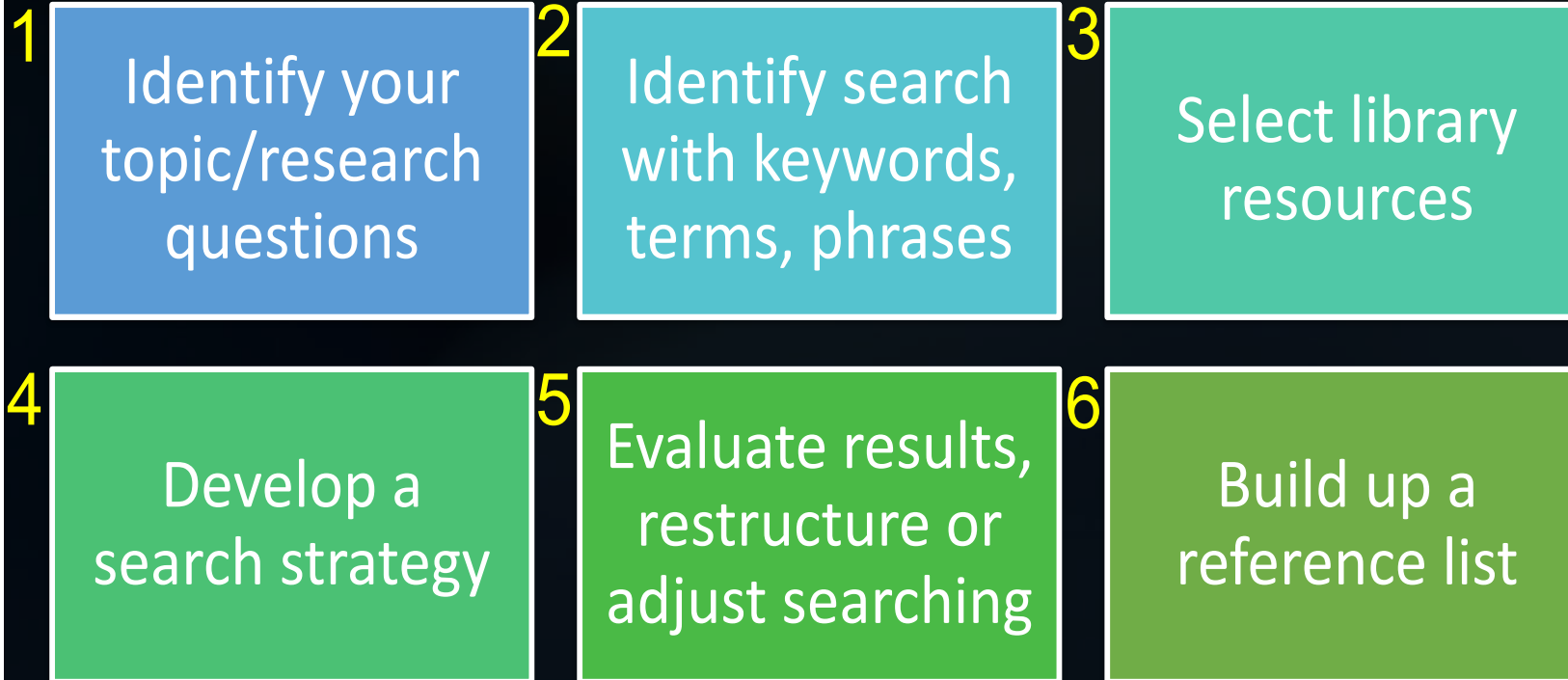# Searching/handling/analyzing data relevant for Islamic economics research

Assoc. Prof. Dr. Mohamed Asmy Bin Mohd Thas Thaker

KENMS, IIUM

THE RESEARCH PROCESS

1 Identify your topic/research questions

2 Identify search with keywords, terms, phrases

3 Select library resources

4 Develop a search strategy

5 Evaluate results, restructure or adjust searching

6 Build up a reference list

1. IDENTIFY YOUR TOPIC/RESEARCH QUESTIONS

- **Brainstorming** the ideas.
- Develop **mind mapping** to get ideas.
- Ask your lecturer(s).
- Conduct a **preliminary search** - Check encyclopedias, articles, news, Internet, textbooks, etc. for general information on your topic.
- State your topic as a question you want to answer (or a set of questions).
  - o What do you know about that topic?
  - o What do you want to know about that topic?
  - o Do I want to make it broad or narrow?
- Use your questions to identify keywords and concepts.

2. IDENTIFY SEARCH WITH KEYWORDS, TERMS AND PHRASES

- Identify the main keyword in your topic.
- List the alternative keyword(s) for each concept (synonyms)
    - Using Encyclopedias, Thesaurus, etc.

    Example: https://www.thesaurus.com/browse/synonym
- Does your area of research use subject specific terminology (technical vocabulary or technical terms)?
- Different author(s) use different keyword(s).

KEYWORDS, TERMS, & PHRASES

Topic: The awareness of education Takaful among youth in Malaysia

Concept 1	*Concept 2*	*Concept 3*	*Concept 4*
Awareness	**Education**	**Takaful**	**Youth**
▪ Consciousness ▪ Alertness	▪ Knowledge ▪ Understanding	▪ Insurance ▪ Islamic insurance	▪ Teens ▪ Puberty ▪ Minority ▪ Adolescent

KEYWORDS, TERMS, & PHRASES

Topic: Comparative analysis of sukuk and conventional bond

Concept 1	Concept 2	Concept 3
Comparative analysis	**Sukuk**	**Conventional bond**
▪ "Comparative studies" ▪ Comparative survey ▪ Comparative review	▪ "Islamic bonds" ▪ sharia compliant	▪ "fixed-income securities"

KEYWORDS, TERMS, & PHRASES

Topic: A strategy of the company performance in the international market

Concept 1	Concept 2	Concept 3
Strategy	**Company performance**	**International market**
▪ Plans ▪ Strategic planning ▪ Design ▪ Approach	▪ Business performance ▪ Business situation ▪ Commercial performance ▪ Business development	▪ Global market ▪ Global industries ▪ Foreign market ▪ International trade ▪ Export market

KEYWORDS, TERMS, & PHRASES

Topic: Awareness of the Islamic Banking products and services among non-muslim

Concept 1	Concept 2	Concept 3
Islamic Banking	**Product and Service**	**Non-muslim**
▪ Islamic Finance ▪ Shariah-compliant finance	▪ Brand ▪ Output	▪ nonbeliever ▪ infidel

What kind of materials would have the information that I need to answer my research questions and how to find them?

- Books?

- Scholarly Journals?

- Information from government or non-profit organizations?

- Newspapers?

- Internet?

ONLINE DATABASES & EBOOK

- **CORE** https://core.ac.uk/
- **ScienceOpen** https://www.scienceopen.com/
- **Directory of Open Access Journals (DOAJ)** https://doaj.org/
- **Education Resources Information Center (ERIC)** https://eric.ed.gov/
- **arXiv e-Print Archive** https://arxiv.org/
- **Google Scholar** https://scholar.google.com/
- **Dataset Search** https://datasetsearch.research.google.com/
- **Semantic Scholar** https://datasetsearch.research.google.com/

Open Access

Research materials have been made available to the general public, free of charge: data and datasets, books and articles, including scholarly research articles.

Authors have chosen to share freely, so anyone can use the works legally without permission or fees.

SEARCH STRATEGY TECHNIQUES

1. Searching with **keywords**
2. Searching for **exact phrases**
3. Using **Boolean Operator**
4. Using **wildcard** and **truncation searches**
5. Searching with **subject headings**

1. SEARCH WITH KEYWORDS

- Keywords are words or phrases used to find relevant content in a database

- Avoid searching using short or insignificant words such as the, in, to, or an that have no specific meaning.

- Ensure to enter the exact word and accurate spelling to get a relevant result.
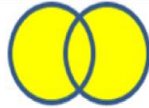
2. SEARCH FOR THE EXACT PHRASE

- A type of search that allow users to search for documents containing **exact sentence / phrase**, rather than single keyword .

- If you want search term to appear next to each other in an exact phrase, use quotation marks, e.g., **"budget deficit", "international marketing", "Islamic banking", "Information technology".**
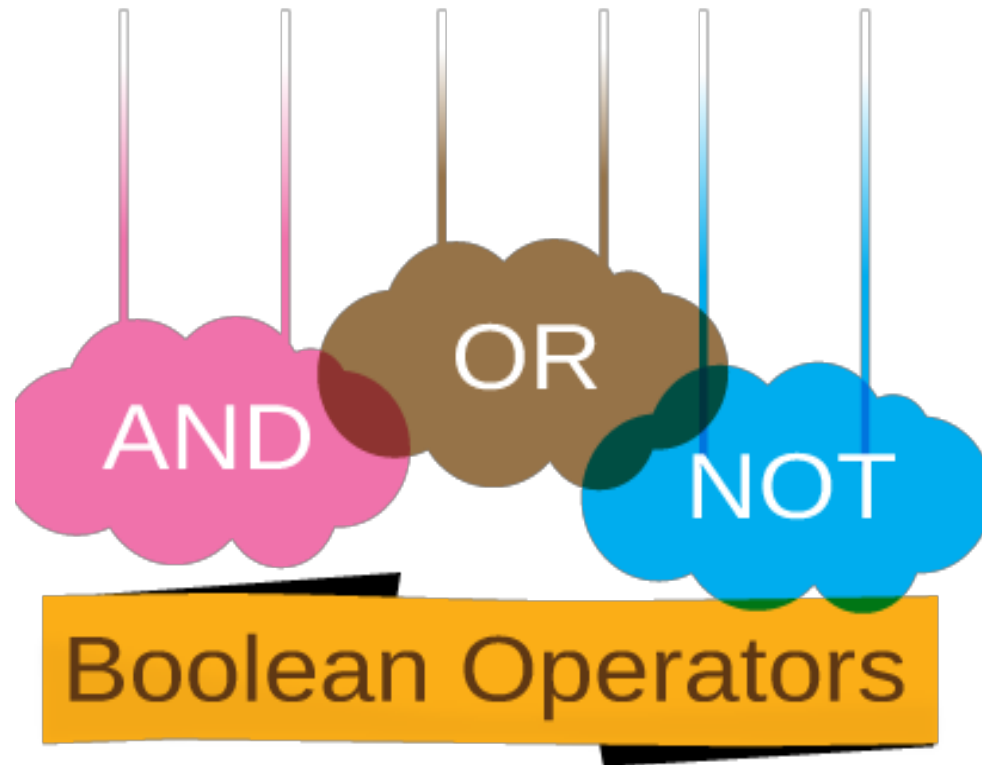
3.USING BOOLEAN OPERATOR

Boolean Operators are simple words **(AND, OR, NOT)** used as conjunctions to **combine or exclude** keywords in a search, **narrowing or broadening** the search, resulting in more focused and productive results.

Boolean Operators (AND, OR, NOT)

Boolean	Function	Search example	Result
AND	• **Narrow** the search term • Tell the database that ALL search terms must be present in the resulting records.	"Halalan Toyyiban" **AND** "halal food" "Halal food" **AND** consumption "Halal food" **AND** consumption **AND** Malaysia	Results will include both terms
OR	• **Broaden** your results, telling the database that ANY of your search terms can be present in the resulting records.	Challenges **OR** obstacles "halal food" **OR** "Muslim food" Consumption **OR** marketing "Twentieth Century" **OR** 20th Century	Results will include one or both terms
NOT	• **Exclude** words from your search • **Narrow** your search, telling the database to ignore concepts that may be implied by your search terms	University **NOT** college "higher education" **NOT** Polytechnique "social media" **NOT** Facebook	Excludes results with the term following NOT

4. USING TRUNCATION AND WILDCARD SEARCHES

- You can use truncation and wildcard searches to find variations of your search term. Truncation is useful for finding singular and plural forms of words and variant endings.

- Truncation or wildcard symbols can broaden your search and allow you to look for variations of words.

Truncation

- Use truncation to avoid having to think of (and type out) all possible variations of a word.
- To use truncation, enter the root of a word (the point at which the spelling could change) and put the truncation symbol at the end.
- The database will return results that include any ending of that root word.
- For example, searching on market* would bring up variations such as market, marketing, markets, etc.

Wildcards

- Wildcards Similar to truncation, wildcards substitute a symbol for one letter of a word.

- This is useful if a word is spelled in different ways, but still has the same meaning.

- Wildcards are useful for finding British and American spellings, for example:

"behavio?r" = behaviour and behavior

WILDCARD & TRUNCATION

Concept	Search Examples	Result
Wildcard **(?) (#)** Use (?) (#) to replace a letter/letters inside the words	Analy?e Analy#e Organi?ation Wom?n Wom#n	Analyse / Analyze Organisation / Organization Woman / Women
Truncation **(*)** Use * to truncate a word	Market* Product*	Marketing Marketable Product Production Productivity

Other alternatives to get materials (i.e. articles/sample of questionnaires)

- email the authors

- engage with respective agencies to obtain data

- inter library help for un-subscribed journals

- https://www.wur.nl/en/article/How-to-use-Google-Scholar.htm