

Module: Plan Your Data Collection: Summary

Contents:		
1	What this module covers	<p>This module deals with the last two steps of the research process</p> <ul style="list-style-type: none"> • Define the project topic and the problem statement • Identify the research objectives • Choose a research method • Collect the data • Analyse and interpret the data
2	Step 4: Collect the data	<p>Primary data can be collected through:</p> <ul style="list-style-type: none"> • Focus groups • Observations • Surveys
2A	Focus Groups	<p>Focus groups:</p> <ul style="list-style-type: none"> • A discussion of 8 to 10 respondents • A moderator asks questions to get the respondents to give their opinions, views and comments on the issue • Open-ended questions are used to generate discussion • Another person helps to take notes and to observe the respondents' body language and facial expressions • Useful for qualitative research • Good for what, how, and why questions <p>Disadvantages of focus groups:</p> <ul style="list-style-type: none"> • More difficult to control the discussion compared to interviews • Analysis of data may be more difficult due to open-ended responses • Respondents may feel pressured to agree with the opinions of the majority
2B	Observations	<p>Observations</p> <ul style="list-style-type: none"> • Gather data by observing how people behave • Good for 'how', 'what', and 'how many' types of questions
2C	Surveys	<ul style="list-style-type: none"> • According to the Merriam-Webster's online dictionary, a survey is defined as "to query (someone) in order to collect data for the analysis of some aspect of a group or area" <p>Source: http://www.m-w.com/dictionary/survey</p>

		<p>Survey Methods</p> <p>1.Face-to-face Interviews:</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Can clarify questions and comments • Can observe the non-verbal responses • More in-depth survey <p>Disadvantage: Time consuming, costly and smaller sample size.</p>
		<p>2.Telephone Interviews:</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Can interview more people compared to face-to-face interviews • Removes the awkwardness of face-to-face interaction • Can clarify questions and comments <p>Disadvantage: Time consuming compared to email, mail and web surveys</p>
		<p>3.Mail or E-mail Surveys</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Can survey a larger population • Allows respondents to answer at their own leisure <p>With email surveys, added advantages are:</p> <ul style="list-style-type: none"> • Inexpensive • Faster response rate as compared to mail survey <p>Disadvantages:</p> <ul style="list-style-type: none"> • Response rate is often low • Long waiting time to receive completed surveys
		<p>4.Web Surveys</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Can survey larger population • Easy to process data as it can be downloaded to an Excel spreadsheet or data software for analysis • Can randomise questions and include pop-up instructions • Can enhance visual appeal <p>Disadvantages:</p> <ul style="list-style-type: none"> • No control over who participates in the survey • No control over how many times people take the survey • People who are technologically less savvy may not be able to participate • Technical problems relating to IT • Sample size may not be representative of the population

		<p>5.Tips on Data Collection</p> <ul style="list-style-type: none"> Where applicable, collect: <ul style="list-style-type: none"> Both qualitative and quantitative data Both primary data and secondary data Determine which data collection methods are most suitable You may use a combination of methods Share your findings with the respondents If you quote them, ask for permission and acknowledge them in your report If you are using surveys, you should also consider the following: <ul style="list-style-type: none"> How much time do you have to collect your data? How big should your sample size be? What type of questions should I ask?
3	Step 5: Analyse and Interpret the data	<p>Step 5 of the research process consists of these 3 sub-steps:</p> <ul style="list-style-type: none"> Consolidate the data <ul style="list-style-type: none"> Check the data for errors and accuracy Enter the data into a computer Organise the data <ul style="list-style-type: none"> Tables Charts (e.g. pie charts, bar charts) Graphs Discuss and report <ul style="list-style-type: none"> Interpret the results and findings and relate it to the research problem Make recommendations and conclusions
		<ul style="list-style-type: none"> Pie charts are very useful for showing the data as a percentage of the total sample size Bar charts are useful for showing the difference between the two data Line graphs are useful for showing continuous data.
		<p>Pitfalls of Data analysis</p> <p>Problems with interpreting the data:</p> <ul style="list-style-type: none"> The questions asked may not be relevant Too much information collected Unable to interpret and link the data to the problem <p>Ethical Issues:</p> <ul style="list-style-type: none"> Do not fake results to look good or impressive Do not plagiarise