

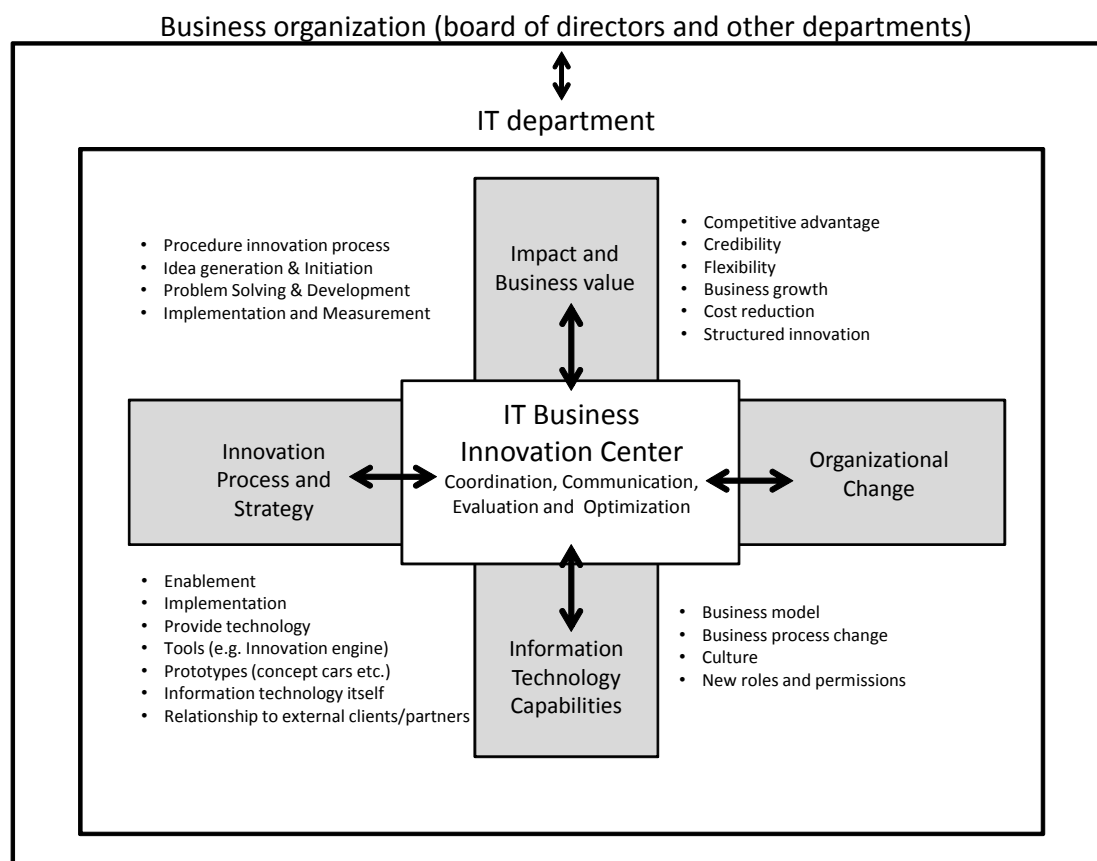
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Innovation Management: How to drive Innovation through IT – A conceptual Model

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Abstract

This paper focuses on innovation management and how to drive innovation through IT. While the IT used to operate in the back ground of a business organization, it is now responsible to create a competitive advantage. Especially, when today’s business environment becomes hypercompetitive, business organizations have to consider how to become more competitive. To achieve an competitive advantage many business organizations focus on IT innovations. In this context, this paper describes how the IT can be used as an internal strategic resource by creating an IT strategy with regard to the business value and goals. Based on the aligned IT strategy this paper presents an approach which describes how the IT department can engage in business processes and creates an IT value to the entire business organization. The IT value is an important pre-condition for being accepted as a source to drive innovation. On the basis of the IT strategy and IT value an IT innovation management model is created, which includes organizational relationships that have to be noted when implementing an IT innovation management approach. The theoretical model describes how the IT department can contribute to drive innovation and business opportunities by operating a centralized IT Business Innovation Center (IT-BIC).

Keywords: Innovation Management, IT Innovation, IT value, IT and business strategy, Innovation Center

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List of Abbreviations

AISeL	Association for Information Systems Electronic Library
BPMS	Business Process Management System
CEO	Chief Executive Officer
CIO	Chief Information Officer
ER	Entity Relationship
ERP	Enterprise Resource Planning
HR	Human resources
IS	Information System
IT	Information technology
IT-BIC	IT Business Innovation Center
MIS	Management Information Systems
OECD	Organization for Economic Co-operation and Development
R&D	Research and Development
ROIC	Return on invested capital
SME	Small and Medium Enterprises
TSLRP	Technology Strategic Long Range Planning
UML	Unified Modeling Language

1. Introduction

The awareness of the role of Information Technology (IT) has changed over the past decades. While the IT used to operate in the back ground of a business organization, it is now responsible to generate strategic competitive advantage (see Eul et al., 2012, p. 101). According to a global management consulting business organization named A.T. Kearney (2009, p. 2), approximately 90% of executives surveyed identified the IT as an “extremely important” differentiator.⁵ Nevertheless, some executives are often concerned about growth and raising the market share (see Hofbauer and Wennmann, 2008, p. 81). Especially, when today’s business environment becomes hypercompetitive, business organizations have to consider how to achieve competitive advantage. With regard to the aforementioned study, 85% of the business organizations stated that at least 10% of their growth rate was due to IT innovations (A.T. Kearney, 2009, p. 3). However, according to the latest Gartner (2012) survey many business organizations and their management teams have lost their focus on IT innovation. Approximately 50% of Chief Executive Officers (CEO) say they will invest more in innovation but only 25% are actually addressing it as an explicit discipline.⁶ For many CEO’s, new information on customer sales and threatening competitors become more important than setting the focus on new IT innovation. In addition, innovation leaders often have the opinion the IT is a barrier to innovation. They believe that the IT should be used just for automating and standardizing business processes (see Tarafdar and Gordon, 2005, p. 1). Therefore, it is necessary to convince the executives and other employees to focus again on a strategic IT innovation management. This can only be realized if the IT is acknowledged as an innovative partner. However, the research on how the IT can use their capabilities to drive innovation is very young (see Kießling et al., 2012, p. 3). In this context, this paper describes first of all how the IT can be used as an internal strategic resource to create competitive advantage. Furthermore, the paper presents an IT innovation management model, which includes organizational relationships that have to be noted when implementing an IT innovation management approach. This leads to the central research question of:

RQ: *How to drive Innovation and Business Opportunities through IT?*

Based on Webster and Watson (2002), the structure of the paper is as follows: After describing the topic motivation and explaining the contribution to the innovation topic in the introduction, the theoretical and practical background on innovation, IT innovation and the Innovation Management is described. Then, the research design together with the literature search process is presented. Afterwards, the principal part of the paper begins. The first part presents two approaches on the creation of IT value. The second part explains how IT can be

⁵ The survey conducted 150 executives from American and European business organizations. A requirement was annual revenue of \$500 million or more.

⁶ The survey conducted more than 220 CEO’s and business executives from over 25 countries. A requirement was annual revenue of \$500 million or more.

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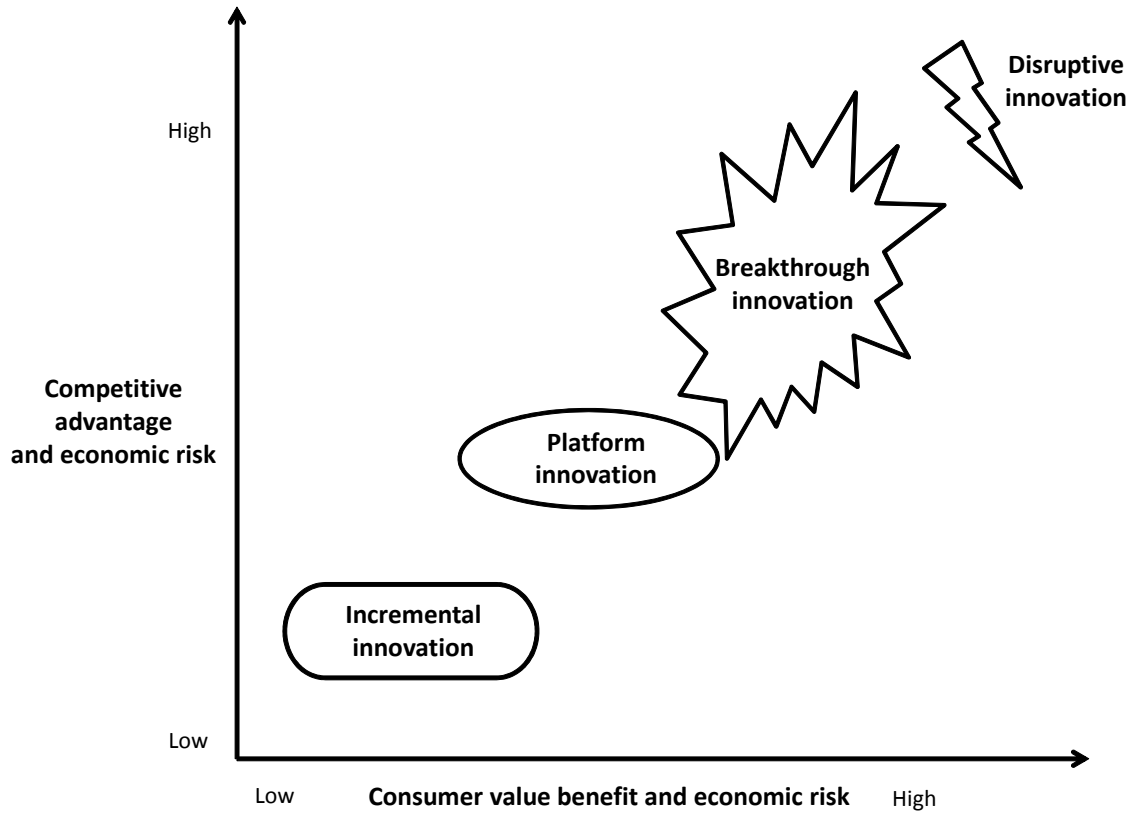
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Appendix

Appendix 1: Competitive innovation matrix V

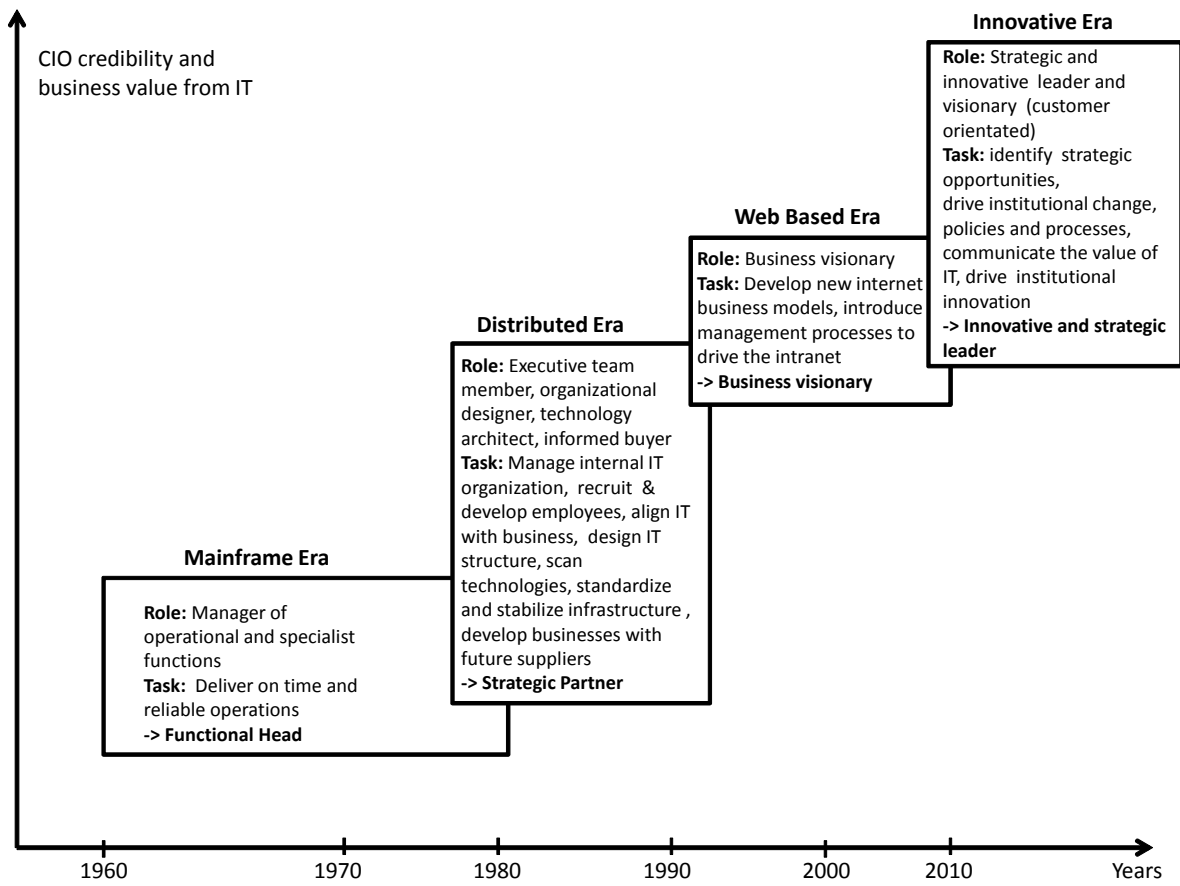
Appendix 2: CIO's IT competencies matrix..... VI

Appendix 1: Competitive innovation matrix



(own representation based on Koetzier and Kristensen, 2011, p. 3; Noé, 2013, pp. 3-4)

Appendix 2: CIO's IT competencies matrix



(own representation based on Feeny and Ross, 1999, p. 3 et seqq.; Allison, 2010, p. 10)

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