

# **Research Methodology**

## Lesson 1 – Introduction of Research

by Yudi Fernando., Ph.D. Faculty of Industrial Management yudi@ump.edu.my

### Objectives of this course

- To define the research.
- To understand how to develop problem statement.
- To identify the good research topic.
- To understand the content of proposal.

# **Course Synopsis**

This course will explain the brief concept of research and its application to solve the company/ industry problems. Besides that this course is also discussed the importance of theory or in absence of theory to explain the phenomena. The content of proposal and attributes of good research topics will help the students to understand better to prepare a scientific proposal.

#### **Expected Outcomes**

- 1. In the end of lesson 1 the students are able to understand the nature of research and its application.
- 2. Students are expected to identify the research topic in advise of potential supervisor.

## **Research definition**



#### How do we start?



#### Do we need theory?

- What = Descriptive
- Why = Description and require analysis



# Typology of theories



# Preparing proposal

- Organize ideas
- Convince audience
- Ethical requirements

## Contents of research proposal

- Chapter 1 Introduction
- Chapter 2 Literature Review
- Chapter 3 Methods

References

Appendix:

Cover letter

List of questionnaires/ list of interview questions

## Chapter 1 – Introduction

- Background of study motivations
- Problem statement gaps/issues
- Research questions What, how, why?
- Research objectives to examine? To explore?
- Expected outcomes
- Theoretical contribution to knowledge
- Practical company/ industry improvement
- Social society/ environment
- Definition of key terms main variables
- Structure of proposal ch 1; ch 2; ch 3; ch 4; & ch 5

### Chapter 2 – Literature Review

- Industry overview current and trend
- Underpinning theory to explain the relationship
- Independent variables (X) predictors
- Dependent variables (Y) outcomes
- Moderating variables (Z) third variable
- Intervening variables (IVV)
- Control variables (if any)
- Proposed theoretical framework
- Hypothesis
- Summary of chapter

# Chapter 3 - Methods

- Nature of study/ research design
- Population
- Sample
- Sampling technique
- Unit analysis
- Statistical analysis
- Summary of chapter

#### 3 Elements of Good Topic



# Proposal

- Appropriateness of methods.
- Strength of the argument.
- Fresh, clarity and organisation.
- Convincing use of evidence.
- The writing is clear and concise.
- The conclusions are accurate and supported by the content.

# Summary

- The topic selection is critical for success of research.
- Theory is needed if you plan to conduct theory driven research.
- If the little information available then you can use "how" and "why" to start your research.