

CCT College Dublin Continuous Assessment

Programme Title:	BSc (Hons) in Computing in IT (Award)				
Delivery Mode:	Full Time				
Cohort Details:	Sept 2021 intake				
Module Title(s):	Strategic Business Information Technology Problem Solving for Industry (Capstone Project)				
Assignment Type:	GROUP (in PAIRS). Weighting(s): SBIT: 30%				
	[You can opt to do this by				
	yourself, if you are completing the		Problem Solving for Industry:		
	Project as an individual]		10%		
	IMPORTANT				
	Group members <u>must</u> be the				
	same as for the Capstone Project				
Assignment Title:	Group Project Strategic Analysis	Group Project Strategic Analysis			
Lecturer(s):	Ken Healy				
	Muhammad Iqbal				
Issue Date:	Mon 17 th Feb 2025				
Submission	Sunday 16 th March 2025 @ 11:59p	n m			
Deadline Date:					
	Late submissions will be accepted	•	-		
Late Submission	submissions are subject to a penal		<u> </u>		
Penalty:	Submissions received more than 5	•	the deadline above <u>will not</u> be		
	accepted and a mark of 0% will be	awarded.			
Method of	This assignment is submitted via Moodle.				
Submission:	The state of the s				
	1) Report				
	- Submit in .pdf format ONLY				
	- Submit in .pui format ONL1				
	2) Presentation Slides				
	- Submit a .ppt or .pdf format (ONLY!) of the slides for your presentation. You				
Instructions for					
Submission:					
	3) Individual QA (for Groups ON	NLY)			
	- This will be conducted in class ON Mon 24 th Mar ONLY				
	** IMPORTANT **				
	No ZIP files, RAR files of any other compressed files will be accepted. If you uploa				
	compressed file, you will score zer	o!			
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Feedback Method:	Results posted in Moodle gradebook		
Feedback Date:	Week of 24 th March (ONLY where submission is made before deadline. Late		
	submissions will receive feedback at a later time)		

Assessment Outline

Description of Assessment Task

1) Strategic Analysis Report

You are required to analyse your Capstone Project concept (Ref "Problem Solving for Industry") in terms of its **potential use for business/commercial purposes**.

** IMPORTANT PROJECT NOTE **

Your Capstone Project MUST apply Data Analytics AND/OR Machine Learning / Artificial Intelligence as part of the project

The output of this analysis could potentially be used as the 'Chapter 1' for your Project Report document. [Equally, you can amend your Rationale when submitting your final Project report]

The purpose of this analysis is to provide a <u>clear, coherent business case</u> for your project and for the technologies that you intend to use.

The "business case" should be strategic in nature (i.e. high-level and with a long-term view) and focus on the commercial reasons for your project. To complete this, you must use a 'business analysis tool' (see Guidance Section for possible alternatives). Remember to focus on BUSINESS issues, not technical ones! For example: Who would use your system? Why? What competitive advantage(s) might your system give to a business? How would these be achieved?

Your business case MUST provide an <u>overview</u> of any legal or ethical issues that you believe could impact on your project design or implementation.

You may (if you wish) use another Business Analysis method that you have researched yourself. If you do this, then you must identify it clearly! You are not limited to only the methods listed in the Guidance section.

For the technologies, your analysis should focus on **why you chose your proposed technologies**, and what advantages they hold over potential alternatives. For example: If you chose Open Source technology, why? Are there equivalent proprietary systems that you could have used. How are you evaluating the potential technologies that you could use?

You MUST also <u>outline</u> how your project will (or might) collect data, and how this data collection could be used to gain a competitive advantage.

You **do not** need to provide a detailed report into the functionality provided by each alternative technology you propose to use – remember that this is a STRATEGIC report and should be kept at a high-level. The purpose of this section is to show that you have explored alternative technology options and can justify your decision to choose the specific technologies that you are using.

In Particular, you MUST:

- a) Define your project concept clearly and <u>in brief</u>, so that all of your peers can understand the nature of your research, i.e. 'To analyse customer order trends in a café in Dublin'. You can state whether it addresses an existing problem that you have experienced, or is something you found in research, or it may be a piece of innovation where a problem is not defined or known.
- b) Use a business analysis approach, or method, (either from those listed under the 'Guidance' section or another one you are familiar with) to make your case for why <u>organisation(s)</u> would want to use/buy your project (product or service) commercially.

[Consider: How is it useful? What competitive advantage(s) might arise? Who might use it? Why would they pay money for it, and so on.]

- c) Provide a high-level overview of TWO of the **technologies** that you have selected and compare these with <u>at least one</u> possible alternative. Justify your technology selection(s) and explain why an Open-Source choice is better/more appropriate than a proprietary alternative (or, if you have chosen proprietary software, why this is better than an Open-Source alternative).
- d) Outline any legal or ethical issues that you will need to consider when designing and building your system. If there are none, then clearly explain why you believe this to be the case.
- e) Outline how you intend to collect/obtain the data that you will use and consider any issues that may arise. Show that you have considered how this data might be used to gain a competitive advantage.
- f) Reference **ALL** sources that you have used. Referencing must follow the Harvard referencing system. <u>You will be penalised if you have not cited your research correctly in the text of your report!</u>
- g) WORD COUNT: 1000-1500 words

2) Presentation

Upon completion of your analysis, you are to create a short **5-slide presentation** which will provides a summary of:

- your project concept,
- ii) the business analysis method you used, and
- iii) what you have concluded from using the method, or methods.

NOTE: You will **not** be asked to deliver this presentation, but you should prepare this as though it would be presented "live" – remember that it has to be a <u>summary</u> of your analysis!

3) Individual QA

Each member of each group will be asked a small number of questions about the submission and their contribution. IMPORTANT: If it is deemed that you did not make a fair contribution to the submission, then you will receive a lower mark!

Marking Schedule – SBIT (30% weighting)

Description	Weighting
A business analysis method is used EFFECTIVELY to make a GOOD, COHERENT case for commercialisation	30
The report has explained clearly how data could <u>be used</u> to enhance potential competitive advantage;	20
For each technology selection made, there is a clearly explained, well-justified case for why Open Source is more appropriate than Proprietary (or <i>vice versa</i>)	20
Project presentation slides are well designed and consistent; the presentation conforms to the limit set out in the requirements	10
Presentation content provides a clear <u>summary</u> of the content of the report	20
Total	100%
Individual Contribution Multiplier (Min: x 0.5 – Max: x 1.0)	
This will be based on your ability to answer questions about your own project submission and to explain your contribution.	
NOTE: If it is deemed that you made NO MEANINGFUL CONTRIBUTION AT ALL then you will receive a zero mark!	

Problem Solving for Industry (10% Weighting)

Report clearly defines the project concept, purpose, justification and the proposed customer base along with users.	30
Report identifies legal and ethical issues that may need to be addressed during the design and build of the system OR	30
If no significant legal or ethical issues exist, provides a well-reasoned justification for this conclusion. This includes any issues with the collection or use of data.	
The Technologies selected for the project are sensible and choices have been justified properly; Chosen technologies have been compared with at least one alternative in a high-level (strategic) manner.	30
The report is well-structured, professional, and easy to navigate and adheres to academic writing standards, including proper citations and references where necessary.	10
TOTAL	100

GUIDANCE

There are many different approaches to analysing a business, no one method is the 'right' choice; it depends on the nature of the analyses taking place. It could be to examine the internal environment, the external environment, the market currently operating in, entering new markets or looking at competitors, e.g. rival products and services. Common methods include Porters Five Force Analysis, PEST (political, economic, social and technological) and SWOT - some of these will be explored during the course.

Below are some examples of approaches that can be taken to analyse a business in particular contexts, you may choose ONE of these to be used in your report.

You may also use a different method, but if so, you MUST briefly explain the method you have used.

SCRS (Strategy, Current State, Requirements, Solution)

The SCRS approach in business analysis suggests that the analysis should flow from the high-level business strategy down to solution. This requires that a high-level strategy exists and is coherent. The strategy then passes down through the current state, through requirements and then the solution.

- Strategy (to create an app that can take over the world)
- Current State (there is not app similar to this in the world)
- Requirements (need lots of people, specific technology and money)
- Solution (hire people, use emerging technology, go after one market first)

MoSCoW (Must, Should, Could, Won't)

This is used to prioritise requirements by allocating an appropriate priority, measuring it against the validity of the requirement itself and its priority against other requirements. This can be useful when defining features for a new application to be developed, similar to what you're doing in the cross modular assignment with the business students. It can also be used to measure what you're building/doing against what already exists in the market.

- Must have or else delivery will be a failure / client or customer will not accept
- Should have otherwise will have to adopt a workaround, i.e. should have a database
- Could have to increase delivery satisfaction / competitive advantage against rival products
- Won't have this time useful to the exclude requirements from this delivery timeframe

Business Analysis Canvas

The Business Analysis Canvas is a tool that can be used to present a high level view of the activities that will be completed as part of the business analysis process. These attributes are similar to what is seen in project plan, or charter. The Business Analysis Canvas is broken into several sections, e.g.:

- Project Objective to build an app to allow CCT students acquire attendance
- Stakeholders staff, students, GNIB
- Deliverables a working prototype, supporting documentation, user manual
- Impact to Target Operating Model supports current model in parallel, it replaces it etc.
- Communication Approach how would you market this product/service?
- Responsibilities Apart from you, who else is required to fulfil this project?

• Scheduling – How long would it take to build a fully working model, enter the market?

Assessment Requirements

All assessment submissions must meet the following minimum requirements:

All assessment submissions must meet the minimum requirements listed below. Failure to do so may have implications for the mark awarded.

All assessment submissions must:

- Be approximately 1000-1250 words. If your report is too short or too long, then you may lose marks.
- Be in the format specified.
- Be submitted by the deadline date specified or be subject to late submission penalties
- Be submitted via Moodle upload
- Use <u>Harvard Referencing</u> when citing third party material
- Be the student's own work.
- Include the CCT assessment cover page (for the report).

Learning Outcomes:

This assessment addresses the following module learning outcomes:

SBIT

- Utilise tools of strategic business analysis to evaluate the current macro and micro business environment with a view to formulating future action plans.
- Understand the relationship between data gathering and business intelligence and its impact on industry policy
- Critically analyse and select open source and proprietary software with a view to developing IT solutions for business and business-related IT problems

Problem Solving for Industry

- Demonstrate an advanced ability to research an assigned problem area and propose an innovative solution while applying, professional, ethical and legal considerations. [In part]
- Express an awareness of ethical and legal issues to include diversity and multiculturalism through the commercialization analysis of the project build. [In part]

Statement of Acceptable Use of Artificial Intelligence

Use Prohibited

The use of generative AI tools (such as ChatGPT, DALL-E, etc.) is not permitted in this assignment.
Any assignment that is found to have used generative AI tools in an unauthorised way will be subject to college disciplinary

procedures as outlined in the QA Manual.

When in doubt about permitted usage, please ask for clarification.

The Irish Grading System

The grading system in CCT is the QQI percentage grading system and is in common use in higher education institutions in Ireland. The pass mark and thresholds for different grade bands may be different from what you have experienced in the higher education system in other countries. CCT grades must be considered in the context of the grading system in Irish higher education and not assumed to represent the same standard the percentage grade reflects when awarded in an international context.

Please review the CCT Grade Descriptor available on the module Moodle page for a detailed description of the standard of work required for each grade band, and review the marking criteria outlined in this assignment brief for a breakdown of the marking criteria for this specific assignment.

Additional Information

- Lecturers are not required to review draft assessment submissions. This may be offered at the lecturer's discretion.
- In accordance with CCT policy, feedback to learners may be provided in written, audio or video format and can be provided as individual learner feedback, small group feedback or whole class feedback.
- Results and feedback will only be issued when assessments have been marked and moderated / reviewed by a second examiner.
- Additional feedback may be provided as individual, small group or whole class feedback. Lecturers
 are not obliged to respond to email requests for additional feedback where this is not the specified
 process or to respond to further requests for feedback following the additional feedback.
- Following receipt of feedback, where a student believes there has been an error in the marks or
 feedback received, they should avail of the recheck and review process and should not attempt to
 get a revised mark / feedback by directly approaching the lecturer. Lecturers are not authorised to
 amend published marks outside of the recheck and review process or the Board of Examiners
 process.
- Students are advised that disagreement with an academic judgement is not grounds for review.
- For additional support with academic writing and referencing students are advised to contact the CCT Library Service.
- For additional support with subject matter content students are advised to contact the <u>CCT Student</u> Mentoring Academy
- For additional support with IT subject content, students are advised to access the CCT Support Hub.