HSLU Hochschule Luzern

Lucerne University of Applied Sciences and Arts Hochschule Luzern - Technik & Architektur

Bachelor-Thesis Wirtschaftsingenieurwesen | Innovation

Digital Documentation Management: The Road Towards Agility - Florian Furrer

Purpose

As a globally leading Swiss medical equipment manufacturer accelerates its digital transformation, the complexity of **managing documentation** across systems, teams and tools has become a **bottleneck**. In particular, the lack of standardized documentation governance frameworks leads to knowledge being fragmented, inconsistent reporting practices and reduced traceability. These issues are highly impacting in environments where decision-making depends on timely, high-quality data which is extracted from dashboards and reports.

This thesis aims to enhance **documentation quality** and reduce the required effort for unplanned maintenance of operational dashboards and reports. This is achieved through developing an **implementation plan** focused on improving documentation governance practices. The goal is to boost decision-making reliability by ensuring documentation **accuracy** and **stability**.

Applied competences











Problem-based research

Interviews

SA Personas

Solution Design

Problem-based research is the context in which this thesis is exploring the challenges in documentation governance. Crucial insights were gathered through interviews with internal and external stakeholders and experts. Combined with the insights which emerged through observational fieldwork, following the GEMBA method, two different personas were derived and validated. Finally, these personas were used to develop and propose a solution approach.

Results

This study confirms that documentation challenges in digital manufacturing are not caused by a lack of tools alone, but by deeper organizational and procedural gaps. Without clear expectations, ownership, and support, documentation remains inconsistent despite its recognized importance.

In a first step, to not create too much resistance within software teams, a **lightweight framework** with some basic quality indicators can promote accountability and show the importance of documentation without overwhelming team members.

