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# Organisational Design & Enterprise Engineering - Two sides of the same coin?

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## ABSTRACT

Change is a constant for most contemporary organisations, whether it is initiated top-down, or it emerges bottom-up. One could even say that organisations are continuously in motion. Dealing with change in organisations can be approached from many different vantage points. In this presentation, we investigate two of these vantage points, while also trying to bridge between them. More specifically, we will look at Organisational Design, originating from *social sciences*, and Enterprise Engineering, originating from *engineering sciences*.

Organisational Design considers organisations as the result of social interactions between (human) actors. By way of this interaction, the actors define and shape the organisation. This could, indeed, happen in a directive / top-down style, as well as in a more open / bottom-up style. Even more, 'top-down' decisions made by a few, might not actually be institutionalised by the many that may be effected by these decisions.

Enterprise Engineering, also referred to as Organisational Engineering or Business Engineering, includes domains such as Business Process Management and Enterprise Architecture. It extrapolates from Software Engineering via Information Systems Engineering, to the engineering of organisations and their enterprises. The core tenet of Enterprise Engineering is to treat enterprises as purposefully designed artefacts. This may seem natural from an engineering point of view. But do organisations, being made up primarily from humans, behave rationally? Can organisations be engineered at all? Does the extrapolation hold?

Organisational Design and Enterprise Engineering look at change in organisations from two different perspectives. Each perspective has a potential added value when dealing with change in organisations. They could be regarded as two sides of the same coin; the coin of organisational change. Or are they so different that we should really see them as different sides of different coins?

In this presentation we will explore the tension between Organisational Design and Enterprise Engineering further, as well as the need / benefits of combining the two. In doing so, we will

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also consider the role of enterprise models as potential boundary objects between the social processes from an Organisational Design perspective, and the rationality-driven Enterprise Engineering processes. We suggest enterprise models as a possible way keep to ensure that the two sides of the coin are indeed two sides of the same coin.

## CCS Concepts

•Information System→Information System  
Applications→Enterprise information systems •Applied  
Computing→Enterprise Computing→Enterprise information  
systems.

## Keywords

Organisational Design; Enterprise Engineering; Organisational change; Social science; Engineering science

## Bio

Prof.dr. Henderik A. Proper, Erik to friends, is Head of Academic Affairs of at the Luxembourg Institute of Science and Technology (LIST) in Luxembourg, and senior research manager within IT for Innovative Services (ITIS) department of LIST. He also holds a chair in Information Systems at the Radboud University Nijmegen. Furthermore, he chairs the Enterprise Engineering research network involving researchers from a.o. these two institutions.

Erik has a mixed background, covering a variety of roles in both academia and industry. His professional passion is the further development of the field of enterprise engineering and enterprise architecture. His long experience in teaching and coaching a wide variety of people enables him to involve and engage others in this development. He has co-authored several journal papers, conference publications and books. His main research interests include enterprise architecture, enterprise engineering, enterprise modelling, systems theory, business/IT alignment and conceptual modelling. Erik received his Master's degree from the University of Nijmegen, The Netherlands in May 1990, and received his PhD (with distinction) from the same University in April 1994. In his Doctoral thesis he developed a theory for conceptual modelling of evolving application domains, yielding a formal specification of evolving information systems.

After receiving his PhD, Erik became a senior research fellow at the Computer Science Department of the University of Queensland, Brisbane, Australia. During that period he also conducted research in the Asymetrix Research Lab at that University for Asymetrix Corp, Seattle, Washington. In 1995 he became a lecturer at the School of Information Systems from the

Queensland University of Technology, Brisbane, Australia. During this period he was also seconded as a senior researcher to the Distributed Systems Technology Centre (DSTC), a Cooperative Research Centres funded by the Australian government.

From 1997 to 2001, Erik worked in industry. First as a consultant at Origin, Amsterdam, The Netherlands, and later as a research consultant and principal scientist at the Ordina Institute for Research and Innovation, Gouda, The Netherlands.

In June 2001, Erik returned to academia, where he became an adjunct Professor at the Radboud University Nijmegen. In September 2002, Erik obtained a full-time Professorship position at the Radboud University Nijmegen. In Januari of 2008, he went back to combining industry and academia, by combining his

Professorship with consulting and innovation at Capgemini, with the aim of more tightly combining his theoretical and practical work. Finally, in May 2010 Erik moved to the Luxembourg Institute of Science and Technology (formerly called the Public Research Centre - Henri Tudor) in Luxembourg, while continuing his chair at the Radboud University Nijmegen, The Netherlands.