

## Writing The Literature Review

### Chapter 2



**THE MORE YOU KNOW ABOUT  
YOUR TOPIC,  
THE MORE EFFECTIVELY YOU  
CAN TACKLE THE PROBLEM**

**It all starts with Literature  
Review**

### *Literature Review (LR)*

- LR is the building block (or the basis) you use to build your research or develop your system on.

#### **For you:**

- LR provides insight and ideas
- Guides you on how to handle and progress in your project

#### **For your readers:**

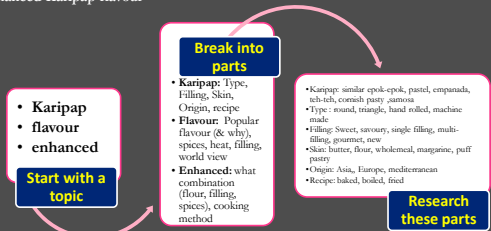
- LR provides the connection between previous work done and where you fit in
- Guide them to understand your thinking and the choices you made

### *Outcome of LR*

- **Evidence of familiarity** with the broad area of the selected topic
- **Classification** of areas of study
- Identify trend, direction, and research issues
- Evidence of **not repeating** what others have done
- To **guide in formulating** the statement of problem
- To **guide in selection** of tools, techniques, methodology

## How to start LR?

Example:  
Enhanced Karipap flavour



- Karipap
- flavour
- enhanced

Start with a topic

Break into parts

- Karipap: Type, Filling, Size, Origin, recipe
- Flavour: Popular flavour (& why), spices, heat, filling, world view
- Enhanced: what combination (flour, filling, spices), cooking method

Research these parts

- Karipap: similar epok-epok, pastel, empanada, nih-neh, cornish pastry jamona
- Type: round, triangle, hand rolled, machine made
- Filling: sweet, savoury, single filling, multi-filling, gourmet, new
- Skin: butter, flour, wholemeal, margarine, puff pastry
- Origin: Asia, Europe, mediterranean
- Recipe: baked, boiled, fried

## How to start LR?

Project: Class attendance system using RFID (CASUR)

Start with a topic

Class attendance in FC  
Class attendance everywhere else (take at least 3 example)

Break into parts

RFID  
RFID Implanting  
Technology to : Store data  
Technology to : Search data

Research these parts

Class attendance (in FC, everywhere else): how its done, what do they use, who use, make comparison  
RFID: what type, active/passive, how to read, how to make tag info,  
Store data: how to get and store data from RFID, how and where to store data (dbase, tables,etc)  
Search data: what algo to use, how to present result

## Where to find these info for LR?

### System Development

- The organization current practice
- Other similar systems currently used → web, site visit
- Technology → journal & conference papers, white papers, articles, product catalog, books, theses
- User requirement and preference → survey, interview, observation

### Research

- Domain → web, site visit
- Technology, algorithm → journal & conference papers, white papers, articles, books, thesis
- Research requirement → survey, interview, observation

\*\* Have a selection of different resources.

\*\* You can do your own little experiment to prove a point.

System Development Based Project	Research Based Project
Chapter 2: Literature Review	Chapter 2: Literature Review
2.1 Introduction	2.1 Introduction to case study <b>A little change : find within</b>
2.2 Inter-organisation Case Study (if any)	2.2 Problem formulation
2.3 Current system analysis (e.g.: product/prototype/software/tools)	<ul style="list-style-type: none"> <li>• Study of domain from general to specific</li> <li>• Related studies</li> <li>• A description of the identified problem</li> <li>• Study of theory/algorithm/method that can contribute towards solving the problem.</li> <li>• Justification of chosen theory/algorithm/method</li> <li>• Every sub-topic within the domain must have a review</li> </ul>
2.4 Compare between existing systems	2.3 Suggestions to solve identified problems
2.5 Literature review on technology used	2.4 Chapter summary
2.6 Chapter summary	

This is the guideline for the chapter.  
Read the description carefully to understand.

This chapter gives the reader a peek into your thinking process → must be explored deeply and written well.

Show your understanding of what you are doing.

## Deconstructing CH2 : Sys\_Dev

**2.1 Introduction** → intro to the chapter, what could be expected in it

**2.2 Inter-organization Case Study (if any)** → To identify user requirements, to understand flow and even source of problem(s)

### 2.3 Current system analysis

→ Review currently available systems or prototype  
→ Find the characteristics of the system (+ve and -ve)

### 2.4 Compare between existing systems

→ Ensure strength and weakness between systems

### 2.5 Literature review on technology used

→ Database, Servers, Android, etc.

## LR Overview: System Development

Project: Class attendance system using RFID (CASUR)

- **2.1 Introduction** - welcome to the chapter
- **2.2 FC, UTM**
  - 2.2.1 FC the organization, class structure, etc
  - 2.2.2 FC current class attendance system
- **2.3 Currently similar and existing class attendance**
  - 2.3.1 U. of Sheffield, UK Attendance system
  - 2.3.2 Kent Coders Inc., US Employee sign-in system
  - 2.3.3 S.M.K Jinjang Students and Staff attendance system using RFID
  - 2.3.4 comparison between existing systems (must have table & don't forget to put your proposed system in it too)
- **2.4 RFID**
  - 2.4.1 RFID types
    - 2.4.1.1 RFID tags, readers and writers,
    - 2.4.1.2 Embedded
  - 2.4.2 RFID process
- **2.5 Technology used (why use, how it works)**
  - 2.5.1 Database: MySql – why use this?
  - 2.5.2 web server
- **2.6 Chapter summary** – in this chapter we discussed.....

## Deconstructing CH2 : Research

**2.1 Introduction** → intro to the chapter, what could be expected in it

**2.2 Introduction to case study or domain** → intro to the case study or domain and the issues

### 2.3 Current method/algo analysis

→ Review currently used and available methods or algorithms (that can contribute towards solving the problem)  
→ Find the characteristics : the workings, +ve and -ve

### 2.4 Comparison between methods or algorithms

→ Compare between these with what you are proposing  
→ How does yours stand out? Why is yours the better solution to the problem?

**2.5 Suggestions to solve identified problems** → Your suggestions

**2.5 Review on technology used (if any)** → Usually used in experiment development

## LR Overview: Research

Project: Effectiveness of RFID in checkout systems

- **2.1 Introduction** - welcome to the chapter
- **2.2 Current Checkout systems and problems**
- **2.3 RFID**
  - 2.3.1 RFID system component and cost
    - 2.3.1.1 Tags, readers, middleware, Server
  - 2.3.2 Active Tag
  - 2.3.3 Passive tag
  - 2.3.4 factors affecting RFID performance
- **2.4 Differences between RFID and barcode in retail**
- **2.5 Current RFID Systems** (although this could be your algos)
  - 2.5.1 Metro Group Company
  - 2.5.2 Exxon Mobil "SpeedPass"
  - 2.5.3 MasterCard "PayPass"
- **2.6 Shopping checkout system using RFID**
- **2.7 Chapter summary** – in this chapter we discussed.....

## Some notes on LR

- Research projects are fluid → not all are the same → so tweak where necessary
  - With SV guidance
- Start broad and end specific
- Read, understand then write in your own words → **say NO to Plagiarism**
  - Reminder: direct translation is plagiarism
  - Cite diligently

## Homework

- Start your LR.
- Meet your SV and discuss your approach to it → **have a 'mind map' of what should be in your LR**
- Submit the following (online): the TOC of Chapter 2
  - What is going into your PSM CH2

TOC -Table of Content

### Example: mind map CASUR



End of class today

**ALL PROGRESS  
TAKES PLACE  
OUTSIDE THE  
COMFORT ZONE**

Michael John Bobak

STAY  
POSITIVE,  
MOVE  
FORWARD

