

# Strategic Guidance for the Swisscom Cloud

Degree programme: EMBA General Management

Thesis advisor: Dr. Arno Schmidhauser

Expert: Marc Tomascchett (Synto Unternehmensberatung AG)

External project partner: Swisscom (Schweiz) AG, St. Gallen

The technical and economic design of Swisscom's current Enterprise Cloud, which provides Infrastructure as a Service (IaaS), has yet to be aligned to Swisscom's Cloud vision. The misalignment impacts mapping current large, individual and traditional Enterprise requirements to the capabilities of the Enterprise Cloud. A concrete strategic guide and a cloud computing roadmap supports Swisscom in accompanying large enterprises on their way to cloud computing.

## CLOUD

Cloud is far more than just a set of technologies tied together. Cloud is a philosophy or process, requiring a major change in the existing organizations.

## STARTING POINT

Swisscom has two different cloud solutions supporting the Swisscom Cloud vision:

- Application Cloud
- Enterprise Cloud

The Application Cloud follows the container concept. This is what Swisscom calls the Platform as a Service (PaaS) approach, where amongst other characteristics, elastic resource scaling is in the main focus. The Application Cloud is to a large part built on open source and software defined solutions.

The Enterprise Cloud offers classic Infrastructure as a Service (IaaS), with which Swisscom addresses current large enterprise requirements. The Enterprise Cloud is mostly built on commercial enterprise products and technologies.

Swisscom is developing its own cloud management platform (CMP) for interfacing with the customer, by providing a portal and application programmable interfaces (APIs).

## CHALLENGE

One of the biggest challenges is that large enterprise customers are heading toward the Enterprise Cloud path with conflicting expectations of what Swisscom's Enterprise Cloud should deliver, particularly in regards to features, technologies of choice, solutions for backup / disaster recovery / high availability, and similar. Some customers believe that more open source technologies should be used to reduce costs. The current challenge is the lack of cost transparency and the ensuing difficulty to justify product and technology choices against customers and internal stakeholders (product management, executive management, architects) without the existence of a consistent cost structure. Several questions arise: is the technical and economic design of the Swisscom Enterprise Cloud aligned to the Swisscom Cloud strategy? Does Swiss-

com have to develop different shapes of Enterprise Clouds with different capabilities in order to satisfy and address customer needs? Should Swisscom even consider abandoning its idea of an Enterprise Cloud?

## DELIVERABLES

- A common cloud computing roadmap for large enterprises.
- A dependency model between production costs, sales models and operational accounting. The focus lies on large enterprises planning to outsource their classic in-house virtualization environment to an off-premise cloud provider IaaS cloud computing environment.
- Recommendations for the Swisscom Cloud program with next steps, focusing on large enterprises and predominantly the Enterprise Cloud.

## CONCLUSION AND RECOMMENDATION

The present thesis provides Swisscom with a strategic guide to address the current individual large enterprise requirements with classic IT / traditional outsourcing while introducing a new level of IaaS – the elastic Enterprise Cloud! A seven steps approach is proposed. The initial project scope covers the first three steps:

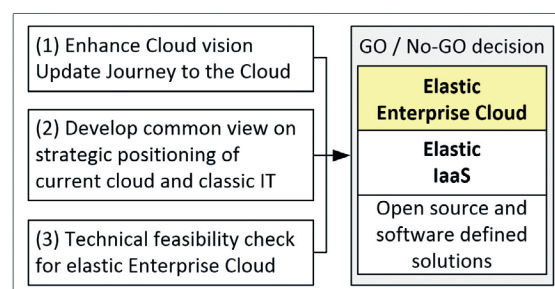
- Enhance the Swisscom Cloud vision and update the Swisscom Journey to the Cloud story.
- Develop a common view on strategic positioning of the current cloud and classic IT.
- Execute a technical feasibility check for the idea of an elastic Enterprise Cloud.



Mario Walker

+41 79 213 81 10

mario.walker@swisscom.com



Initial project scope (own representation)