

Activity 5.4 – Discussion: Sampling

Five scenarios related to sampling are given below. You will be assigned one of these scenarios based on the first letter of your last name.

First Letter of Last Name	A-E	F-J	K-O	P-T	U-Z
Scenario	1	2	3	4	5

For your assigned scenario, indicate what would be the relevant population and the most appropriate sampling design. Be sure to give the reasons for your answers.

	<p>Scenario 1: A medical inspector wants to estimate the overall average monthly occupancy rates of the cancer wards in 80 different hospitals that are evenly located in the northwestern, southeastern, central, and southern suburbs on New York City. State the relevant population and the most appropriate sampling design. Be sure to discuss the reasons for your answers.</p>
	<p>Scenario 2: A magazine article suggested that, “Customers aged 35 to 44 will soon be the nation’s biggest spenders, so advertisers must learn how to appeal to this over-the-thrill crowd.” Suppose you are an apparel manufacturer and this suggestion appeals to you. State the relevant population and the most appropriate sampling design. Be sure to discuss the reasons for your answers.</p>



Scenario 3: The McArthur Company produces special vacuum cleaners for conveniently cleaning the inside of cars. About a thousand of these, with stamped serial numbers, are produced every month and stored serially in a stockroom. Once a month an inspector does a quality control check on 50 of these. When he certifies them as to quality, all 1000 units are released from the stockroom for sale. The production and sales managers, however, are not satisfied with the quality control check since, quite often, many of the units sold are returned by customers because of various types of defects. State the relevant population and the most appropriate sampling design for selecting the 50 units. Be sure to discuss the reasons for your answers.



Scenario 4: A consultant had administered a questionnaire to some 285 employees using a simple random sampling procedure. As she looked at the responses, she suspected that two questions might not have been clear to the respondents. She would like to know if her suspicion is well-founded. State the relevant population and the most appropriate sampling design. Be sure to discuss the reasons for your answers.



Scenario 5: The executive board of a relatively small university located in Europe wants to determine the attitude of their students toward various aspects of the university. The university, founded in 1928, is a fully accredited government-financed university with 11,000 students. The university specializes in the social sciences and humanities and has five facilities, six service departments, eight research centers, and two graduate schools. The executive board has asked you to come up with a sampling plan. State the relevant population and the most appropriate sampling design. Be sure to discuss the reasons for your answers.

Reference:

Sekaran, U., & Bougie, R. (2013). *Research methods for business: A skill building approach* (6th ed.) (pages 272-273 of chapter 13: Sampling). Chichester, United Kingdom: Wiley. ISBN: 978-1-119-94225-2.