

Keywords: System thinking, Stakeholder engagement, design process, residential care

The value of cross-disciplinary work and stakeholder involvement is recognized and implemented in healthcare related design processes of new environments. However, the process and results are often described as discontent (Stichler, 2008). Knowledge of the system has been described as a key factor for the success of a design project. A design process should therefore be a learning process together with stakeholders to generate knowledge of the system and design proposals.

The changes needed in healthcare are complex to handle as they consist of care processes, delivery, supply processing and distribution, communication, management and the financial system. These complex systems are interrelated, and one change in one part affects the entire organizational systems' structure" (Stichler, 2011). The challenges in healthcare require new healthcare environments.

Thus, the design process needs to be developed towards a collaborative design process in which the stakeholders are engaged, and not only involved. In addition, there is a need of more system knowledge as a base for decision-making in the process.

This poster presents a methodology developed to deal with complexity and stakeholder engagement in design. By opening up challenges, and understanding complexity, the method attempts to address the root cause of a problem, rather than fighting the symptoms (Bosschaert, 2009).

The method, Symbiosis in Development (SiD) consists of five cyclical steps; 1) setting goals, 2) mapping the system, 3) system understanding, 4) route mapping, and 5) evaluating the results.

This poster presents a methodology developed to deal with complexity and stakeholder engagement in design. By opening up challenges, and understanding complexity, the method attempts to address the root cause of a problem, rather than fighting the symptoms (Bosschaert, 2009). The method, Symbiosis in Development (SiD) consists of five cyclical steps; 1) setting goals, 2) mapping the system, 3) system understanding, 4) route mapping, and 5) evaluating the results.

In each step different tools for stakeholder engagement can be used to facilitate cross- disciplinary work between the stakeholders and thereby enabling multi-faceted innovations.

On the poster the methodology and the appropriate tools are illustrated by the case of Zevenkamp, which is an residential care facility in Rotterdam. The result is a visual framework that provides designers a different perspective and approach to stakeholder engagement.

Fig 3. Stakeholder tree by the students of Except academy: The tree visualises the stakeholder groups and the actually parties involved in care in Zevenkamp. The amount of stakeholders where found though semi structured interviews with the initiating stakeholders: the residents of zevenkamp.

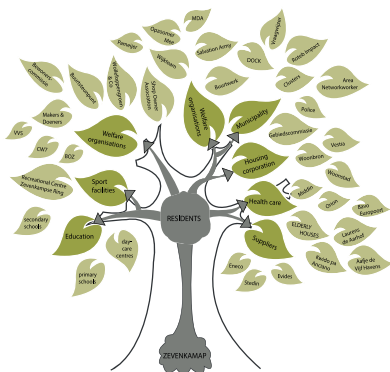


Fig 4. Photos Zevenkampproject; steps of the SiD method and possible ways of engagement (Except, 2014) The image show the students of Except Academy in their different phases of SiD.



Fig 1. Diagram Symbiosis in Development (SiD) Method (Bosschaert, 2015). The SiD method can be started at every step of the cycle, deciding each time on the level of participation.

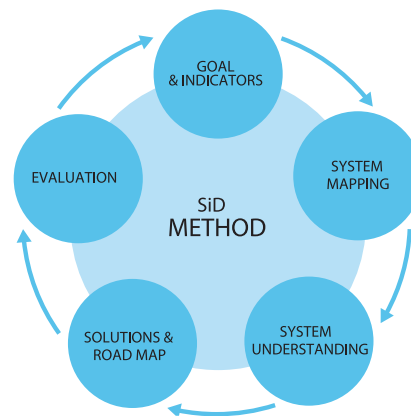


Fig 2. Diagram that shows the degrees of impact. Used for stakeholder analysis and ; ways of engagement (Excerpt, 2014) This is a tool to place actors to understand the effect of changes in the direct environment (1st degree), or indirect environment. (2nd degree or the whole system) (3rd degree). With this understanding we could prevent problems to move within the system instead of using the system relations to create greater benefits.

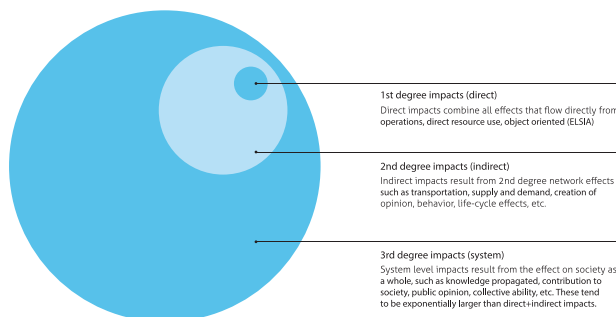
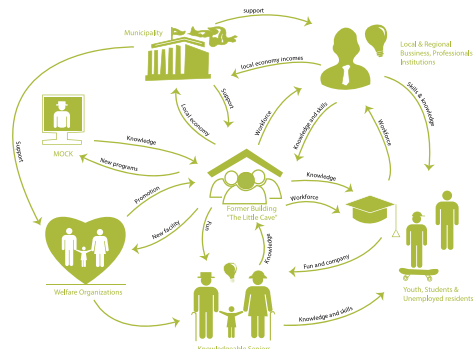


Fig 5 The system map of one of the intervention proposed shows the interlinkedness with other stakeholders and functions. Through positive loops there are benefits on several levels.



References

Literature:
BOSSCHAERT, T and ZUTHEM, H, VAN (2015) *Sid quick guide* [Concept], Rotterdam [Accessed: 20th February 2015].
EXCEPT (2009) the sid definition of sustainability [Online]. Available on: <http://except.nl/en/articles/204-the-sid-definition-of-sustainability> [Accessed: 20th February 2015].
STICHLER, J. F. (2008), Staff nurse engagement in health facility design, *Journal of Nursing Administration*, 38 (7/8), 315-318.
STICHLER, J. F. (2011) Adapting to Change. *Health Environments Research & Design Journal* 2011 Summer, 4(4):8-11
Figure 1. Sid Method, diagram viewed 20 February <http://except.nl/en/articles/204-the-sid-definition-of-sustainability>