The Core of Design Thinking, and its Impact on Digital Transformation in Healthcare

eTELEMED 2020

Niels F. Garmann-Johnsen
Dept. of Information Systems,
UiA, Kristiansand, Norway
e-mail: niels.f.garmann-johnsen@uia.no

Migle Helmersen
UiA, and Dept. of Societal research,
NORCE research inst., Kristiansand, Norway
e-mail: migle.helmersen@uia.no

Tom R. Eikebrokk
Dept. of information systems,
UiA, Kristiansand, Norway
e-mail: tom.eikebrokk@uia.no
Agenda

Motivation and research problem

Method

Findings

Summary
Motivation and research problem

• This study contributes to creating awareness about the potential of Design Thinking in healthcare

• Although popular in practice, there has been a gap in academic literature, especially in Information systems, regarding the impact of Design Thinking in this context

• Dorst's article «The core of ‘design thinking’ and its application» lays out the theoretical foundation for Design Thinking. This fundament builds on abduction as the third inference method of social science research (the first two being Induction and deduction, respectively)

• The term ‘Abduction’ stems from Charles Sanders Peirce (1839–1914), the founder of American Pragmatism philosophy, and describes an approach to science which commences with one or more observations and then seeks the simplest and most likely explanation to observed phenomena
Method

• Review of the literature showed that this innovation-philosophy and paradigm has had a high impact on several sectors, especially the Information Technology sector
• Something that in its turn, impacts healthcare
• Doing a literature review based on a central source of design thinking paradigm, Kees Dorst, the authors explore examples of such impact and generalize a picture of the state of art in this field
Findings

• Definitions of Design Thinking in healthcare, and Design Thinking methods applied
• How Design Thinking designer practices are dealing with complexity in healthcare
• Some potential pitfalls in applying Design Thinking in healthcare, and what kinds of caution should be applied
• The potential positive outcome of applying Design Thinking methods, for the care providing organizations and for care-receivers

(Examples, and references in article)
Summary

- The Design Thinking practices for dealing with complexity, “wicked problems”, like often found in healthcare innovation dilemmas, makes the methodology appropriate in this context.
- Design Thinking methods for dealing with complexity involves abductive reasoning, framing and reframing of the problem, as illustrated in Figure (right).
- Design Thinking in healthcare does not annihilate the needs for normal change management procedures, like getting all employees on board as involved and engaged, and employing proper governance methods.