

# Team Project Brief: Requirements & Deliverables.

## Report requirements:

There is no template provided for this exercise, however, a list of requirements and a brief description of each of section of the deliverable is provided in the following pages. Please read each of the section descriptions carefully and ensure that all required sections and subsections are complete prior to submission.

Please note the inclusion of tables/figures in the report is welcome. Any tables and figures should be captioned and referred to at least once in the body of the text.

Requirement	Details	Note
File name	[Team Number]_Team_Project_Report.pdf	
Page limit	10 pages limit max Page limit includes: charts and figures Does not include: references, coversheet, table of contents To support your discussion a 5-page appendix of supporting materials is allowed to be attached (see details below for requirements)	If you can convey all necessary information in less than 10 pages, that is encouraged.  Pages over the limit will not be assessed.
Formatting	Use:     Headings for sections of work     Titles for all tables and figures     Page numbers Avoid:     Large un-broken sections of text.	Present your report clearly and professionally.  Appropriate formatting makes information easier to read and conveys your message effectively.
Page format	<ul> <li>A4 only.</li> <li>Portrait orientation, with A4 landscape acceptable to display charts etc.</li> <li>Do not include special pages, e.g. A3, etc.</li> <li>Page margins must be standard (2.54cm)</li> </ul>	
Font	<ul> <li>Main body in an easy to read font (e.g. Verdana)</li> <li>Font size: 11 pt or bigger</li> <li>Line spacing: 1.15 to 2.0</li> <li>Headings, sub-headings, captions, etc. should be formatted appropriately.</li> </ul>	



Referencing	APA 7 <sup>th</sup> edition Use <b>APA</b> 7 <sup>th</sup> <b>ed.</b> in-text citations and reference list at the end of your report.  To reference the project brief, please use the following: "Team Project Brief, Attracting International Competitions to New Zealand, ENGGEN 403, 2024"	
Cover sheet	Must accompany your report.  Must include:	Cover sheet template is located on the Team Project report assignment page

#### **Deliverables**

- 1. Executive summary
- 2. The Strategic case
  - 2.1. Project background
  - 2.2. Problem Space
  - 2.3. Stakeholder analysis and their requirements
  - 2.4. Key assumptions
- 3. The Economic Case
  - 3.1. Long-list option assessment
  - 3.2. Recommendations of the short-listed options
- 4. Appendix of supporting figures
  - 4.1. Requirements table

#### 1. Executive summary

The executive summary should address *in brief* the most important details of your report. This includes its purpose, methods, recommendations, and costs. It should be interesting and easy to read with items raised in the same order that they occur within your report.

Typically, an executive summary is 300 – 500 words. While your summary may exceed 500 words, it should be no longer than a <u>single</u> page.

The executive summary gives the reader the first impression of your entire report. In some cases, it is the only part of the report that some may read. Make it a good impression.



**Important**: Remember to conclude your executive summary with your proposed action moving forward. If a reader only has time to read the executive summary, you want to give the clear impression that you have thought about 'what next.'

## 2. The Strategic case –making the case for change

You are applying the skills you developed across ENGGEN 204, 303, and 403 to address a problem. This portion of your report should shed some light on the project context. What is the need?

Note: While it may seem strange to re-state the need back to your client, it is good practice. Learning to state what you and your team are working on to the client ensures that all parties are on the same page.

#### 2.1. Project Background

The purpose of this section of the report is to present a clear introduction to the project, background, objectives and aims. It should contain a brief overview of the reasons why the project came about. Some background information has been provided for you in this brief, along with references to additional resources.

#### 2.2. Problem space

Identifying the problem space and articulating that clearly is an important skill. It communicates to your clients that you have taken the time to fully appreciate their need. Similar to the project background, information related to the initial problems is outlined in the brief. You are free to use the information available to inspire your problem statements; however, you must refrain from a direct copy/paste. A high-level problem analysis must be conducted in this section to investigate the root cause of problems and/or cause and effect relationships between different elements of the problem. At least **two specific problem statements** should be generated for the overarching problem.

#### 2.3. Stakeholder analysis

This section should highlight the key stakeholders that have an interest in the expected outcomes of the project. Read over the information provided and extract all the key stakeholders identified. List them and briefly describe their role, interest, and influence in the project. Given the scale of this project, you are likely to identify many stakeholders. Recall the different stakeholder analysis matrices that you will have used in previous group projects and discussed in class. Use a similar system here to clarify who are your key stakeholders are.

### Key stakeholders' requirements and key success factors

This section aims to describe the requirements that must be delivered for the project to be considered a success. These are the key stakeholders' requirements. Take the key stakeholders identified in your stakeholder analysis and identify their requirements. Requirements can include topics such as sustainability, profitability, and safety. It is important to highlight shared/common requirements and those which may be conflicting.



It is suggested that you describe stakeholder requirements as falling into one of three categories.

**Necessary:** Requirements that MUST be met for the project to be successful. Note this list may have to be modified as you progress. If major stakeholders have conflicting requirements, some compromise might be required.

**Nice-to-have:** These requirements add value to the final deliverable but are not necessary for the project to be considered 'complete.'

**Aspirational:** Requirements that a stakeholder might identify but fall outside of your project definition scope.

The body of the report should provide the necessary requirements and supporting discussion around common and conflicting interests. A requirement table containing the Necessary, Nice-to-have, and Aspirational requirements for each key stakeholder must be provided in the appendix (Appendix 4.1).

#### **Key success factors**

From the necessary requirements, narrow down to a list of 4-6 key success factors. These are attributes that an option must achieve in the initial assessment for it to be considered into the shortlist. The main point is that they are key to the project, not just desirable, and are set at a level that does not preclude important options at an early stage of the analysis.

#### 2.4. Key assumptions

For every project proposal, there will be numerous assumptions.

These are factors that have been treated as true or certain, without proof. If things are not certain to happen, treat them as an assumption. For example, you may be assuming that particular organisations will be partnering with you for this proposed project.

Capture these assumptions in whatever format you deem suitable. For details that you feel need further explanation, a small written summary is acceptable.

## 3. The Economic case – Exploring the potential options

This section of your report serves two main functions.

- It communicates a wide range of options a 'long-list'
- It should undertake a 'best-fit' trade-off of some sort, where the 'long-list' of generated options is narrowed down to shortlisted options

## 3.1. Long-list option assessment

The purpose of this section is to demonstrate to the reader that you have assessed a broad range of possible options. Your stated options should initially be wide-ranging (a long-list) but within the realm of possibility (i.e., may be new to your application but should not come from science fiction or undeveloped technology). Options should be insightful, and each offers some merit towards achieving the requirements,



whether innovative or proven. The advantages and disadvantages of each option should be clear.

#### Narrowing down to the short-list

To narrow down to the short-list teams should apply two frameworks, either in series or in parallel. The first framework is applying the key success factors (KSF). Any option which fails to meet more than one KSF or can only partially meet two KSF should be discounted and not carried forward. For a project of this magnitude, you may find that none of the options fully satisfy all of the 'necessary' stakeholder requirements. As such, you will need to think carefully about whatever options you carry forward into your short-list for further investigation. You should clearly articulate which necessary stakeholder requirements were not fully met, yet why you still feel the solution is appropriate.

The second framework is the Desirable, Feasible, and Viable (DFV). Briefly describe the extent to which each option is Desirable, Feasible, and Viable. Viability should include a very high-level thought about cost. Exact numbers are not required but estimating if an option has costs and benefits on order of \$10 million, \$100 million, or \$1 billion etc. should be done. If an option is not technically feasible, it should not be carried forward.

From these two frameworks, you will identify the shortlist. It is possible that options may need to be combined in order to pass both KSF and DFV frameworks. Shortlisted options may not meet every single criteria set forth but will need to meet most.

Note: Remember that the client/audience is NOT interested in the details of the long list in the report itself. Rather, they are interested in the range and breadth of the considerations in the long list(s) and the critical criteria used to simplify to the short list.

#### The 'do-nothing' option:

In addition to the options generated, teams should include a 'do-nothing' option. Maintaining the status quo is always an option (as spending nothing to gain nothing is better than spending money to gain nothing, if your options do not provide enough economic and social benefit). This option should be included in the assessment of your options. It provides a benchmark to determine the relative value of each option under consideration. It should be noted that 'do-nothing' is a valid conclusion to arrive at, and many projects are stopped at this stage upon the realisation that doing nothing is the best answer. This option must be carried into the shortlist.

#### 3.2. Recommendation of short-listed options (for further exploration)

Based on this analysis above, the recommended short-list for further assessment in the detailed business case can be listed here. In this section, describe in detail the short-listed options (two or more, in addition to the do nothing) and why they should be carried forward for further investigation. Identify, quantify and monetise at least one major impact as a result of implementing your solution, you may use the CBAX



spreadsheet or other sources to monetise impacts. Identify and qualify any other major impacts.

## Workload and Student Support

The effort required to complete this report is estimated at 8 to 10 hours per student.

There will be three support sessions for the team project. Monday 19/08 from 11 am-12 pm in the lecture hall 260-115 for Team Leaders, Tuesday 20/08 from 11 am-12 pm via zoom for the class, and Thursday 22/08 from 12 pm to 1 pm via zoom for the class.

Ed Discussions will be operating as usual, and all questions will be answered as promptly as possible.