Project Management: Dissertation/ Thesis and Research Funding Proposals/ Grant Applications
Main aspects of presentation

• Why project management?
• Project managing your thesis
• Thinking through activities, timeframes and milestones
• Tools for planning
• Problems and challenges
• Conclusions

Activity: compile a plan for completing your Masters dissertation or PhD thesis
Why project management?

Project is “an organized undertaking that has a completed product/outcome”

A project is a sequence of unique, complex, and connected activities having one goal or purpose and that must be completed by a specific time, within budget, and according to specifications. (Edgeman, nd)

If you fail to plan, PLAN TO FAIL
Project managing a thesis

- Undertaking a PhD is risk prone like all other projects
- Need to balance competing demands
- But we understand the requirements of completing a PHD and therefore we can prepare for it
- The PhD is complex, over a long period (generally minimum of 3 years), unique and expensive
- Increases success/completion rate – complete a task on schedule/time
- Is a map and a guide
- Learning orientated

If you know where you are going, you are likely to get there!
Some excuses for not planning

• My work is cutting edge research so I can’t anticipate what will happen
• A schedule is too constraining for good research
• Planning is a waste of time – just get it done
So what makes a good planner/manager?

- Passion
- Focused
- Determination
- Hard worker
- Commitment
- Can deal with criticism
- Time management
- Good communicator
- Realistic objectives
- Meets deadlines
- Knowledgeable about area of research
- Leverages resources
Thesis project cycle

1. Thesis ideas
2. Initiate the project: Thesis proposal
3. Plan the thesis
4. Complete the thesis – execute the plan
5. Thesis submission and graduation: close project
Key components

- Plan and be prepared!
- Promotes flexibility and adaptation
- Identifies key activities to ensure success
- Identifies resources needed/costing
- Results/outcomes based
- Knowledge management
Alignment of activities with overall research objectives
Key Phases of Project Management

- **Planning**
  - Formulate **SMART** results
  - Set activities
  - Select indicators (how do you know whether activities have been completed)
  - Identify resources needed

- **Monitoring activities**
  - Monitor activities against timeframes

- **Review and revise**
  - Review activities and timeframes
  - Revisit activities and timeframes (may require revisiting aims and objectives)
Activities, timeframes, milestones and budget

- Is it realistic?
- Link budget and timeframe to key activities
- Identify funding sources
- Identify potential problem areas
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>TIME-FRAME</th>
<th>BUDGET/ RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature review</td>
<td>8/3-8/5/2011</td>
<td>R500 (printing, books, articles) - Personal</td>
</tr>
<tr>
<td>Development of research instruments</td>
<td>15/3-15/6/2011</td>
<td>-</td>
</tr>
<tr>
<td>Data collection/ fieldwork</td>
<td>15/6-1/8/2011</td>
<td>R1000 (fieldworkers) - Grant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R1000 (transport) - Grant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R1000 (accommodation and subsistence) - Grant</td>
</tr>
<tr>
<td>Data analysis</td>
<td>15/7-30/8/2011</td>
<td>R500 (SPSS) - Grant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R1000 (water testing) - Grant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R500 (GIS data in shape file format) - Grant</td>
</tr>
<tr>
<td>Write-up</td>
<td>Continuous 30/8-26/9/2011</td>
<td>-</td>
</tr>
<tr>
<td>Submission</td>
<td>16/10/2011</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>-</td>
<td>R5500</td>
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</tbody>
</table>
## A typical PhD thesis

<table>
<thead>
<tr>
<th>Month/ year</th>
<th>Description</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb – Dec 2016</td>
<td>Development of research proposal</td>
<td>Submission of proposal to university</td>
</tr>
<tr>
<td>Jan 2017 – May 2017 Continuous</td>
<td>Literature review</td>
<td>Completion of literature review chapters Ongoing through final write-up of thesis</td>
</tr>
<tr>
<td>June – Sept 2017</td>
<td>Development of survey instruments/ data collection techniques</td>
<td>Completion of methodology chapter Finalisation of research instruments</td>
</tr>
<tr>
<td>Sept – Dec 2017</td>
<td>Data collection/ fieldwork</td>
<td>Piloting Completion of fieldwork</td>
</tr>
<tr>
<td>Jan – March 2018</td>
<td>Data coding and inputting</td>
<td>Data cleaned and ready for analysis</td>
</tr>
<tr>
<td>April – Dec 2018</td>
<td>Data analysis</td>
<td>Completion of data analysis chapter/s</td>
</tr>
<tr>
<td>Jan – July 2018</td>
<td>Final write-up of theses</td>
<td>Submission of draft</td>
</tr>
<tr>
<td>Aug – Nov 2018</td>
<td>Finalise for examination</td>
<td>Submit for examination</td>
</tr>
<tr>
<td>Dec 2018</td>
<td>Graduation</td>
<td>Celebration and DR!</td>
</tr>
</tbody>
</table>
Some points to note

• Literature review is a continuous process
• Do not underestimate the amount of time it takes to revise when supervisor/s comment – revising is a time-consuming process
• Each descriptive component has specific activities that need to be considered, for example, fieldwork:
  – Compilation of draft surveys
  – Identifying and accessing communities
  – Logistical arrangements, etc.
Activity:
Develop activity schedule for inclusion in your proposal

Please note: Institutional requirements
Tools for planning specific activities/ tasks and linkages: project scheduling
<table>
<thead>
<tr>
<th>Weekly/monthly/yearly planner (can be adapted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing completion goals: eg. complete section 1, write-up method, etc.</td>
</tr>
<tr>
<td>Research goals: eg. plan fieldwork, attend research training workshop, etc.</td>
</tr>
<tr>
<td>Tasks: eg. check references, check for ethical clearance, etc.</td>
</tr>
<tr>
<td>Meetings/consultations: supervisor meeting, community meeting, etc.</td>
</tr>
<tr>
<td>Other commitments: wedding, teaching, etc.</td>
</tr>
<tr>
<td>Notes: comments to provide extra information, eg. need to check on availability of community leaders</td>
</tr>
</tbody>
</table>
Network Diagrams

<table>
<thead>
<tr>
<th>Task</th>
<th>Predecessor</th>
<th>Duration (in months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Research proposal</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>2. Literature review</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>3. Research techniques</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>4. Policy chapter</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5. Conference presentation</td>
<td>4</td>
<td>0.2</td>
</tr>
<tr>
<td>6. Data collection</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>7. Data analysis</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

Scheduling Techniques
- PERT – Program Evaluation and Review techniques
- CPM – Critical Path Method
## Gantt Chart

<table>
<thead>
<tr>
<th>Task</th>
<th>Duration (in months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-4</td>
</tr>
<tr>
<td>1. Research proposal</td>
<td></td>
</tr>
<tr>
<td>2. Literature review</td>
<td></td>
</tr>
<tr>
<td>3. Research techniques</td>
<td></td>
</tr>
<tr>
<td>4. Policy chapter</td>
<td></td>
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<tr>
<td>5. Conference presentation</td>
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<td>6. Data collection</td>
<td></td>
</tr>
<tr>
<td>7. Data analysis</td>
<td></td>
</tr>
</tbody>
</table>
Example of Gantt Chart with multiple aspects
Problems and challenges

• Problems linked to the topic
  – Inappropriate topic choice
  – Lacks focus
  – Inappropriate choice of methods
  – Unrealistic objectives

• Engaging with supervisor/s
  – Agree on timeframes and activities
  – Communicate clearly
  – Have realistic expectations
  – Respond to feedback and communicate regularly
Time and resource-related challenges

• Time
  – Poor use of time
  – Inadequate time allocated
  – Procrastination/ displacement
  – Include time for supervisor input, drafts, etc.
  – Set priorities
  – Political context (balancing work and personal commitments)

• Resources
  – Limited funding
  – Underprepared fieldworkers/ research assistants
What do you do when problems arise?

• Detecting and predicting problems
• Think ahead and manage risks
• Action delayed is action abandoned
• Embrace change
• Be decisive!
• Take a break if you need it
Conclusions

• Give yourself plenty of time to plan
• Stick to aim and objectives to focus activities
• Get input and feedback from colleagues, supervisor/s, experts, etc.
• Review and revise

THANK YOU!