MIS770 Foundation Skills in Business Analysis

DEPARTMENT OF INFORMATION SYSTEMS AND BUSINESS ANALYTICS

DEAKIN BUSINESS SCHOOL

FACULTY OF BUSINESS AND LAW. DEAKIN UNIVERSITY







Assignment One

Designing a Survey Instrument

Particulars

• **Due:** Week 5, Thursday 9th December 2021, 8:00 pm (AEST).

• Marks: 20%.

Words: 2,000 words, plus or minus 20%. (For more information, see Guideline One – Word Count).

Submission: Electronically in CloudDeakin. Email submissions will not be accepted.

• **Notes:** This assignment is to be completed individually.

Please ensure you are familiar with the Extension Request and the Late Penalties rules

governing assignments in the Faculty of Business and Law (see details below).

Assurance of Learning

This assignment assesses the following Graduate Learning Outcomes and related Unit Learning Outcomes:

Graduate Learning Outcome (GLO)	Unit Learning Outcome (ULO)	
GLO1: Discipline knowledge and capabilities: appropriate to the level of study related to a discipline or profession	ULO1: Apply the fundamentals of quantitative reasoning to solve real-world problems	

Overview

For this assignment, we will use the ideas and concepts introduced in Module 1 to design a survey that can be used to collect sample survey data. (Note: For the purposes of this assignment, you will only be creating the survey instrument. Your survey is **not** being used to collect any actual data from the public, nor do you need to estimate the number of responses you require.)

Remember, the first step in Data Analysis is to collect a sample that faithfully represents the population we are investigating. To this end, it's important to ask appropriate questions in our survey such that the data we gather is robust, relevant and fit for purpose.

Scenario

You have been asked by a company to develop a survey that will gauge the views of their employees, regarding "Employee Turnover". The company is interested to know the views of employees concerning their willingness to change workplaces and what impacts their decision to leave a company (pay rates, overtime hours, holiday leave, etc.) in order to improve the retention rate of staff. Additionally, they would like to canvas the views of employees regarding possible initiatives that the company may implement to improve job satisfaction. A few specific items they would like to know is if the age of a person and/or their income are drivers in a person's willingness to change jobs, in addition to any other factors that you might consider to be of influence. You need to be mindful of the company's purpose for the survey when you are crafting your survey.

The survey should contain 20 questions which ought to take a respondent no more than about 5 minutes to complete. Accordingly, for this survey, there should be no open-ended questions and, where appropriate, answers can be selected from options. (For more information, see **Survey Question Hints** and **Guideline Two – Response Option Principle**).

Requirements

In this assignment, your tasks will be split into two (2) distinct Parts. The Part A relates to the Survey Questions and Part B to the Collection of the Survey Data (i.e., the methodology and determination of the target audience/population).

Part A – Survey Questions

- Task 1: write/create twenty (20) questions that are specifically aligned to the survey's purpose,
 i.e.gauging the views of the company's employees regarding "Employee Turnover".
- Task 2: justify/state the purpose/reason for asking each question (Note: you should relate your answers back to the overall purpose of the survey).
- Task 3: indicate the type of variable that is most appropriate to your question (For more information, see Guideline Three Variable Type).
- Task 4: indicate the level (scale) of measurement that is applicable to each question (For more information, see Guideline Four – Level (Scale) of Measurement).
- Task 5: indicate, in detail, the type of visualisation (e.g. Bar Chart, Histogram, Scatter diagram) you would use to visually represent the data for each question.

Part B – Collection of Survey Data (Textbook: Berenson et. al. Ch 1)

- Task 6: indicate the methodology you would adopt to conduct the survey (i.e. how would you propose the data should be collected; what is your Survey Sampling Method).
- Task 7: determine the target audience and comment on the sampling technique you've selected to make certain that your sample is a representative of the population.

Survey Question Hints

An example of an appropriate Survey Question:

What is your age in years (as at last birthday)?

Note: If you wish, you could also ask this question by asking the respondent to give an age range such as [19 to less than 25 years].

An example of an <u>unacceptable</u> Survey Question:

What is your name?

This example fails on multiple counts:

- There can be "no purpose" in asking this question (see Task 2).
- o It's likely the interviewee will decline to answer any further questions (for privacy reasons) or they will deliberately answer the remaining questions untruthfully.
- o It would not be possible to represent the data gathered in any meaningful manner (see Task 5).

Guidelines

Guideline One - Word Count

The following word counts are a guide only (however your overall word count needs to be within the range 1600 words to 2400 words):

Part A - Survey Questions

- Task 1: each survey question you create should be approximately 10 to 20 words (i.e., **200 to 400 words** in total for your 20 questions).
- Task 2: when you explain the purpose of your question, you should allow approximately 30 to 40 words per question (i.e., **600 to 800 words** in total for your 20 questions).
- Task 3: when you indicate the type of variable for each question, you will use a minimal number of words.

- Task 4: when you indicate the level (scale) of measurement for each question, you will use a minimal number of words.
- Task 5: when you explain the type of visualisation for your question, you should allow approximately 25 to 35 words per question (i.e., **500 to 700 words** in total for your 20 questions).

Part B - Collection of Survey Data

- Task 6: when you explain your data collection methodology, use approximately 100 to 200 words.
- Task 7: when you explain your population of interest and your sampling technique, use approximately **200 to 300 words**

Therefore, if you follow the above guidelines, your assignment should be no less than 1600 words and no more than 2400 words overall (i.e., 2000 words, plus or minus 20%).

Guideline Two – Response Option Principle

Ensure your questions are constructed such that any possible answer is both:

- a. Mutually Exclusive (i.e., the user's response cannot be applied to more than 1 option), and
- b. Collectively Exhaustive (i.e., the options provided cover all possible answers).

Guideline Three - Variable Type

When you design your twenty (20) questions, not only do you need to indicate the type of variable that is most appropriate to your question, but you must also adhere to the following minimum counts for these variables:

- a. 5 Categorical questions.
- b. 5 Numeric questions, of which at least:
 - i. 3 need to be Discrete, and
 - ii. 2 need to be Continuous.

Guideline Four – Level (Scale) of Measurement

For each question, you must nominate which of the following level (scale) of measurement applies:

- a. Nominal.
- b. Ordinal.
- c. Interval.
- d. Ratio.

Submission

Your completed work should be a **single Word** document divided into two sections:

Part A. Survey Questions

Your results should be listed question by question (e.g., for question 1, you will list Tasks 1 to 5).

Part B. Collection of Survey Data

There is no need to have a Table of Contents; an Executive Summary; an Introduction; or a Conclusion. You **must**, however, include a section containing your references (this section not included in the total word count).

The assignment is to be submitted to the MIS770 assignment drop box in CloudDeakin **before 8 pm on Thursday 9**th **December, 2021.** Please ensure you include your name and student details in your Word document as well as naming the file in the following format: **yourstudentid_T32021 MIS770 A1.docx**. Failure to follow this naming convention may lead to a delay in receiving feedback and marks. **Note:** CloudDeakin is the **only** method of submission acceptable.

Referencing

In this assignment, you must reference all sources used in your assignment, including words and ideas, facts, images, videos, audio, websites, statistics, diagrams and data. There are many different types and styles of referencing and we recommend that you use the Harvard method. To assist you, the University has provided the online guideline Deakin guide to referencing - Harvard. There is also a thirty (30) page pdf document called "Deakin Guide to Harvard" in the Unit's "Assessments Resources" folder in CloudDeakin.

Faculty of Business and Law Assignment Extension Procedures

Information for students seeking an extension BEFORE the due date

If you wish to seek an extension for this assignment prior to the due date, you need to apply directly to the Unit Chair by completing the Assignment and Online Test Extension Application Form (pdf) and sending the **completed form**, as well as your **supporting documentation**, to our generic email address t32021mis770@deakin.edu.au. Not providing both items would naturally result in rejection of your request.

This needs to occur as soon as you become aware that you will have difficulty in meeting the due date.

Please note: Unit Chairs can only grant extensions up to **two weeks** beyond the original due date. If you require more than two weeks, or have already been provided an extension by the Unit Chair and require additional time, you **must** apply for Special Consideration via StudentConnect within 3 business days of the due date.

Conditions under which an extension will normally be considered include:

- **Medical** to cover medical conditions of a serious nature, e.g., hospitalisation, serious injury or chronic illness. Note: temporary minor ailments such as headaches, colds and minor gastric upsets are generally regarded as not serious medical conditions.
- Compassionate e.g., death of a close family member, significant family and relationship problems.
- **Hardship/Trauma** e.g., sudden loss or gain of employment, severe disruption to domestic arrangements, victim of crime.

Note: misreading the due date, assignment anxiety or travel will not be accepted as grounds for consideration.

Information for students seeking an extension AFTER the due date

If the due date has passed; you require more than two weeks extension, or you have already been provided with an extension and require additional time, you must apply for Special Consideration via StudentConnect. Please be aware that applications are governed by university procedures and must be submitted within three business days of the due date or extension due date.

Please be aware that in most instances the maximum amount of time that can be granted for an assignment extension via the Special Consideration process is less than three weeks after the due date, as Unit Chairs are required to have all assignments submitted before results/feedback can be released back to students.

Penalties for late submission

The following marking penalties will apply if you submit your assessment task after Thursday 9th December 2021, 11:59pm (AEST) without an approved extension:

- 5% will be deducted from available marks for each day, or part thereof, up to five days.
- Work that is submitted more than five days after the due date will not be marked; you will receive 0% for the task.

Calculation of the late penalty (based on the assignment being due on a Thursday at 8:00 pm) is as follows:

- 1 day late: submitted after Thursday 11:59 pm and before Friday 11:59 pm 5% penalty.
- 2 days late: submitted after Friday 11:59 pm and before Saturday 11:59 pm 10% penalty.
- 3 days late: submitted after Saturday 11:59 pm and before Sunday 11:59 pm 15% penalty.
- 4 days late: submitted after Sunday 11:59 pm and before Monday 11:59 pm 20% penalty.
- 5 days late: submitted after Monday 11:59 pm and before Tuesday 11:59 pm 25% penalty.

Note: 'Day' means calendar day.

The Unit Chair may refuse to accept a late submission where it is unreasonable or impracticable to assess the task after the due date.

Additional information: For advice regarding academic misconduct, special consideration, extensions, and assessment feedback, please refer to the document "Rights and responsibilities as a student" in the "Unit Guide and Information" folder under the "Content" section in the MIS770 CloudDeakin site.

Marking Rubric

	Poor	Needs Improvement	Satisfactory	Good	Very Good	Exemplary
Part A: Develop	0 points	3.6 points	6 points	7.2 points	8.4 points	12 points
Survey Questions						
(Marks: 12) Create survey	Proposes no valid questions which indicates no	Proposes only a few valid questions that indicate little	Proposes several more satisfactory creative questions	Proposes a reasonably good number of creative	Proposes many very good creative questions that	Proposes comprehensive creative questions
questions that are aligned with the Scenario	comprehension of the task	comprehension of the task	that indicates satisfactory comprehension of the task	questions that indicates a good comprehension of the task	indicates a deep comprehension of the task	that meets best practice and are grounded in empirical theory. All questions reflect a high level of judgement
	0 – 3.5 Marks	3.6 – 5.9 Marks	6 – 7.1 Marks	7.2 – 8.3 Marks	8.4 – 9.5 Marks	9.6 – 12 Marks
Part B: Method of Survey	0 points	1.5 points	2.5 points	3 points	3.5 points	5 points
Implementation (Marks: 5) Describe how Survey is to be	Provides no direction as to how the survey might be implemented	Provides little direction as to how the survey might be implemented	Provides acceptable direction as to how the survey might be implemented in	Provides a good direction as to how the survey might be implemented	Provides a detailed and insightful direction as to how the survey might be implemented	Provides outstanding detail and insightful direction as to how the survey might
conducted and how to select the target audience			asatisfactory manner			be implemented
	0 – 1.4 Marks	1.5 – 2.4 Marks	2.5 – 2.9 Marks	3 – 3.4 Marks	3.5 – 3.9 Marks	4 – 5 Marks
Overall Assignment	0 points	0.9 points	1.5 point	1.8 point	2.1 points	3 points
Presentation (Marks: 3)	No attempt has been made to follow assignment particulars.	Little attempt has been made to follow assignment particulars.	Most of the assignment particulars have been followed.	Majority of the assignment particulars have been followed.	All of the assignment particulars have been followed.	All of the assignment particulars have been dealt with meticulously.
	Always uses citations and references incorrectly, inadequately or inconsistently.	Often uses citations and references incorrectly, inadequately or inconsistently.	Generally, the use of citations and references has been made correctly.	Mostly uses citations and references correctly and as required.	Frequently uses citations and is skilled in using referencing correctly.	Expertly uses citations and is skilled in using referencing correctly.
	Poorly presented	Unsatisfactorily presented	Satisfactorily presented	Good presentation	Very good presentation	Faultless assignment presentation
	0 – 0.8 Marks	0.9 – 1.4 Marks	1.5 – 1.5 Marks	1.8– 1.8 Marks	2.1 – 2.3 Marks	2.4 – 3 Marks