

First Name	Last Name	Student ID number

Exam Information Management

20.01.2022

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 (i.e. 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	1	2	3	4	5	6	Σ	grade
maximum	17.5	15	12	14	19.5	12	90	
achieved								

Question 1: Business Models (17.5 Points)

The European Post Office from Homework 3 works across the delivery of regular mail & parcel delivery, the management of post offices, and a post bank for consumers. They deliver market-relevant, innovative services and work hard to fulfill customers' high expectations. Therein, they rely on a large logistics and transportation business with over 11,000 suppliers internationally. Annually, the European Post Office makes investments of ca. \$400m to improve efficiency and quality and new services and products.

The Parcel Delivery business line of the European Post Office is a market leader in Europe and delivers more than 500 million parcels yearly. This can only be achieved with strong business partners across Europe and cross-border bilateral agreements as well as a perfectly managed and operated delivery network. However, the Parcel Delivery Business line is currently facing significant challenges:

- a) end customers of the Parcel Delivery business line often expect individual and flexible solutions – around the clock, both physical and digital
- b) the growth in e-commerce is intensifying the pressure on prices in logistics
- c) the increased parcel volume as indirect effect of COVID-19, which is processed by the employees in the parcel centers, is causing a bottleneck

Therefore, the European Post Office wants to make sure they are making the best use of technology to support their business, e.g., by systematically developing its services and access points through combining physical and digital products and services. Therein, the Parcel Delivery Business Unit has its own divisional IT department, which supports building and running very specific solutions. Furthermore, the Parcel Delivery Business also has access to a large corporate IT department, which realizes inter-divisional and division-specific IT solutions in competition with third-party providers. However, to develop possible solutions, it is first necessary to understand the European Post Office's current business model and operations.

As part of your consulting mandate, you are asked to analyze the current business model of the European Post Office's Parcel Delivery Business by using the Business Model Canvas. Your colleagues at ConsultIT have already provided you with some prior work, so you only have to complement and describe the canvas, which you can find on the following page. In general, your job is to...

1. First, correctly name the missing components by filling in the blanks. (2.5 Points)
2. Fill out the missing components of the canvas with bullet points and separately provide explanations for your rationale for each component. If you make assumptions, please make sure to describe them as well. (15 Points)

<div>1)</div>	<div>2)</div>	<div>3)</div>	<div>5)</div>	<div>6) Customer Relationships</div> <div><ul style="list-style-type: none">Self-service through the website or appPersonal assistance through phone or chat as well as through the post offices and the delivery manCommunities, e.g., on Facebook or Instagram</div>	<div>7) Customer Segments</div> <div><ul style="list-style-type: none">Private customersBusinesses customers including corporations, government and public organizations</div>	<div>8) Channels</div> <div><div>Direct channels<ul style="list-style-type: none">Online (website, application, social media)Post offices, drop-off boxes, delivery men</div><div>Indirect channels<ul style="list-style-type: none">Partner shops</div></div>	<div>9) Revenue</div> <div><ul style="list-style-type: none">Product and feature dependent pricing, e.g., based on size and weight of parcel, destination, delivery time, parcel insuranceVolume dependent pricingSpecial conditions for business customers</div>	<div>4)</div>
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Question 2: Outsourcing (15 Points)

To guarantee a self-funded universal service throughout Europe and tackle the described challenges, the European Post Office will have to make substantial investments. “In logistics and digital communication, we want to build up new competencies and grow significantly. To do so, we will invest over 10 billion € over the next four years”, says Martino Cirelli, CEO of the parcel delivery business. In the past, the parcel delivery business of the European Post Office has invested a lot in its own technology infrastructure – e.g., in server, storage, and other data center technologies – but also in its application portfolio and human capital. However, to become more agile in this fast-changing business environment, it plans to slim the corporate IT by outsourcing parts of it to external partners.

For example, the Parcel Delivery Business plans to outsource its data center and compute infrastructure to IBM, the networking infrastructure to Cisco, and its communication and collaboration services to Microsoft. As your supervisor at ConsultIT heard a lot about failed outsourcing projects, he is naturally suspicious about your client's plans. Therefore, he asked you to analyze the European Post Office's Parcel Delivery Business plans and provide him with further insights.

1. Which of the following sourcing strategies will the European Post Office's Parcel Delivery Business apparently follow in the future?
 - Internal (Type I)
 - Shared Services (Type II)
 - Full Service Outsourcing
 - Prime
 - Consortium
 - Selective Outsourcing

Describe the sourcing strategy and differentiate it from one other sourcing strategy that you learned in the Information Management lecture. Please, specifically, refer to the situation of the European Post Office. (5 Points)

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- Describe two reasons that support the plans of the European Post Office's Parcel Delivery Business as well as two risks that it might face when it outsources parts of its existing IT infrastructure to external providers. (4 Points)
- What core IT responsibilities should the European Post Office's Parcel Delivery Business keep inside its organization? Describe two responsibilities and provide reasons why the European Post Office's Parcel Delivery Business should keep these responsibilities inside its organization. (6 Points)

Question 3: IT Portfolios (12P)

The European Post Office's Parcel Delivery Business has announced outsourcing IT infrastructure and parts of its application landscape to external providers. After providing your supervisor at ConsultIT with a deep analysis of the outsourcing plans, he is still worried that the Parcel Delivery Business could outsource applications crucial to its future business success to external providers and, therefore, could risk the competitive edge. Given the following existing and planned applications, you are tasked to provide a statement of whether it is wise to outsource them or not.

MyPost Business: MyPost Business is the key digital platform for services offered to business customers. Many digital services are accessible on this platform, like creating online stamps (= Webstamp) and managing freight and customs documents. Furthermore, MyPost Business can be integrated into ordering systems of business partners allowing for bulk processing of orders including the automatic scheduling of parcel pickup, sending of tracking notifications and management of returns.

Delivery Drivers Disposition Management System: The internal disposition management system is used to optimize the disposition of delivery drivers to delivery trucks and increase the system's overall performance. Based on complex algorithms, the Delivery Drivers Disposition Management Systems predicts the best utilization and distribution of the delivery trucks based on a range of metrics, including the parcel volume, traffic conditions, past performance of the delivery driver, and the history of the delivery truck.

eParcel App: Customers can use the application to coordinate parcel delivery, store important delivery documents, or register physical damage to the parcel. But the eParcel App can do much more. Users can also process documents and pay digital bills with the application itself. It is designed so that many different companies, organizations, and public authorities can use it with their applications (e.g., for payment transactions). This will make the new application a hub for digital correspondence between companies and their customers.

Central Management System for self-driving, autonomous vehicles: The Parcel Delivery Business plans to use cutting-edge technologies to offer its customers up-to-date solutions, including self-driving, autonomous vehicles. These are available around the clock and are ecological and economical to operate. Furthermore, testing autonomous vehicles in different areas showed beneficial for in-house customer logistics and supplement delivery. Therefore, the European Post Office's Parcel Delivery Business plans to use self-driving, autonomous vehicles as one of the future success factors. However, such systems also require high monitoring and maintenance. Therefore, the Central Management System offers the possibility to monitor and control their operation remotely and ensures seamless integration in other systems of the Parcel Delivery Unit, e.g., its order or CRM system.

Use the **Ward & Peppard Application portfolio** to classify these applications. First, name and explain the dimensions of the Ward & Peppard Application portfolio. Secondly, describe how you would classify the applications accordingly. (12 Points)

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Question 4: Planning & Architectures (14 points)

During the Ergon Case Study Homework, you got to know the Major Prestige Hospital that underwent an extensive digital transformation. After several ups and downs, the digital transformation was successfully finished two years ago. Now the hospital is facing a new crisis. Due to the Corona pandemic, the Major Prestige Hospital expects losses for the current financial year 2021. Thus, the management board has commanded cost-cutting in all hospital areas. To achieve this goal, the CEO proposes measures for each department. You, the hospital's new CIO, just had a meeting with the CEO where he explained to you the measures for the IT department. These are:

- a) A significant reduction of the IT budget for the next year 2022
- b) All IT projects that do not pay themselves off by cost savings or increased income within the next 24 months should be stopped (i.e., the benefits within 2 years must pay off all remaining costs)
- c) All future IT projects have to pay themselves off within 2 years
- d) Currently planned innovation project will be stopped until further notice

You, as the CIO, are pretty desperate about these drastic decisions and fear that this could bring the Hospital again into a crisis in the long term. Thus, you decided to write a mail to the CEO explaining to him...:

1. What these measures would mean for the role of IT within the hospital. Discuss at least two points specific to the hospital's situation. Please make assumptions clear. (4 Points)

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2. What long-term consequences you foresee for the development of the hospital's architecture if these measures will be followed through. Please discuss at least two arguments specific to the hospital's situation. (4 Points)

The CEO welcomes your initiative and your long-term view and now asks for your advice for including the architecture in his planning. In analyzing the current state, you find that the hospital's architecture is currently in the standardized technology stage.

3. Explain to the CEO why moving the hospital's architecture to an "optimized core" (from the current "standardized technology" stage) may be the more cost-efficient long-term solution compared to the CEO's proposed measures from above. Make sure to include the current (standardized technology) and future architecture (optimized core) in your explanation and argumentation, and to always refer to the hospital's situation. (6 Points)

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Question 5: Agile Organization / IT (19.5 points)

Looking at the longer-term trend of the COVID pandemic, the CEO is thinking about modernizing the newly established COVID department and arming it for fast-moving changes. Since the IT group has already been following an agile approach for several years, the CEO asks for your advice on whether and how the COVID department should be organized as an agile department.

Following the ING Model that you learned about in the Information Management lecture and considering the following role in the hospital's COVID and IT department: Doctors, Medical Assistants, Department Head, UX Designer, Data Scientists, Engineers;

Please specify both, (a) what the three leading principles are that the CEO should consider for the COVID department and (b) how the model for the hospital's agile COVID department would look like? For both tasks, be specific to the given case. If you make assumptions, please make sure to describe them as well. (19.5 Points)

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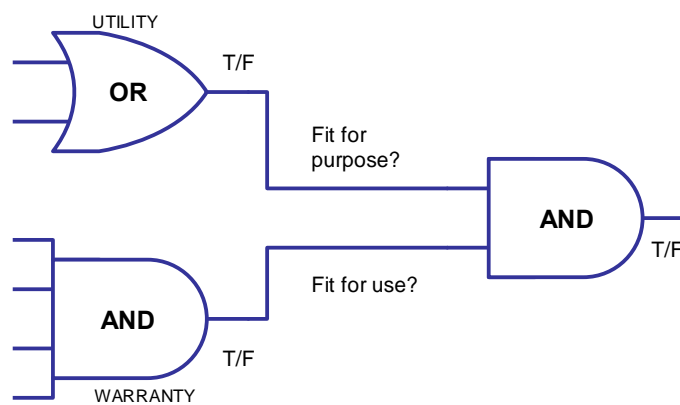
Question 6: IT Services Management (12 points)

Now, please specifically refer back to the Medical Information System you were confronted with during the Ergon Case Study.

1. Explain how value is generated in Service Management along the example of the Medical Information System of the hospital. You can use the drawing below to support your explanation. However, please be specific, i.e., do not just complete the figure below with the general statements from the slides in the lecture. (8 Points)

Inputs

Value created



T: True
F: False

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2. What is the relationship between a business service and an IT service? Please use the example of the Medical Information System! Name at least 2 points (4 Points)