



# Innovation & Digital

Update on the SIX Cloud  
Swiss Banking Services Forum, 22 May 2019

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A hand holds a clear glass sphere in the foreground. The sphere reflects the surrounding environment, including a modern building with a grid of windows and greenery. In the background, large white letters spell out 'INNOVATION' on a lawn. The text 'We become App-Store for the Swiss Financial Market' is superimposed on the sphere's reflection.

**We become App-Store  
for the Swiss Financial  
Market**

# Needs and Pain Points to be Addressed

## Customer Voices

➤ We want to make secure use of **innovative AI and analytics services** based on our data  
*Medium-sized bank*

➤ We would like to **offer our software as SaaS** for a competitive Swiss Market  
*SaaS-Provider for core banking solution*

➤ We need to be highly **flexible in our IT to ensure fast time-to-market**, but we cannot make any concessions regarding data security and “Swissness”  
*Swiss private bank*

➤ We are looking for a platform to **trade securitized credit risks** with banks  
*Large Swiss life insurer*

➤ Our IT hardly meets the **regulatory requirements**, we would like to outpace our entire IT to the cloud to reduce regulatory cost and complexity  
*Small retail bank*

➤ We want to **participate in the Swiss financial ecosystem**  
*FinTech*

➤ We need a highly secure infrastructure for our **certified health ecosystem** to transfer sensitive medical data based on highly secure certificates  
*Provider of health ecosystem*

➤ We may provide our own offerings, e.g. **API platform and digital exchange** on a secure cloud infrastructure  
*SIX*

Source: Interviews and discussions with potential customers

# Access to Cloud Data

 The Cloud Act (March 23, 2018) allows US authorities to access data stored in the cloud of US companies, *even if abroad*

## Appeal possible, but outcome not promising

The cloud operator can object, but only if the release violates local law and if the data does not originate from a US citizen, a US resident or a US company. In addition, the competent US courts must take so many factors into account that they can hardly ever grant the appeal. In addition, bilateral agreements are to be negotiated, which will also eliminate these possibilities for objection.

## US authorities can demand data release

Since 2013, Microsoft has refused to release data stored in Ireland up to the US Supreme Court. Now the case has been dropped by the Supreme Court due to a new law that entered into force, the CLOUD Act (Clarifying Lawful Overseas Use of Data). **It gives the US authorities the right to demand data from US cloud providers even if they are outside the US.**

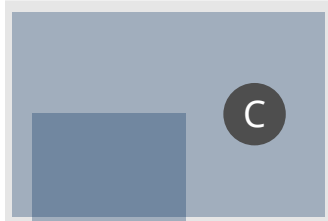
## De facto access to all cloud data

**You have to assume that the US authorities have access to all data of the US cloud providers, no matter where the data is stored.** People who are affected by such a claim have no way of defending themselves and usually do not even learn about it.

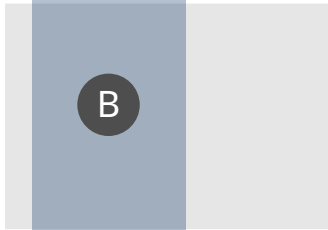
# Comprehensive Offering

## Make Full Use of Cloud Services in the Swiss Digital Ecosystems

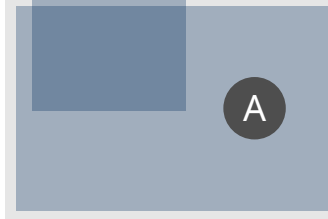
### Ecosystem



### Consulting



### Infrastructure



C

Build up and run various vertical **Ecosystems**

- Selection and orchestration and operation of secure **ecosystems of selected and trustworthy participants**
- Easy consumption of **SIX services** (e.g. API platform, digital exchange and existing SIX services)
- Easy consumption of **SaaS** (e.g. core banking solutions)
- **Managed service / operations** (esp. application management)

B

**Technical consulting as enabler** to become cloud-ready (applications, services and data) and securely use **cognitive services**, esp. AI and Advanced Analytics

A

**Secure infrastructure** for the operation of applications, services and data in a scalable manner

## A A Unique Combination

Multi-Cloud: SIX Will Provide a Unique Combination of Swiss Cloud & Access to New Developments of Global Clouds



### Swiss Cloud

- **Compliance with highest security standards** for particularly sensitive data
- Comprehensive **security services**, e.g. SIX Cyber Security Hub
- **FINMA / BAG-“compliance”** throughout e.g. access, logging, monitoring
- Only Swiss providers, therefore no access from abroad



**Risk mitigation, compliance and reputation**



### Global Cloud

- Integration of **global hyper-scalers**, e.g. Google, Microsoft, amazon, IBM
- Therefore, possibility to use the latest technologies and services, e.g. **AI, Advanced Analytics**
- **Support** by SIX for the secure use of global services
- For less sensitive / regulated data or anonymized data



**Cost reduction and access to technology**

## B Technical Consulting to Become Cloud-Ready

### On-Premise



### Cloud

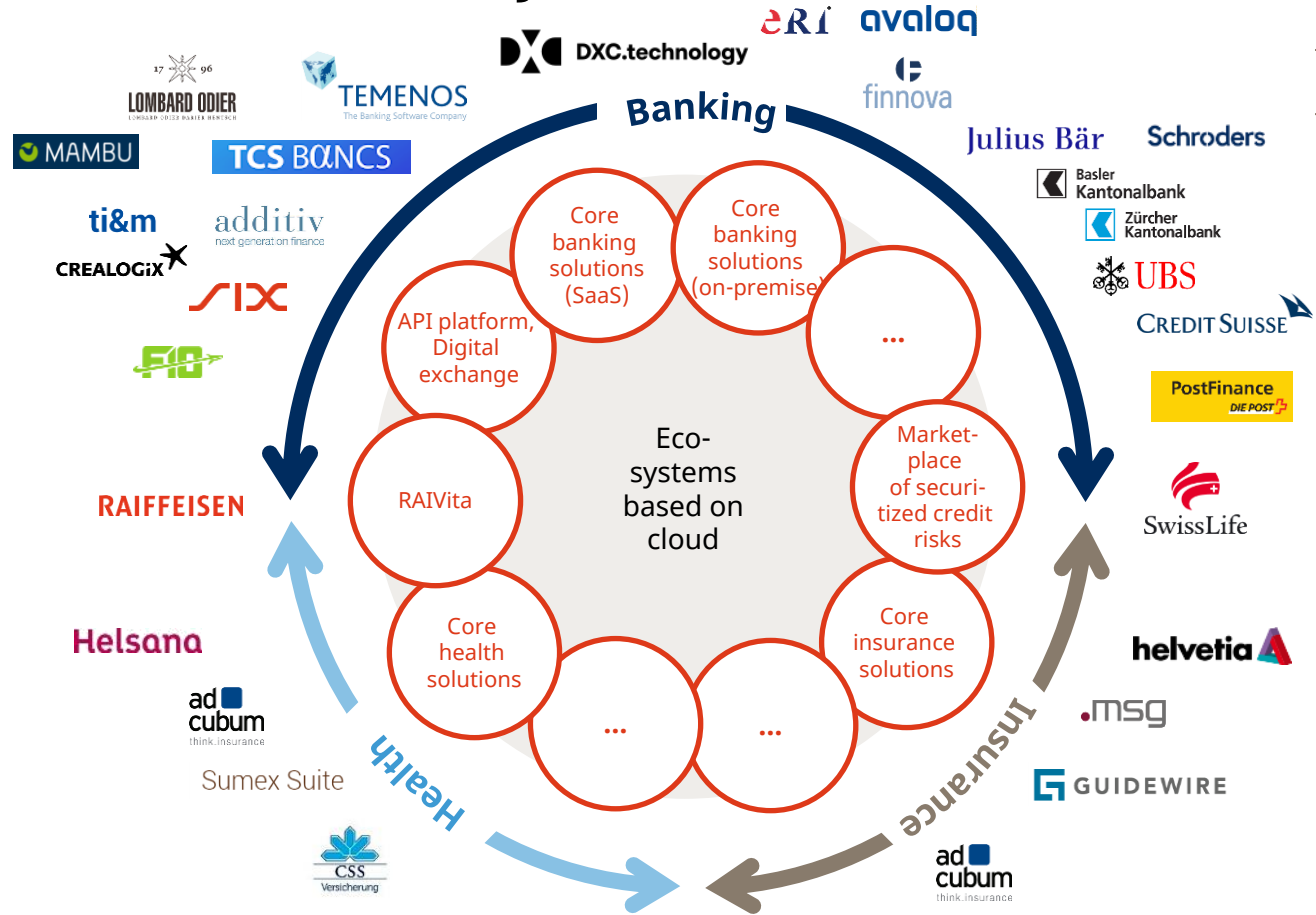


### Offering of consulting services to ...

- ... define strategy
- ... understand and use new innovative services in a beneficial manner
- ... get applications cloud-ready and cloud-operable
- ... combine global and Swiss Cloud (Multi-Cloud) architecturally
- ... ensure technology independence of applications by the integration of highly standardized frameworks
- ... support the Transition of on-prem to SaaS (based on standard processes)

Note: The offering of consulting services needs to be build with partners and internal resources need to be recruited

# C Various Vertical Ecosystems Possible



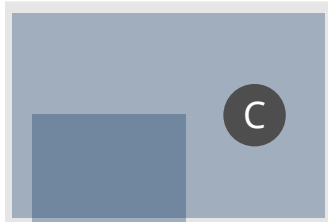
Logos are illustrative examples



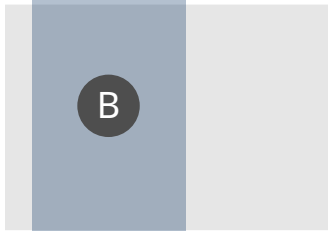
# A Secure Swiss Cloud

## Offering Services for Two Different Client Segments

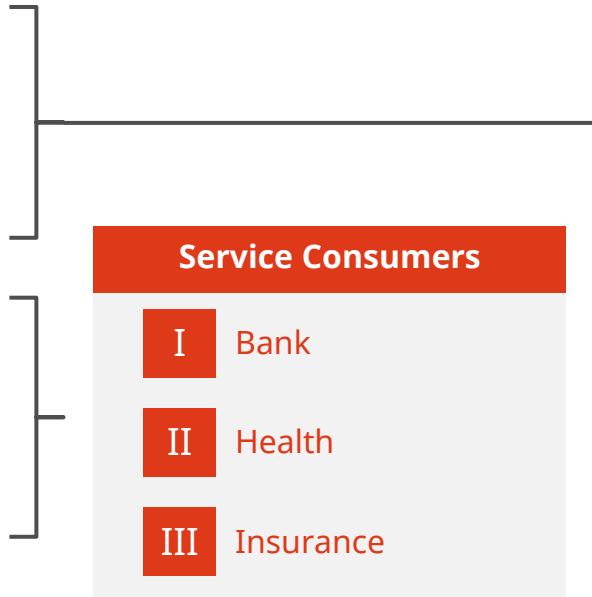
Ecosystem



Consulting



Infrastructure



**Service Providers**

- 1 Bank as a provider
- 2 Core system provider
- 3 Provider of "Umsysteme" e.g. Trading, Risk Mgmt
- 4 SIX
- 5 FinTech
- 6 Cognitive service provider

# Your Advantages

Our Unique Selling  
Propositions



## **Swissness**

Our cloud is hosted and operated in Switzerland.



## **Bank-owned & bank-governed, shared profit**

We focus on the Swiss banks' interests, and share the profit with our Bank-Stakeholders.



## **Ecosystem**

Enables customers to combine services according to their requirements.



## **Size, stability, reliability, security – trust**

We provide reliable, secure and trusted services.



## **Problem- and customer-focused**

We build solutions focusing on the needs of our customers.

# Summary



## Customer need

Clear need for establishing a trustworthy infrastructure, for reducing complexity / cost, and to have access to innovative services



## Why now

Cloud services, i.e. Banking as a Service, are gaining massively in importance for the Swiss financial center. However, US based providers are not an option in Switzerland (Cloud Act)



**Secure. Swiss. Made by SIX.**

## Solution

- Secure platform, consulting to move to the cloud and an orchestrated marketplace for digital ecosystems



## For whom

Institutions with highly sensitive and regulated data (esp. banks, mid-sized and small, life insurers and health insurers)



## SIX USP

SIX as the reliant, trustworthy and innovative partner to build and operate Swiss digital ecosystems for its customers