



## Chapter 1

# Strategies for Healthcare Information Systems

Ton A.M. Spil and Robert A. Stegwee  
University of Twente, The Netherlands

*It is widely recognized that the healthcare industry does not use information technology to its full potential. This book uncovers many of the reasons why large-scale implementation of healthcare information systems has not come to fruition yet. The authors provide a broad coverage of the field, ranging from strategic analysis to real-life project implementation. Moreover the book provides strategies to avoid pitfalls and direct your healthcare organization to strategic use of healthcare information systems. This section of the book will introduce the five main themes of the book and will show that the healthcare organizations are realistic laboratories for the information and communication technology scientists to do research. The five main themes are: Strategy, Network Healthcare Chain, Process Management, Knowledge Management, Standardization.*

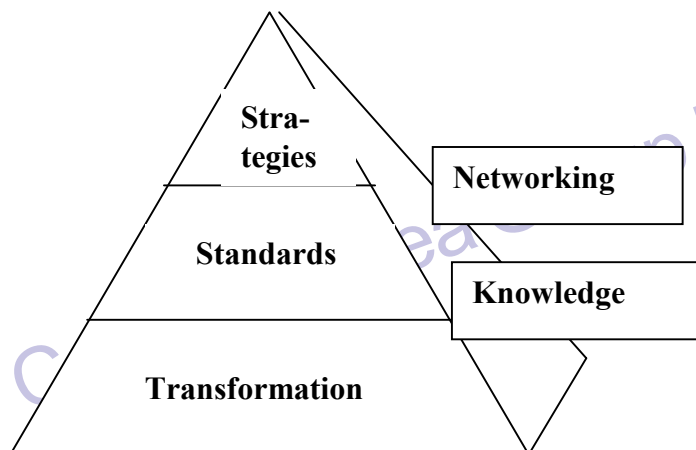
## INTRODUCTION

The environment of the professional healthcare organizations handled in this chapter is changing. Where it should be complex and stable, according to reference models (Mintzberg, 1983; Heijnsdijk, 1990), the environment is becoming more and more unstable. The size of most healthcare organizations in the Netherlands is growing by mergers and natural growth. This means that these professional organizations have to use strategic variables that they have never used before with a new technical system. There is need for structural

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Figure 1: Strategies of Healthcare Information Systems Themes



changes to strengthen middle management but even more need for cultural changes to balance the autonomous and heteronomous powers in the organization (Scott, 1982). This book argues that information management can contribute in these changes for the good and the bad.

Information Strategy in healthcare organizations is an ad hoc static planning process (Spil, 1998) which does not fit the dynamic environment the healthcare organizations are facing. In this research, a more dynamic approach is developed to adapt to the specific organization and the specific environment. The environment (government, suppliers, patients, professional groups) determines for a great deal which planning possibilities are available. That is why in four cycles--agreeing, aligning, analyzing and authorizing--a yearly planning approach is built in which the information projects can be chosen and monitored and changed when necessary (Spil & Salmela, 1999). An action study plan is built to put this approach into healthcare practice in both Finland and the Netherlands.

Information Structure is well developed in healthcare organizations where we regard information structure as heterogeneous socio-technical networks (Hanseth & Lundberg, 1999), in which both social and technical actors take part. Agreements and standards, like healthlevel seven, can support a wide range of applications and create a common language both internal and external. Still, healthcare organizations are struggling with all kinds of new developments on a structural level. The developments focus on management information, Internet, intranet and archiving. Management information is implemented in various ways as networks (Lines, 1999), as

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