MSBA Applied Projects Best Practices Guide for Students

This document outlines the best practices for the MSBA Applied Projects. Please read the document thoroughly, and work with your applied project faculty advisor if you have any questions.

1. Timeline

Spring teams will be allocated in mid-October. You will then participate in a bidding process to pick an applied project for Spring.

You will receive an email introducing you to your client and your faculty advisor in the first week in November.

The introductory email will contain terms of the project's NDA, IP release, and any required background checks. In some cases, you will be required to sign, scan and return one or more of these forms to the client. Complete these formalities ASAP.

You are also required to set up and participate in a kick-off meeting with the client before the Winter break.

Project execution will commence on the first day of the Spring semester.

2. Non-Disclosure Agreement (NDA)

Remember that you are under strict NDAs for your Projects.

Carefully read the NDA/IP release documents that will be provided to you in the email introducing you to your client.

You must never share anything related to your projects (including data, documents, scripts, results) with anybody outside of your team, faculty advisor and the client themselves.

You must get explicit written permission from your client before you use any service/utilities/open source software to store/share/analyze company data. Some of these might breach your NDAs.

3. MSBA Applied Project Teams

As soon as the Spring teams are announced:

- Do a team retreat. Learn about each other's strengths and weaknesses. Think about how you can help each other grow through the shared experience of working on the Applied Project. Realize that this is your opportunity to create a strong network of friend/colleagues.
- Decide on each person's role on the team (client communication, project planning, developer, researcher, QA, etc). Rotate through these roles as you progress through the project (to ensure each person gets exposed to and learns from each experience). You can divvy that up either by tasks or project phase.

Always maintain a Project Execution Plan that everybody has agreed on. The project execution plan essentially depicts how you will complete the given project with the resources at hand, in the given amount of time. A project execution plan must clearly delineate all tasks, owners, deadlines, dependencies and priorities. The project plan must include tasks assigned to <u>all</u> stakeholder associated with the project – including the client. This is a living document and will continue to get updated throughout the project. Note that at any given time, you will likely have more clarity and granularity on the upcoming 2 weeks of owners/tasks/deadlines/dependencies than something that is 4 weeks down the line.

Team cohesiveness in your interactions with the client is critical. You are <u>one</u> team, so you must always have <u>one</u> voice to the client. It's absolutely expected and okay for you to have differences of opinion within the team… but you <u>must</u> reach consensus on ideas / directions / approaches / presentation <u>before</u> you meet with the client. Showing up for a meeting as though it's a contest to impress the client reflects very badly on every member of the team.

Note that developing the skills and mechanisms to navigate difficult people and tough situations are critical skills for succeeding in the Industry:

- Realize that you are almost never going to have a say in choosing the people you work with in your careers. It's a given that you will encounter some uncooperative people. And there will unfortunately always be free-riders in the world…
- Projects, deadlines and deliverables change all the time. Teams change. People leave. And so yes, you will sometimes (often) be expected to do more with less (surprise!).
- Your leads/clients will occasionally (often) expect miracles from you… and then some!
- Also realize that business analytics by its very nature is ambiguous. All problems are going to be ambiguous. All data is going to be incomplete and ambiguous. All clients will sometimes (often) change their mind about what they want.
- The question then is, how are you going to manage all of this while ensuring the overall success of the Project.
- All of the above is exactly why we have you do the Applied Projects. This is your opportunity to hone these skills in a protected environment. So, if you find yourself complaining about a tough situation during project execution, take it as a learning experience and learn how to navigate it. Remember it's going to be 10X more difficult to build this skillset on the fly out in the real-world where the stakes are a lot higher.

4. First Contact with Client and Faculty Advisor

In the first week of November you will receive an email introducing you to the Client/Project you have been assigned, as well as your Applied Project Faculty Advisor.

<u>You must keep your Faculty Advisor CC'd on all communication/meetings with the Client.</u>

As soon as you get an email introducing you to the client, respond to the Client with the following:

- Scanned copies of signed NDA/IP release forms/background checks (if required for your project).
- Schedule a kick-off meeting. The kick-off meeting must occur <u>before</u> the winter break. Provide few days/dates that will work for you so they can suggest a time around that. Student team and client are required at the kick-off meeting; include faculty advisor as optional.

- Request any background/onboarding material to help you ramp up on domain knowledge and context prior to the kick-off meeting. And if available and possible, ask them to share any related reports/results from MSBA work done in previous years
- Request data access in preparation for the kick-off meeting. This is expected and required from the client – unless the client has explicitly requested that they would like to meet with the team before sharing the data. But either way, all clients are required to share data before the winter break. If there is any delay in sharing of the data, contact your faculty advisor immediately.
- Also mention that you would like to schedule weekly syncs, mid-term presentation, and end-of-term presentation, but you will do so after the kick-off meeting.

As soon as you get an email introducing you to the Client, email the Faculty Advisor with the following:

- Ask for an initial meeting with your faculty advisor. At this meeting, understand your faculty advisor's expectations on the Project. At the end of the day, it's your faculty advisor who will grade your work. It is therefore critical that you meet their expectations on the Project.
- Set up weekly/bi-weekly syncs with the faculty advisor (these are mandatory):
    - Student team and faculty advisor are required at the meeting.
    - If for any given week you don't think you need the weekly sync meeting, you can cancel it in consultation with the faculty advisor. Be sure to send a status update over email even if you decide to cancel the meeting.

5. Kick-Off Meeting with the Client

Prior to the kick-off meeting with the client

- Gather domain knowledge about the problem - based on material provided by clients, industry research, company website, product use (if relevant and feasible). Be curious. The more you understand the domain, the better you will understand the data, and the better your approach and solutions are going to be.
- Explore the data a little bit if it's already been shared with you. Note down things you don't understand about it in terms of columns, missing data, etc.
- Compile questions that you might have for the client from the above research.

During the kick-off meeting:

- Be in listen and learn mode.
- Ask questions, don't be shy. This is your opportunity to learn as much as you possibly can about the domain, the context, the project, the data, the deliverables, and the overall expectations before you start the project.

Soon after the kick-off meeting, send an email with the following to the client:

- Thank the client for the kick-off meeting, and follow-up on any items that may have come up during the kick-off.
- Schedule weekly syncs with the client (these are mandatory meetings):
    - Student team and client are required on the meeting; include faculty advisor as optional.
    - Ensure the date/time isn't clashing with your classes or exams.
    - If for any given week you don't think you need the weekly sync meeting, you can cancel it in consultation with the client; be sure to send a status update even if you decide to cancel the meeting.

- Schedule your mid-term presentation (this is mandatory):
    - Student team and client are required on the meeting; include faculty advisor as optional.
    - This must occur week of XXX (check with faculty advisor for when they'd like the mid-term presentation scheduled).
    - Ensure the date/time isn't clashing with your classes or exams.
- Schedule end-of-term presentation (this is mandatory):
    - Student team and client are required on the meeting; include faculty advisor as optional.
    - This must occur week of YYY (check with faculty advisor for when they'd like the end-of term presentation scheduled).
    - Ensure the date/time isn't clashing with your classes or exams.

6. Email Communication with the Client

For all email communication with the client:

- Always keep faculty advisor CC'd on all communication to the client.
- Follow general email etiquette. Use a meaningful subject line, don't keep starting new threads on the same topic, keep emails crisp and concise, highlight action items, etc.
- If you haven't heard back from the client in a reasonable amount of time, follow up with a gentle reminder. Use your situational awareness and discretion, but wait no more than 2 business days to follow-up if you haven't heard back from the client on a blocking issue.

7. Meetings with the Client

For all meetings with the client:

- Always put down the faculty advisor as optional on all meetings with the client.
- Send the meeting agenda at least one day prior to the meeting. Include any questions you want answered by the client during the meeting, so they have a chance to reflect on the questions in preparation for the meeting.
- During the meeting, share any progress made since the last meeting in terms of results, actions, next steps. Include any assumptions, insights, questions, clarifications, roadblocks.
- During the meeting, manage your time to get all your questions answered. Always start with the highest priority questions first so you're not stuck if you run out of time.
- After the meeting, send out the meeting minutes with tasks, owners and deadlines (this should include anything that was assigned to client as well). Call out any dependencies.
- Team cohesiveness in your interactions with the client is critical. You are <u>one</u> team, so you must always have <u>one</u> voice to the client. It's absolutely expected and okay for you to have differences of opinion within the team… but you <u>must</u> reach consensus on ideas / directions / approaches / presentation <u>before</u> you meet with the client. Showing up for a meeting as though it's a contest to impress the client reflects very badly on every member of the team.

8. Presentations

For your mid-term and end-of-term presentations, make sure you have sent a draft to your client and faculty advisor for input and feedback – at least a week in advance. Clients will often invite their managers and peers to these presentations, and they will want to ensure the presentation is focusing on the right elements that they would like to highlight.

Presentations are about story-telling: focus on the narrative, take your audience with you, and make it compelling. A good narrative must always include a beginning (what), a middle (how), and an end (so what). Your audience must always be aware of two things throughout your presentation: what are you talking about, and why is it important. And just like all compelling stories, your presentation must be edited to stay focused on the most important ideas and takeaways.

Understand your audience. And make sure you're taking them along throughout the presentation. Speak in a language they follow. Help them understand and interpret your results as required. Connect everything back to the client's business. Help them bridge the gap between your analysis and what that means for their business. While they are certainly interested in what you did, and how you did it, the bottom line for them is how that translates to something insightful and actionable for them.

Here are things to keep in mind while formatting your presentation:

- Too much text: If the audience is busy reading a lot of text on your slide, then they are not listening to you. Use few, concise phrases that capture the concepts you will be discussing.
- Font too small: This is often due to the "too much text" problem. If it's not readable, then it has little value to the audience.
- Too many slides: If you are not going to give your audience the time to take in a particular slide, don't include it. A good rule of thumb is to average no more than one slide a minute. You can always put slides that you might need to answer questions in an appendix that you go over only if you need to.
- Impact Graphics ("Eye Chart"): Slides with a great deal of graphical information again force the audience to try to decipher the illustration instead of listening to you. Better to use simplified illustrations that capture the concept. If you anticipate questions on detail, include some backup slides after your "Q&A" or closing slide, but don't use them unless there's a need.
- Tables of Numbers: The audience cannot easily grasp quantitative relationships from a table of numbers. Use an appropriate chart type instead.
- Decimal Numbers: When presenting decimal numbers, especially output from a tool, only use the number of significant digits that is justifiable from the input (e.g., if you know the dimensions of a 1-foot cubic box to the nearest inch, calculating the volume to 10 significant digits is meaningless). In columns, it is usually best to line up the decimal points so relative magnitudes are clear.
- Poor Color Selection: Some color combinations are very difficult to read. Standard themes usually do not have these problems.
- Unaware of Color Blindness: If you construct a graph that is making a distinction between two objects or sets of objects, avoid using red and green.
- Too much animation: Animation should be used sparingly, only when it supports the content (e.g., a pause between bullets or graphics to allow the audience a chance to respond, or movement to emphasize a process step). If you need animation to keep the audience's attention, then there's something wrong with your content or verbal delivery.

Here are things to keep in mind while making your presentation:

- Reading the slides: This is often accompanied by “too much text”. The slides should have brief phrases acting as triggers for the audience and maybe for you. If you read the slides, you are offering nothing beyond the slides.
- Not facing the audience: Facing the slides is often a result of reading the slides. You should know the material well enough not to look at the slides other than catching a brief reminder of the concepts you are presenting, or to point out something to the audience (but you don't need to point out each bullet or anything else that is obvious).
- Congregating: Anyone not speaking at the moment should be off to the side, not in front of the slides, and not a distraction. Don’t congregate around the speaker.
- Uncoordinated Slide Control: It’s usually best for the speaker to control the slides. Otherwise, the speaker and the slide transitions are not coordinated; sometime resulting in rapid slide transitions to get to the correct slide, i.e., “flashing slides”. If a remote is not available, it’s still better for the speaker to control the slides from the computer, even though the presenter then loses control over some other desirable behavior dealing with audience interaction.
- Poor Pausing/Meter: Use a conversational pace (slow down!). Vary the rate; use pauses of varying length and frequency. Avoid clutter (e.g. “um”, “y’know”, “like”, “uh”).
- No vocal variety: Change your volume, rate, and pitch occasionally. Monotone, constant rate speech will put your audience to sleep.
- No Physical Movement: Use intermittent movement, varying to match content. Use a variety of gestures but make them natural and spontaneous.
- No eye contact: Maintain random eye contact with the audience. Don’t forget those in the back of the room.
- Poor Time Management: Practice your presentation for delivery and timing. Know how you deliver; some people go faster during the real presentation, others go slower.
- Video-tape a dry-run of the presentation and watch it. It’s a great way to catch what’s not working.

9. Professionalism

In every interaction with the Client - throughout the Applied Project - remember that you are representing ASU, WPC, and the MSBA Program. Their overall experience with your team will directly impact their willingness to engage with us in the future.

Some things to keep in mind:

- Maintain the highest standards of honesty and integrity
- Maintain the highest degree of professionalism in all your online and in-person interactions
- Be courteous and respectful in all your online and in-person interactions
- Be on time and meet all your deadlines
- Go above and beyond with project execution
- Maintain team cohesiveness
- Reflect professionalism in your appearance by attending all meetings with business casual attire and personal polish

Also, please review the WPC professionalism policy: https://gradstudents.wpcarey.asu.edu/student-resources/professionalism-policy

10. Ending the Applied Project

After your final presentation:

- Send an email thanking the client for the experience.
- Make sure all final deliverables have been submitted to the client – this includes mid-term presentation deck, final presentation deck, written report, and all relevant scripts and files.
- Connect with them on LinkedIn.

You will receive a survey at the end of the Applied Project to provide your input on things went. Please be sure to fill it out so we can continue to improve the overall Process.