# FIT3138 Real Time Enterprise Systems Semester 2, 2022 Assignment Two – Business Case for an ERP implementation

**Due Date**: Monday 17th October 2022 11:55 pm

Value: 20% of final Assessment

Mode of submission: Online on Moodle

**Type of Assignment:** Group Assignment

Students are required to work in groups of 2.

# Assignment Aim and Objectives:

The aim of this assignment is to provide students with an opportunity to develop their analytical and research skills through the process of developing a business case to assist TGB in their enterprise systems initiative. In so doing, the following objectives are sought:

- To develop skills in producing a succinct and convincing business case;
- To develop skills in researching various ERP software vendors and to provide a recommendation;
- ❖ To develop skills in performing a cost-benefit analysis as well as critically assessing the potential risks involved and other implementation issues; and
- ❖ To explore the current trend in cloud computing and in-memory computing in real-time enterprise systems.

#### The Case:

The following is a description of a company who manufactures and distributes racing bikes, Top Gear Bikes (TGB). They plan to implement an enterprise system for the first time.

Currently they are importing some of their raw materials and sub-assemblies from China but are also purchasing consumable items and raw materials from local suppliers.

The company has a research and development arm and a manufacturing assembly plant in Melbourne and purchases consumable items and some materials from local Australian suppliers. However, the Executive team is considering sourcing and purchasing additional materials and sub-assemblies from India, Vietnam as well as China and offshoring some of their manufacturing to these countries.

The company started business in 1989. Their business processes have not changed much over this time; however, the market has changed considerably. They have a variety of legacy systems that were built specifically for the company. But they now realise the company lacks the agility it needs to be competitive, and their top executives and middle managers are unable to make informed decisions as they do not have the relevant nor correct data that can be provided in a timely fashion.

The Board of Directors and CIO have been deliberating for quite some time about implementing an enterprise system. Now this imperative has become very real since they will be manufacturing products and sub-assemblies offshore and shipping them to their home base in Melbourne. They have had many vendor presentations and have specifically concentrated on ERP systems and generic software products that they feel would support their business requirements and drivers.

#### Main **business drivers** behind the implementation:

- Enable Online Customer orders and customer order transparency
- Enable Online Vendor managed inventory stocks
- Expand operations into Vietnam, India and China
- Provide their Business Areas Sales Managers, who work out of the office, with mobile applications that can talk to their ERP system real time – the Executive Team consider this will require a cloud based functionality

# Strategic directions of the company

- To better coordinate all their dealers and be able to better support them, especially with relevant customer and product information
- To have optimal control of their demand and inventory management
- To seamlessly track profitability and manufacturing costs of all their product range
- To be able to perform predictive analytics to support strategic planning and decision making

One dilemma the company has is whether to adopt their enterprise systems wholly in the cloud or have part of the system on premise and another part in the cloud.

The company has 2000 staff; which includes 15 top level managers, 20 middle managers, 50 sales staff, and 15 operational managers; as well as 1,500 end users of the system and 400 contract workers from a variety of departments; such as, warehouse, production and manufacturing, research and development, call centre personnel, sales and distribution, service and HR staff to name a few. End users can be broken down into four main groups with various levels of computer literacy: experienced users, inexperienced core users, inexperienced casual users, and users requiring simple system awareness. These end users will be impacted by the implementation in various ways.

## Requirements:

It is not uncommon for companies to jump on the ERP bandwagon without first conducting a much needed research and planning to ensure a successful ERP implementation.

TGB Board of Directors had heard of just too many horror stories of ERP implementation going wrong. As such, they are doing everything they could to ensure that their ERP project would be a success. As part of this initiative, they have requested a Business Case to justify and recommend a solution to their situation.

## Key Deliverables:

- ❖ A Business Case, which should include the following:
  - 1.0 Introduction/ Background

A background information of TGB Inc.

- 2.0 Business Objective.
- 3.0 Current Situation and Problem/Opportunity Statement

Discuss how/why the current situation as mentioned in the case presents an opportunity/problem for the ERP initiative.

- 4.0 Critical Success Factors and Constraints
- A summary of 6 factors to ensure a successful ERP implementation relevant to the case.
- A detailed research of this (and well-referenced) should be included in Exhibit A.
   [Note: Each team member is required to research on 3 factors and the respective name should be indicated in the final submission. An individual mark is allocated to this section]
- Any other assumptions and constraints
- 5.0 Analysis of Options and Recommendation
- Critically evaluating 4 ERP systems and offer a recommendation. This evaluation should include a Weighted-Scoring Model
- Should also include an analysis on software as a service (SaaS) and cloud ERP as well as in-memory computing.
- This section should only include a summary of your research of the different options and a detailed research of this should be included in Exhibit B.

[Note: Each team member is required to research two systems and the respective name should be indicated in the final submission. An individual mark is allocated to this section]

# 6.0 Preliminary Project Requirements

The main features or requirements for the recommended option (from 5.0)

# 7.0 Budget Estimate and Financial Analysis

- A preliminary estimate of the costs involved, and the expected benefits gained for the recommended option (from 5.0).
- This should be a summary based on a comprehensive Cost-Benefit analysis (NPV and ROI), which should be included in Exhibit C.

#### 8.0 Schedule Estimate

Estimated time required for the project and an estimated projected go-live date. Include some milestones in this section.

#### 9.0 Potential Risks

- Summarise the top 4 potential risks that this project might face and the possible response strategy.
- Likelihood of the risks impacting on the implementation and the success of this ERP initiative.
- A detailed risk analysis should be included in Exhibit D. (You should identify and analyse at least 8 risks, but you only need to summarise the top 4 risks in the business case)

#### 10.0 Exhibits

- Exhibit A: Factors for a successful ERP implementation
- Exhibit B: ERP Options and recommendations
- Exhibit C: Cost-Benefit Analysis
- Exhibit D: Risks Analysis likelihood and impact and response strategy
- ❖ Demonstrate depth and breadth of reading and research to include a reference list (at least 5)
  - Use APA referencing style for all references in body of text and in reference list
  - <u>PLEASE NOTE</u>: You will not get any marks for 'referencing' if you DO NOT reference in the body but have an extensive reference list at the back of your assignment.

## Submission instructions:

- 1. Please upload your submission (one submission per group) on the FIT3138 Moodle site under "FIT3138 Assignment 2 Submission" link. Note that each member in the team must click the 'submit' button to ACCEPT the Student Statement.
- 2. All submission must be in the form of a Word or PDF file and saved as:

  <u>GroupNumber Assignment</u> 2, where 'GroupNumber' is the number assigned to your group.

# Plagiarism declaration:

The moment you upload your assignment on Moodle, you are required to accept the Student Statement (which includes a declaration that you have not plagiarised during the preparation of your assignment solution). Every member in the team is required to ACCEPT the Student Statement; otherwise, your assignment will still be in 'draft' mode, and it will NOT be assessed.

#### Late Submission:

Submission must be made by the due date. For each day, or part thereof, an assessment task
is overdue, a late penalty of 10% of the available total marks applies up to a maximum of seven
days. Assessment tasks submitted more than seven days after the due date will receive a mark
of zero for that task and may not receive feedback.

2.	If you believe that your assignment will be delayed because of circumstances beyond your control such as illness, you should apply for an extension prior to the due date. Extensions and
	other individual alterations to the assessment regime will only be considered using the Faculty Special Consideration Policy. Students should carefully read the <u>Special Consideration</u> website, especially the details about what formal documentation is required.

# Template:

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1.0 Introduction/ Background
2.0 Business Objective
3.0 Current Situation and Problem/Opportunity Statement
4.0 Critical Assumptions and Constraints
5.0 Analysis of Options and Recommendation
6.0 Preliminary Project Requirements
7.0 Budget Estimate and Financial Analysis
8.0 Schedule Estimate
9.0 Potential Risks
10.0 Exhibits Exhibit A: Exhibit B:

# **MARKING CRITERIA**

Deliverables:	Criteria	Weight
1.0 Introduction	A background information of TGB	4
/Background		
2.0 Business Objective	Clearly defining the business objective of TGB	5
3.0 Current Situation	Clearly discuss the current situation of TGB	5
and	Discuss how/why the current situation as mentioned in	
Problem/Opportunity	the case presents an opportunity/problem for the ERP	
Statement	initiative.	
4.0 Critical	A summary of 6 factors to ensure a successful	5
Assumptions and	ERP implementation • Other assumptions and	
Constraints	constraints	
	Exhibit A: Include a detailed research (and well	5
	referenced) on the 6 factors mentioned with justification.	
	[Note: Each team member must research on 3 factors,	
	and this will be an individual mark - indicate the	
	respective student's name].	
5.0 Analysis of	Critically evaluating 4 options/software and offer a	10
Options and	recommendation,.	10
Recommendation	Exhibit B: Providing a thorough analysis of the different	
Recommendation	options and include a weighted scoring model or other	
	technique to evaluate the options.	
	teeringue to evaluate the options.	
	Exhibit B: Include a detailed research of the options	15
	( each team member must research on two and this will	
	be an individual mark) - indicate the respective student's	
	name against each option.	
	Include valid justification and assumptions.	
6.0 Preliminary Project	The main features or requirements for the recommended	10
Requirements	option (from 5.0)	
7.0 Budget Estimate	A preliminary estimate of the costs involved, and the	10
and	expected benefits gained for the recommended option	
Financial Analysis	(from 5.0). • This should be a summary based on the	
	findings included in Exhibit C.	
	Exhibit C: A comprehensive Cost-Benefit analysis with	
	justification.	
8.0 Schedule Estimate	Estimated time required for the project and an estimated	5
	projected go-live date - reasonable and justified.	
	Include some brief milestones in this section.	

9.0 Potential Risks	Summarise the top 4 potential risks that this project might face and the possible response strategy.  Likelihood of the risks impacting on the implementation and the success of this ERP initiative.  Exhibit D: A detailed risk analysis of at least 8 risks with proper justification.	15
10.0 Exhibits	All clearly presented and referenced.	6
Overall presentation and flow		
		100

The following marking criteria should be used to support your assignment:

HD 80-100	A good and succinct Business Case with comprehensive coverage of all topics
This is an	Excellent structure – easy to follow, headings used effectively
outstanding	Extensive research with excellent supporting evidence and critical
assignment	assessment, clear
doorgrinion	explanations, flow from one point to the next in logical sequence
	Higher level considerations
	Sound and useful strategies and/or issues provided are supported
	by evidence
	References correctly cited in body of text and in list
	Excellent grammar, spelling, neatly and consistently presented
<b>D</b>	
D	A very good coverage of the topic with a good level of supporting
70-79	evidence; critical assessment evident, reasonably clear
	explanations, logical sequencing used Some additional considerations offered
	Good use of strategies and/or issues provided, supported by evidence
	References used correctly in body and in list
	Good grammar, minimum spelling errors, neatly presented
C 60-69	A reasonable coverage of the topic with some level of supporting evidence.
	Critical assessment may be demonstrated but is limited in its
	scope.
	Fair to moderate explanations. Sequencing in some logical style.
	Some link to strategies and/or issues offered with supporting
	evidence, but little in-depth knowledge displayed.
	Referencing used correctly
	Reasonable grammar and spelling, neatly presented
Р	A basic coverage of the topic, all questions answered but little in-
50-59	depth knowledge demonstrated, indicating lack of reading. Poor
	logical sequencing.
	Little or no critical analysis attempted. Headings limited.
	Some grammatical and spelling errors – basic presentation
	Referencing limited or inappropriate reference sources

	Referencing style incorrect or inappropriate References listed do not correspond to those shown in the report.
NP <49 This is a very poor assignment	Insufficient coverage of the topic or the content was one that was not related at all to the topic. No evidence of additional reading to support the argument. Absence of critical analysis. Poorly organised and displayed.  Less than acceptable grammar and spelling. Insufficient and incorrect referencing

## **PLEASE NOTE:**

# 1. Acknowledgment of sources

Each time you complete any assessment, please refer to and make yourself familiar with the most current information regarding acknowledgement of sources, plagiarism and academic conduct contained in the FIT Policy website. You may refer to the <a href="Citing and Referencing">Citing and Referencing</a> website.

# 2. Standards for presentation

All printed assignment work must be word processed and meet the standards set out in the assignment. Refer to the <u>Faculty Style Guide</u> for writing assignments and for referencing styles.