

Entrepreneurship Support Track

Digital Health Startup Journey

Proposed Title:

Challenges and Success Factors of Digital Health Startups: A Systematic Analysis and Framework Development

Background & Motivation

Digital health startups face a unique set of challenges that differ significantly from traditional startup environments. These include strict regulatory requirements, complex stakeholder ecosystems, and long time-to-market cycles.

Within a joint initiative involving UnternehmerTUM, TUM Venture Labs, Heidelberg University, and the Berlin Institute of Health @ Charité, initial building blocks for a Digital Health Startup Framework have already been developed. This master's thesis builds on this foundation and aims to further refine and scientifically validate the framework.

Research Questions

- What are the key challenges and success factors determining the success of digital health startups?
- How can these be systematically structured and translated into evidence-based recommendations?

Objectives

- Provide a scientific foundation and structure for the Digital Health Framework
- Extend the framework through benchmarking and best practices
- Derive evidence-based recommendations
- Contribute to a publication in the field of entrepreneurship and digital health

Target Audience of the Results

- Digital health founders (guidance across the startup lifecycle)
- Startup advisors and experts (best practices and tools for healthcare innovation)

Scope of Work

The thesis will include:

- Literature Review & Theoretical Foundation
- Systematic review of academic and practitioner literature on digital health startups
- Empirical Analysis / Benchmarking (quantitative and qualitative)

- Analysis of existing studies, reports, and frameworks
- Benchmarking of international digital health startups
- Interviews with founders and domain experts
- Framework Development
- Structuring identified challenges
- Integration of best practices
- Development of a consistent and applicable model
- Scientific Writing & Publication
- Critical reflection of findings
- Derivation of actionable recommendations
- Contribution to a joint publication

Requirements

- Master's student in Entrepreneurship, Innovation Management, Management & Technology, Industrial Engineering, Data Science / AI, Health Sciences, Healthcare Management, or related fields
- Strong interest in startups, innovation, and healthcare
- Structured and independent working style
- Experience with academic research methods
- Ideally, first exposure to Digital Health, MedTech, AI, and/or qualitative or quantitative research

What We Offer

- Supervision by TUM, UnternehmerTUM, and TUM Venture Labs
- Close integration into the UnternehmerTUM & Venture Labs ecosystem
- Work on a highly relevant future topic (Digital Health & AI)
- Access to startups and experts in the healthcare domain
- Opportunity to contribute to a scientific publication

Upon successful application, you will become part of the TUM Entrepreneurial Masterclass and enjoy all its benefits.

TUM Entrepreneurial Masterclass

Tim Bernhard

tim.bernhard@tum.de