Innovation in Internet of Things (IoT)

Designing an innovation process for Hilti to identify and protect business-relevant ideas in the area of Internet of Things

CHALLENGE

The construction industry is undergoing a major change driven by to the emergence of new technologies. Digtialization is transforming the sector with the Internet of Things (IoT) being one its core enablers.

As a leading multinational organization that provides cutting-edge tools, technologies, software and services for the global construction sector, Hilti is responding to this change by shifting from a product-oriented focus to become a more solution-oriented company. One essential factor of this transition is the adoption of the IoT technology to provide new solutions to address the customers' needs in the digital future. Thus, Hilti needs to identify and seize the opportunities in the field of IoT.

The purpose of this graduation thesis is to enable Hilti to identify new ideas in the area of IoT and protect them with intellectual property rights to enable long-term differentiation. The goal of this project is to help spot systematically new business opportunities by developing an innovation process to captures ideas from within the company.

APPROACH

A qualitative user research was conducted uncovering several pain points in the current process. The loss of ideas and the lack of quality of ideas were found to be the biggest challenges that are hindering innovation from happening. The findings were contrasted with literature, which pointed out the importance of the development of an abstract idea to become more concrete, in order to derive value from or protect it.

key insights

Loss of ideas

Lack of quality of ideas

THE INNOVATION PROCESS

The outcome created is an innovation process, structured into four phases including: ideation, collection, assessment and protection of ideas. The basic concept of the process is the validation of assumptions, for which a tool was developed that facilitates this and acts as the main touchpoint throughout the process.

IoT Canvas

Process Blueprint
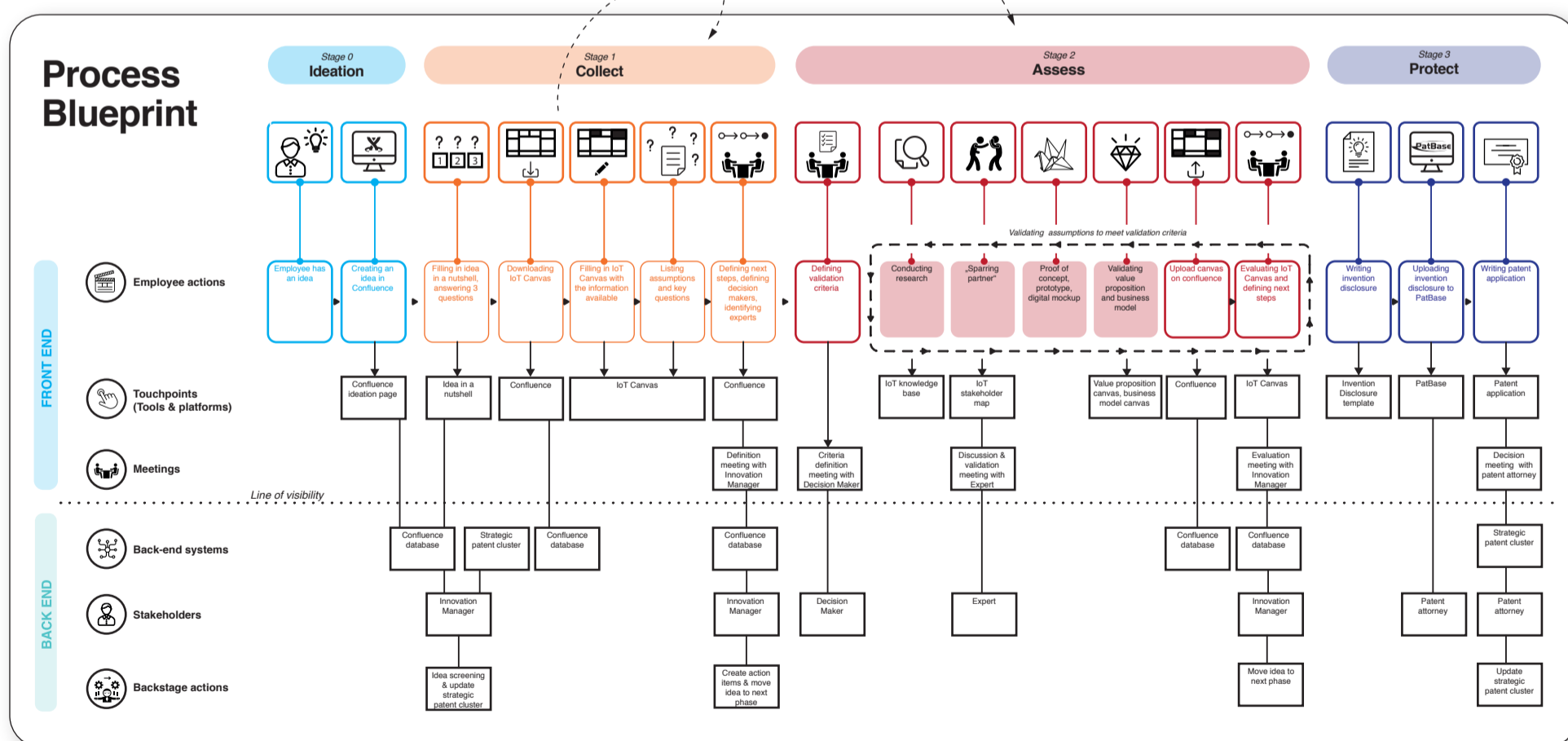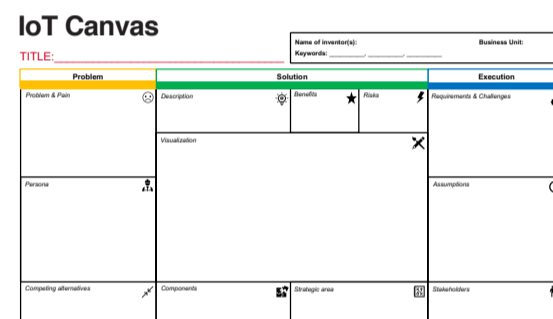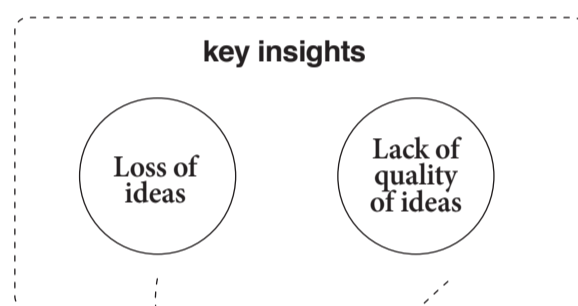
Silvio Philipp Hochuli
Designing an innovation process for Hilti to identify and protect business-relevant ideas in the area of Internet of Things
20/08/2019
Strategic Product Design

Committee — Prof. Dr. G. Kortuem
Jeroen Coelen

Company — Marc Vetter

TUDelft