

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			
Assignment Type:	INDIVIDUAL	Weighting(s):	Emerging Tech Strategic Analysis Submission – 20%	
			Research & Interactive Oral Assessment – 50% TOTAL: 70%	
Assignment Title:	Strategic Analysis of Emerging Technology for Competitive Advantage			
Lecturer(s):	Ken Healy			
Issue Date:	10th March 2025			
Submission	Saturday 12th April at 23:59			
Deadline Date:				
Late Submission Penalty:	Late submissions will be accepted up to 5 calendar days after the deadline. All late submissions are subject to a penalty of 10% of the mark awarded. Submissions received more than 5 calendar days after the deadline above will not be accepted and a mark of 0% will be awarded.			
Method of Submission:	This assignment is submitted via Moodle.			
Instructions for Submission:	 Strategic Analysis Submission Submit your presentation in MS Powerpoint format (.ppt/.pptx) or Google Slides format or in PDF format (other formats will not be accepted!) OR Submit your Academic Poster in .pdf format ONLY Interactive Oral Assessment This will be completed in class time. You must be present or you will be awarded zero for the entire CA! See Assignment Detail for further information. 			
	Results posted in Moodle gradebook			
Feedback Date:	As this is the final assessment for the module, results and feedback will only be made visible following the Board of Examiners meeting and the official release of results by the college			

Assessment Outline

Description of Assessment Task

You are required to select <u>any</u> new or emerging technology for detailed research and analysis. This must be a computing/IT-related technology!

You must submit a list of THREE possible topics NO LATER THAN **14th March 2025. This is to avoid having too many submissions on the same topic!**

You will then be allocated a topic and you MUST complete the assessment using the topic allocated. Changes will NOT BE ALLOWED under any circumstances.

You must then carry out a detailed piece of research into this new technology to identify and analyse the potential for this new technology to provide a competitive advantage to **commercial organization** that is USING the technology. Do **NOT** select an organization that is building/creating the technology! (See Guidance Section for an example)

You <u>MUST USE</u> Porter's "Five Forces" model to outline how this technology could provide a competitive advantage.

[Historical Example: Imagine that mobile phone technology was just emerging. What might it effect? How could an organization use this technology for advantage?]

You must <u>also</u> analyse how the technology might impact (or already is impacting) <u>on society as a whole</u>, using relevant research to support your analysis. You may use a SWOT analysis (or another analysis tool) here to assist you, but this is not a requirement.

In Particular, you MUST:

- a) Explain the technology **BRIEFLY** and <u>identify</u> TWO industries or organizations who might use (or already are using) this technology for competitive advantage.
- b) Critically analyse HOW an organization is using (or could use) the technology TO GAIN A COMPETITIVE ADVANTAGE. (This must use Porter's 5 forces!) IMPORTANT: Ensure that you select an organization that is using (or could use) the technology and NOT an organization that is making/building the technology!
- c) Analyse how the technology might impact (or already is impacting) on society as a whole (or on a specific group in society). You may use other analysis tools (e.g. SWOT) if you wish, but this is not essential.
- d) Support your analysis with references and properly reference ALL sources that you have used. WARNING If you do not support your work, you will not receive a high mark!

Submission Options (Weighting: 20%)

You may choose to submit EITHER a Presentation OR an Academic Poster. Please note as follows.

Option 1) Presentation

Upon completion of your analysis, you are to create a **presentation** lasting **4-5 minutes** which will provide a <u>summary</u> of:

- i) The technology [max 1 slide!],
- ii) How the technologybe used to gain a competitive advantage for a specific organization [say 3 slides], and
- iii) Your analysis of the impact the technology might have (or is having) on society [say 1-2 slides].

You will be required to deliver this presentation during class time. The intention here is that your peers will learning something about how the technology might be deployed by an organisation for competitive advantage.

Please note that you WILL BE STOPPED when your time is up. You are strongly recommended to practice your presentation if you choose this option!

NOTE RE: REFERENCES – You may EITHER include all of your references at the end of your presentation (Is so, make sure they are legible!), OR you may submit a separate word document containing a list of your references.

IN EITHER CASE you must ensure that references are cited appropriately on your presentation!

IF YOU DO NOT PRESENT, <u>OR IF YOU ARE ABSENT AT YOUR SCHEDULED TIME</u>, THEN YOU WILL SCORE ZERO FOR THIS ASSIGNMENT.

Option 2) Academic Poster

Upon completion of your analysis, you are to create an Academic Poster (approx. 1000-1100 words in total) that will provide a summary of:

- 1) The technology (max 100 words)
- 2) How the technology might be used to gain a competitive advantage for a specific organization. (This should represent most of the work on the poster)
- 3) Your analysis of the impact the technology might have (or is having) on society.
- 4) A section listing your references. These must be clearly cited in the section(s) of your poster where they are used.

You will be required to give a short summary explanation of your Poster during class time. You will be allowed a MAXIMUM of 4-5 mins for this. The intention here is that your peers will learning something about how the technology might be deployed by an organisation for competitive advantage.

<u>IF YOU ARE ABSENT AT YOUR SCHEDULED TIME</u>, THEN YOU WILL SCORE ZERO FOR THIS ASSIGNMENT.

Interactive Oral Assessment (50% Weighting)

Following your Presentation / Poster Summary, you will undertake an Interactive Oral Assessment. The primary goals of this assessment are:

- 1) To ensure that you did the research / work yourself.
- 2) To test your understanding of your own submission.
- 3) To explore your understanding of the relationship between technology and competitive advantage.
- 4) To ensure that you are familiar with the research that you cited in your submission.

This assessment will last for <u>approximately 5 minutes</u>. This means that, in total, each student will have about 10 mins spent between their presentation/poster summary and their interactive oral assessment.

NOTE: If you are unable to answer questions to a satisfactory standard within this time, you may be asked to attend a longer session at a separate time!

Marking Schedule

Description	Weighting
Submission (Poster or Presentation) has been designed appropriately. It is clear to the audience and easy to understand.	10
The content of the submission is coherent and addresses all the required elements appropriately. Research has been properly cited throughout.*	10
The submission has been explained/presented well.	10
The student can answer questions coherently about the 5 forces analysis that they carried out, and demonstrates a clear understanding of how the technology can (or might) provide a competitive advantage for a commercial organisation *	40
The research is relevant in an academic context and the student is familiar with the research that has been cited. The student is able to discuss various aspects of their research.*	30
Total	100%

^{*} Your analysis <u>must</u> be supported with suitable references. Where this is not done PROPERLY, you may lose marks for these elements and may receive a zero mark if the work is very poor.

GUIDANCE / Possible Topics

There are many emerging technologies that you could decide to research for this assignment. This list is NOT intended to be exhaustive. You can suggest a technology that is not listed here if you wish.

- 1. Robotics / Drones
- 2. Blockchain
- 3. Smart home / Internet of things
- 4. 3D printing
- 5. Holographic display technology / VR / AR / XR
- 6. Self-driving vehicles
- 7. Quantum Computing
- 8. Nanotechnology
- 9. Specific AI or Machine Learning Applications

When selecting an organisation to explore the potential for competitive advantage, it is <u>critical</u> that you select one that is USING (or could use) the technology -- *not* building/developing/selling the technology! For example, if you were researching Drones, you need to consider an organisation that is USING drones and not a drone manufacturer! Similarly, if researching self-driving cars, then you cannot research a car manufacturer!

Assessment 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:

- Follow the submission guidelines depending on the submission option chosen, as detailed above.
- 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 for this module:

- 1. Critically evaluate the relationship between information technology and organisational competitive advantage
- 2. Utilise tools of strategic business analysis to evaluate the current macro and micro business environment with a view to formulating future action plans
- 3. Research emerging technologies and critically evaluate their impact on business and business information systems in general

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.

Grading Criteria

This grading rubric sets out the marking criteria for your assignment.

Criteria	Poster / Presentation Design Submission is clear and easy to understand.	Content The content of the submission is coherent and addresses all the required elements appropriately. Research has been properly cited throughout.	Delivery Submission is explained/delivered well	Ability to answer questions about topic presented Student can answer questions coherently about the 5 forces analysis that they carried out, and demonstrates a clear understanding of how the technology can (or might) provide a competitive advantage for a commercial organisation	Familiarity with own research The student is familiar with the research that has been cited and is able to discuss various aspects of their research
Weighting per criteria	10 marks	10 marks	10 marks	40 marks	30 marks
	Excellent design. Clear and properly formatted. Text, colour and images/charts are used professionally throughout.	Submission is comprehensive, clear and coherent. All required elements have been addressed and explained extremely well, with supporting research cited correctly throughout	Excellent, confident and professional delivery. Addressing audience throughout. Strong evidence of proper preparation.	Excellent throughout. Clearly understands most of the detail and can clarify most or all explanations	Has a very comprehensive understanding of cited research and can speak to the specifics of most these. All cited work is relevant and academically suitable
Excellent (+70%)		J			to the topic

Very Good (60 - 69%)	Very good design. Clear and properly formatted. Text, colour and images/charts are used very well.	Submission is very clear and coherent. Most required elements have been addressed and explained very well, with supporting research cited correctly in most cases.	Very good delivery. Addressing audience throughout. Evidence of proper preparation.	Clearly understands a lot of the detail and can clarify many explanations. May be somewhat unclear in a small number of aspects.	understanding of cited research and can speak to the specifics of several
Good (50 - 59%)	Good design. Generally clear and well formatted with scope for improvement. Could use text / colour / images (etc) in a better way to help the audience		Some explanation lacking	understanding of the detail and can clarify some explanations	Has a good understanding of cited research and can speak to the specifics of a small number of these. A small number of articles (1 or 2) appear not have been read in detail. Most cited work is relevant and academically suitable to the topic
Acceptable (40 - 49%)	Acceptable design. Generally clear but much scope for improvement. For example, may be missing images / charts entirely.	Submission is generally clear and coherent. Required elements have been addressed with some detail and explained to a satisfactory extent. Supporting research is listed but has not been cited correctly in text	Reasonable delivery. Not always addressing the audience. Explanation lacking in detail / generic in most cases but has covered the essentials.		Has a basic understanding of cited research. Can speak to specifics of 1 of these but in other cases is vague or general. Several articles appear not have been read in detail. Some cited work is relevant and academically suitable to the topic.

Poor design. Unclear and unhelpful to the audience. Likely to have too much text and/or be badly laid out. Poor or no use of colour / images, etc.	Submission is unclear and / or lacks coherence. Several main elements are not addressed at all or are addressed only superficially. Research is missing or irrelevant.	General explanations throughout with little or no link to the specific topic at	understanding of the essential points. Unable to clarify or is just repeating an already unclear starting point.	Shows little or no understanding of cited research. Appears not have read many of the cited items beyond the abstract/summary. Most of the cited work is either not relevant or relies too much on 'blogs' or organization self-
Fail (< 39%)				promotion

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> <u>Mentoring Academy</u>
- For additional support with IT subject content, students are advised to access the CCT Support Hub.