
UNIVERSITY OF CAMERINO - Master Degree in COMPUTER SCIENCE EXAMINATION "Alignment of Business and IT"

Lecturer: Re - Hinkelmann

Data: 30.02.2018 **Time:** 60 minutes

Aids / Material Allowed: none

Note:

• Put your name down on **all** the sheets.

• Write down your answers **only** on the sheets provided.

• Do **not use** any sheets of your own.

• Do **not write** in pencil.

Exam Structure Points

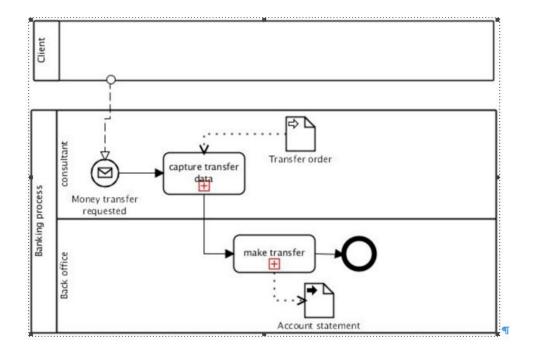
Questions	1	2	3	4	5	6	Total
Max Points	3	6	6	6	6	6	
Points Achieved							

GRADE												
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QUESTION 1 (3 points) - Question related enterprise architecture.

- 1. (1 points) What are the four roles of IT for an enterprise according to (Hanschke 2013)?
- 2. (2 points) For each of the role, mention the main objective for IT usage.

QUESTION 2 (6 points) - This is a model of a banking process for EuroBank:



Use ArchiMate to create an architecture view for this process, which also incorporates the following information.

"Account management is realized by the Banking process. The Banking process makes use of the electronic money transfer, which is realized by the E-banking system."

QUESTION 3 (6 points) - ITIL is the most widely adopted framework for IT service management in the world.

- 1. (1 point) What are the stakeholders of the ITIL framework? 2. (1 point) Who defined the ITIL framework? 3. (1 point) What is the meaning of the service operation phase in the service life-cycle according to ITIL? (1 point) What is the meaning of continuous service improvement? 4. 5. (1 point) What is the meaning of roles? Why they are introduced?
- 6. (1 point) What is the relationship between ITIL and ISO?

QUESTION 4 (6 points) - Considering the overall idea of Business-IT Alignment.

 (2 points) For Business-IT alignment there can be internal and external drivers, as well as drivers from business and IT. This is reflected in the strategic alignment model of Hendersen and Venkatraman. Make a sketch of the strategic alignment model introduced by Hendersen and Venkatraman and explain it.

2. (2 points) ArchiMate distinguishes three layers and three types of elements. To which layer and element belong "Node" and "Value"?

3. (2 points) ArchiMate implement cross-layer dependencies. Describe by means of example the alignment between application and technology?

QUESTION 5 (6 points) - Using ArchiMate model the following statement.

1. (3 points) Make a graphical business motivation model for a bank according to the following description: "an Insurance policy document is the representation of an Insurance policy, which is a business object. The meaning related to this document is the Insurance policy notification, which consists of a Policy explanation, an Insurance registration, and a Coverage description".

2. (3 points) Using ArchiMate model the following statement: "A bank offers the product Telebanking account to its customers. Opening an account as well as application support (i.e., help-desk and the like), are modeled as business services realized by the Customer relations department. As part of the product, the customer can make use of a banking service which offers application services realized by the Telebanking application, such as electronic Money transfer and requesting Account status".

QUESTION 6 (6 points) - Business Motivation Modeling

Most customer own smartphones. Mobile payment would reduce transaction cost. Mobile payment could be attractive for customers. To allow mobile payment, an app for mobile payment shall be developed. After one year 40% of customers should use the mobile payment. Make a graphical OMG business motivation model according to the description given above. It should include one or several of the following element types: influencer, assessment, course of action, desired result. Also make relations between the elements (you do not have to label the relations).