



Chapter XXVII

Experiences from Using the CORAS Methodology to Analyze a Web Application

Folker den Braber, Norway

Arne Bjørn Mildal, NetCom, Norway

Jone Nes, NetCom, Norway

Ketil Stølen, SINTEF, Norway

Fredrik Vraalsen, SINTEF, Norway

EXECUTIVE SUMMARY

During a field trial performed at the Norwegian telecom company NetCom from May 2003 to July 2003, a methodology for model-based risk analysis was assessed. The chosen methodology was the CORAS methodology (CORAS, 2000), which has been developed in a European research project carried out by 11 European companies and research institutes partly funded by the European Union. The risk analysis and assessment were carried out by the Norwegian research institute SINTEF in cooperation with NetCom. NetCom (www.netcom.no) is one of the main mobile phone network providers in Norway. Their 'MinSide' application offers their customers access to their personal account information via the Internet, enabling them to view and change the properties of their mobile phone subscription. 'MinSide' deals with a lot of sensitive

customer information that needs to be secure, while at the same time being easily available to the customer in order for the service to remain usable and competitive. The goal of the analysis was to identify risks in relation to the use of the 'MinSide' application and, where possible, suggest treatments for these risks. This was achieved through two model-driven brainstorming sessions based on system documentation in the form of UML sequence diagrams and data flow diagrams.

ORGANIZATIONAL BACKGROUND

NetCom

NetCom is the second largest mobile phone network provider in Norway, providing solutions for mobile communication. NetCom is an innovative company that uses new technology and knowledge to meet its customers' demands and aims to be a leading company in Norway within the market of mobile communication. A main goal for NetCom is that their products shall be competitive on price and quality, while at the same time remaining easy to use and understand for all its customers. With offices in Trondheim, Bergen, Stavanger, Kristiansand and Tønsberg, and its main office located in Oslo, NetCom has 740 employees in Norway.

NetCom is owned by the Swedish-Finnish company TeliaSonera, the leading telecom company in the Nordic and the Baltic regions. Based on the number of customers, the company is the largest mobile provider in Sweden and Finland, the second largest in Norway (NetCom) and the fourth largest in Denmark. TeliaSonera is also the largest fixed voice and data provider in the region, with leading positions in Sweden and Finland. Furthermore, TeliaSonera is the largest operator in the Baltic region, with consolidated

Table 1: NetCom's Key Figures

	2002	2001	2000	1999	1998
Customers					
Number of customers	1,178,466	1,082,850	900,282	745,089	535,892
NetCom's market share (of total amount of mobile phone customers)	29%	26%	28%	30%	30%
Total share of mobile subscriptions in Norway	86%	81%	75%	62%	48%
Finance					
Turnover/Sales (million NOK ¹)	4,591	3,752	2,914	2,494	2,032
(million USD ²)	670	547	425	364	296
Result/Profit (million NOK)	1,101	725	421	331	103
(million USD)	160	106	61	48	15
Calling minutes per customer per month					
Subscription	255	227	214	179	-
Prepaid	63	58	64	79	-
Text messages (SMS³)					
Total amount (in millions)	-	502	310	157	36

¹NOK Norwegian Kroner

²USD United States Dollars

³SMS Short Message Service

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/experiences-using-coras-methodology-analyze/6405

Related Content

The Integration of Library, Telecommunications, and Computing Services in a University

Susan A. Sherer (1999). *Success and Pitfalls of Information Technology Management* (pp. 200-212).

www.irma-international.org/article/integration-library-telecommunications-computing-services/33492

Why People Copy Software and Create Computer Viruses

Susan J. Harrington (1989). *Information Resources Management Journal* (pp. 28-38).

www.irma-international.org/article/people-copy-software-create-computer/50918

Effects of Managerial Drivers and Climate Maturity on Knowledge-Management Performance: Empirical Validation

Jang-Hwan Lee, Young-Gul Kim and Min-Yong Kim (2006). *Information Resources Management Journal* (pp. 48-60).

www.irma-international.org/article/effects-managerial-drivers-climate-maturity/1296

Technology of Formal Education

Donald A. Hantula and Dareleen M. DeRosa (2005). *Encyclopedia of Information Science and Technology, First Edition* (pp. 2761-2764).

www.irma-international.org/chapter/technology-formal-education/14689

Case Study of the St. Paul Companies Virtual Office for the Risk Control Division

Nancy J. Johnson (2001). *Annals of Cases on Information Technology: Applications and Management in Organizations* (pp. 60-71).

www.irma-international.org/chapter/case-study-paul-companies-virtual/44607