



MASTER MEIM 2022-2023

# Research design in project management Master 2022-2023

Prof. Roberto Cerchione

Department of Engineering, University of Naples Parthenope

Rector's Delegate for Start Cup Campania 2023

Chair of IEEE Blockchain Italy

# WHAT IS RESEARCH DESIGN?

#### **Short presentation of participants**

- Name
- Master degree
- Thesis topic
- Professional goals for your future
- Have you conducted research before MEIM?
- Have you written research projects?



# RESEARCH DESIGN



# WHAT IS RESEARCH DESIGN?

It is a *blueprint* for the material and data collection, the measurement and analysis of expected results



# DESCRIPTIVE RESEARCH DESIGN MAKES USE OF SIX W'S OF RESEARCH

- Who is a part of study?
- What information to be collected?
- When is the information to be collected?
- Where should the respondents be contacted?
- Why are we obtaining the information?
- Which way of obtaining information?



# NEED FOR RESEARCH DESIGN

- It facilitates smooth flow of various research processes
- A good research design means that good research results can be obtained with minimum utilization of time, money and effort
- A research without a research design is like being lost on journey without a guiding light
- It channelizes the energy into right direction
- It helps a researcher in deciding the relevant and irrelevant facts



#### A GOOD RESEARCH DESIGN SERVES

To confine the boundaries of research activity



# FEATURES OF A GOOD RESEARCH DESIGN

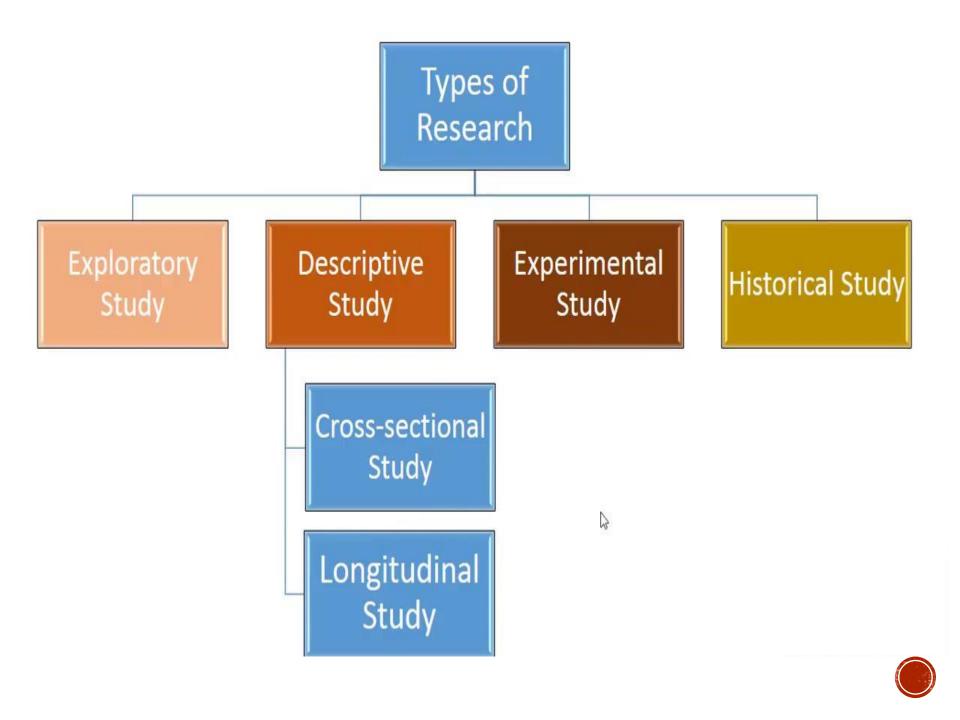
A research design appropriate for a particular research problem, usually involves the following features.

- Objectivity: no proclivity, free from biasness
- Reliability: should deliver consistent results each time
- Validity: design would deliver accurate and correct results.
- Generalizations

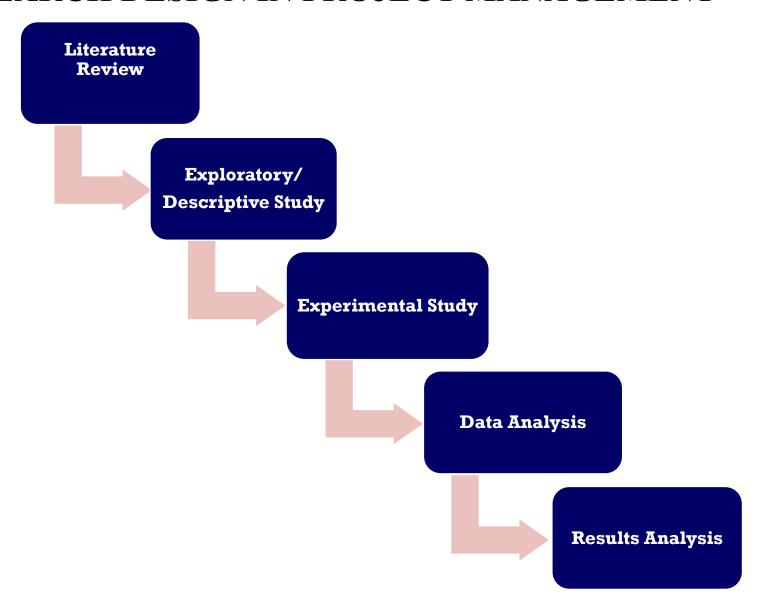


- The important things that need to be observed while preparing these designs are:
- Definition of problem
- Methods of data collection
- Preparation of instruments
- Sampling designs
- Data collection and analysis techniques



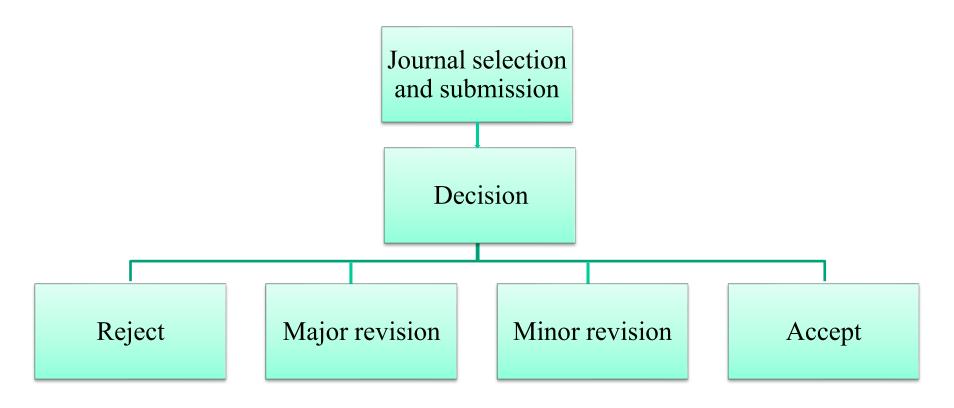


#### RESEARCH DESIGN IN PROJECT MANAGEMENT

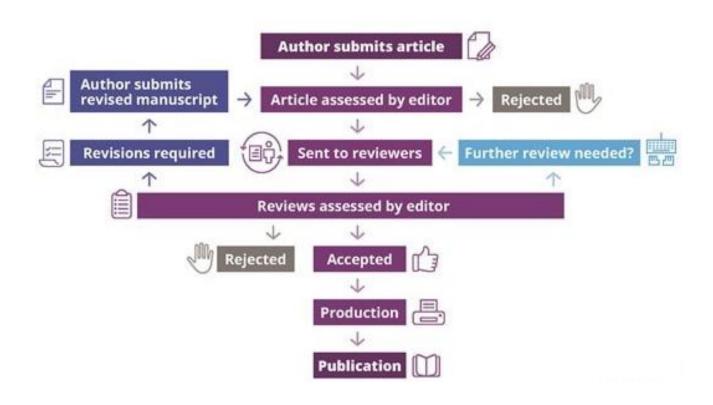




### Research paper journey (Author perspective)



#### Research paper journey (Journal perspective)



- Title
- Abstract
- Keywords
- Introduction
- Theoretical background
- Methodology
- Results
- Discussion
- Conclusions and implications

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- Convey the main topics of the study
- Highlight the importance of the research
- Be concise
- Avoid unnecessary words
- Attract readers
- Be creative

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- A summary of the content
- A time-saving shortcut for busy researchers
- A guide to the most important parts

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- What was done?
- Why did you do it?
- What did you find?
- Why are these findings useful and important?

- Title
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- Represent the content of your manuscript
- Be specific to your field or sub-field

- Title
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- Well balanced
- Current
- Relevant

- Title
- Abstract
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- Contextual scientific overview
- Theoretical justification
- Methodological justification

• Title

• Abstract

Keywords

Introduction

Theoretical background

Methodology

• Results

Discussion

• Conclusions and implications

Materials and methods

Describe what you did in the past tense

Describe the methods in a replicable way

Describe established methods briefly

• Cite a reference for methodological justification

• State all statistical tests and parameters

- Title
- Abstract
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- Discuss your results in order of importance
- Compare your results with previous studies:
- Mention any inconclusive results

- Title
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- Conclusions and implications

- Discuss what your results may mean
- State how extend results of previous studies
- Discuss theoretical and practical implications
- Suggest future research directions
- Briefly describe the limitations of your study
- At the end state your main concluding remarks

- Figures
- Tables
- Acknowledgments
- References
- Formatting

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- Images Include scale bars, consider labeling important items, indicate the meaning of
- different colours and symbols used, avoid images
- manipulation

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 Data plots - Label all axes, specify units for quantities, label all curves and data sets, use a legible font size

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 Maps - Include latitude and longitude, include scale bars, label important items, consider adding a map legend

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• Schematics - Label key items, provide

complementary explanations in the caption and

main text

- Figures
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- Clear and concise legend/caption
- Data divided into categories for clarity
- Sufficient spacing between columns and rows
- Units are provided
- Font type and size are legible

- Figures
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- Thank the people who helped with the research
- Provided intellectual assistance, technical help

- Figures
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- Establish the origin of ideas
- Provide a context for your work
- Show there is interest your field of research

- Figures
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- Formatting

- Read all word and character limits
- Include all required sections
- Meet language requirements
- Provide all requested contact information
- Insert figures in the correct location
- Use the correct file format for your images
- State any conflicts of interest
- Include details of any regulatory permissions

- Know the requirements
- Know your audience
- Know your resources

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- Know your resources

- Know how long the speech must be
- Know how many points to cover
- Know how many sources or visuals

- Know the requirements
- Know your audience
- Know your resources

- Know what to break down
- Know what to gloss over
- Know about audience background

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- Know what to break down
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- Create a script
- Limit the number of ideas
- Design visual aids
- Think in terms of conversation

- Create a script
- Limit the number of ideas
- Design visual aids
- Think in terms of conversation

- Use notes to jog your memory
- Have one point per notecard

- Create a script
- Limit the number of ideas
- Design visual aids
- Think in terms of conversation

- Find the most important points
- Make an outline of the highlights
- Remove any jargon

- Create a script
- Limit the number of ideas
- Design visual aids

- Use slides with graphics
- Think in terms of conversation
- Use charts
- Use bullet points

- Create a script
- Limit the number of ideas
- Design visual aids
- Think in terms of conversation
- Emphasize important ideas
- Cycle back to a previous point
- Minimize the unnecessary details
- Show enthusiasm

# Practice, practice and more practice

- Practice your presentation
- Ask for constructive criticism

- Tape record yourself
- Be warm

### Practice, practice and more practice

• Practice your presentation

• Tape record yourself

Listen yourself

• Be warm

Listen which parts are/are not good

### Practice, practice and more practice

- Practice your presentation
- Tape record yourself
- Be warm

- Welcome in your audience
- Establish a comfortable atmosphere

• Introduction

• Problem

Methodology

Objective

• Results

• Importance for the audience

• Conclusions

• Introduction

Methodology

• Results

• Conclusions

• Research design

Data and materials

• Methods of analysis

• Test methods

- Introduction
- Methodology
- Results
- Conclusions

- Selection of the most significant results
- Choice of the presentation method
- Absence of some information

• Introduction

Methodology

• Results

Conclusions

- Few concluding remarks (three or four)
- Implications
- Limitations
- Future research directions