ASSESSMENT 1 BRIEF	
Subject Code and Title	CCF501 Cloud Computing Fundamentals
Assessment	Technology Report and Presentation
Individual/Group	Individual
Length	Research Report 1,200 words (+/-10%) Presentation 5-7 minutes (+/-10%)
Learning Outcomes	The Subject Learning Outcomes demonstrated by the successful completion of the task below include: a) Describe the essential computing elements in cloud services to enable industry automations. b) Distinguish the use of cloud services from traditional IT infrastructure in digital transformation.
Submission	Due by 11:55pm AEST Sunday end of Module 4 (Week 4).
Weighting	30%
Total Marks	100 Marks

Assessment Task

Deliver a 1,200-word written report (+/- 10%) and a 5- to 7- minute presentation describing and distinguishing the key contributions of cloud computing to business automation.

Please refer to the **Instructions** for details on how to complete this task.

Context

In the first four weeks, we explored some key concepts in cloud computing such as the advantages of cloud computing over traditional IT infrastructure in business automation, the essential characteristics of the cloud, cloud computing deployment models and service models.

This assessment provides an opportunity for you to apply the knowledge and skills you have learnt in the first four weeks to a close-to real-life scenario. You will have an opportunity to demonstrate your understanding of:

- Cloud computing and how the cloud fits with modern computing requirements
- Essential characteristics of cloud computing and the potential of cloud computing, including the benefits and the challenges
- Various types of essential computing elements or services provided by the cloud service providers.

Instructions

1. Report

This assessment is based on the following scenario. Read the scenario, then address the following tasks in a 1,200-word report.

Scenario

ABC Enterprise launched the ABC app in October 2020, which supports some services such as food delivery, taxi bookings and payments.

ABC ruled out developing an on-premises solution to support its ABC app. ABC is a start-up company and cannot afford the upfront costs of an on-premises infrastructure. Like other start-ups, ABC finds that cloud-based IT has a pay-as-you-grow model, which would allow the company to carefully control its costs. With cloud technology, IT expenditure would increase only as their business expanded and revenues grew. ABC start searching for cloud services that are highly scalable and reliable because they cannot afford downtime as they are operating in a competitive business where customers can switch to another app if their app has problems.

The company found that only XYZ Cloud provider could meet its needs. The launch of the ABC app was successful with XYZ Cloud, and ABC went on to launch its food delivery service, which offers customers delivery services from 500 restaurants. Data traffic to come from the ABC app is routed via cloud Route 53 to the ABC cloud infrastructure. The data is then processed by elastic computing instances or virtual machines running web and application servers. Cloud storage service is used for backups and imagery.

By using cloud services, ABC reduced the IT start-up costs by 80 percent as the company grew and added more customers. After one campaign, ABC saw that the customer numbers had increased by 10 times in a single month. Despite its increase in customers, ABC has avoided a corresponding increase in IT management expenses.

The Chief Cloud Officer (CCO) is seeking to leverage the best cloud solution to help the business grow. You, as a cloud systems analyst, have now been engaged to provide an initial report to the chief cloud officer addressing several tasks assigned to you.

Report structure

Based on this scenario, you will need to write a report in which you:

- Provide three benefits of cloud computing over the traditional IT infrastructure of ABC Enterprise. Discuss which cloud characteristics, can help to achieve that.
- Discuss any potential challenges ABC Enterprise might face when migrating from traditional infrastructure to the cloud, and how these challenges can be mitigated.
- Discuss the cloud service models and deployment models in detail. Suggest which service model and deployment model are more suitable for this scenario.
- Suggest which cost model is more suitable for this scenario. Provide an in-depth analysis of the recommended cloud cost model.
- If ABC Enterprise decides to choose a cloud service provider other than XYZ, which provider (AWS, Azure, or GCP) would you recommend? Identify at least two essential computing elements from the selected provider that would best address ABC Enterprise's specific requirements to enable industry automations. Rationalise your answer.

Note: You should support your report with a minimum of 10 to 12 references. These should be included using the appropriate APA style. Please refer to the Assessment Rubric for the assessment criteria.

2. Presentation

To complete this assessment, you are to create a 5- to 7-minute audio-visual presentation video to describe and distinguish the key contributions of cloud computing to business automation.

- Introduce yourself by your name, Torrens' student ID and show a student card (if issued) at the beginning of the recording.
- Address the benefits and challenges of cloud computing over the traditional IT infrastructure based on the scenario.
- Discuss the cloud service models and deployment model that is suitable for the case study scenario.

Please refer to the Assessment Rubric for the assessment criteria.

Note: The presentation must be delivered in class to your Learning Facilitator or can be recorded (audio-visual presentation video) and uploaded with the written report.

Refer to the resources at Torrens Academic Skills Webpage for additional guidance on preparing for Oral Presentations. Technical support for recording and submitting video assessments with Microsoft Stream is available at Student Hub--Quickstart PDF guides.

Referencing

It is essential that you use current APA style for citing and referencing the sources that you use. Please see more information on citing and referencing guidelines on the Academic Success webpage.

Assessment Support

For a range of additional resources and support to help you complete your assessment, please consult the Study Support page on the Student Hub.

Academic Integrity

All students are responsible for ensuring that their submitted work is original, adheres to academic writing standards outlined in the Torrens University Academic Writing Guide, and is appropriately referenced according to the guidelines provided in the Torrens University APA Referencing Guide. Students need to have read and be aware of the Torrens University Australia Academic Integrity Policy, Academic Integrity Procedure and subsequent penalties for academic misconduct. For more information, please refer to the Academic Integrity guidelines and the Torrens University Library.

Students must also keep all required evidence in making an assessment; a copy of all submitted material and any assessment drafts.

Generative AI

Please refer to the Torrens University Library for guidance on the use of Generative AI. Please speak to your learning facilitator regarding the use of GenAI tools in your assessments.

Submission Instructions

Submit this task via Assessments > Briefs & Submissions in the main navigation menu in CCF501 Cloud Computing Fundamentals. Please name your file using the following format:

- SubjectCode_Surname_FirstNameInitial_AssessmentNumber

e.g. CCF501_Jones_S_Assessment_1

Your marked assessment can be viewed in MyLearn.

Assessment Due Dates and Late Penalties

Assessments may be submitted on or before the due date. Late penalties apply for assessments that are submitted after the due date.

Refer to:

- Assessment Policy for Higher Education Coursework (HE) and ELICOS
  Torrens University | Think Education
- Assessment Special Consideration Guidelines for Students (HE Coursework)
  Torrens University | Think Education
- Student Hub for Assessment Extension Information.

Special Consideration

To apply for special consideration for a modification to an assessment task or exam due to unexpected or extenuating circumstances, please consult the Assessment Policy for Higher Education Coursework and ELICOS and, if applicable to your circumstance, submit a completed Application for Assessment Special Consideration Form to your learning facilitator.

Assessment Rubric

Assessment Attributes	Fail (Unacceptable) 0-49%	Pass (Functional) 50-64%	Credit (Proficient) 65-74%	Distinction (Advanced) 75 -84%	High Distinction (Exceptional) 85-100%
Effective communication (Presentation/Oral) **20%**	Presentation is difficult to follow. There is a poor flow of ideas with no logical or clear structure and the arguments lack supporting evidence. Specialised language and terminology are rarely or inaccurately employed. Does not address the benefits of cloud computing over the traditional IT infrastructure. Limited use of engaging presentation techniques (e.g., posture; eye contact; gestures; volume, pitch and pace of voice). Presentation aids are not employed or developed as directed.	Presentation is sometimes difficult to follow. Information, arguments and evidence are presented in a way that is not always clear and logical. Employs some specialised language and terminology with accuracy. Limited information is provided regarding the benefits of cloud computing over the traditional IT infrastructure and some aspects are not clear. Sometimes uses engaging presentation techniques (e.g., posture; eye contact; gestures; volume, pitch and pace of voice). Employs basic, but generally accurate presentation aids as directed. A number of aspects	Presentation is easy to follow. Information, arguments and evidence are well presented, with a mostly clear flow of ideas and arguments. Accurately employs specialised language and terminology. Clear information is provided regarding the benefits of cloud computing over the traditional IT infrastructure but some aspects require more elaboration. Uses engaging presentation techniques (e.g., posture; eye contact; gestures; volume, pitch and pace of voice). Employs clear and somewhat engaging presentation aids as directed. A few aspects require further refinement such as the amount of	Presentation engages audience interest. Information, arguments and evidence are very well presented. The presentation is logical, clear and well-supported by evidence. Accurately employs a wide range of specialised language and terminology. Accurate information is provided regarding the benefits of cloud computing over the traditional IT infrastructure. Confidently and consistently uses a range of engaging presentation techniques (e.g., posture; eye contact, expression; gestures; volume, pitch and pace of voice; stance; movement). Employs succinct, styled and	Presentation engages and sustains audience interest. The presentation is expertly presented and is logical, persuasive and well-supported by evidence, with a clear flow of ideas and arguments. Discerningly selects and precisely employs a wide range of specialised language and terminology. Clear analysis of the benefits of cloud computing over the traditional IT infrastructure. Dynamic, integrated and professional use of a wide range of engaging presentation techniques (e.g., posture; eye contact, expression; gestures; volume, pitch and pace of voice; stance; movement).

		require further refinement such as the amount of information, styling and editing.	information, styling and editing.	engaging presentation aids that incorporate a range of elements such as graphics, multi-media, text and charts.	Employs succinct, creative and engaging presentation aids that effectively integrate a wide range of elements such as graphics, multi-media, text and charts.
Demonstrates the essential computing elements in cloud services (such as key services, service model and deployment model) to enable business automation **30%**	Demonstrates a limited understanding of the services, service models and deployment model. Limited or no capability of analysis is demonstrated.	Demonstrates an understanding of different services, service models and deployment models. Some capability of analysis is demonstrated.	Shows a well-developed conceptual demonstration of different services, service models and deployment models. The analysis is elementary and covers most of the aspects of the services utilised in the scenario	Thoroughly discusses and validates different services, service models and deployment models. The analysis is in-depth and covers nearly all the aspects of the services utilised in the scenario.	Comprehensively compares and validates different services, service models and deployment models. The analysis is in-depth and covers all the aspects of the services utilised in the scenario.
Knowledge and understanding of cloud characteristics, cost model of cloud computing **20%**	Demonstrates a limited understanding of key concepts: characteristics, cost model of cloud computing.	Demonstrates an adequate understanding of key concepts: characteristics, cost model of cloud computing.	Demonstrates a proficient understanding of key concepts: characteristics, cost model of cloud computing.	Demonstrates an advanced understanding of key concepts: characteristics, cost model of cloud computing.	Demonstrates an exceptional understanding of key concepts: characteristics, cost model of cloud computing.
Distinguishes the use of cloud services from traditional IT infrastructure in business automation	Demonstrates little or no attempt to distinguish the use of services from traditional IT infrastructure in business automation.	Demonstrates some attempt to distinguish the use of services from traditional IT infrastructure in business	Includes a clear analysis of the comparison of cloud computing over traditional IT infrastructure in business	Includes a clear and thorough analysis of the comparison of cloud computing over traditional IT infrastructure in	Includes a comprehensive and critical analysis of the comparison of cloud computing over traditional IT

20%		automation.	automation and the advantages of cloud technology.	business automation and the advantages of cloud technology, including future expansion.	infrastructure in business automation and the advantages of cloud technology, including future expansion.
Demonstrates appropriate use of resources, including correct in-text citations and reference list **10%**	Demonstrates an inconsistent use of good quality, credible and relevant resources to support and develop ideas. Little or no attempt to include in-text citations, a minimum number of resources (6) and/or a reference list at the end of the report. APA referencing is omitted or incorrectly addressed.	Demonstrates some use of credible and relevant resources to support and develop ideas, but these are not always explicit or well-developed. Some attempt to include in-text citations, a minimum number of resources (6) and a reference list at the end of the report. APA referencing is basic, with frequent or repeated errors.	Demonstrates the use of high-quality, credible, and relevant resources to support and develop ideas. Adequate use of in-text citations and 10 to 12 resources have been included and listed in the reference list. APA referencing is adequate, with occasional errors.	Demonstrates the use of good quality, credible and relevant resources to support and develop arguments and statements. Shows evidence of wide scope within the organisation for sourcing evidence. Thorough use of in-text citations and a minimum of 15 resources have been included and listed in the reference list. Applies APA referencing techniques with no errors.	Demonstrates the use of high-quality, credible, and relevant resources to support and develop arguments and position statements. Shows evidence of wide scope within and beyond the organisation for sourcing evidence. Excellent and meticulous use of in-text citations and 18 or more than 18 resources have been included and listed in the reference list. Applies APA referencing techniques with no errors.

The following Subject Learning Outcomes are addressed in this assessment	
SLO a)	Describe the essential computing elements in cloud services to enable business automations.
SLO b)	Distinguish the use of cloud services from traditional IT infrastructure in business automations.