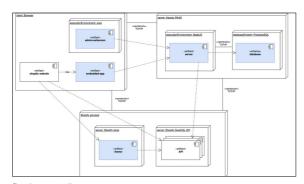
Graduate Candidates	Jan Frei, Cedric Wehli
Examiner	Prof. Frank Koch
Co-Advisor	Prof. Hansjörg Huser, Menzingen, ZG
Subject Area	Internet Technologies and Applications

Subscription based sales service

Developing an extension for e-commerce platform



Technologies Logos from various companies



Deployment diagram Own presentment



Subscription management view Own presentment

Initial Situation: This bachelor thesis was initiated in close cooperation with a permaculture startup. They were in the process of developing a business model and the goal of this thesis was to help them with their online solutions. The startup was already using an e-commerce cloud provider as CMS and online store to sell their products. The requirements and specifications were not worked out at the start of the project. Unfortunately, due to external factors, the collaboration with the startup broke off. This led to a more generic approach in order to make the solution available to a broader audience.

Approach: In the beginning of the thesis, the requirements and use cases were developed in close cooperation with the permaculture startup. Based on these results, a solution was searched which should integrate with the existing infrastructure, be realizable in the time frame of this thesis, and allow future extensions.

To allow agile development with short feedback loops, an optimized scrum process was used. The deployment process was completely hosted on well-known Cloud infrastructure. The implementation followed industry standards in terms of security and scalability which allows real world usage.

Result: Based on the requirements and market analysis, the solution design that was developed during this thesis was realized as a subscription-based selling service application for the startup's e-commerce platform.

In the middle of our working on this thesis, the e-commerce platform announced a new API. This extended their domain model with subscriptions and replaced the domain model originally elaborated in this thesis. As the API was released as a beta version, some functionalities were not yet fully operating.

The implemented application at the end of the project consists of multiple components of different technologies and deployment methods. While an MVP for subscription-based sales could be completed, there is still potential for extensions.