Digitalization of the health sector is surrounded by major challenges and frequent turbulence also triggered by the collective ownership attached to public sector campaigns. The main reasons for the extensive challenges in eHealth programmes are that these structures are (i) much larger than single organization systems, (ii) technically more heterogeneous and (iii) organizationally more complex because of many stakeholders. Often, no single actor is in control, leading to long processes of power struggles, compromises and complex co-ordination. The results of these endeavours are sometimes dramatic failures but often time consuming, and very expensive projects with slow progress, and that do not deliver according to its promises.

Modern innovative technology labelled “lightweight IT” holds the promise of more rapid implementation cycles, less expensive projects and more user friendly technology that allows user driven innovation. Lightweight IT is also modularized and commercialized in a way that makes it easier to acquire and implement in relation with the existing system portfolio.

The thesis empirical evidence comes from three cases within eHealth in Norway that chose an alternative strategy in their efforts to facilitate implementation and use of innovative technology. The Medicloud case was trying to establish a boundary resource between clinical systems and 3rd party apps, despite of the courageous discourse they were unable to deliver a proper technology to fulfil the promises. The ambitious Aker case was able to implement a lightweight IT infrastructure that operated apart from the established infrastructure, and successfully improved some of their processes. The innovative project at the new Kalnes hospital in Østfold was the most successful since they were able to implement a lightweight IT system operating together with the established infrastructure leading to a transformed digital infrastructure.

The cases are analysed using discourse analysis from Michel Foucault and the context-mechanism-outcome configuration from Pawson and Tilley in order to investigate the relation between technological discourse and digital infrastructure. The findings from the case suggest that technological discourse is an important phenomenon within digital innovation, but that these discourses needs to connect to a concrete technology in order to enable a strategic shift. The findings also give indications that lightweight IT makes it easier to change the digital infrastructure. The thesis thus describes an alternative way of obtaining strategic shifts in digital infrastructures.