

# Basics of Academic Research in Business

Week 2

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## Learning Outcomes

- Understand business academic research
- Discuss theory, hypothesis, concept, construct, variable, dimension, indicator
- Understand business academic research writing requirements
- Use APA writing and referencing style
- Develop a simple research model

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## What is Business Research?

- "The application of the **scientific method** in searching for the **truth [or explanation]** about **business phenomena**"
- "A process [that] includes:
  - **Theory development**
  - **Problem definition**
  - **Searching and collecting** information
  - **Analyzing data**
  - Communicating the **findings** and their implications"

Source: Zikmund et al. (2010, p. 5)

<https://drmrizan.files.wordpress.com/2013/01/business-research-method-zikmund-el-al-8th-ed-copy.pdf><sub>3</sub>

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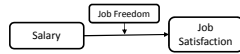
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## What is a theory?

- ❑ **Example:** A survey has shown that 60% of workers earning low salaries with high job freedom are very satisfied with their job.

➔ A theory could be that Salary has an impact on Job Satisfaction. But the extent of that impact depends on the level of Job Freedom



- ❑ **Theory** – A set of **assumptions, propositions**, or accepted facts that attempts to **provide a ... rational explanation** of cause-and-effect **relationships among observed phenomena**.  
Source: <http://www.businessdictionary.com/definition/theory.html>
- ❑ Theories are formulated to challenge and extend existing knowledge

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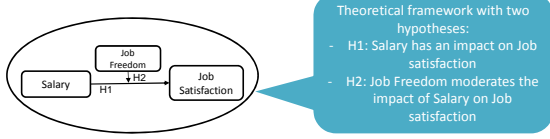
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## Theory & Hypothesis?

- ❑ **A hypothesis** – A prediction about the relationship between two variables  
**Example:** The higher the salary, the more satisfied is the worker
- ❑ Hypotheses are more specific than theories
- ❑ Typically, a theory has many different hypotheses
- ❑ If the hypotheses offered by the theory are confirmed, the theory is supported




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## Concept, construct, variable

- ❑ **Concept** – Something we conceive in our mind (Merriam-Webster, 2014) to help identify/understand/explain tangible and intangible things we can see, feel, or imagine.  
**Examples:** beauty, pain, justice
- ❑ **Constructs** – Very similar to concepts, constructs are people's theoretical "constructions" that are based on observations but which cannot be seen either directly.  
**Example:** IQ, usefulness, satisfaction
- ❑ **Variable** (also called factor)
  - ❑ Statistical term used to refer to and "measure" constructs used in research
  - ❑ Variables have "values" or levels that can change. Examples: IQ can be high or low. Gender can be male, female, etc.
- ❑ There are different types of variables

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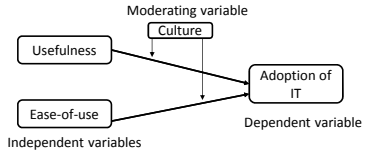
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## Types of variable

- Dependent variable** – The variable you are trying to explain or predict. The variable that depends on the other variables.
- Independent variables** - AKA predictors or explanatory variables, are the factors that you think explain the variation in the dependent variable.
- Moderating variable** – or moderator is a variable that moderates the relationship between two other variables.



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## Dimension, indicator

- Constructs are vague and abstract. They can't be measured directly**
- Dimensions and indicators are used to measure constructs**
- Dimensions and indicators**
  - Represent different facets or aspects of a construct
  - Here are some indicators/dimensions of IT ease-of-use and IT usefulness:

Indicators of IT usefulness	Indicators of IT ease-of-use
Ability to help in decision making	User friendliness
Quality of information generated by the IT	Amount of training required to learn it

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## APA citation style for academic research

- Established by the **American Psychological Association**
- Rules and conventions for documenting sources used in a research paper.
- Used for in-text citations and Reference list
- Sources:
  - Perdue University: <https://owl.english.purdue.edu/owl/resource/560/01/>
  - Publication Manual of the APA: <http://www.apastyle.org/manual/>
  - Internet source citation: <http://blog.apastyle.org/apastyle/2010/11/how-to-cite-something-you-found-on-a-website-in-apa-style.html>

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## In-text APA source citation

- Single author: author's last name and year at appropriate point
  - Example 1: According to the technology acceptance model (Davis, 1989)
  - Example 2: Davis (1989) argues that perception is the key factor ...
- Multiple authors: authors' last names and year
  - Example 3: As suggested by Simon and Welsh (1999), gathering ...
  - Example 4: Gathering intelligence is the first phase of decision making (Simon & Welsh, 1999)

Information quality (IQ), as a concept, has been investigated extensively in prior information science research, where much of the discussion has been devoted to the underlying dimensions (or attributes) of IQ, such as accuracy, completeness, presentation, and objectivity (Hilligoss & Rich, 2008; Lee, Strong, Kahn, & Wang, 2002; Liu, 2004; Rich & Danielson, 2007; Wang & Strong, 1996). Largely, these investigations have focused on the salience of the various dimensions, studying whether one quality dimension better represents users' perceptions of IQ than does another dimension. These studies have shown that information consumers may perceive certain quality dimensions to be more important than are others, and for a variety of reasons, including domain expertise (Stanford, Tauber, Flegg, & Marable, 2002), gender (Flanagin & Metzger, 2003), or differences in information-seeking style (Rains & Karmali, 2009).

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## APA-style Reference list

- Order:** Entries should be arranged in alphabetical order by authors' last names.
- Authors:** Write out the last name and initials for middle and first names. Use an ampersand (&) instead of the word "and" when listing multiple authors of a single work. e.g. Smith, J. D., & Jones, M.
- Titles:** Capitalize only the first letter of the first word of a title or subtitle, and any proper names that are part of a title.
- Pagination:** Use the abbreviation *p.* or *pp.* to designate page numbers of articles from *periodicals that do not use volume numbers*, especially newspapers. These abbreviations are also used to designate pages in *encyclopedia articles and chapters* from edited books. Use beginning and ending page separated by dash (-) for periodicals that use volume numbers (e.g. *Management Science*, 27, 459-478)
- Example:**

Davis, F., Bagozzi, R., & Warshaw, P. (1989). User acceptance of technology: a comparison of two theoretical models. *Management Science*, 35 (8), 982-1002.  
Ginzberg, M. J. (1981). Early diagnosis of MIS implementation failure: promising results and unanswered Questions. *Management Science*, 27, 459-478.

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## APA style Reference list

### References

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## Questions

- Based on what we covered during this class session, you should be able to take the following quiz:

### Quiz 2 (Based on Week 2 Research Lecture)

- The quiz is available in D2L
- Also this week, there are two writing assignments to be complete and uploaded to dropboxes. They will be given in class

13

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