

first name:	last name:	student ID number:

# Exam Information Management

17.01.2014

You have 90 minutes to work on the exam. The maximum number of points you can achieve is 90. Use the points for each task as an indication how long you should work on it.

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	1	2	3	4	5	6	7	8	$\Sigma$	grade
maximum	17	11	13	9	12	9	8	11	90	
actually achieved										

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## Business Models & (17 points)

SoftwareOne is a Swiss-based expert on Software licensing with 30 years of industry experience. This company does not only sell licenses, it helps companies to find licensing models which suits their needs best. Because SoftwareOne also has a large customer base, the company is able to negotiate substantial price reductions from the software vendors. Furthermore, the company offers services around software licensing: self-service portals are provided so that companies can manage all software assets in a structured way and benefit from in-depth reports about usage and costs.

One customer, for example, is Atkins. It is one of the world's leading engineering, design and project management consultancies. It has a massive tail end software portfolio encompassing 500 products and 250 vendors. To simplify the procurement lifecycle, Atkins established a centralized framework agreement with SoftwareONE, which includes all tail end software assets and maintenance agreements. Atkin's procurement process has now been streamlined. Software licenses can now be purchased in a shorter timeframe and for a lower cost. In the first year of the contract, SoftwareONE delivered savings against the contractual spend. Atkins has also been able to free up internal procurement resources.

### Task 1:

**a)** Which form of cooperation has SoftwareOne chosen to interact with its partners? Please give two reasons why such a form of cooperation makes sense and relate your argumentation to the degree of specificity and transaction costs. (5 points)

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**b)** Develop a business model (according to Osterwalder) for “SoftwareOne”. If necessary, use plausible assumptions. (9 points)

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**c)** Which business model pattern does fit Google with respect to its search engine? Justify your answer shortly. Furthermore, name another example of a company using the same business model pattern. (3 points)

## IT Outsourcing & IT Governance (24 points)

**Task 2:** In the following, you will read a short case study about an outsourcing project.

**a)** Explain shortly the functions each step in the outsourcing cycle has and which steps have been taken in the case study below. (6 points)

**b)** Why was the general manager unsuccessful with her outsourcing project?

Justify your answer by

- i. referring in your discussion to the availability of internal knowledge and
- ii. giving two possible reasons for the failure with respect to the principal-agent theory. You can come up with plausible assumptions.

(5 points)

*The IT department of a retailing company had recently been transferred to its Corporate Services division. The general manager believed that commodity functions should be outsourced so the division could focus on adding value to the operational business units. She saw IT services as a commodity and put data centre operations out to tender. As a commodity market, she believed the providers were undifferentiated in their services and approaches, and the contract was awarded solely on the basis of price. The successful bid was 30 percent lower than the nearest other bid. Things soon began to go wrong. Scope and price variations became common. Eventually a post had to be dedicated to variation management. Service levels were rarely achieved, because they had been set up as targets not minimum standards. This was because the client accepted the service provider's 'standard' service level agreement rather than developing one that represented its needs. The service provider capped the amount of resources they would provide for the price and would only provide more if more money was paid. In time, the general manager had to hire specialists to work in the data centre in order to restore service to previous levels and meet peak demands.*

*Within a year the total cost of contract outstripped the bid and the inhouse baseline. Moreover – and most telling – the efforts of the division's remaining IT people had become focused on fighting the contract, not on adding value to the business.*

*(source: Willcocks, Cullen, Craig (2011): The Outsourcing Enterprise; p. 97).*

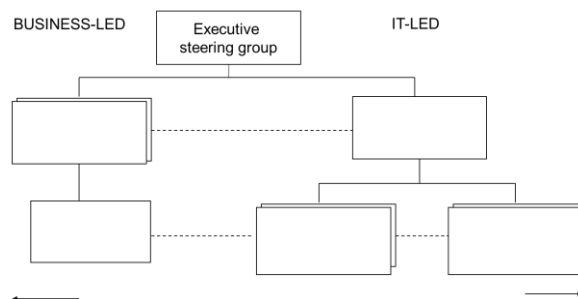
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**Task 3:**

**a)** Which stage of organizational development must have been achieved by an organization with respect to IT governance, so that it can use outsourcing as a means for restructuring? Give a reason why you think this stage is necessary? Describe the stage of organizational development shortly and indicate possible problems this organizational setup might bear. (4 points)

**b)** In the case study introduced before, the general manager decided to outsource the data center operations. In the lecture, you have been introduced to an IT governance structure with committees (see figure below). Now, with respect to an IT governance structure and the problems presented in the case above, which committee would be ideally suited to manage an outsourcing partner? Please justify your answer, which committee or committees are suited best and why. (5 points)



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**c)** Discuss how outsourcing and unbundling (with respect to Osterwalder) are (not) related to each other. (4 points)



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## **IT-Strategy, Planning with portfolios & IS/IT-Strategy (21 points)**

### **Task 4:**

Does the development of commercial music download portals (such as iTunes store, Google Play, Amazon MP3) contradict Carr's core point? In order to answer the question, proceed as follows: (a) describe Carr's core point; (b) what does Carr compare IT with? and (c) describe, how Carr's core point is applicable (or not) to the domain of commercial music downloads.

(9 points)

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**Task 5:**

**a)** Which role does the IT application portfolio have for the IS/IT-strategy development? What output does it deliver? (4 points)

**b)** Imagine that you are the leader of a university library’s IT department. A team member elaborated the following application/project portfolio. Check if you agree with the suggested grouping of the applications/projects into the quadrants. If you do not agree, explain for the project(s) shortly, why it/they should be placed into another quadrant. (8 points)

Strategic	High Potential
P2 ( <i>introduction of RFID tags</i> ) P4 ( <i>Whatsapp messages from library system</i> ) P5 ( <i>research project</i> )	P6 ( <i>using intermediary for software licensing</i> )
P3 ( <i>update to new release</i> )	P1 ( <i>availability management for server</i> )
Key Operational	Support

**Project 1 (*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.

**Project 2 (*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 focusses on personalized, qualified help, the priority of this project is very high.

**Project 3 (*update to new release*):** The software system to manage the whole process from purchase, over cataloguing to lending media awaits an update to the latest release offering an easier user interface and providing new functions. To configure the new system, a test environment must be set up.

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Project 4 (*Whatsapp messages from library system*): In addition to project 5, the new release includes the possibility to send reminder messages via Whatsapp to the users, if a loan period ends. This feature has not been discussed with the data protection manager of the university. Transmitting and storing personalized data of users on other servers than the university is forbidden by law.

Project 5 (*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 6 (*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, such as SoftwareOne, to simplify purchase and managing of software licenses.

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## IT and Organization (17 points)

**Task 6:** Commercial music downloads can be considered as electronic markets.

**a)** Describe the transaction phases as seen by customers who want to purchase music through downloads. (6 points)

**b)** Why is music a good choice for a product being sold in an electronic market? (3 points)

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**Task 7:**

Assume that AdNovum, as presented in the guest lecture, wants to become a product company. Their core product will be specialized security software for banks. What changes does it need to become a true software product company? In your argumentation, refer to the dimensions listed below – but you need only to pick 4 of them. (8 points)

culture
organization
roles
sales approach
project size
consistency
intimacy to customer
risk

## ITIL (11 points)

### Task 8:

a) "You cannot manage what you can't measure." Why is this a basic principle in ITIL? Give an example. (3 points)

b) In the following, you will find single-choice questions for ITIL. **Please note that only one answer is correct.** Mark the correct answer by ticking the box in front of it. You should read all possible answers first before you decide about the correct answer for each question. Each correct answer will give a point; wrong answers will be counted as zero points.

(8 points)

<b>1. Problem management aims at?</b>	
<input type="checkbox"/>	capturing tickets retrospectively.
<input type="checkbox"/>	analyze trends on a regular basis.
<input type="checkbox"/>	guarantee response/processing times according to SLA for the tickets.
<input type="checkbox"/>	avoiding incident tickets on the long run.

<b>2. The best description for a problem is:</b>	
<input type="checkbox"/>	known cause of a single or even several incidents
<input type="checkbox"/>	unknown cause of a single or several incidents.
<input type="checkbox"/>	several incidents belonging to a known error.

<b>3. In which document is described how the IT and the procurement department (following in-house agreements) collaborate formally?</b>	
<input type="checkbox"/>	Operational Level Agreement
<input type="checkbox"/>	Service Level Agreement
<input type="checkbox"/>	Service Specsheets
<input type="checkbox"/>	Underpinning Contract

<b>4. What is the service desk's responsibility?</b>	
<input type="checkbox"/>	First and sole contact point for users.
<input type="checkbox"/>	Resolve incidents as fast as possible.
<input type="checkbox"/>	Find the reasons for a problem.

5. Something is broken again at the same PC as two months before. Is this...

	a problem?
	an incident?
	a known error?

6. Which activity has the problem management to carry out first?

	prioritize problems
	identify problems by analyzing incidents
	resolve problems

7. Which statement describes the value that customers are offered by using a service?

- 1.) The performance of the tasks related to a service will be increased.
- 2.) The probability, that the desired result will be delivered, will be increased.
- 3.) The risk for a customer increases at the same rate as the received performance increases.
- 4.) The effect of constraints will be reduced.

	a) 1, 2, 4
	b) 2, 3, 4
	c) 1, 3, 4
	d) all

8. Which of the following statements with respect to the IT service lifecycle is **not** correct?

	The IT strategy supports the business by designing service solutions.
	Services are supported in order to execute and maintain the agreed services.
	A continuous improvement cycle should be used to secure competitiveness.
	IT strategy should guide the business strategy.