UNSW

ELEC4122
term 1, 2019

for Activity-Class Week 6
Go / No-Go Decisions Part 1

The assignment described overleaf requires you to undertake a go/no-go analysis for an engineering consultancy firm AusEngIT. You must think about tendering to design and implement the IT infrastructure for a government project which will be operated by another company.
This assignment and the related second part completed in class in Week 6 contributes directly as **your 'homework' mark for this session**.

Preparation

1. Review the principles of a go/no-go analysis.
2. Read the accompanying materials.

Instructions

1. Complete and sign this coversheet and staple it to the top of your report.
2. Do not exceed 600 words total; 300 could be enough, if you are skillful with words.
3. This assignment must be submitted **at the start of your tutorial class in Week 6**. Late submissions cannot be accepted because your assignment will be needed in that class for the other part of this task.

I declare that this assessment item is my own work, except where acknowledged, and has never been submitted for academic credit elsewhere. I acknowledge that the assessor of this item may, for the purpose of assessing this item,
(i) reproduce this assessment item and provide a copy to another member of the University, and/or
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I certify that I have read and understood the University Rules about Student Academic Misconduct.

signature: date:

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Assignment task

Read the situation described on the next page!

You are working in the IT division of AusEngIT, a large Australian-based engineering consultancy group specialising in information & communication technologies of all types. AusEngIT is considering whether to tender for the work involving the IT systems for GeneAus's database. Your boss has asked you (a suitably competent engineer and strategic thinker who did well in ELEC4122) to complete the go/no-go analysis and then write a summary of your assessment for its Board of Directors.

Note that *your personal views on the nuclear industry are not relevant* to this assessment. However, *the reasons you hold those personal views may be relevant*. Necessarily, we will assume that you do not oppose this proposal to such an extent that you will refuse to work on the task and quit your employment.

This constitutes the first part of this assignment. The second part will be given to you by your tutor during class in week 6 and you will be asked to complete it during that tutorial after handing in the first part. Both parts will contribute directly & equally to your homework mark.

Suggestions

You could (but don't need to) use these headings in your report to the Board of Directors.

a. *Capabilities*, to undertake the project, including directly related experience, qualified staff, IP & technologies, etc.

b. *Potential benefits, both immediate & strategic*, including potential profit, developing capabilities & credentials in a new area, possible strategic alliances, etc.

c. *Market & client relationships*, including knowledge of the client, clear accountabilities for the work, likelihood of client problems.

d. *Unusual risks*: analysis of potential risks and whether & how these could be controlled.

e. *Outcome* of your go/no-go assessment.

We suggest spending about 3 hrs working on go/no-ogo decisions and this pre-tutorial task.

The situation

A few years from now. You are no longer a graduate engineer, but a CPEng!

The Federal Government has decided to build on its failed *My Health Record* project by supplementing it with another database: a national DNA database.

The security and poliec forces have long argued the value of having a database containing the DNA profile of everyone in the country. Also, coupled with a national identity card, it would solve problems such as illegal migrants. But the Government proposal goes further. The true benefits of a DNA database are only realised when combined with the database of people's medical records. So this proposed database is expected to be available for medical research. Its unprecedented size (globally, though China may catch up fast!) allows tracking genetic diseases throughout the entire population. This will permit—at least in theory—identification of genetic markers and then preventative therapies for at-risk people.

The Government has awarded the contract to collect, maintain and secure this huge database to GeneAus, a company set up solely for this purpose. Its parent companies are 3 trans-national corporations. The majority share-holder is IBM which brings its expertise in AI and data security. Another is a merchant banks providing the capital. Finally, the third is a local start-up (rumoured to be connected to a politcal party) with novel technology for DNA profiling. The size of this project will extend beyond the bounds of what has been undertaken previously, at least in Austrlia, so there may be need for some very creative fixes.

One of GeneAus' contract conditions is that it must employ local, i.e. Australian-owned, sub-contractors for a prescribed fraction (rumoured to be 51 contract. (Such stipulations are common in government contracts.) Consequently, amongst other contracts, GeneAus has requested that Australian companies tender to provide all the IT systems for receiving information from all sources, and processing, storing, & securing the data.

Your company (AusEngIT) is interested in this IT contract.

key themes: surveillance, genetic finger-printing, biometrics, health records, cyber-security

DO NOT ATTACH THIS PAGE TO YOUR ASSIGNMENT.
WE ONLY NEED THE COVER.