

CSCM10/CSCM10J Research Methodology

Dissertation Tips

Dr Scott Yang

March 2022

Dissertation Outline



Introduction

- Topic area
- Research question
- Significance to knowledge

Literature review

- Previous research others & yours
- Interlocking findings and Unanswered questions
- Your preliminary work on the topic
- The remaining questions and inter-locking logic
- Reprise of your research question(s) in this context

Dissertation Outline cont.



Methodology

- Approach
- Data needs
- Analytic techniques
- Plan for interpreting results

Results (experimental or theoretical)

Discussion and Conclusions

Bibliography

Components



- Title
- Introduction
- Statement of the problem
- Rationale/justification/significance of the research
- Scope and limitations of the study
- Review of literature
- Objectives of the research
- Operational definitions of terms used
- Hypothesis

Components cont.



- Methodology used
- Time schedule/work plan
- Budget/estimated cost built up
- Organization of the report/chapter outline
- Experiments & Results evaluation
- Conclusions
- Bibliography/References
- Appendix

Title



- First page title of the research; researcher's name; name of institute; name of the sponsoring organization, name of the supervisor, co-supervisor; date; etc.
- In selecting the title, following points should be taken care of:
 - ☐Be self-explanatory
 - ☐Be brief
 - □Language be simple and unambiguous
 - ☐ Be specific to a particular domain
 - □Bracket; arithmetic figures, etc be avoided
 - □ Avoid confusing meaning
- Reflect the theme of the research

Problem statement



Introduction

- Theoretical background
- Background of the problem
- Etc.

Statement of the problem

- Definition
- Nature
- Extent

Rationale & Scope



Rationale/justification/significance of the research

- Importance
- Addressing the national context problem
- Bridging the knowledge gaps
- Useful to the society/community
- Present state of affairs
- Affected stakeholders

Scope and limitations of the study

- Boundaries of the research
- Aspects and issues addressed
- Shortcomings of the research resource and time constraints

Literature & Objectives



Review of literature

- Researches so conducted; vital information
- Issues discussed; unaddressed issues
- Relevancy to the present research
- Finding out information/knowledge gaps

Objectives of the research

- Contextual/consistent to the title
- Concise, clear-cut, expressed in simple language, precise, self-explanatory
- Distinctive, quantifiable, measurable
- Two types of objectives : general/broad/overall; specific

Terms & Hypothesis & Methodology



Operational definitions of terms used

Clear-cut meaning of the terms used

Hypothesis

- Proposition subject to verification
- May be null, accepted, rejected
- Guide/lead the research

Methodology used

- Selection of appropriate approach
- Tools/techniques to be used
- Data collection techniques
- Data processing, analysis, interpretation techniques
- Data/information presentation techniques

Conclusion & Reference



Conclusion

- State about the feasibility of the proposed research/study
- Upcoming challenges
- Upcoming treats, difficulties, hindrances
- Make a conclusive remark

Bibliography/References

- Related documents to be consulted/studies
- Follow technicalities in writing bibliography/references
- To be presented in alphabetic order
- To be presented in classified manner: manuscripts, books, journals, commission reports, newspapers, etc.

Contribution to knowledge



It is beneficial to provide an indication of

- the contribution that your research will make to the literature in your particular subject area
- or by indicating the potential practical or policy implications of your research
- This means providing an indication to suggest how it may fill gaps in existing research
- and showing how it may extend understanding of particular topics

Other components



Time schedule plan

Time line of the assigned tasks

Budget/estimated cost built up

 Cost built up – resource personnel, support staff, stationery, transport, utilities, house rents, miscellaneous, etc

Organization of the report/chapter outline

- Outline of the dissertation/report
- Four major parts of the report: introductory, findings and discussion, summary, and conclusion

DOs and DO NOTs



DO

- Produce/prepare a professional looking proposal
- Make it informative, meaningful
- Write easy way to read
- Use clear headings/sub-headings
- Be concise, precise
- Check spelling, grammar
- Present in accurate/acceptable format

DO NOTS

- Use no jargon which you do not understand
- Use of difficult terms unimpressive to the readers/supervisor/authority

Common pitfalls to avoid



- Forget to include table of contents
- Not connecting the proposed research to the literature review
- Not enough detail about methods
- Jargons
- Relying solely on your supervisor

Common pitfalls to avoid cont.



- The project is not focused
- The project is unlikely to be completed
- The practice is not research

Advices



- Know the evaluation criteria and CHECK that you meet these
- Start with an outline
- Once "finished" ask others to proofread
- Use diagrams to illustrate models
- Make sure your mentor approves it before you submit