

College of Arts, Technology and Environment ACADEMIC YEAR 2023/24

Assessment Brief

Submission and feedback dates

Submission deadline: Before 14:00 on 01/08/2024

This assessment is eligible for 48-hour late submission window.

Marks and Feedback due on: Sep 2024

N.B. all times are 24-hour clock, current local time (at time of submission) in the UK

Submission details

Module title and code: UFCFKJ-15-M

Assessment type: COURSEWORK

Task 1 REPORT (75% of total module mark)

Task 2 PRESENTATION (25% of total module mark)

Assessment title: Analyse & Report on a Cloud-Based Case Study.

Assessment weighting: 100% of total module mark

Size or length of assessment: Task 1 REPORT 2000 words

Task 2 PRESENTATION (slides plus 10 min presentation link)

Module learning outcomes assessed by Tasks 1 & 2:

- 1. Demonstrate a comprehensive understanding of the business drives, techniques, and methodologies applicable to cloud computing and virtualisation.
- 2. Undertake independent analysis of the security issues in Cloud Computing
- 3. Evaluate sustainability issues arising from cloud computing and propose actions to mitigate.
- 4. Critically compare traditional data storage and modern-day cloud computing data center technology and apply new approaches to complex problems that are appropriate to this level.
- 5. Critically evaluate various cloud computing mechanisms including cloud services.

Completing your assessment

What am I required to do on this assessment?

The coursework involves tackling a business-oriented challenge related to adopting cloud solutions, following specific guidelines. Your task is to propose a solution and provide implementation details. You will be presented with a case study and expected to research to find appropriate solutions from a range of cloud service providers that meet the outlined requirements. Moreover, a set budget will be assigned for implementation, allowing for a thorough evaluation of the proposed solutions. Finally, you'll discuss any challenges encountered during the adoption process in task 1. Refer to Appendix 1 for precise instructions for Task 1.

For Task 2, your objective is to deliver a high-level presentation to stakeholders, emphasizing the significance and rationale behind the solution you've implemented, as well as the outcomes and impacts of your solution.

Where should I start?

- Conduct in-depth research on various cloud service providers and thoroughly understand the array of services they offer.
- Engage with and complete the tasks outlined in the workshop, focusing on the case studies provided for practical application and learning.
- Develop sufficient knowledge of the module materials.

What do I need to do to pass?

To successfully pass this coursework assessment, you must attain an overall mark of 50% or higher in both tasks (presentation and coursework).

How do I achieve high marks in this assessment?

To get good grades, make sure you follow the instructions in Appendix 1 carefully. If your solution doesn't stick to these rules, some marks will be taken off. On the other hand, if your solution makes sense, is creative, and is based on research, you'll get higher marks.

How does the learning and teaching relate to the assessment?

During the class session, there will be a comprehensive presentation covering the assessment overview. Additionally, the class content will revolve around fundamental concepts in cloud computing, including virtualization, cloud deployment modes, cloud service models, cloud pricing models, sustainability aspects in cloud computing, and addressing security concerns related to the cloud. This knowledge will serve as a foundation to comprehend the case studies and craft suitable and effective solutions for the given problem.

What additional resources may help me complete this assessment?

Please consult the module blackboard for valuable and relevant resources.

What do I do if I am concerned about completing this assessment?

UWE Bristol offers a range of Assessment Support Options that you can explore through <u>this</u> <u>link</u>, and both <u>Academic Support</u> and <u>Wellbeing Support</u> are available.

For further information, please see the <u>Academic Survival Guide</u>.

How do I avoid an Assessment Offence on this module?

Use the support above if you feel unable to submit your work for this module.

Outline the most common forms of AOs for this type of assessment and brief guidance on how to avoid this.

Marks and Feedback

Your Task 1 assessment will be marked according to the following marking criteria.

Criterion	Poor/Fail (<50)	Good (50-59)	Very Good (60-69)	Excellent (70+)
1. SWOT analysis (current & future IT infrastructure & services) (15%)	Lacking clear purpose or rationale; vague	Mostly clear though a little vague/general	Clear and SMART; context and importance quite well justified	Very clear, research-based; convincing rationale
2. SaaS, PaaS & IaaS service provision analysis (30%)	Lacking novelty / poorly executed version of summary	Derivative or rather uninteresting; lacking personal creativity	Some innovation; Largely safe, conventional but solid approach	Highly innovative / creative. Substantial personal interpretation
3. Commercial service provider & cost analysis (20%)	Irrelevant material; No consideration of user needs	Some less relevant or basic; Lack of / cursory consideration of user needs	largely relevant work cited, largely descriptive; Good understanding of user needs	Relevant, state-of-the-art literature understood and critically reviewed; Extensive, evidence-based user needs assessment
4. INaaS & BPaaS services & development analysis (15%)	Poorly chosen / flawed approach; not relevant/poor match	Some structure to approach though perhaps lacking formal aspects or comparison	Good attempt to use methodologies; specific details	Clear use and appropriate process methodologies; highly suited
5. Sustainability Discussion (10%)	Lacking clear rationale; very vague	Mostly clear though a little vague/general, with some explanation	Clear and mostly SMART; context and importance quite well justified	Very clear, research-based; convincing rationale
6. Report Structure & Quality (10%)	Very poorly organised and hard to understand; Spelling or grammatical errors	Some organisation and typological issues; Some lack of clarity in presentation	largely well organised and easy to follow; minor presentation issues; occasional presentation issues	Logical layout of sections and narrative; Grammar and spelling correct; Accurate and complete referencing; a cohesive and coherent report

Your Task 2 assessment will be marked according to the following marking criteria.

	Poor (Below 50)	Fair (50 -59)	• • •	Very Good (70- 79)	Excellent (80++)
CONTENT			Contains one or two major errors or flaws, and one or two	•	All material clearly supports the core message.
(30%)	serious errors or flaws, and usually many minor ones. Includes many fundamental mistakes and misapplications of the business concepts. No conclusion or reference.	fundamental mistakes and misapplications of business concepts. Does not include the facts for the appropriate sections of the presentation. Insufficient reference and conclusion.	misapplications of the business concepts. Repeats facts for the appropriate sections but still includes minimal analysis and has adequate development of the strategic implications and recommendations.	analysis and integration. Limited recommendations, conclusion, and reference.	conclusions are clear. All analysis supports the recommendations and conclusions and references.
COHERENCE	There is little cohesion between the speakers and the material.		The flow and transitions have one or two major errors.	generally smooth but show	A clearly developed message that flows naturally. Transitions are smooth. The presentation is
20%			The presentation shows little polish and practice.		well conducted and not choppy.
ORGANIZATIO N	,	The presentation shows little hard work and coordination.	Follows the outline with few minor flaws.	with one or two minor flaws.	the outline. The introduction
20%					and the agenda start the formal presentation.
SPEAKING	Not completely delivered.	Inconsistent delivery.	Delivered orderly but lacks confidence.	Generally spoken with confidence.	Poised, clear articulation, proper
SKILLS 15%					volume, steady rate, good confidence.
TIMELINESS	Could not complete within 10 minutes				Within 10 Minutes goal.
15%					

- 1. In line with UWE Bristol's <u>Assessment Content Limit Policy</u> (formerly the Word Count Policy), word count includes all text, including (but not limited to): the main body of text (including headings), all citations (both in and out of brackets), text boxes, tables and graphs, figures and diagrams, quotes, lists.
- 2. UWE Bristol's <u>UWE's Assessment Offences Policy</u> requires that you submit work that is entirely your own and reflects your own learning, so it is important to:
 - Ensure you reference all sources used, using the <u>UWE Harvard/OSCOLA</u> system (amend as appropriate) and the guidance available on <u>UWE's Study Skills</u> referencing pages.
 - Avoid copying and pasting any work into this assessment, including your own previous assessments, work from other students or internet sources
 - Develop your own style, arguments and wording, so avoid copying sources and changing individual words but keeping, essentially, the same sentences and/or structures from other sources

- Never give your work to others who may copy it
- If an individual assessment, develop your own work and preparation, and do
 not allow anyone to make amends on your work (including proof-readers, who
 may highlight issues but not edit the work) and

When submitting your work, you will be required to confirm that the work is your own, and text-matching software and other methods are routinely used to check submissions against other submissions to the university and internet sources. Details of what constitutes plagiarism and how to avoid it can be found on UWE's Study Skills pages about avoiding plagiarism.

Appendix 1 – Assessment Overview

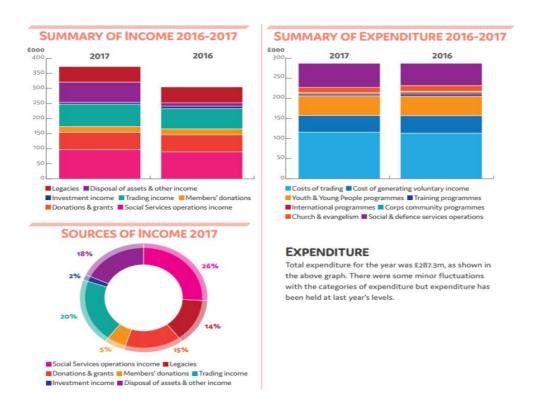
Task: The Christian Volunteer Service (CVS) Case Study

Christian Volunteer Service (CVS) is a national charity supporting poor and vulnerable people across the UK.

Started in the 1860's CVS has a long history of meeting pastoral and charitable goals. It is a provider of long-term services and beyond probity, efficiency and effectiveness, CVS is not driven by a financial (profit oriented) motive.

CVS has 50,000 members and employs 4,000 people, many part time. It has around 260 charity shops across the UK which are run by employed managers and shop volunteers. Volunteers are often people needing support although everyone in the community is encouraged to volunteer. Good pay, working conditions, and generous pensions are offered to all staff. A bonus of 10% annual salary is also paid.

A breakdown of the total income & expenditure for 2016/17 is given in the charts below:



Of the £287.3 million total expenditure for 2017, IT costs across for all services account for about £25.7 million per year.

This cost includes the 40 IT staff working at head office at a cost of £4.4 million a year. Of the remaining £21.3 million, 40% (or £8.5 million)

is taken up by annual software licensing and service costs. The software used includes a range of leased CRM systems, legacy databases and applications, custom applications, HRM software, Payroll software,

office applications, mail, and web services. Another 30% (or £6.4 million) is accounted for by hardware and network purchase and service costs.

Legacy Income, people leaving money and property to CVS in their wills, was around £65 million for 2017. In addition, around £18 million is collected through member donations. All income from donations and grants totalled over £96 million in 2017. These income streams are crucial to the long-term financial health of the charity, and hence CVS employs 120 people at the head office in marketing & fundraising roles using CRM software and several legacy databases and custom applications. 12 IT support staff and 6 programmers/database support staff are required to support and maintain these often slow, failing, and unreliable legacy systems. Last year, 15 working days were lost to system or database downtime. Each failure affects approximately 100 members of staff and equates to 1500 lost working days (or 6 FTE's). These legacy systems & custom applications are expensive too, costing £7 million per annum in licensing fees and support. This said, CVS cannot do without these legacy systems as they hold crucial membership and donor records (6.4GB of data).

Note that of total IT costs, the remaining £6.4 million is spent on IT staff, local volunteer management & reporting systems (usually Access DB's or Excel spreadsheets), office software, and support in the 16 regional offices managing the 260 shops. These regional

offices have also to provision their local payroll software needs using off-the-shelf packages and 5 different packages are currently used across the 16 offices.

The Context

The Board of Directors of CVS, in consultation with the CEO, Heads of Finance & IT, as well as knowledgeable senior members have decided to invest in a major upgrade to CVS's information infrastructure and information technology systems & processes.

The key idea is to update the existing information and software systems to deliver a more robust, effective, and focused (higher level & value) service. This includes the provision of timely strategic and operational management data analytics as well as exploiting social media and emerging web and cloud-based services for better focused marketing. This has the aim of increasing public and member cash and legacy donations. The CRM, HRM, and Payroll systems also need updating and if provisioned as SaaS services will generate substantial savings in licensing and service costs according to the Head of IT.

The promise of shifting IT "CapEx" costs to lower "OpEx only" costs and ridding the organisation of expensive leased systems is also appealing to the Board & CEO.

One weakness of CVS compared with many other national charities is that it has failed to exploit e-commerce effectively and strategically. Public donations of items to the shops - watches, jewellery, vintage clothing, paintings, books, etc. often contain valuable items. Local shop managers are advised to put these up for auction on eBay or in local auction houses. The Head of Finance has ideas for a national e-commerce strategy with each shop uploading photos of rare and valuable items to be centrally priced and sold through an e-commerce portal. However, it has been pointed out that outbound logistics (items being packaged, insured, and sent by potentially 260 shops to customers) remains problematic and will require significant planning, resource allocation, and staff training.

Overall, the Board and the CEO believe that the benefits outweigh the costs and the risks can be either mitigated or avoided. The key goal is to generate substantial increased income via more donations and IT cost savings which in turn can be spent on the core care services, training, pastoral and social work provisioned by CVS to the poor & vulnerable.

However, Head Office staff, particularly in IT and some in Marketing are not all supportive of the proposed changes and have expressed their concerns through their Unions. Some staff fear redundancy and the Board & CEO have reassured all employees of a full consultation process including arbitration and generous severance deals if any redundancies are required.

A budget of £10 million has been allocated to plan, implement, and deliver this project over the next 3 years. This figure does not include eventual redundancy costs.

Your Task

You have been commissioned by CVS to carry out a full Systems Analysis of the proposed changes.

As part of this analysis, you are required (firstly) to produce a high-level report (2000 words) covering the following areas:

- a SWOT analysis of the current IT infrastructure & services.
- a SWOT analysis of the proposed IT infrastructure & services.
- an analysis & summary of Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (laaS) cloud computing solutions applied to and in the context of the scenario.
- recommendations & cost estimates of provisioning these services from any one of the major service providers (Amazon, IBM, Google, Microsoft, etc.).
- recommendations and suggestions for Information as a Service (INaaS) and Business Process as a Service (BPaaS) development & provision in the coming 3 years.
- a critical examination of the selected service providers' green credentials in terms of energy efficiency and sustainability.

Resources

It is highly recommended you read through the following background readings:

A drivers' quide to upgrading your IT to a hybrid cloud engine

Peterborough City Council Moves IT to AWS Cloud

SWOT Analysis

Deliverables & Format

Blackboard submission with an attached report in MSWord or PDF format.