts to educate you, more or less for free, in any subject imaginable, says Alm.

— I needed venture capital for my company, and so I asked around if anyone could help me. I started that process a year ago, and now I'm finalizing contracts with investors.

Test your network by coming up with two things you need help with, something personal or professional.

 Think about who could help you. Call and ask them. I guarantee you'll find what you need within five phone calls.

Johny Alm also recommends working networking into your weekly schedule. Every week he writes down who he has been in contact with, who is new, who is old, who is needed the most?

- It only takes a few minutes, says Alm. Next week you can start making new contacts. One new contact per week makes 52 per year.

...by the power of Internet

Would you like to learn how the new IP standard really works, or find out more about the best uses of Net-based learning? Do you want to do it together with Ericsson colleagues in other parts of the world?

Ericsson offers a range of courses, from the simple to the more complex, and many of them are free.

 We have developed courses that contain elements of self-paced learning and class meetings in real time on the web, explains Eva Lanteli Senior Consultant at Ericsson University.

There are about four hundred different Net-based courses in telecommunications, technology and product management. Participants can take courses in WAN technology, general telecommunications, data communications, IP fundamentals and cash flow.

There are courses from beginner's level to certification, such as Java programming.

 The only requirement is that the course is relevant for the employee's goals. It must fit in with his or her skills development plan, Lanteli says.

The fact that many courses do not cost anything does not affect the quality – but it makes it easier for managers to say yes. An Ericsson employee seldom has to justify to his or her manager just why a particular

course would be valuable to take.

- It's actually the other way around, says Lanteli.
- It's the boss's job to motivate the employee to set aside time for training and further development.

A course in Microsoft Excel is easy and handy to do on the Internet. The big challenge is to stick with it and complete the course. Studying requires discipline.

- You have to be very active, be really motivated, because you often study alone, says Lanteli.
- We have expressed goals for employees to keep learning new things, but we don't help them enough along the way. We have to help people find out how they learn best. The best way to do that is to plan the courses together with the manager.

Part of the planning is to make a study schedule and make room in your agenda for studying.

 Everybody can talk to me if I'm at work in an open office, no one can see that I'm actually in class. I have to show somehow that I don't want to be disturbed, or go and sit somewhere else.

In the fall of 2001, Ericsson University launched a Net-based course that included self-paced learning, discussion forums and instructor-led seminars online in real time. The students came from Europe, South America and the US.

- We see a huge potential in these courses. The participants 'talked' to each other and exchanged experiences. The course was tied directly to their work, and we're going to develop this further, Eva Lanteli promises.

Five ways to get started:

- Learn how you learn: if you find it difficult to learn on the web, find a another way – for example by studying together with someone.
- Make a study plan for where, when, and what you are going to study.
- If you are going to study from home: plan it so that it works with your private life.
- Set goals and partial goals.
- Reward yourself when you have achieved a partial goal.

A visit to the Ericsson University website could be the first step towards a learning experience. What are your tips to improve everyday learning? Let us know! university.ericsson.se is the address.



The Linux approach

The most famous person in the world of free computer software is Linus Thorvalds, creator of Linux. Shared knowledge is key to his approach – and his followers are many.

There is a world of mutual learning that is unknown to many people. A basic principle of it is that people share their knowledge, and distribute it among others.

Imagine a world based on the principle that we learn from each other, and where no one demands cash payment for their work. Imagine a world made up of mostly of young people the world over who make free software, and who discuss, test and develop new solutions.

That world exists, and it is grow-

— In the beginning I learned from others, when I got better at programming I wanted to share what I knew with the people who had helped me earlier. I think that is human behavior, says Mikael Djurfeldt, doctoral student at the Royal Technical University in Stockholm.

Djurfeldt has devoted considerable time to free software. The movement began in the late 1970s when several companies began selling software, or programs, for computers.



Researcher Richard Stallman at MIT in Boston was critical, to say the least, to the entrance of profit making into what had earlier been a non-profit and almost altruistic world of computers. He started up the GNU project, aimed at creating a free operative system and software to go with it.

The key is that the source code — the programming code itself — is free to use and develop. This means that no one has to reinvent the wheel. Everybody can use, or borrow, well-coded and well-written parts of the

program from each other without running into problems.

Much later, Linus Thorvalds created the Linux operating system, which can be seen as a component of the larger GNU project. But the world is much larger and diverse than that. Where some people see free software almost like a religion or an ideology, others see only the commercial advantages.

 You could see it like a society that's tied together by news groups and email lists, explains Mikael Djurfeldt.

Henrik Abelsson is another developer of free software.

– A person that gives back a lot gains higher status in this society than the one who only uses it, he explains.

Alan Cox, England, is one of Linus Thorvald's closest co-workers. He describes their world as a kind of cloud that is constantly changing. He points out that there are no problems of trust. – Everybody here can read and use the source code, which also means that it is not possible to build any strange configurations into the software. That happens all the time in the commercial programs. Linux is open and reaches out its arms to everyone who wants to participate, Cox says.

He believes that people basically want to cooperate with each other. Free software creates many possibilities for anyone who wants to work with computers.

- The future for Linux depends on how Microsoft acts. If they do everything they can to disrupt the openness, things will get worse for

Personally, he is motivated by acquiring new knowledge.

— I spend a lot of time playing with new and different parts of the computer world. When I do that, I see other people that also want to find ways to make the programs better.

When you have come as far as a Mikael Djurfeldt or an Alan Cox you slip into something of a teacher's role. And that role is inspiring:

 Close contact with the student requires you to learn new things all the time, says Alan Cox.

Charlotte Säfström

Useful links for learning more about the free software world: www.gnu.org; www.linux.org; www.stallman.org

Meetings that matter...



People who talk too much, others who say nothing. Decisions that are never implemented. Rikard Wildhuss, a meeting communications specialist, gives us a few pointers on how to solve the most common problems associated with work meetings.

One person always dominates the meeting. How should we handle that?

- Start with a brief round of suggestions, where each person has a given length of time to ventilate some of his or her ideas. No one may comment until it is his or her turn to speak. That way everyone can speak without being interrupted, the quiet participants too. Another solution is to appoint a chairman who gives the word to speakers in turn, and is

aware of each individual's particular expertise or valuable knowledge.

Nothing happens at our meetings – nobody brings up the important issues or organizes the conversation. How can we make meetings more effective?

– In this case it is important to have a chairman who opens the meeting, declares its purpose and keeps track of speakers. In brief, someone who moves the process forward. There is absolutely no need for a manager to take this role. In



a smaller organization the role can circulate. It is also important to take minutes (notes) that define what is to be done, by whom and by what deadline; and that everybody receives a copy after the meeting. If you have a solid structure from the start, no one will slip through.



Jokes? Can our meeting be lightened up a little? Or does that compromise efficiency and mutual respect?

– Laughter always perks things up, but it must not be at the expense of any co-worker. But humor and jokes are based on people's personalities and cannot be added as a point on the program. If a joke is clumsy or over-the-top, it can lead to a serious loss of respect. The chairman must create a climate in which the participants are not intimidated from say-



Third generation skills

3G – third generation wireless technology – will soon be up and running. Now is the time to plan ahead and upgrade skills to meet the demands of the new technology.

New systems to make the future even more mobile have been under construction around the world in recent years. The first wave of commercial 3G launches will come from telecoms operators, and in fact Ericsson, Nokia and Siemens have already staged more than 70 field tests. The future is on our doorstep, and it is crucial to be prepared. Expertise and skills are needed not just to keep pace but preferably to be a few steps ahead. Ericsson University plans to

help you, the Ericsson employee, take those imperative extra steps by providing knowledge and training opportunities.

– In a type of business where quick and constant changes are part of the work, there is a permanent need for skills development and training, says Ulf Östberg, Product Manager for Ericsson University.

A number of updated training programs will be available this coming Fall. The skills-upgrading project at Ericsson is global, and Östberg estimates that thousands of Ericsson employees will have the opportunity to receive professional training in the 3G field.

 For instance, we have an order for our co-workers in Network Configuration, Network Integration 1st, 2nd, 3rd line Support. We work together with Ericsson Education in the area of product-related training that is shared by Ericsson employees and our clients. The training will alternate theory and practice.

– The participants can expect a combination of web-based education, seminars and teacher-led segments. But this is an overall upgrading of Ericsson skills to be implemented over a longer period of time. I wouldn't say that we have set any closing date for the program. The training programs will simply be updated in pace with the development of 3G itself, and in accordance with Ericsson's strategies and business plans.

The training programs are not only a challenge for the actual 'students'.

- This is definitely a challenge for Ericsson University too. We have to enlist support from experts in the field, says Östberg.

As mentioned above, the training programs will start in the fall.

– We can't start training when a new activity kicks off, by then it's too late. The qualifications needed to meet the demands must already be in place. You have to have planned ahead, or you'll be behind from the start, Ulf Östberg concludes.

Details and latest information about all product related training are available at: university.ericsson.se

ing what they think, and where they dare to be themselves. Then the jokes will eventually come naturally.

At our meetings, some of us want to appoint a chairman and set an agenda, while others want to start at the other end and iden-

tify the problem right off. How do we go about it the best way?

– This is a classic problem and both groups are right in their own way. You have to start by clarifying the purpose of the meeting, and then set up a list of issues based on that. You have to find a middle road





between these two approaches that works for everybody.

People tend to react negatively towards everything that is said at our meetings. How do we break this pattern?

– Why are people so negative? Often because they have attended numerous meetings where nothing happened, or where they were only allowed to listen, or the decisions were never implemented. That is why it is important to engage every participant and let them be a part of the discussion. It is also important that the measures agreed upon at meetings really happen on schedule. Another basic rule is 'the right person at the right meeting'.

Josefin Ekman

Latest news in **learning**

New Modules in Product Management Curriculum

"Communicating Value" gives the answers to what value is and how it should be expressed. Learn more about pricing principles and perceived price versus real price in the module "Strategic Pricing". The Curriculum covers 15 modules in all.

Mobile Internet Application Development

Ericsson Mobility World Competence Solutions announces the development of a new service package. Analysis of training needs, and a variety of courses and training flows are offered to employees and customers. The aim is to guide the operators and application developers in which kind of applications to offer their customers, now and in the future.

Fast Track to Mobile Internet Revenue

Learn more about the business and technical aspects of Mobile Internet. This course describes Mobile Internet's key enablers and applications of today.

Advanced Training for System Engineers

The SYDIC-Training project has been approved and signed by the European Commission, Advanced training for system engineers, who want to stay on the edge for tomorrows' system development, will be developed by the best universities and research centers in Europe.

Net-based Learning from Harvard Business School

Ericsson University North America has partnered with Harvard Business School to offer all Ericsson employees Net-based courses at a discount corporate rate.

The Way Strategies Work

It is more important than ever for all employees to understand how business decisions are made in response to the fast changing market situation. A new Netbased course focusing on the new Strategic Planning Process will be released in June.

Read the news in full, and get the latest updates at: university.ericsson.se

One of the key skills in a knowledge based company is that of storytelling. It is a way to visualize values as well as nourishing flows of relationships.

"At a certain level, what we do at Disney is very simple," writes Michael Eisner in his book Work In Progress. "We set our goals, aim for perfection, inevitably fall short, try to learn from our mistakes, and hope that our successes will continue to outnumber our failures. Above all, we tell stories, in the hope that they will entertain, inform and engage."

"Storytelling could provide a useful tool for capturing and disseminating knowledge in organizations," says David Snowden, IBM's director of the Institute of Knowledge Management for Europe and the Middle East. "Stories are already a necessary part of an organization's life. They are told around the water cooler, confidentially whispered in the elevator, distributed via email. Moreover, organizations are beginning to understand that storytelling is not an optional extra. Stories are something that already exist as an integral part of defining what that organization is, what it means to buy from it, what it means to work for it. These are

the early days in understanding the use of stories in a modern business. The results, however, are sufficiently good that we now know that there are major benefits to be achieved from the use of stories and from the development of storytelling skills."

One of the best exponents of the power of story telling is Stephen Denning, author of The Springboard: How Storytelling Ignites Action in Knowledge-Era Organizations. Working with the World Bank he began to explore the power of storytelling. "Time after time, when faced with the task of persuading a group of managers or front-line staff in a large organization to get enthusiastic about a major change, I found that storytelling was the only thing that worked," Denning recounts. "Storytelling gets inside the minds of the individuals who collectively make up the organization and affects how they think, worry, wonder, agonize and dream about themselves and in the process create and recreate their organization. Storytelling enables the

individuals in an organization to see themselves and the organization in a different light, and accordingly take decisions and change their behavior in accordance with these new perceptions, insights and identities. The attractions of narrative are obvious. Storytelling is natural and easy and entertaining and energizing. Stories help us understand complexity. Stories can enhance or change perceptions. Stories are easy to remember. Stories are inherently non-adversarial and non-hierarchical. They bypass normal defense mechanisms and engage our feelings."

In many ways storytelling is the antithesis of what managers have been trained to do for the last 100 years. It is anti-analytical. But, says Denning, this does not mean that the role of rationality and analysis in business is dead. "Storytelling doesn't replace analytical thinking," he says. "It supplements it by enabling us to imagine new perspectives and new worlds, and is ideally suited to communicating change and stimulating innovation. Abstract analysis is easier to understand when seen through the lens of a well-chosen story and can of course be used to make explicit the implications of a story."

Companies including IBM, Disney, Cap Gemini Ernst & Young, Siemens, Aventis, and so on, are all exploring the power of storytelling. The reason, says Stephen Denning, is simple: "The CEOs of the world are all in a dilemma: they are sitting on organizations that must change, but they have great difficulty in persuading the organization to change. Change is inevitable, yet the organization is immovable. So they are desperate. They try to coercive methods but these are very unpleasant and costly. And so they wonder: is there another way? Fortunately there is."

Stuart Cranier

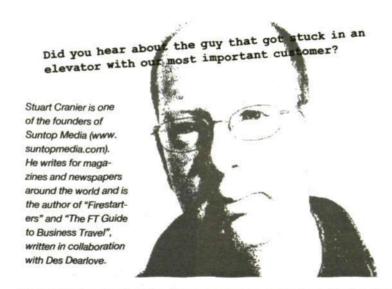
YOUnique!?

You're holding the second Two down, still more to come. We will continue to reach out to all Ericsson employees, and to try and get our point across. Why? Because it is important that Ericsson employees worldide reflect upon the direction that the company is going, and think about which kind of competence will be needed to get there - for the individual and the company as a whole. Also, it is important for us to show you the great opportunities available for competence development at this point in time. And least but not last, to offer a deeper understanding of the learning process, of different learning methods and tools for learning.

YOUnique is a highly efficient and at the same time cost effective way to distribute information. and to make you aware of what's happening inside and outside Ericsson when it comes to learning, competence development and education. The cost of one issue of YOUnique is actually as low as 40 cent per printed

Another great advantage is that a magazine allows us to gather a lot of useful information in one place, rather than drowning your post boxes with direct marketing

Let's be frank about something else too: This is not a magazine about Ericsson University - it's about you as an individual and about the prosperity of Ericsson. It may sound like a sales pitch, but it is our firm belief that the swers to a lot of questions and the solutions to a lot of problems lie in learning and knowledge. We publish YOUnique because we in all this: On your side.



YOUNIQUE

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