
36-726: Statistical Practice

Third Progress Report

Brian Junker

132E Baker Hall

brian@stat.cmu.edu

Outline

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- References
- **Your work is incomplete –“Drafty drafts”**
- Figuring out what you can reasonably accomplish
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Third Progress Report Due Dates

- Third Progress Reports scheduled for Apr 12-21
 - Present talk (same order as 2nd progress reports)
 - Submit slides (as pdf)
 - Submit draft paper (as pdf)
- The last day to submit draft paper and slides is Apr 21.
 - However, ****please**** don't wait that long!
 - If the papers come in one at a time, I have time to give constructive comments to everyone
 - If the papers all come in at the end, I have much less time for constructive comments

Third Progress Report

- **Abstract**
 - Title page (1 slide) + outline with sections for I, D, M, R and D of paper
- **(I)ntroduction**
 - (2-3 slides) What are the research questions?
- **(D)ata**
 - (2-6 slides) What dataset was used for this study?
 - Typically: Variable definitions, sample size, quick summaries and initial descriptive EDA
- **(M)ethods**
 - (2-6 slides) What did you do, to address these questions?
- **(R)esults**
 - (3-9 slides) What did you find?
- **(a)nd**
- **(D)iscussion**
 - (1-3 slides) What does it all mean?
 - Typically: answer questions, discuss generalizations & limitations
- **Extra slides**
 - Have a few extra slides with details that don't fit in the main talk

Abstract

- For the talk

- This is just the title page with your names and the name(s) of your mentor(s)
 - You need a title page with the same information for your IDMRAD paper

- For the paper

- You can write an abstract or an executive summary.
 - Both should contain something from every section I,D,M,R, and D
 - Abstract is typically 4-6 sentences
 - Executive summary is typically a page or so, and has more detail, especially about Results and Discussion

Introduction

■ For the talk

- What are the main research questions?
 - The Methods & Results sections should be organized around these questions
 - Depending on the project, you may also want to organize the Data and Discussion sections according to these questions

■ For the paper

- Background, motivation, who is your client, why does any of it matter?
 - What are the main research questions?
 - The Methods & Results sections should be organized around these questions
 - Depending on the project, you may also want to organize the Data and Discussion sections according to these questions
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Data

■ For the talk

- Similar to progress report #2, but you will have to shorten to make room for other new material!
- Even though you are making it shorter, it still needs to be understandable and cover the data you will use in the results section

■ For the paper

- A complete Data section:
 - What dataset(s) was used for this study?
 - Description any major munging/merging/wrangling
 - Include variable definitions, data “shape” (e.g. #observations, #variables), quick summaries, initial descriptive EDA, etc.

Methods – a progress report!

- For the talk

- Summarize all the methods you will use
 - Let us know which questions require which methods
- Focus on one or two that are important for your project

- For the paper

- It is probably best to divide this into subsections, one subsection for each main question.
 - Describe each method and how it will be used to answer the question
 - If it is a method that was not discussed, or discussed only a little, in an MSP class, give a reference where the reader can learn more

- *May be somewhat incomplete – more on that below!*

Results – a progress report!

- For the talk
 - One or more examples of results you have obtained or tried to obtain (these do not need to be “final”)
 - Other results that you expect to obtain
 - Make sure we know which research question each “result” addresses
- For the paper
 - For each research question
 - Results you are confident of so far
 - Results you are still developing
 - Results you may or may not be able to get to
- *May be somewhat incomplete – see below!*

Discussion – a progress report!

- For the talk

- For each main question:

- What are the next steps?
 - What would you like to do that there may not be time/data/resources for?

- For the paper

- For each main question:

- Briefly summarize your results (or your results “so far...”)
 - Translate the results into a take-home action or policy message for your client, in your client’s terms
 - The work is not done yet: what do you still hope to finish? What might not get done (and why)?

- *May be somewhat incomplete – see below!*

Extra slides for the Talk

- Have a few extra slides with details that don't fit in the main talk
 - Put these in a section of the talk called “extras” that is after your “End” or “Questions?” slide
- Often when I write a talk, it is too long, and the slides I cut out, I save for these ‘extra slides’ at the end. For example:
 - Descriptions of data or methods or results with too many details
 - Additional work that I've done that will be in the paper but would make the talk too long
 - Etc.

Technical Appendix for the Paper

- Just like technical appendix from 36-617
 - The technical details (code, detailed output, additional figures, etc.) that are needed to justify material in the main body of the IDMRAD paper go here
 - Remember to cross-reference these details by page number in the main body of the IDMRAD paper
- Should be readable (by a statistician) on its own
 - Organize by main question
 - English descriptions of what, and why, you are doing
- There will be work that you've done that doesn't make it into the paper or the tech. appx
 - Keep that work in your team's common file area, etc.

References...

- No references needed in progress report Talk
- For draft IDMRAD paper I expect to see a “references” section listing papers, books, etc. that you have consulted for the project
 - ASA style, just like 36-617
- This may still be somewhat incomplete, but show me you are thinking about this

Your work is incomplete – “Drafty drafts”

- After you give these project reports you still have 3-4 weeks to finish your team’s work
 - Introduction should be fairly complete
 - Data section should be fairly complete
 - Methods – mostly complete; maybe some things you haven’t tried yet
 - Results – still many holes because you haven’t had time to do everything yet
 - Discussion – you should have some idea what you want to say, but it won’t be very complete yet
- There will be a lot of “holes” – point them out and tell me how or whether you think you can fill them

Figuring out what you can reasonably accomplish

- What can you accomplish in the remaining three weeks?
- Are you on-schedule to do all those things?
- Do you need more time/data/resources to accomplish some of them?
- This is a “last chance” to reconsider, and possibly reformulate, project goals, etc.
 - Discuss with your faculty mentor, me, and your clients

Dates/Locations for final presentations

- In the next week or so, I will set up a signup sheet to schedule final project presentations
 - Arrange for faculty mentor, client (!) and all team members to be present
 - Preference for class time so that class may attend
 - Are there NDA issues that mean we need to restrict who can attend?

- Final paper will be due at the time of your final presentation

Last Weeks of Class

- **Week 11 - Apr 12, Apr 14**
 - **Third Team Progress Report Presentations**
- **Week 12 - Apr 19, Apr 21**
 - **Third Team Progress Report Presentations**
- **Week 13 - Apr 26, Apr 28**
 - **Finishing Project Work**
- **Week 14 - May 3, May 5**
 - **Finishing Project Work**
- **Finals Week - May 10–17**
 - **Final Presentations to Clients, Schedule TBA**