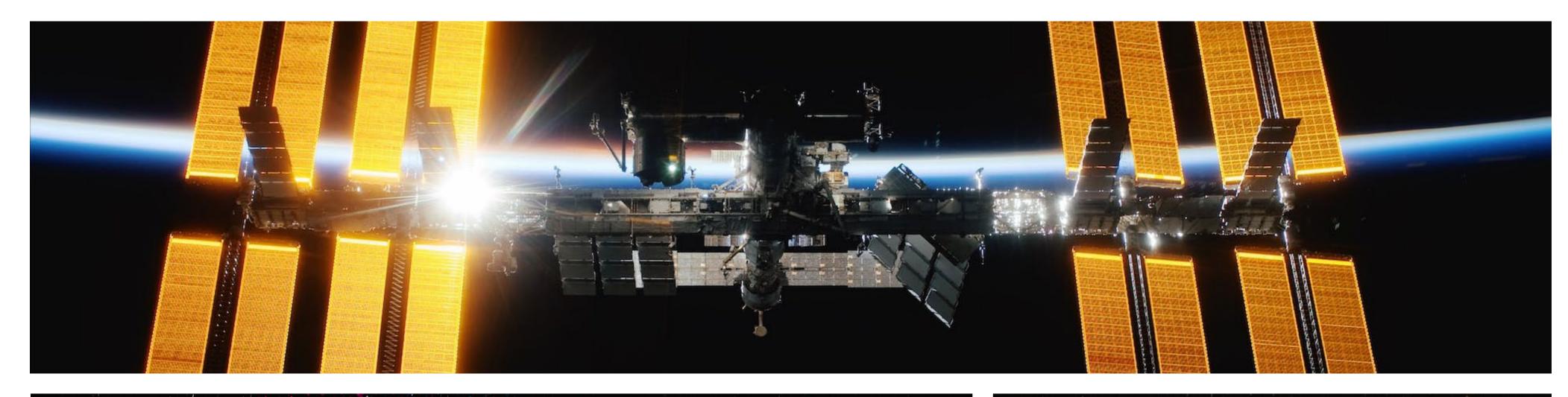
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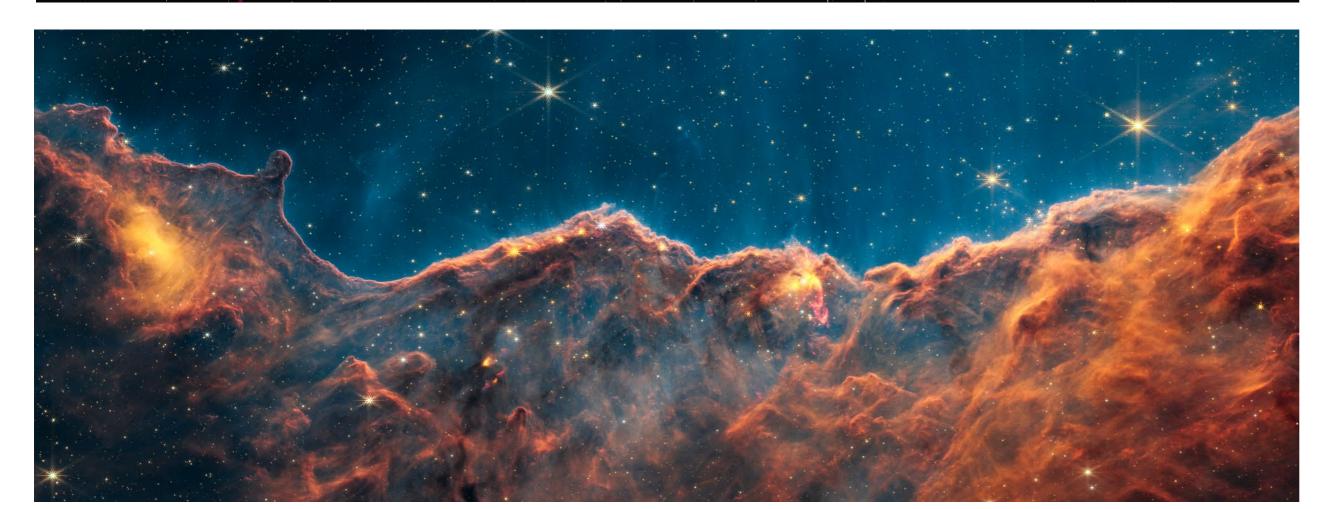
Technik & Architektur
FH Zentralschweiz

Bachelor-Thesis Business Engineering | Innovation

Business Model Development for Commercial Microgravity Platforms









Abstract

The Competence Center Bioscience and Medical Engineering has developed specialized research methods and technologies tailored for conducting research in microgravity conditions. These technologies have proven to be valuable tools in advancing the understanding of various phenomena in space and on Earth and have contributed to diverse scientific discoveries.

However, it is worth considering whether these technologies could also be applied in commercial settings outside of the research context. For this purpose, this thesis aims to design a suitable business model.

A combination of the Magic Triangle and the Lean Canvas was employed to develop innovative business models. The Magic Triangle provides a broader but straightforward overview of business model develop ment, while the Lean Canvas allows for a more in-depth analysis of the specific components.

Two different business models emerged from combining these methods, both of which target academia, commercial corporations, the space industry and its suppliers, as well as private consumers. The first model, Diversifying Competencies, offers consulting services in the microgravity and space market and an online shop featuring exclusive space-related goods. The second model, Online Platform, aims to cultivate a community centered around microgravity and space by connecting a diverse group of stakeholders on an online platform. This platform can be used to exchange information, sell products, establish projects or collaborations, professional networks, and more.

Based on the analysis, the most promising strategy appears to be combining elements from both models in order to maximize the chances of success. While it is clear that entering this market will require significant investments and careful planning, the potential rewards make it a promising endeavor.

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