

# Research Methodology

## Step 3:

Determine your Timeline and Scope

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Issued date: Aug / 2009

Last update: Jan / 2014



# Outlines:

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## Timeline and Scope

- Timetable
- Detail of Timeline
- Microsoft Project (MSP)
- Scope
- Applied or Basic
- Case or Sample



# Timeline

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# Overlook of timeline

## During Course Work

|  | Semester 1 | Semester 2 | Semester 3 | Semester 4 |
|--|------------|------------|------------|------------|
| Become acquainted with <b>library</b> and <b>librarian</b>                     | X          |            |            |            |
| Become acquainted with <b>issues</b> and <b>literature</b> in the <b>field</b> | X          | X          | X          | X          |
| Search for <b>dissertation topic</b>   |            | X          | X          | X          |
| Search for <b>dissertation director</b>  |            |            | X          | X          |
| Choose a <b>topic</b>  |            |            | X          | X          |
| Choose a <b>director</b>   |            |            |            | X          |
| Choose other <b>committee members</b>  |            |            |            | X          |

# Overlook timeline (Cont...)

Proposal Development (semester 5, by week)

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| Develop a topic   | X | X | X | X | X | X |   |   |   |    |    |    |    |    |    |    |
| Consider grant or loan application if necessary   |   | X | X | X | X |   |   |   |   |    |    |    |    |    |    |    |
| Begin meeting with director to discuss proposal   |   |   | X | X | X | X |   |   |   |    |    |    |    |    |    |    |
| Find out requirements for proposal submission   |   |   |   | X | X | X |   |   |   |    |    |    |    |    |    |    |
| Outline proposal  |   |   |   |   | X | X | X |   |   |    |    |    |    |    |    |    |
| Complete detailed review of literature; construct theoretical framework; write review of literature chapter |   |   |   |   |   | X | X | X | X | X  | X  | X  | X  |    |    |    |
| Decide on methodology; write method chapter   |   |   |   |   |   |   |   |   |   |    |    | X  | X  | X  |    |    |
| Give proposal to committee  |   |   |   |   |   |   |   |   |   |    |    |    |    | X  | X  | X  |

# Overlook timeline (Cont...)

**Proposal Defense and Conducting Research (semester 6, by week)**

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| File paperwork and schedule defense                              | X |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| Arrange permission, community contracts, and other preliminaries | X | X | X |   |   |   |   |   |   |    |    |    |    |    |    |    |
| Defend proposal  |   | X | X | X | X |   |   |   |   |    |    |    |    |    |    |    |
| Revise proposal if necessary                                     |   |   |   | X | X | X |   |   |   |    |    |    |    |    |    |    |
| Meet with director to draw up schedule for research              |   |   |   | X | X |   |   |   |   |    |    |    |    |    |    |    |
| Conduct research for study                                       |   |   |   |   | X | X | X | X | X | X  | X  | X  | X  | X  | X  | X  |
| Analyze data from research                                       |   |   |   |   |   |   |   |   |   |    |    |    |    | X  | X  | X  |

# Overlook timeline (Cont...)

Writing and Defending the Dissertation (semester 7, by week)

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| Outline dissertation  | X |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
| Meet with director to discuss outline and preliminary data analysis       | X | X | X |   |   |   |   |   |   |    |    |    |    |    |    |    |
| Update proposal chapters for dissertation                                 |   | X | X | X | X | X |   |   |   |    |    |    |    |    |    |    |
| Write results chapter   |   |   | X | X | X | X | X | X | X |    |    |    |    |    |    |    |
| Write summary and conclusions chapter                                     |   |   |   |   |   | X | X | X | X | X  | X  |    |    |    |    |    |
| Find out requirements for submission and scheduling of final oral defense |   |   |   |   |   |   |   | X | X | X  | X  |    |    |    |    |    |
| Polish writing, consult with editor if necessary                          |   |   |   |   |   |   |   |   |   | X  | X  | X  | X  |    |    |    |
| Submit draft of dissertation to committee                                 |   |   |   |   |   |   |   |   |   |    |    | X  | X  |    |    |    |
| Submit dissertation paperwork and schedule for oral defense               |   |   |   |   |   |   |   |   |   |    |    | X  | X  | X  |    |    |
| Have dissertation professionally typed or printed from word processor     |   |   |   |   |   |   |   |   |   |    | X  | X  | X  | X  |    |    |
| Defend dissertation   |   |   |   |   |   |   |   |   |   |    |    |    | X  | X  | X  |    |
| Make minor revisions, if necessary  |   |   |   |   |   |   |   |   |   |    |    |    |    | X  | X  |    |
| Graduate  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    | X  |



# Details of Timeline

| Year | Month | Title  | Complete |
|------|-------|--|----------|
| 1    | Feb   | Set up a meeting with your advisor to discuss PhD requirements (i.e., courses, research practicum, minor area paper, research, possible Dissertation topic, Dissertation Committee and timeframe to complete your Research). |          |
|      |       | Setting shorter and longer-term goals of your research now   |          |
|      |       | Begin preparing topic  |          |
|      |       | Choose related courses and modules to your research and discuss this with your advisor   |          |
|      |       | Get involved with research and start to determine what research you would like to pursue for your dissertation.  |          |
|      |       | Your thesis research should be underway!   |          |





# Major portions of a Timeline (Cont...)

| Year | Month | Title  | Complete |
|------|-------|--|----------|
| 1    | Mar   | Begin to discuss your Dissertation topic with your advisor   |          |
|      |       | Identify co-supervisor based on your topic or research   |          |
|      |       | Submit brief minor paper proposal  |          |
| 1    | Apr   | Submit complete draft of minor area paper proposal to your Faculty                                 |          |
|      |       | Start to Choose and complete related courses to your research parallel with your research          |          |
|      | ....  | Researching<br>Attending to related courses<br>Meeting up with supervisor and Co-supervisor weekly |          |
| 2    | Feb   | Think about Publishing (if you have any idea)  |          |
|      |       | Your thesis research should be underway!   |          |



# Major portions of a Timeline (Cont...)

| Year | Month | Title   | Complete |
|------|-------|---|----------|
| 2    | Feb   | Revise and resubmit your proposal to faculty  |          |
|      | Mar   | Submit final draft of thesis proposal to the committee  |          |
|      | Apr   | Submit final proposal to the faculty and ready to Presentation                                |          |
|      | May   | Preparing the presentation of proposal  |          |
|      | Jun   | Attending to the oral presentation session fro proposal                                       |          |
|      | Jul   | Sitting with supervisor and co-supervisor for following the committee correction and advising |          |
|      | Aug   | Complete and submit new version of proposal   |          |
| 2    | ...   | Think about publishing (if you have any idea)   |          |
|      |       | Your thesis research should be underway!  |          |



## Major portions of a Timeline (Cont...)

Sample of a PhD Research timeline:

| Year | Month | Title   | Complete |
|------|-------|---|----------|
| 2    | Sep   | You should be continuing/completing your Dissertation data collection, other research |          |
|      | ...   | Continue your research  |          |
|      | ...   | Focus on analyzing and test of your data  |          |
| 3    | Jan   | Begin writing your dissertation draft   |          |
|      | Feb   | Preparing final model and contribution of research                                    |          |
|      | ...   |   |          |
|      | May   | Begin writing your dissertation final version   |          |
|      |       | Think about Publishing  |          |
|      |       | Your thesis research should be underway!  |          |



## Major portions of a Timeline (Cont...)

Sample of a PhD Research timeline:

| Year | Month | Title  | Complete |
|------|-------|--|----------|
| 3    | Dec   | Submit final dissertation to the faculty     |          |
|      | ...   | Preparing presentation and be ready for Viva |          |
|      | ...   | Conducting a MAK viva                        |          |
|      |       |  |          |
|      |       |  |          |
|      |       | Think about Publishing                       |          |
|      |       | Your thesis research should be underway!     |          |

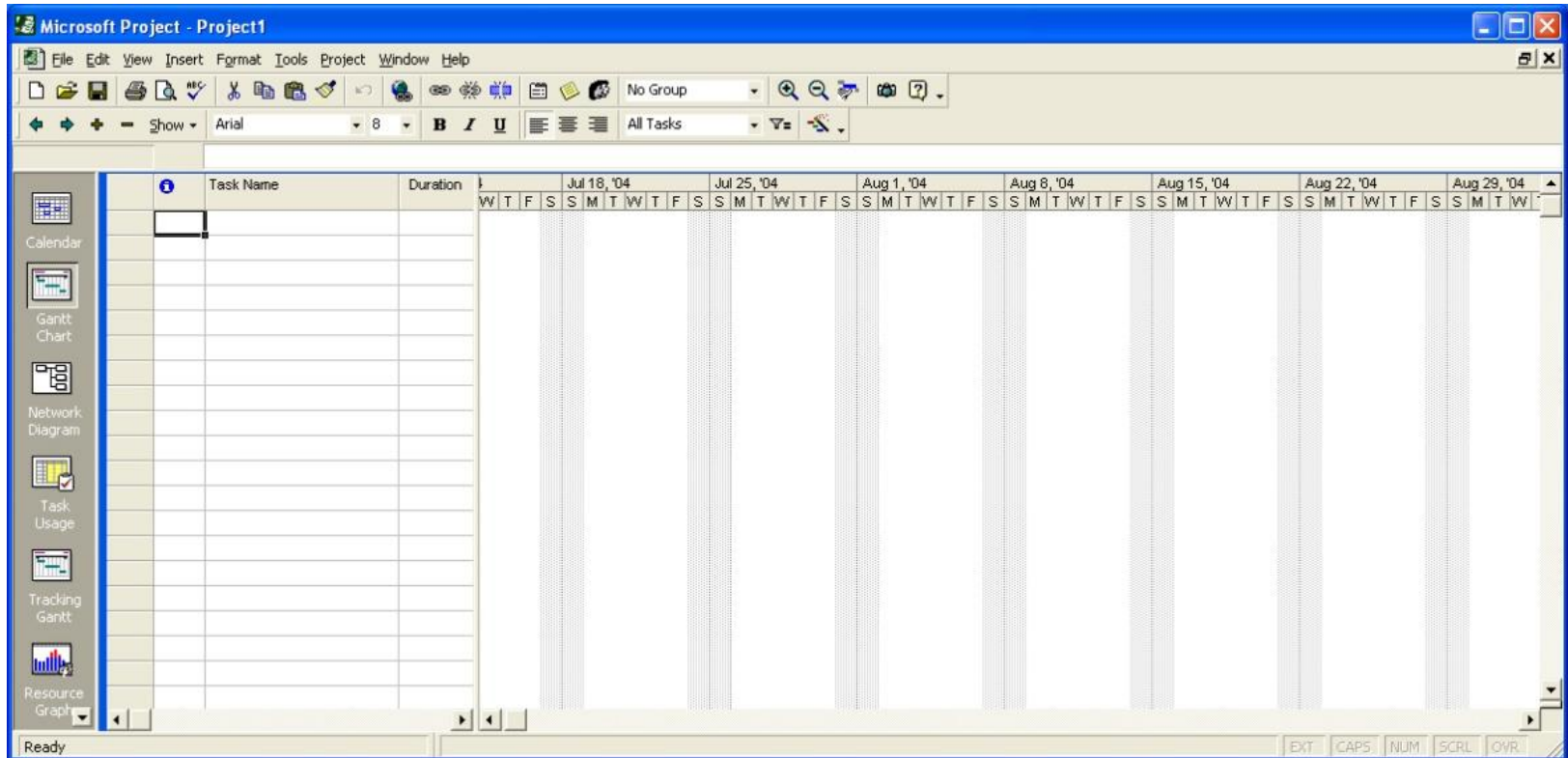


# Microsoft Project (MSP)

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# Using Microsoft Project (MSP)

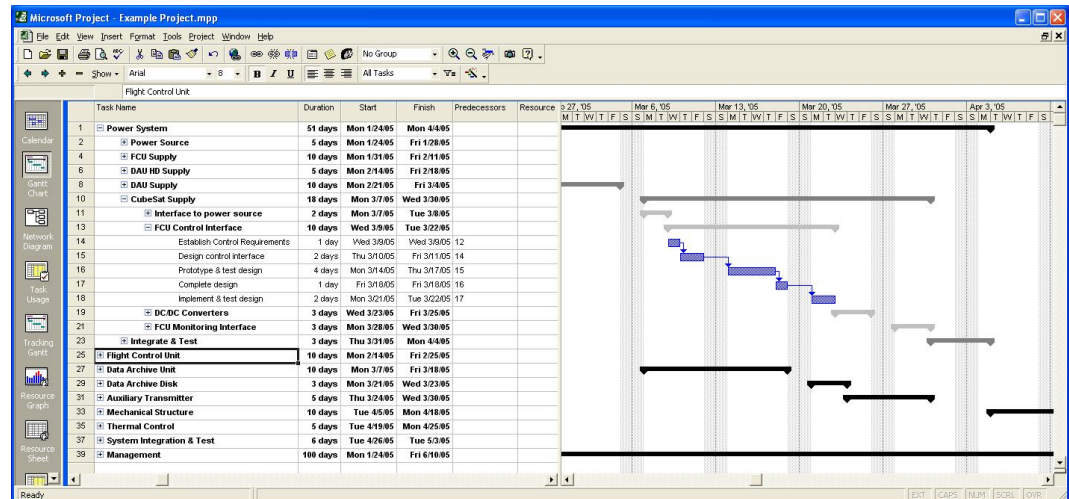
Microsoft Project (MSP) is a project management software program



# Using Microsoft Project (MSP)

It is designed to assist project managers in:

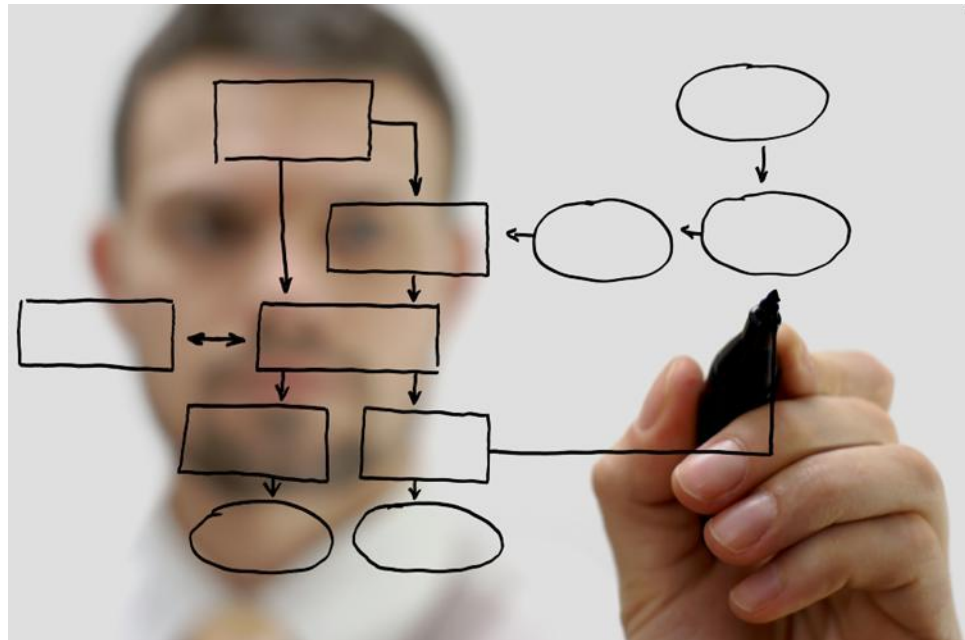
- developing plans
- assigning resources to tasks
- tracking progress
- managing budgets
- analyzing workloads



If you have any Fund, Grant or financial support then you can handle your research completely by MSP

# MSP Offers

- MSP enables you to stay informed and control:
  - Project work
  - Schedules
  - Finances



- And to keep project teams aligned



# The Research / Project Map

- The Research / Project Map outlines the three phases of the Research / project life cycle:
  - Build a plan for your research and project
  - Track and manage your research and project
  - Close your research and project



# Track and Manage a Research / Project Activities

- Track progress
- Manage a schedule
- Manage resources (Time and Time and Time and...)
- Manage costs (Fund, Grant, ...)
- Manage risks

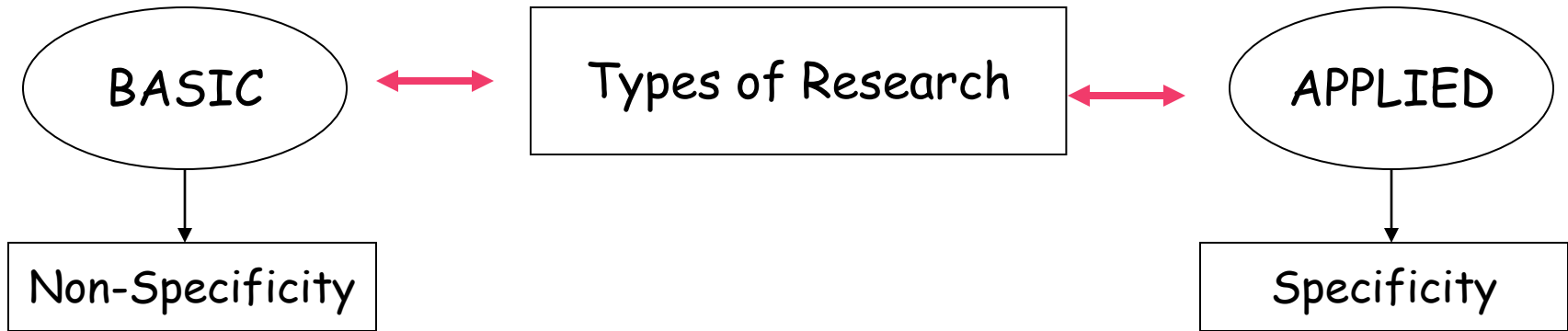




# Scope

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# Scope of Research



Research is undertaken in numerous scientific disciplines such as:

- Natural / Physical Sciences
- Social Sciences
- Management Sciences
- Humanities
- ...



# case or sample?

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Are you solving a single case of something,  
or is it a sample that will allow you to generalize to a population?

In a case study...

- You are interested in "what happened or will happen here".
- The quest for an answer can be like that in a court case.
- Be wary of conventional wisdom and your own prejudices.

In a sample study ...

- You are interested in "what happens in general".
- Rarely, "what" is simply descriptive: the frequency, mean value or other simple statistic of something in the sample.
- You control for other possible predictor variables either by holding them constant or measuring and including them in the analysis.



# Scope is limitation

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Make sure the problem is restricted in scope

Provide the area/scope that will be considered in the proposed research and justification why it is being considered

Justifying and deciding feasibility of your proposed work


Limitation and boundary of your research

Sample: Variables , Boundary of research , Limitation of research , Population of interest ,...

Such as: Number of factors in model, Android HP, Programming Language, number of nodes in net., list of equipments

# Methodology:

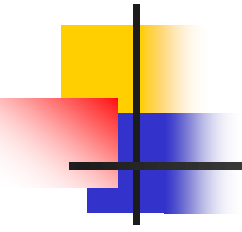
Define the Boundary and Limitation  
Using time schedule management sys.



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## Next Session

Step 4: How to find useful Sources  
(LR/RW)



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*"There is no way to get  
experience except  
through experience."*