**MODULE 4 UNIT 3**

**Assignment**

Learning outcomes:

LO3: Investigate how an organization can use robotics to achieve cost leadership, differentiation, or focus.

LO4: Decide if an application of robotics is appropriate in an organization.

LO5: Evaluate the strategic, technical, and other aspects of an application of robotics.

# Name:

## Instructions and guidelines (Read carefully)

### Instructions

1. Insert your name and surname in the space provided above, as well as in the **file name.** Save the file as: **First name Surname M4 U3 Assignment** – e.g., Zadie Smith M4 U3 Assignment. **NB:** *Please ensure that you use the name that appears in your participant profile on the Online Campus.*

2. Write all your answers in this document. There is an instruction that says, “Start writing here” under each question. Please type your answer there.

3. Submit your assignment in **Microsoft Word only**. No other file types will be accepted.

4. Do **not delete the plagiarism declaration** or the **assignment instructions and guidelines**. They must remain in your assignment when you submit.

PLEASE NOTE: **Plagiarism cases will be investigated in line with the terms and conditions for participants.**

IMPORTANT NOTICE: Please ensure that you have checked the Online Campus for the due date for this assignment.

### Guidelines

1. There are 4 pages and 3 questions in this assignment.

2. Make sure that you have carefully read and fully understood the questions before answering them. Answer the questions fully but concisely and as directly as possible. Follow all specific instructions for individual questions (e.g., “list,” “in point form”).

3. Answer all questions in your own words. Do not copy any text from the casebook, readings or other sources. **The assignment must be your own work only.**

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| --- |
| **Plagiarism declaration:** |
| **1. I know that plagiarism is wrong. Plagiarism is to use another’s work and pretend that it is one’s own.**  **2. This assignment is my own work.**  **3. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.**  **4. I acknowledge that copying someone else’s assignment (or part of it) is wrong, and declare that my assignments are my own work.** |

In the final module of this program, you will create a roadmap for using AI technologies in an organization of your choice. In each assignment included in this program, you will be required to complete activities that will inform your thinking for the completion of the final roadmap. A high-level overview of the structure for the roadmap is shown below. In this assignment, you will be working on the “Proposed initiative” section.

1. Executive summary
2. Current state
3. **Proposed initiative**
4. Plans of action and criteria for success

Now that you have a better understanding of the capabilities of robots, consider how they could be applied to your chosen organization, by answering the three questions in this assignment. Ensure that your answers are coherent and clear.

Review guidelines:

Your assignment will be reviewed according to your insight into tasks and processes that could benefit from the use of robotics, your desired future state for your organization, your insight into technical and leadership requirements, and the structure and logic of your writing. View the detailed rubric on the Online Campus.

**Question 1**

Consider the working environment you have chosen to focus on during this program. Identify three to five organizational processes that could benefit from the use of robotics. (Max. 50 words per process.)

Start writing here:

Autonomous mobile branches:

Robotics technologies, such as the self-driving car, could bring a fleet of autonomous mobile branches. My organization already have some fleet of mobile branches. Autonomous car technology can help us to increase the number of available mobile branches to reach more customers in remote locations.

Automated branches:

In the future, branches might become fully automated where robots perform the duty of bank agents. Robots will be able to perform many functions such as sign-language and have a conversation in different languages. Those branches can utilize machine learning to provide more personalized services.

Personal banking robot:

Customers are demanding more personalized and always-available services from the financial sector. This demand could be because of necessary needs for disabled customers (e.g. hearing and visual aid) or private banking need for high-quality services. A company can differentiate itself by providing high-quality services using robots.

**Question 2**

Setting a vision or desired future state is the process of defining the desired pathway for a technology’s deployment. Before using robots in your organization, you will need to identify what you hope to achieve. Using Porter’s three generic strategies as a reference, describe how robots will impact cost leadership, differentiation, or focus to give you a competitive edge.

Be sure to outline your desired future state where robots are used in the organizational processes you discussed in Question 1. (Max. 200 words in total.)

Start writing here:

I believe robotics will have a significant impact on future organizations. The financial service sector will be one of the least impacted industry until robotics become mainstream and reliable. However, this does not mean financial organization cannot utilize robots to achieve a competitive edge.

Cost leadership:

Mobile branch banking service is a great idea which helps customers to access vital banking services in remote locations. However, it is costly to have a large fleet of mobile branches. Autonomous vehicle technology can reduce the operating cost while increasing the number of available mobile branches. Those mobile branches can be fully automated to further reduce cost in the future.

Differentiation:

Automated branches will have the ability to provide a variety of features to our customers. These features could be providing services in multiple languages or specialized tasks such as sign language. Those branches will have access to machine learning technologies to provide customized services and products.

Focus:

Personal banking robots can help us to focus on a segment of customers like disabled and wealthy customers. Those segments have different needs where robots can be specialized to meet those requirements.

Conclusion:

Robotics have potential to provide us with many strategic advantages.

**Question 3**

Consider the technical and leadership or managerial requirements of rolling out robots across the areas you have identified in Question 1. Cover the following questions in your answer:

* Who should be involved in implementing the proposed initiative, and what should the scope of their roles be?
* How does the proposed initiative fit in with the business strategy and IT strategy?
* What are some technical considerations and requirements for implementation?

(Max. 300 words in total.)

Start writing here:

Implementing robotics project is a significant effort that has to be embedded in the organization’s strategy. Robotics is still in its development stage which requires further advancement to be reliable. However, it has a significant future value where organizations need to be comfortable to implement. A successful implementation requires C-level executives to realize its future value and include in a broader AI strategic vision.

After including robotics in the wider AI strategy, these projects require SMEs (subject matter experts) and project managers. SMEs are responsible for defining the problem (e.g. communication medium between customers and robots) and the desired outcome of the project. Project managers are accountable for managing and resourcing actionable insights.

Robotics projects will require third-party contracts and services (e.g. self-driving car technology from Google or Tesla). It will be C-level executives’ role to facilitate those contracts and agreements. An agreement must be reached on the handling repair and services between the third party and the organization. In some cases, liability agreement should be included for projects such as autonomous mobile branches where it might result in asset damage or even loss of valuable life. Furthermore, a project like autonomous mobile branches will require approval from legislators and significant infrastructure improvements to facilitate self-driving.

When the agreement is reached for robotics technologies, SMEs will give technical considerations and requirements to implement those projects. Project managers will make a decision based on those to facilitate. If those conditions are outside of business strategy or risk appetite, project managers will discuss with C-level executives in the decision making.

In conclusion, the organization needs a strategic vision for robotics as part of the broader AI strategy. Robotics will most likely disrupt normal operating rhythms in the organization. However, C-level executives should enable the adoption and progress of those project.