



Niels Bjørn-Andersen (ed.)

CASES ON IT LEADERSHIP:

CIO Challenges for Innovation and Keeping the Lights on

Samfunds
litteratur

Niels Bjørn-Andersen (ed.)

CASES ON IT LEADERSHIP

CIO Challenges for Innovation and Keeping the Lights on

1. edition

Samfundslitteratur

Niels Bjørn-Andersen (ed.)
Cases on IT Leadership
CIO Challenges for Innovation and Keeping the Lights on
1. edition 2016

© Samfundslitteratur 2016

Publishing editor: Birgit Vrå
Copy editor: Amalie Hypolit
Cover: SL grafik (slgrafik.dk)
Typeset: Steen Christensen (SL grafik)
Print: Totem

Bog trykt ISBN: 978-87-593-2730-2
E-bog ISBN: 978-87-593-2831-6

Samfundslitteratur
info@samfundslitteratur.dk
samfundslitteratur.dk

All rights reserved

No part of this publication may be reproduced or used in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval systems, without permission in writing from Samfundslitteratur. The companies have permitted the use of the illustrations for this publication exclusively. No illustration may be reproduced without permission from the companies.

CONTENTS

Preface	7
Affiliation of authors	11

1. Creating Reliable Operations

1.a The Challenge of Technological Debt – Coop	15
1.b It Only Takes One – IT Security in Novo Nordisk	31

2. Making more with less

2.a How the CIO got Freedom to Navigate – IT Transformation in Maersk Line	51
2.b Supporting Innovation while Trimming Cost through Persistent Management – JP/Politikens Hus	65

3. Enhancing User Support

3.a Creating a Nimble, Fast and Effective ERP-Platform for Meeting User Demands – LEGO Group	79
3.b How to Make a Business-Focused IT Strategy while Ensuring Operational Stability – Arla Foods	95

4. Business Repositioning

4.a Managing IT Costs under Different Business Strategies – DONG Energy	107
4.b The Acquisition IT Integration Challenge – Danisco/DuPont	123

5. Digital Innovations

- 5.a Preparing for Potentially Disruptive Business Models – **Falck** 145
- 5.b IT for Winning the Gaming Market – **Danske Spil** 159

6. Co-Creating with and Sourcing from Partners

- 6.a Create Room for the Essentials by Sourcing the Non-Essentials – **Novozymes**
171
- 6.b Open Sesame: The Journey Towards an Open Platform Strategy – **Saxo Bank**
187

7. Public Sector Digitalization

- 7.a Digital by Default: A National Public Sector Digitization Strategy – **Danish Government** 201
- 7.b The Danish IT Healthcare Platform – Real-Time **Hospital** Management 217

Preface

IT and digitalization is increasingly topping the strategic agenda

I have had the good fortune to do research and teach IT and business since 1969 at the Copenhagen Business School. The world is a very different place today. It has been an amazing experience to observe and in some instances influence how IT innovations have contributed to changing our lives: the work we do, the way companies are organized, and the structure of industries. In particular, IT has never been more important than now for private/public organizations in achieving effectiveness and innovation objectives.

In order to be **effective**, companies need a solid foundation in the form of organization-wide standardized corporate ERP systems (or similar well-integrated IT systems) for all business processes. If IT systems are down, all work stops, and the organization cannot function properly. Indeed, integrated IT systems are essential for **keeping the lights on**. As we shall see in this book, many leading companies are still struggling to establish global processes based on streamlined IT architectures and IT infrastructures, so they are confronted with huge costs to keep the lights on.

To be **innovative**, companies need a digital strategy. Disruption of existing business models is an everyday occurrence. SMAC (social, mobile, analytics, and cloud computing), Internet-of-Things, robots and other technologies are taking center stage. Indeed, IT has become the single most important factor for **innovation of business models** today.

This book takes the perspective of the CIO, who in any organization is under pressure to deliver more for less and to respond instantly to demands from business. In spite of this, many CIOs have difficulty in getting the attention of Board and business process leaders for the opportunities of new technologies before it is too late. Given the importance of IT, it is paradoxical that, in many organizations, the CIO is not a member of the top team or of the Board.

Need for cases instead of lectures

The strong proliferation of the Internet, the WWW, and the improved search mechanisms available to everybody more or less since the turn of the millennium has made it clear to me that we also seriously need to reconsider university education.

We know that traditional classroom lectures based on textbooks and scientific articles are extremely inefficient learning mechanisms. At best, students remember 20% of what the professor says using PowerPoint. Furthermore, we only achieve the 20% if

students are present, if they are attentive, and if they do not use Facebook or Snapchat at the same time. Unfortunately, that is very seldom the case.

I strongly believe that we ought to include cases much more in our courses in order to facilitate (co-)creation of knowledge. Professors should not be merely transferring knowledge from research/books/articles in lecture format. Students can more easily and more flexibly pick that up themselves from a wide variety of textbooks (with videos, PowerPoints and other learning material), publicly available source material, huge databases with ‘everything’ ever published, educational games, news media, etc. The different search engines from the libraries, Google, Academia.edu, Scopus and many others are available to all. Accordingly, we should train students to find ‘stuff’ by themselves, structure it, and present it. They will learn a lot from doing it on their own, but they would learn even more, if they were to collaborate in (virtual) teams.

When we physically assemble students in classrooms, and we need to do that for motivational reasons anyway, we should use classroom time for **co-creating knowledge together with students using cases**. Cases provide a unique opportunity for students to apply the knowledge (theories/methods/tools) they have obtained from reading textbooks and research articles beforehand. In a structured/directed way from a good teacher, it is possible to train students in reasoning and debating to enhance their learning. However, there is a scarcity of relevant cases for teaching Information Systems, especially from a CIO point of view. This book is an attempt at bridging that gap.

Classification of the cases

The book presents 14 cases from some of the largest and most interesting private companies and public institutions in Denmark. Most of them are global companies, and my personal experience would confirm that the challenges they are facing are relevant far beyond Danish borders.

My extensive experience from engaged scholarship with companies and public institutions suggests that it is relevant to characterize organizations according to the degree of importance they attach to: 1) innovations or keeping the lights on and 2) the degree to which IT and businesses are integrated. Based on these two dimensions, it is possible to develop a taxonomy of four types of companies (archetypes) that I have chosen to name as laggards, traditionalists, technologists, and strategists.

	LOW INTEGRATION OF IT AND BUSINESS	HIGH INTEGRATION OF IT AND BUSINESS
Innovations	Technologists	Strategists
Keeping the lights on	Laggards	Traditionalists

Figure 1. Four types of **digital leadership** as illustrated in the cases in the book