First Name:	Last Name:	Student ID Number:	

# **Exam Information Management**

## 15.01.2016

You have 90 minutes to work on the exam. You can achieve a maximum number of 90 points. Use the points for each task as an indication how long you should work on it. Each point equals one minute.

Please, do not use additional sheets of paper you brought along yourself. If you need more, official paper will be provided.

Put your name on the cover page and your student ID number also on each of the following pages.

Answer all of the exam's questions either in English or German and stick to the chosen language throughout the whole exam.

## Indicate clearly, if you need to make assumptions.

Good luck!

task	1A	1B	2A	2B	3A	3B	4A	4B	Σ	grade
maximum	6	19	6	14	16	9	10	10	90	
actually achieved										

### 1 Business Models (25 points)

AdNovum is a Swiss-based company that specializes in the design, implementation and maintenance of software and security solutions that comply with stringent business and technical requirements. Its customer offering covers project engineering (the development of specialized, tailor-made software applications), products (licensing, maintenance, and cloud service provider subscription fees), and services (network, application management hosters). The company serves a diverse customer basis from public administration, finance, logistics, telecommunication, and insurances.

For instance, one of AdNovum's cumstomers is Avaloq. In 2010, Avaloq introduced the smart client, a usability-optimized .NET-based client for their core banking system. AdNovum designed the smart client's security concept, implemented its security functionality and was involved in its development. Numerous banks use the SmartClient in production today.

In each of the questions below, apply the knowledge about AdNovum from the lecture.

#### A) Business Model Patterns

1.) Which business model pattern does fit AdNovum's project engineering division? Please explain your answer shortly. Furthermore, name and briefly explain another example of any company using the same business model pattern. **(6 points)** 

#### **B) Business Model Canvas**

2.) Develop a Business Model Canvas (according to Osterwalder/Pigneur) for AdNovum. Name all 9 components of the Business Model Canvas, fill them out reasonably, and give an explanation. If necessary, use plausible assumptions and indicate them as such. **(19 points)** 

Student ID number:

## 2 IT Consumerization (20 points)

Avaloq is a Swiss-based banking software and financial services company. Hans, the CIO of Avaloq, is worried about the recently ongoing consumerization of IT at Avaloq. It seems inevitable that employees make uncontrolled use of private devices. People already use their private phone to check mails, access the company intranet, and share information. Hans fears that this will lead to a loss of control of the hardware and software environment, unforeseeable issues with data security, reliability, and performance, and a blurred distinction between private and business life. After all, some Avaloq employees have very sensitive knowledge of banking clients and are obliged to maintain confidentiality. Hans asks for your help to better understand what's going on and how to manage it.

#### A) Drivers of Consumerization

1.) Name and explain two drivers of IT consumerization. (6 points)

#### B) Strategies for Managing IT Consumerization

In the IM lecture, you have heard about the following four strategies for managing IT consumerization: 1) Broadening the scope, 2) Providing a Gadget Budget, 3) Segmenting Employees by Role, 4) Advocating Uptake.

2.) Give a short explanation for each of the above four IT consumerization strategies. **(8 Points)** 

3.) Which of the four IT consumerization strategies would you recommend to Hans for the above case study? Give an explanation. **(6 Points)** 

## 3 IT Portfolios (25 points)

#### A) Application Portfolios

1.) In the IM lecture, you have heard about the Ward & Peppard Application portfolio. Briefly explain the 4 dimensions of the Ward & Peppard Application Portfolio. **(8 points)** 

2.) Imagine that you are the leader of a university library's IT department. Categorize the 4 Projects in the Application Portfolio. Give an explanation. **(8 points)** 

Project 1 *(introduction of RFID tags)*: RFID (radio frequency identification) tags allow the easy loan and returning of media, even via automatic machines. Reducing routine tasks for the employees at the check-in/-out counter would free them for higher qualified tasks and/or could even lead to a decreased headcount due to further automation. Since the vision of the library's management focuses on personalized, qualified help, the priority of this project is very high.

Project 2 (*research project*): The library recently joined a research initiative to build the "scholar's desktop of the future" integrating searching and reference management functions whilst writing in a web-based environment where data is stored "in the cloud" to be accessible from everywhere a user wants to work. Since no other library has such a service to offer, some managers of the library's staff want to promote it as a unique advantage.

Project 3 (using an intermediary for software licensing): The library manages the purchasing of many educational software titles and runs several computer pools. The various software products and licensing models they provide are very cumbersome to manage. Therefore, the library's purchase unit is urging to use an intermediary to simplify purchase and managing of software licenses.

Project 4 (*availability management for server*): The server running the local library software for lending or returning media has not been integrated into the automatic machine management infrastructure of the university's data center and only during standard office-hours support through the library's IT staff is guaranteed. The library's management and the university agreed to have a 99.5% availability for the local library software.

Strategic	High Potential
Key Operational	Support

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#### **B)** Portfolios and IT Strategy

3.) In the lecture we have discussed several frameworks and their role. Please explain how a portfolio (as a framework) can be used as basis for developing an IT strategy. Briefly discuss at least one strength and one limitation of this approach? **(9 Points)** 

## 4 IT Projects, Benefits, and Change Management (20 points)

Think back of the KPMG Case Study. After you have successfully helped the client (LOGO) to develop an IT strategy for enabling the digital value chain, LOGO now wants to start implementing your concept. They ask an external software engineering company to develop a cross-media publishing platform (CMPP). The CMPP supports the overall digital strategy with a centralized platform for the creation and management of relevant content, standardized quality review processes for managed content and publications, and publishing from one central source to all different channels. LOGO wants you to act as a project manager for this rather risky IT project. To manage this project successfully, it is A) necessary to be aware of the risks and B) ensure that the desired benefits are met.

#### A) IT Project and Change Management.

1.) Name and explain 3 reasons why such an IT project may fail. (6 Points)

2.) Name and explain 2 actions (or Key Success Factors) that you could do to prevent this IT project from failing. **(4 Points)** 

#### **B) IT Benefits Management**

3.) One possible approach to ensure that the benefits of an IT projects are met is to use Key Performance Indicators (KPIs). Define (in total) 5 reasonable KPIs for the cross media publishing platform and explain them briefly. Use the following framework from the KPMG Case Study to structure your KPIs. (10 points)

Measure	Reach	Act	Convert	Engage
Brand Measures				
Content Performance Measures				
Commercial Measures				

Student ID number: