

## Bachelor-Thesis Wirtschaftsingenieurwesen | Innovation

### Development of an Enterprise Risk Management Concept for Capsero

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#### Purpose

Capsero AG is a Swiss start-up that develops modular production systems for highly regulated industries, such as pharmaceuticals, cosmetics, and nutritional supplements. As the company grows, it faces increasing regulatory demands and more complex decision-making. Until now, risks have been managed intuitively, an approach that no longer meets the needs of a scaling organization.

This raises the central question: how can an effective, ISO 31000-aligned Enterprise Risk Management (ERM) concept be developed for a start-up like Capsero, which operates under high innovation pressure in a tightly regulated environment?

ERM is about managing risks, enabling structured decisions, increasing transparency, and identifying opportunities early. For Capsero, it becomes a strategic tool that strengthens daily operations without adding unnecessary complexity.

#### Applied Competencies



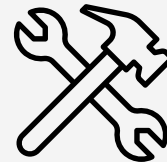
Design Science Research



Literature Research



Document Analysis



Tool Development

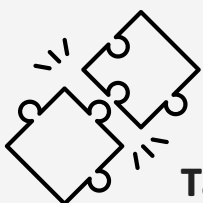


Field Testing

The Design Science Research (DSR) methodology was well suited for this thesis, as it focuses on developing and refining practical artifacts. It provided a structured approach to designing the ERM concept and its sub-artifacts, including templates and a risk register, and validating them through a field test. DSR enabled a clear link between conceptual development and real-world application in a start-up context.

#### Resultat

The thesis created a tailored ERM framework for Capsero, aligned with ISO 31000 for a start-up. It includes a central ERM concept and three tools: a risk reporting template, a treatment template, and a risk register. The system was tested and refined using feedback. It is lightweight, scalable, and integrates into daily operations, allowing Capsero to manage risks proactively and support informed decision-making.



**Tailored ERM  
Framework**



**Field-Tested  
Tools**



**Stakeholder-Driven  
Design**