### Chapter 22

# Developing Efficient Processes and Process Management in New Business Creation in the ICT-Sector

#### Arla Juntunen

Helsinki School of Economics, Finland

#### **ABSTRACT**

In this study, a Finnish telecommunication company is analyzed from 1990-2007. Discussing the major developments in technology, society and firm-level decisions, this study focuses on the R&D process development and changes due to these exogenous and endogenous factors that have occurred. These factors have also caused changes in the company's competitive advantage, organizational structure, product- and service portfolio. It has required adaptation skills and capabilities to manage change in order to survive in a rapidly changing competitive environment. This chapter will describe the changes in the R&D process from the in-house development to a multi-partner R&D network. Information and Communication Technology (ICT) can be considered both a strategic catalyst and enabler of business process reengineering (BPR). In summary, the chapter discusses how a competitive advantage in mobile and multimedia business was created by efficient process changes and network management capabilities.

#### INTRODUCTION

Over and above the managerial challenges inherent in a business creation and development, high-tech companies face unique challenges due to technology-driven services and markets. These firms need to cope with exceptionally short product life-cycles in the face of fast changing technology and need to be able to adapt to rapidly evolving or collapsing markets (cf. McGrath 1995, 4). In high-tech and knowledge-intensive industries, R&D-partnerships, alliances and coalitions are often used for creating new technological platforms and dominant solutions (cf. e.g. Blomqvist, 2002; Möller and Rajala, 1999).

DOI: 10.4018/978-1-60566-669-3.ch022

Recent years have shown an exceptional growth in demand for inter-organizational partnerships (Achrol and Kotler, 1999; Brandenburger and Nalebuff, 1996; Gulati, 1998; Gulati et al, 2000; Hagedoorn, 1990, 1995; Spekman et al., 2000) resulting from the rapid pace of technology development along with the dispersion of knowledge and technological resources. Partnering is a process where a customer firm and supplier form strong and also broad social, economic, service and technical ties over time (Anderson and Narus, 1999). To be competitive and survive in a network economy, organizations need efficient business processes within and between the partner-organizations that are creating services or products together. In this chapter, the concept efficiency describes the efficient use of resources available and tuning business processes so that there are no overlapping tasks. Effectiveness refers to a capability to produce more innovations from R&D-process or new product versions from the product maintenance process into the commercialization process. Moreover, the capability view requires also the explanation of how processes and capabilities are linked, for example, Eisenhardt and Martin (2000, 1107) defined dynamic capabilities as the firm's "processes to integrate, reconfigure, gain and release resources," to match and even create market change.

This chapter describes a new business development based on technologies, like broadband, Internet and mobile in Finland. In addition, a pioneering actor as the case organization in this study was, it had to develop specific managerial capabilities in order to be able to fine-tune the existing processes to adjust to new demands and market changes, to launch new services and to advance from the development of basic technologies to the commercialization and marketing of information and communication technology (ICT)-solutions and home commerce (HC)-services. The business development and success was based on adaptive and adjusting R&D process and business process development. In other words, the purpose of this paper is to describe how the ability to develop efficient process management was a critical condition for success.

#### BACKGROUND

The case organization is Elisa. It is a leading Finnish information and communication technology (ICT) solutions company offering a comprehensive range of communications services, including voice and data services, connections to the internet, customised ICT-solutions and network operator services. Elisa is a forerunner of new mobile and content services (Elisa's annual report 2006). Its core business areas are fixed network mobile network including internet-based services (Juntunen 2005). Elisa's organization was integrated from several subsidiaries of different names into one Elisa in 2003. Elisa continued its corporate restructuring in 2006: Tikka Communications Oy and Jyväsviestintä Oy merged with Elisa. Saunalahti Group became a wholly-owned subsidiary of Elisa, and Lounet company was also acquired. Elisa's mission is to offer its customers fast, effective and secure communication telecommunication services. Its vision is to be the most attractive and effective operator. Elisa operates in Finland and in carefully selected international market areas, and provides international services in association with its partners, Vodafone and Telenor (Elisa's annual report 2006) It seems that Elisa's customers have adopted smartphones and mobile broadband to productive use both in the home market and internationally through the Vodafone partnership. In 2007, its revenue in 2007 increased by 3.3 per cent to EUR 1,568 million. Its mobile subscription base increased by almost seven percent, that is about 170,000 subscriptions, on the previous year. CEO Veli-Matti Mattila stated on February 12th 2008: "Customer subscription churn decreased by more than one percentage point on the previous year to approximately 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/developing-efficient-processes-processmanagement/36584

#### Related Content

### Engineering Management: The Evolution, Conceptual Model, and Social Responsibility of an Emerging Discipline

Jean C. Essila (2018). *International Journal of Operations Research and Information Systems (pp. 36-50).* www.irma-international.org/article/engineering-management/212675

## Optimal Policies for Items With Quadratic Demand and Time-Dependent Deterioration Under Two Echelon Trade Credits

Azharuddin Sarfuddin Shaikhand Poonam Prakash Mishra (2018). *Handbook of Research on Promoting Business Process Improvement Through Inventory Control Techniques (pp. 32-43).* 

www.irma-international.org/chapter/optimal-policies-for-items-with-quadratic-demand-and-time-dependent-deterioration-under-two-echelon-trade-credits/198682

#### Single-Minute Exchange of Dies at a Kaizen Event

(2018). Lean Six Sigma for Optimal System Performance in Manufacturing and Service Organizations: Emerging Research and Opportunities (pp. 117-141).

www.irma-international.org/chapter/single-minute-exchange-of-dies-at-a-kaizen-event/197537

#### Decision-Making Elements for the Design of Emerging Multi-Dimensional Auctions

Charis A. Marentakisand Dimitrios M. Emiris (2010). *International Journal of Operations Research and Information Systems (pp. 59-82).* 

www.irma-international.org/article/decision-making-elements-design-emerging/47105

### The Role of Universities in Industry 4.0 Era: Entrepreneurship and Innovation Perspectives

Haldun Yavuztürk, Zeynep Tuçe Kalenderand Ozalp Vayvay (2019). *Technological Developments in Industry 4.0 for Business Applications (pp. 50-70).* 

www.irma-international.org/chapter/the-role-of-universities-in-industry-40-era/210479