

CS25110 Assessed Assignment Semester One, 2012-2013

Scenario Analysis Report

Mid Wales University

Adrian Shaw, Stephen Kingston and John Gilbey

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1 Introduction

Your task for this assignment is to produce a “Scenario Analysis Report”, outlining your recommendations, in the *fictional* scenario which follows.

2 Mid Wales University

The Welsh Government has decided that the area of Mid Wales needs a new university, to be sited on two campuses in Newtown and Caersws, approximately 5 miles apart. It is envisaged that this university will be relatively small (perhaps up to 2000 students), with teaching and research staff, as well as administrative and secretarial support and non-academic departments such as the finance office.

In order to be competitive in today’s higher education market, it is crucial that the IT infrastructure of the university be properly planned from the beginning. To this end you have been commissioned by the newly-appointed management to help formulate the complete ICT strategy for the whole university.

The University’s buildings are to contain the following rooms and facilities:

- a custom designed computer server room;
- teaching laboratories;
- academic staff offices;
- administration and support staff offices;
- research laboratories;
- coffee shops and other semi-public spaces.

2.1 Your Role

You are tasked with analysing the scenario and producing a report that addresses eight different issues.

You should put forward your recommendations in each of these areas, in around 500 words. Your complete report should be between 4000 and 6000 words in length.

You must provide a full justification for each of your recommendations. If you perceive any uncertainties or ambiguities, then you should identify those problems and clearly state what further information you would require to finalise your recommendations.

3 The Issues to be Considered

Your recommendations for the eight issues, together with a brief introduction, a final overall summary (including combined estimated costs) and a bibliography, should be presented as eleven separate sections in your report.

1. Brief Introduction: This section should introduce the problem and make any general scene setting remarks.
2. Custom Designed Server Room: Specify the server room and network provision. You should include consideration of the infrastructure, services and support systems. Do **not** consider the server computers themselves as part of this item, they are the topic of a later section of your report.
3. Project Management: Consider and specify a series of appropriate structures, tools and procedures which would enable this project (to design, install and commission the new ICT facilities) to be managed effectively. You should note that risk management, and early warning of problems, is a key part of the overall project environment of the university. Consideration of “risk” during the design, installation and commissioning phase should be included in this section.
4. Computer Hardware: Across the two campuses, there will be different hardware needs. You need to consider the servers, as well as personal computers for the various types of staff (don’t forget that some, especially researchers, might be power hungry users), as well as visitors. You are going to need to specify appropriate computer hardware for these different groups. Make recommendations, and justify them. Include approximate, but realistic, cost estimations. How are you going to cope with the problem of two separate campuses with server hardware?
5. Computer Software: It is clear that a number of computer services will need to be provided. The different types of user would also suggest different software requirements. Considering suitability, as well as cost and usability, make recommendations for software that you think should be acquired, installed and supported. Your recommendations should cover operating systems, specialist services and end-user applications. Don’t forget to make recommendations for server software as well as for user machines. Include approximate, but realistic, cost estimations.
6. Security: Consider the ways in which the rooms and facilities might be used - now and in the future. Explain how the high level security goals of the university will be captured and interpreted. Making appropriate assumptions, present your high level security goals as formal requirements. Specify how those requirements will be met and how the extent to which they are met will be monitored.
7. Naming and Directory Services: It is clear that some form(s) of naming and directory services will be required to support the operation of the ICT services you are recommending. Make appropriate recommendations for what naming and directory services should be deployed and exactly what type of information will be stored in each.
8. Business Continuity: Consider a risk analysis of the whole environment. Remember that ICT is only ONE facet of the risk environment, and it cannot adequately be considered in isolation. You should consider future risks in this section.
9. Ongoing Management: Consider the structures which the university might wish to put in place in order to ensure that the ICT provision meets both the current and the future expectations of ALL its customer groups.
10. Overall Summary: A final overall summary (including combined estimated costs).
11. Bibliography: A bibliography clearly citing all sources you consult and any appropriate references to technical documents and web sites etc. A good bibliography helps show that you have done in-depth research to arrive at your recommendations, and will impress the management.

4 Choices you are free to make

If you perceive any uncertainties or ambiguities, then you are free to make whatever assumptions you choose, but you must state those assumptions clearly. Alternatively, as noted above, you could propose, with justification, new “requests for information” that would need to be answered by the management of the University. For the purposes of this assignment, you should still produce “interim, draft recommendations”.

5 Time Allocation

As you will be aware, this module is fully assessed by course work activity which consists of a sequence of “laboratory workbooks” as well as this “scenario analysis report”. The module **does not** have a formal examination.

The time plan for this module assumes you will spend around 40 hours working on this “scenario analysis report” assignment.

6 Assessment Criteria

Bearing in mind that this project concerns software development, the most appropriate “assessment criteria” are those in Appendix AC of the student handbook, namely those for “Assessment Criteria for Essays”. The appendix is available on-line.

Note: The assessment criteria make it very clear that the structure and presentation of your report, and the quality of the English used, will influence your mark. Your report will thus not be marked on only its technical content.

This assignment is worth 60% of the total marks available for this module. The other 40% of the marks are associated with the laboratory practical worksheets.

7 The Material You Must Submit

Your submission must be a SINGLE FILE which must be less than 10Mbytes in size and in PDF format (you can export to PDF from most word processors, or produce it directly from L^AT_EX). We require you to submit your 4000 -> 6000 word report electronically via the course materials web site for module CS25110 on AberLearn Blackboard.

<https://blackboard.aber.ac.uk>

If you have drawn understanding from published books or web pages, you should include appropriate references and a bibliography in your document. Please make sure you fully understand the department’s stance on plagiarism as described in the current student handbook.

Please note, as a matter of routine, all your submissions will be evaluated by the University’s anti-plagiarism software.

NOTE: This is an “individual” assignment and must be completed as a one person effort by the student submitting the work.

8 Submission Date

Your solution to this assignment must be submitted before 14:00 GMT on Monday 7th January 2013.