Information Systems for Business and the Role of Integration

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ICT700 Assessment4
Report due: Sunday Week 11 | 18-May-2025 | 11:59pm
1 Group Presentation File Upload in Week 11/12
Assessment Type: Group Assessment
Weighting: 35% (Report 25% and Presentation 10%)



Assessment 4: Group Case Study Assessment (Weighting: 35%)

1 Report

This task is to be completed by a group of 4 to 5 students. Each group will select one of the provided topics and investigate how the selected system can be improved using information systems and integration. The report should address key aspects of business processes, cloud technology, data management and ethical considerations related to information systems. Each team must select one topic and no duplicate topic is allowed:

Topics:

- 1. **Smart Manufacturing System Integration:** Explore how information systems can integrate various parts of a smart manufacturing process, focusing on data management, automation and cloud-based solutions.
- 2. Online Learning Management System (LMS) Integration for Educational Institutions: Evaluate how LMS systems in educational institutions can integrate business processes, enhance student engagement and improve administrative efficiency using cloud technology.
- 3. **E-Commerce Order and Supply Chain Management Integration:** Investigate how an e-commerce platform can integrate order processing and supply chain management to improve operational efficiency and customer experience.
- 4. Cloud-Based Human Resource Management System (HRMS): Analyse the use of cloud technology to improve HR operations such as payroll, recruitment and employee performance management, focusing on integration and data management.
- 5. **Automated Legal Case Management System:** Explore how law firms can use information systems to streamline case management, track legal processes and integrate with other departments such as finance and HR.

- 6. **Smart Inventory Management System for Retailers:** Investigate how a retail business can use information systems to optimise inventory management, including automated reordering, data analytics, and real-time stock tracking.
- 7. **Healthcare Patient Management and Records System:** Analyse how healthcare organizations can integrate patient management, appointment scheduling and medical records to improve patient care and operational efficiency.
- 8. **Customer Service Chatbot and CRM Integration:** Evaluate how integrating a chatbot with a CRM system can enhance customer service, reduce response times, and improve customer satisfaction in a service-oriented company.
- 9. **Financial Transaction and Fraud Detection System:** Explore how financial institutions can use information systems to detect fraudulent activities in transactions, secure data, and improve reporting accuracy.
- 10. Automated Hotel Reservation System and Customer Experience: Analyse how hotels can integrate automated reservation systems with customer relationship management tools to improve guest services and streamline operational tasks.

Report Structure

The report should be no longer than 2500 words. Additionally, each student must include a 500-word individual abstract which is not included in the word count for the report. If you exceed 2500 words, a penalty mark will apply. The main body of the report should include the following sections:

- 1. Cover Page: Include the KOI group assignment coversheet available on Moodle.
- 2. **Executive Summary:** Provide a concise summary of the report's key points, including the main challenges identified, proposed solutions and key conclusions. This should be about 200-300 words.
- 3. **Table of Contents:** List all headings and subheadings in the report, including page numbers for easy navigation.

4. Introduction:

- (a) Provide background information on the selected system and explain its importance in business operations.
- (b) Describe the organization, its business activities, and current systems in place. Provide relevant details about the business model, target audience, and operations.
- (c) Identify and explain two key challenges the company faces in relation to the use of their existing systems, such as inefficiencies, user errors, or security vulnerabilities.
- (d) Outline the scope of the analysis and the purpose of the report.
- 5. **Current System vs. Proposed System:** Create two swim lane diagrams using Lucidchart to illustrate:
 - (a) Current System (As Is): Depict the existing workflow and processes.
 - (b) Proposed System (To Be): Show how the system will be improved after integrating new technologies and processes. The diagrams should clearly highlight how the proposed system addresses the identified challenges.
- 6. **Mock-Up Screenshots:** Provide three mock-up screenshots of key interfaces from the proposed system. Use a tool like Figma, Adobe XD, or another design tool to create the mock-ups.
 - (a) Safe and Secure Data Entry Screen: Discuss how the design ensures safe data entry, including user authentication, data validation and encryption.
 - (b) Automated Recurring Service Update Screen: Explain how the system will handle automated updates for recurring services such as subscriptions or bookings.

(c) Customer Billing Screen: Describe how your design facilitates the billing process ensuring accuracy and security in generating customer invoices.

7. Business Process Management, Software Development and Database Systems:

Discuss how business processes can be managed and optimised through the implementation of software systems, emphasising the development lifecycle and the role of database management in acquiring and developing information systems. Use your chosen topic as a case study to illustrate these concepts. Refer to the readings provided on Moodle for detailed information.

8. Ethical, Legal, and Social Issues:

Examine the ethical, legal, and social implications of implementing the proposed information system. Discuss how these issues influence system design, data management, and security strategies.

9. Conclusion:

The conclusion should summarise the key findings of the report, highlighting the main challenges identified and the proposed improvements to the business process. It should provide recommendations for the effective implementation and integration of the new information system ensuring it aligns with business needs and enhances operational efficiency.

- 10. **Individual Abstract:** Each student must write a 500-word abstract reflecting on their personal learning experience throughout the project. This section should focus on what was learned about information systems development, the challenges faced, and the role of integration in improving business operations. The individual abstract is not included in the report word count.
- 11. **References:** You are required to provide between eight and twelve peer-reviewed research articles in your report. Ensure all references are formatted using **Harvard Referencing Style**.

2 Oral Presentation

- 1. You (as a group) are required to prepare a PowerPoint and present your report findings in 15 minutes.
- 2. Upload a PDF PowerPoint on the submission link via Moodle in Week 11/12.
- 3. Check the rubric for marking your group and individual presentation (10 marks).

Information:

Info: Do not use generative AI for assessment tasks in ICT700. Here are some guidelines to consider when intend to use generative AI (ex. ChatGPT) in your assessments:

- 1. Make sure that the final product is your own work and not just copied from an AI generator. We have strict policies regarding the use of AI in this course. If more than 30% of your work is detected as being generated by AI in Turnitin, it must be reported, and you will face a penalty. If this happens for the first time, you will be required to resubmit your work, and a late penalty will be applied, along with a warning. For a second occurrence, you will receive a formal letter and further penalties. DO NOT EXPOSE YOURSELF TO ACADEMIC INTEGRITY PROBLEMS.
- 2. Be aware of the KOI Academic Integrity policy and your responsibility to follow it. The information provided in assessment section.

3. **Do not:**

- (a) paste the assessment sections and/or questions into AI and hope for the best. This can result in plagiarism.
- (b) assume all the information provided by AI is correct AI can provide incorrect or biased information.
- (c) allow tools like Grammarly to significantly change the words or content of your assessment beyond spelling and grammar corrections.
- (d) lose the opportunity to develop your academic skills by being over-reliant on AI tools.
- (e) assume the language used by AI is better than your own.
- (f) forget to use your textbook and other resources provided by the lecturer before using AI to study.
- (g) assume you will not require writing or research skills in the future.
- (h) replace generative AI for your thinking and originality of your ideas, arguments and creative output.
- **Info:** For more information on writing academic report, follow one of the following websites:
 - https://library.torrens.edu.au/academicskills_ap/reports
 - https://uniskills.library.curtin.edu.au/assignment/writing/reports/
 - https://www.student.unsw.edu.au/report-writing-support
- Info: Upload your report as a PDF to Moodle by 18-May-2025 (Week 11) at 11:59pm and 1 group presentation file upload in week 11/12.
- **Info:** Reference style to use in your reports is Harvard. See the University of New South Wales Library Guide for appropriate use of Harvard referencing method:

https://www.student.unsw.edu.au/citing-different-sources

Info: Please review the detailed rubric provided on the last page or found in the Assessment 4 section on Moodle.

Rubric for the Report (Value: 25%):

Criteria	Fail (0 – 49%)	Pass (50 – 64%)	Credit (65 – 74%)	Distinction (75 – 84%)	High Distinction (85 – 100%)
Format and structure (2 marks)	Very difficult to read, unclear structure, and most of the required sections are missing	Some difficulty in reading, not very clear, but important sections are included	Clear and readable, and all required sections are included	Well written and very clear, and all required sections with completed discussion are included	Well written and very clear, all required sections with completed discussion are included, and additional sections have been added for clarity
Introduction (3 marks)	No introduction given or most of the introduction is irrelevant	Introduction is provided with some details and limited cohesion	Introduction is provided with most of the re- quired details in cohesive manner	Introduction is provided with all of the re- quired details in comprehen- sive and cohe- sive manner	Introduction is provided with all details presented systematically in a comprehensive and cohesive manner
Discussion (15 marks)	No evidence/ support for the argument in the main body	Provides some evidence/sup- port for the argument in the main body	Provides sound level of evidence/- support for the logical argument	Provides very convincing level of evidence/sup- port for the strong logical argument	Provides exceptional level of support for the compelling argument
Conclusion, Individual abstract (2 marks)	No conclusion presented or not based on argument, rec- ommendation unconvincing	Conclusion based on argument but lacks supporting evidence, recommendation lacks some detail	Conclusion based on sound argu- ment and evidence, rec- ommendation convincing	Conclusion based on an extensive argument and evidence, recommenda- tion strongly convincing	Conclusion based on an extensive and compelling argument, recommen- dation per- suasive and convincing
References (3 marks)	Wrong or no references	Inconsistent and incom- plete refer- ences	Inconsistent but complete references	Consistent but incomplete references	Correct and complete references
Penalty (2 marks) Total Mark: (25 marks)	Exceeded 2500 words	Exceeded 2500 words	Exceeded 2500 words	Exceeded 2500 words	Exceeded 2500 words

Table 1: Marking Rubric for the Report

Rubric for the Presentation (Value: 10%):

hline Criteria	Fail (0 – 49%)	Pass (50 – 64%)	Credit (65 – 74%)	Distinction (75 – 84%)	High Distinction (85 – 100%)
Attendance and Presen- tation Time (2 marks)	No presenta- tion	Some members must be present. Presentation not on time	Some members must be present. Presentation on time	All members must be present. Presentation not on time	All members must be present. Presentation must be on time
Delivery (2 marks) Visual aids (2 marks)	Wrongly presented. Less organised. Difficult to follow and no engaged with the audience Wrong slides. Incorrect visually appealing slides. Unsuitable use of figures/data/diagrams	Less clearly presented. Organised and difficult easy to follow and less engaged with the audience Unclear and unreadable slides. Less visually appealing slides. The lack of suitability use of figures/data/diagrams	Clearly presented. Organised. But not easy to follow and less engaged with the audience Clear and readable slides. Less visually appealing slides. The lack of suitability use of figures/data/diagrams	Clearly presented. Organised and easy to follow. Less engaged with the audience Clear and readable slides. Visually appealing slides. Lack of suitability use of figures/data/diagrams	Clearly presented. Organised and easy to follow. Engaged with the audience Clear and readable slides. Visually appealing slides. Suitable use of figures/data/diagrams
Content (2 marks)	Wrong content.	Difficult to comprehend. Not well-researched use of material.	Less comprehensive not well researched of material.	Comprehensive Reasonable re- searched use of material.	Comprehensive Well- researched use of mate- rial
Answers to questions (2 marks)	Unthoughtful unrespon- sive. Drew no knowledge of topic beyond presentation	Less thought- ful Respon- sive. Drew little knowl- edge of topic beyond pre- sentation	Thoughtful Responsive. Drew little knowledge of topic beyond presentation	Thoughtful Responsive. Drew partial knowledge of topic beyond presentation	Thoughtful Responsive. Drew on knowledge of topic beyond presentation
Total Mark: (10 marks)					

Table 2: Marking Rubric for Presentation