Business Research Process

BUS 230: Business Research and Communication

Goals and Learning Objectives

- Goals of this chapter:
  - Learn what research is.
  - Learn why businesses want to do research to inform decisions.
  - Learn about types of research.
  - Learn the steps of the research process.
- Learning objective: LO1: Develop the ability to define a research problem. Formulate research questions and hypotheses that are measurable, well-defined, address the overall problem, are directly related, and reflect the scope of the problem.

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- **Business problem:** a situation in which negative consequences are possible.
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Why Research?

Ambiguous situations:

- Existence of an opportunity or problem may not be obvious.
- Precise nature of the problem or opportunity is not known.
- Alternatives for resolving a problem, or taking advantage of the opportunity are not fully clear.
- Set of symptoms to a problem are unclear or not all known.

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Example

McDonald's coffee sales are down. Is this a,

1. problem,
2. opportunity,
3. symptom,
4. or alternative?

Defining the Research Objectives

- Research objectives: what are the goals of your research project?
- *Problem / research question:* a single statement/question describing the objective of the research project.
  - Term "problem" is used more generally, what don't we know, what question are we going to answer?
  - Not about confirmation or justification.
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Methods for Finding Problem

- Exploratory research.
- Literature review. Often previous (published) research will motivate new questions.
- Pilot study (practice run): small-scale research project that collects data from individuals similar to those which will be used in a full study.
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   - This is only the first step in a business decision process.
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  - How will an improvement in quality of a product change customer demand?
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Text-Questions: Types of Research

- What is the relationship between alcohol consumption and students' academic performance?
- What is the ethnic, racial, and age profiles for viewers of *The Daily Show* on Commedy Central?
- Is there a difference between the amount of cheating between freshman students and senior students?
- What are the UW-L College of Business enrollment forecasts for the next year?
- A restaurant distributes a customer satisfaction survey.

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Evidence for Causation

- Temporal sequence: cause happens first, then effect.
- Concomitant variation: simply means two variables are related.
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- Non-spurious relationship: concomitant variation is evidence that one variable causes another. This one is extremely tough to establish.

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Variable Co-movement

- Spurious relationship: data on two variables are correlated but variables are not directly related to one another.
- Example: ice cream consumption and murder rate are positive related to one another.
- Example: class size and academic performance is related to another. Do you think they are positively related or negatively related?
- Example: alcohol consumption and academic performance??
- Example: being overweight and psychologically depressed??

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Degrees of Causality

- **Absolute causality:** cause is necessary and sufficient to bring about the effect.
- **Conditional causality:** cause is necessary, but not sufficient, to bring about an effect.
  - Close example: smoking *and* lung cancer.
  - Possible business (close) example: develop a new product *and* increasing market share??
- **Contributory causality:** cause does contribute to effect, but the cause is not necessary or sufficient to bring about the effect.
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  1. Defining the research objectives.
  2. Planning a research design.
     - Planning a sample.
     - Collecting the data.
  3. Analyzing the data.
  4. Formulating conclusions.
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- Purpose of collecting a sample:
  - Make inferences about the population, based on results from the sample.
  - Objective is *not* just to describe the sample.
- First ask: who is population?
  - Might be obvious: A population may be UW-L students.
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