Technology Evaluation for Emerging Technologies

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Task 1 – Analyse industries and practices

In this task, you are to identify emerging technologies and practices within the IT industry.

Please select one of the following industries to complete this task.

* Network and System Administration
* Software Development
* Gaming Development
* Media

Complete the 3 tables below based on your chosen industry.

* An overview of current technology used in the industry.
* Emerging **technology** that the industry will use soon or have recently started using.
* How will this technology change the work **practices** in this industry?
* Reference 2 sources of information you have used to perform this analysis.

|  |  |
| --- | --- |
| Industry | Gaming Development |
| Industry overview | Game development is one of the biggest industries & constantly evolves.  Current common tech for this industry is:   * 9th gen game consoles * Snapdragon XR2 gen1 processors (soon gen 2) * i5+ Computer CPU |

**Table 1** XR Industries

|  |  |
| --- | --- |
| Industry Emerging Practice | Transitioning to other game engines that aren’t Unity for VR games. |
| Emerging Technology | The Snapdragon XR2 gen 2 processor, & Apple’s Mixed Reality headset. |
| Describe how the industry will use the new technology | Pushing the XR2 Gen2 to its limit & seeing all of its capabilities.  Using the mixed reality for better work production. |
| Describe how the technology will change the industry practices | There will be more advanced games being produced.  More work can be done in offices & at a faster speed. |
| 2 references you used for research | <https://www.apple.com/apple-vision-pro/>  <https://www.qualcomm.com/products/mobile/snapdragon/xr-vr-ar/snapdragon-xr2-gen-2-platform> |

**Table 2** High Depth Graphics

|  |  |
| --- | --- |
| Industry Emerging Practice | <select **a second** emerging practice that is occurring within the industry> |
| Emerging Technology | <select **a second** emerging technology that is being used in the industry> |
| Describe how the industry will use the new technology | <describe how the industry can use the new technology> |
| Describe how the technology will change the industry practices | <describe how this technology will change how the industry operates> |
| 2 references you used for research | <provide 2 links to sources of information used when researching this industry and technology> |

**Table 3** Game Engins/software

|  |  |
| --- | --- |
| Industry Emerging Practice | <select **a third** emerging practice that is occurring within the industry> |
| Emerging Technology | <select **a third** emerging technology that is being used in the industry> |
| Describe how the industry will use the new technology | <describe how the industry can use the new technology> |
| Describe how the technology will change the industry practices | <describe how this technology will change how the industry operates> |
| 2 references you used for research | <provide 2 links to sources of information used when researching this industry and technology> |

Task 2 - Evaluation

# Part 1 - Emerging Technology Analysis

In this task, you are to evaluate and emerging technology and practices.

Please select **three** of the following technologies to complete this task.

* Static website hosting using a S3 Bucket
* AWS Lambda
* EC2 Virtual Machines
* Amazon Lex
* Amazon RDS

## Technology 1 – Static Website hosting using a S3 Bucket

### 1.1 Overview

<Briefly describe what is required to utilise your chosen technology. Remember to think of hardware, software, training, or 3rd party devices>

### 1.2 Features and functions

<Setup and configure the technology within AWS to show its functions and features. Ensure to provide screenshots showing your technology is running>

### 1.3 Advantages of using your chosen technology

<Describe in some depth the advantages of using your chosen technology>

### 1.4 Disadvantages of using your chosen technology

<Describe in some depth the disadvantages of using your chosen technology>

### 1.5 Organisational alignment

<Look at the strategic plan, and at the “Vision Statement”, “Mission Statement” and “Core Values” within the document. Describe how (or if) using your chosen technology will align with these goals>

### 1.6 Business impacts

<Describe the impact emerging technology will have on current business practices. How will it impact staff? What impact might it have on customers?>

## Technology 2 – EC2 Virtual Machines

### 2.1 Overview

<Briefly describe what is required to utilise your chosen technology. Remember to think of hardware, software, training, or 3rd party devices>

### 2.2 Features and functions

<Setup and configure the technology within AWS to show its functions and features. Ensure to provide screenshots showing your technology is running>

### 2.3 Advantages of using your chosen technology

<Describe in some depth the advantages of using your chosen technology>

### 2.4 Disadvantages of using your chosen technology

<Describe in some depth the disadvantages of using your chosen technology>

### 2.5 Organisational alignment

<Look at the strategic plan, and at the “Vision Statement”, “Mission Statement” and “Core Values” within the document. Describe how (or if) using your chosen technology will align with these goals>

### 2.6 Business impacts

<Describe the impact emerging technology will have on current business practices. How will it impact staff? What impact might it have on customers?>

## Technology 3 – <enter technology here>

### 3.1 Overview

<Briefly describe what is required to utilise your chosen technology. Remember to think of hardware, software, training, or 3rd party devices>

### 3.2 Features and functions

<Setup and configure the technology within AWS to show its functions and features. Ensure to provide screenshots showing your technology is running>

### 3.3 Advantages of using your chosen technology

<Describe in some depth the advantages of using your chosen technology>

### 3.4 Disadvantages of using your chosen technology

<Describe in some depth the disadvantages of using your chosen technology>

### 3.5 Organisational alignment

< Look at the strategic plan, and at the “Vision Statement”, “Mission Statement” and “Core Values” within the document. Describe how (or if) using your chosen technology will align with these goals>

### 3.6 Business impacts

<Describe the impact emerging technology will have on current business practices. How will it impact staff? What impact might it have on customers?>

## Feedback

### 4.1 Feedback

<Obtain feedback regarding your solution from your lecturer. Use Microsoft Teams or a mobile phone to record the meeting and place a link to the recording in the box below.

**Feedback Link**

|  |
| --- |
|  |

# Part 2 – Emerging Practices Analysis

In this task, you are to evaluate and emerging technology and practices.

Complete the following **three** emerging practices.

## Option 1 – Displaying 3D Photos on a static website

### 1.1 Overview

<Briefly describe what is required to utilise the practice>

### 1.2 Features and functions of the emerging practice

<Describe the feature and functions that can be offered by utilising the practice>

### 1.3 Advantages of the emerging practice

<Describe in some depth the advantages of using the practice>

### 1.4 Disadvantages of the emerging practice

<Describe in some depth the disadvantages of using the practice>

### 1.5 Organisational alignment

< Look at the strategic plan, and at the “Vision Statement”, “Mission Statement” and “Core Values” within the document. Describe how (or if) using the practice will align with these goals>

### 1.6 Business impacts

<Describe the impact emerging technology will have on current business practices. How will it impact staff? What impact might it have on customers?>

## Option 2 – Using a chatbot to Book a Hotel

### 2.1 Overview

<Briefly describe what is required to utilise the practice>

### 2.2 Features and functions of the emerging practice

<Describe the feature and functions that can be offered by utilising the practice>

### 2.3 Advantages of the emerging practice

<Describe in some depth the advantages of using the practice>

### 2.4 Disadvantages of the emerging practice

<Describe in some depth the disadvantages of using the practice>

### 2.5 Organisational alignment

< Look at the strategic plan, and at the “Vision Statement”, “Mission Statement” and “Core Values” within the document. Describe how (or if) using the practice will align with these goals>

### 2.6 Business impacts

<Describe the impact emerging technology will have on current business practices. How will it impact staff? What impact might it have on customers?>

## Option 3 – Autoscaling EC2 instances

### 3.1 Overview

<Briefly describe what is required to utilise the practice>

### 3.2 Features and functions of the emerging practice

<Describe the feature and functions that can be offered by utilising the practice>

### 3.3 Advantages of the emerging practice

<Describe in some depth the advantages of using the practice>

### 3.4 Disadvantages of the emerging practice

<Describe in some depth the disadvantages of using the practice>

### 3.5 Organisational alignment

< Look at the strategic plan, and at the “Vision Statement”, “Mission Statement” and “Core Values” within the document. Describe how (or if) using the practice will align with these goals>

### 3.6 Business impacts

<Describe the impact emerging technology will have on current business practices. How will it impact staff? What impact might it have on customers?>

## Feedback

### 4.1 Feedback

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**Feedback Link**

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Task 3 – Developing Strategies

# Part 3 – Develop strategies to prepare for emerging technologies and practices

Based on your technologies and practices in Task 2, complete the following:

## 1.1 Stakeholders required for implementation

<List below the stakeholders that were or will be involved in the implementation of the technology and practices. Describe who they are, and what role they will have, and any impact on the role.>

|  |  |  |
| --- | --- | --- |
| Stakeholder | Role in the project | How will the role be impacted? |
| Project sponsor |  |  |
| Implementer (you) |  |  |
| Support desk staff |  |  |

## 1.2 How will our organisation be impacted by the new technology?

<For each of the technologies that have or will be implemented, describe 2 potential issues or impacts it will have on the business, and then processes or procedures that can be put in place to minimise the disruption?

**Technology (Task 2 Part 1 Tech 1)**

|  |  |
| --- | --- |
| Issue or impact | Strategy to minimise problem |
|  |  |
|  |  |

**Technology (Task 2 Part 1 Tech 2)**

|  |  |
| --- | --- |
| Issue or impact | Strategy to minimise problem |
|  |  |
|  |  |

**Technology (Task 2 Part 1 Tech 3)**

|  |  |
| --- | --- |
| Issue or impact | Strategy to minimise problem |
|  |  |
|  |  |

<For the implementation of the emerging practices, describe 2 potential issues or impacts it will have on the business, and then processes or procedures that can be put in place to minimise the disruption?

**Emerging Practice (Task 2 Part 2 Practice 1)**

|  |  |
| --- | --- |
| Issue or impact | Strategy to minimise problem |
|  |  |
|  |  |

**Emerging Practice (Task 2 Part 2 Practice 2)**

|  |  |
| --- | --- |
| Issue or impact | Strategy to minimise problem |
|  |  |
|  |  |

**Emerging Practice (Task 2 Part 2 Practice 3)**

|  |  |
| --- | --- |
| Issue or impact | Strategy to minimise problem |
|  |  |
|  |  |

## 1.3 Implementation Strategy

<Select 1 of the 3 technologies and practices from earlier in the assessment. Assume the technology integration and emerging practices will be implemented over a 6-month period. Describe below:

* The steps that will be done at specified times (e.g., setup of cloud services)
* Any changes in practices (e.g. training on new systems)
* Any special organisational response required (e.g. extra help desk staff to assist with issues, after hours work)

Not every step will have one of the above, but each should exist at least once>

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Task(s) for this month | Changes to practices | Organisational response to changes |
| February (Start of project) |  |  |  |
| March |  |  |  |
| April |  |  |  |
| May |  |  |  |
| June |  |  |  |
| July |  |  |  |

## Feedback

### 2.1 Feedback

<Obtain feedback regarding your solution from your lecturer. Use Microsoft Teams or a mobile phone to record the meeting and place a link to the recording in the box below.

**Feedback Link**

|  |
| --- |
|  |