1.1 Introduction to project management

Friday, 24 February 2023 12:36 PM

What questions do you have about:

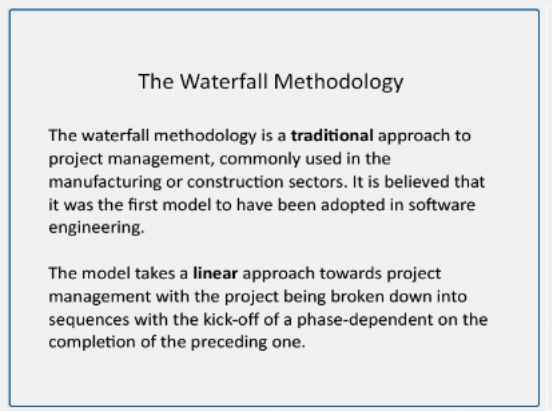
project scoping?
project planning?
project delivery?
closing projects?

None really. I think I have sufficient background in project management in the real world. The areas that may be concerning might be how IT projects differ from Capital projects delivered in the resource sector

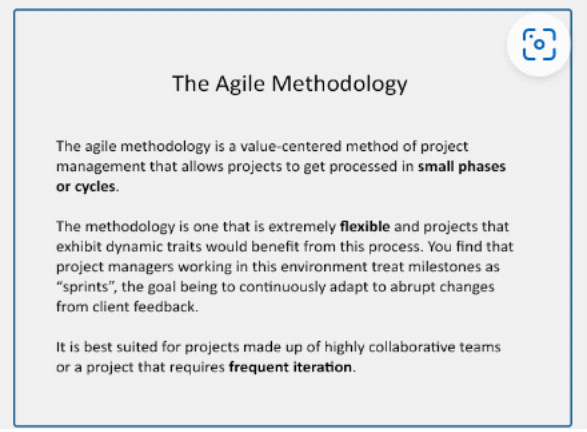
1.2 Project management methodologies

Step 1:
Introduction to two of the most well-known project management methodologies are traditional (Waterfall) and Agile

1. Waterfall
    a. Linear approach towards Project management
    b. Project broken down into sequential activities with the kick-off of a phase dependent on the completion of the preceding one.



1. Agile .
    a. Flexible
    b. Value centered methodology
    c. Project progresses in small phases or cycles
    d. Milestones are treated as sprints and
    e. Goal is to continuously adapt to abrupt changes from clients feedback



Step 2: Agile and cybersecurity

- Agile methodology has become increasingly pervasive throughout cyber industries.
- Agile methodologies put an emphasis on embracing and harnessing change as part of managing projects.
- The emphasis is on faster, more iterative processes.
- The Agile perspective gained momentum following the 2001 publication of the Manifesto for

Agile Software Development by a group of leaders in the software industry.

Activity - Do some research of your own about Agile project management and its 12 principles. You may wish to start with the *Agile Practice Guide* (available in the Reading List). Note down any preliminary conclusions you have come to after exploring and discussing different methodologies in project management.

12 Principles of Agile Methodology:

1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. Business people and developers must work together daily throughout the project.
5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
7. Working software is the primary measure of progress.
8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
9. Continuous attention to technical excellence and good design enhances agility.
10. Simplicity--the art of maximizing the amount of work not done--is essential.
11. The best architectures, requirements, and designs emerge from self-organizing teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Preliminary Conclusions:

- Processes are not as important as the product delivered.
- Change is embraced and effectively worked into deliverables
- Speed and Agility in identifying obstacles and assigning resources to remove them
- Lean organization, focussed on product

1.3 Confirming your project

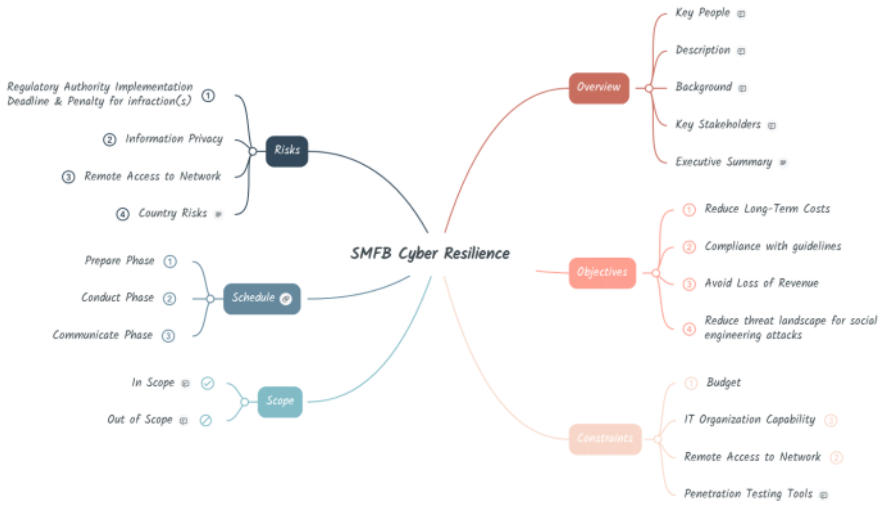
Project Discussion with Facilitator:

- Project discussed with Bazlur. He raised concerns about the international nature of the project and encouraged this should be discussed with Brett.
- Discussed with Brett and Project was endorsed.

Mindmap

This is done using MindMeister application and the mindmap is available here:

[SMFB Cyber Resilience - MindMeister Mind Map]



1.4 Scoping a project

Friday, 24 February 2023 11:45 AM

Step 6: Write a scope for your project

Write a scope section similar to the one in the Nuclear Regulatory Commission case that clearly shows what requirements are within the scope of your project and what you have explicitly excluded from the scope of your project. This will eventually form a part of your project proposal.

1.6 Establishing goals, requirements & potential problems

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- Step 1: SMART goals
    - SMART goals of the project - general ideas of the change aimed t.
    - SMART - Specific, Measurable, Attainable, Realistic and Time bound goals. The SMART goals technique is simply one that has evolved through management thinking and practices for establishing concrete targets that you can strive to achieve over a set period of time.
    - SMART goals of this project are:
        i. Reduce Long-Term Costs, saving the bank from reputational damage that may arise from a cyber incident.
        ii. Increase awareness of Cybersecurity within the bank so as to help in combating social engineering attacks. Goh (2021)informs that humans are the weakest player in the maintenance of cybersecurity.
        iii. Compliance with the Central Bank of Nigeria (CBN) guidelines and avoid sanctions and penalties that may arise from regulatory non-compliance issues.
        iv. Avoid Loss of Revenue from business downtime
        v. Provides a Cybersecurity Risk Assessment Template that the bank may use for future assessments.

- Step 2: Requirement specification While scope encompasses all the work needed to deliver a project and meet the defined goals, requirements specify the features, characteristics and capabilities of the project's deliverables.
    - What do you think are the defining features of a requirement? The specific things that the project must meet, they are at more finite level than the goals of the project which is broader. They help in lookback and making a determination as to whether the project achieved its purpose
    - Is it useful to classify requirements in defining and prioritising them? Yes
    - If so, what sort of classification might be useful? Maybe something like Must, May Be and Inconsequential

- Step 3: Your project requirements Develop an initial draft list of requirements you anticipate for your chosen project. Consider classifying these in order to help you prioritise and plan for your project.
    a. inventory the Information Technology assets, network and enabling infrastructure.
    b. conduct the cybersecurity assessment be to determine both its present state and its target or desired cybersecurity profile or state.
    c. identify gaps, threats, and risks.
    d. identify the potential impact.
    e. prioritize action plans to mitigate the risks identified,
    f. suggest a tracking methodology to assure that actions are implemented and closed

- Step 4: Project problems Projects involve risks and problems or issues. These are not quite the same thing, though they may overlap. Typically you will endeavour to have some idea of potential risks at the beginning of your project. We will be looking at risk assessment and analysis in Week 4 of Cyber Project 1 - *what might be the sort of problems you would anticipate such a project could encounter?*
    a. Remote access to data for the project
    b. Employees perception of the project as a witch hunt
    c. Infrastructure and it knowledge
    d. tools

1.7 Pitching a project

Pitch element	Description	Your notes	Your pitch
Problem statement	Explain what's wrong and the problem you have uncovered.	Cyber posturing of the company is undetermined. Operating in the financial sector with custody of human data makes the company at a high risk of cyber attack. In addition, the regulatory authority has mandated some measures that the enterprise must take to address this risk	Cyber incidence are on the rise and will continue into the foreseeable future. The CBN, the regulator, has mandated guidelines that MFBs have to comply with as well.
Get worse	Explain the likely outcome of not solving this problem.	If this issue is not addressed the company may suffer enormous financial and reputational loss arising from a cyber incidence. Non-compliance with a regulatory guideline is a ground for withdrawal of operating license	A successfully executed cyber attack may compromise personal identifiable data held by the bank as well as subject the business enabling data to ransomwaren MFB handling personal identifiable data in addition to business enabling critical data
Glimmer of hope	What you can do to fix this problem.	Carry out an evaluation of current infrastructure and their resiliency to cyber attack. Understand the gaps and develop a gap closure plan for implementation by the enterprise	Promote an appreciation of cybersecurity risks through a vulnerability assessments and the development of a gap closure plan for implementation by the enterprise
Novel solution	The idea you can have that can solve the problem.		
Credibility	Why you are the person to solve the problem.		I have tremendous influence on the management of the enterprise and I am the most informed, following my Graduate Cert and M.Sc program, in Cybersecurity issues.
Vision	Inspire your audience, paint the picture of the outcome of the problem once solved.		A full compliance with the CBN Guidelines as well as an ongoing appreciation of cybersecurity issues making the bank resilience to a successful cybersecurity attack

- To prepare and produce your project pitch you should draw on the various activities you worked on this week, in particular:
    - Scoping: Outline what specifically will be included in this project and what are the skills that you bring.
    - Establishing goals, requirements and potential problems: Outline the change you plan to make, specify the requirements and identify the potential problems you have considered.

Describe the scope

i. inventory the Information Technology assets and enabling infrastructure.
ii. conduct the cybersecurity self-assessment be to determine both its present state and its target or desired cybersecurity profile or state.
iii. identify gaps, threats, and risks.
iv. identify the potential impact.
v. prioritize action plans to mitigate the risks identified

vi. provide a timeline for remediation; and
vii. provide a remediation status with possible residual vulnerabilities and risks.

Project justification

This project will assist SMFB, classified as an OFI by the CBN, to comply with the provisions of the Risk Based Cybersecurity Framework and Guidelines. Compliance with CBN guidelines is a condition upon which the approved license to operate as an OFI is based and while no sanctions are stated in the guideline for non-compliance, the External Auditor of the bank is expected to report instances of non-compliance with guidelines to the users of the Financial Statement and the CBN with the probable result that continued non-compliance may lead to heavy sanctions and the withdrawal of the license to operate.

Blockers

(i) The effective date for the guideline being 1st Jan 2023 and a reporting requirement by 31st March 2023. These deadlines have been discussed with SMFB and there are no current alternative plans to meet the dates. SMFB is in discussion with NAMB and a few other OFI's to seek a waiver from meeting these dates.

(ii) Physical access to Equipment and Infrastructure – While the majority of the work can be done remotely using Digital Forensic Tools, there may be some infrastructure that will require physical access. The IT Administrator will be used to cover such scope and if necessary, a trip to Nigeria will be planned

2.2 Estimating project resources

Step 2: Project resources. Select one particular chunk or task of your project and estimate the resources required.

Consider the following:

staff engagement
budgets
hardware requirements
software requirements
other material requirements.

Resources	Type	Details
AnyDesk	Software	VPN
OpenVPN	Software	VPN
PGP	Software	Encrypted messaging
Laptop	Hardware	
VM Ware	Software	Virtualization

2.3 Scheduling a project

Step 1: Getting started - A simple approach to scheduling a project will usually entail:

- defining your activities/tasks,
- establishing an initial order for executing activities/tasks,
- creating some milestones,
- allocating people to tasks,
- calculating timing for each activity/task, and
- setting-up a process for ongoing review of your schedule.

Step 2: The Census case - how would you recommend to fix it?

1. Involving the right people in decision making - stakeholders would probably have pointed out the potential bandwidth issues

Step 3: Consider and reflect on:

- Work Breakdown Structure (WBS) "is a hierarchical decomposition of the total scope of work to be carried out by the project team to accomplish the project objectives and create the required deliverables" (PMI, 2013, p. 126).
- The idea that "logic is the biggest driver in a properly constructed schedule" (Jones, 2009).

  Things to do for project:
  a. Use MS Project for scheduling and ensure that dependencies are logically driven and not manually driven.
  b. Check that the logics make sense and they are achievable

3.2 Version control

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Step 2: Set up a version control system for your project

Take the time to set up your version control plan now.

Note:

- The recommended software here doesn't work on my laptop. Somehow it continues to throw up strange errors that I cannot resolve
- Decided to keep to Git and manage work with this.
- Develop Version Control Process document. Remember to save this to the Git repository.

3.3 Visualisation techniques

Step 2: Visualisations for planning and scheduling

When we look at planning and scheduling a project, we consider :

- planning to refer to the what and the how, and
- scheduling to refer to the who and the when.

Planning and scheduling often go hand-in-hand, particularly when creating visualisations.

Step 3: Kanban and issue tracking for team tasks

- Kanban and issue tracking are not mutually exclusive and will often go hand in hand.
- Kanban is a popular project planner that can be used for almost any kind of project where a high-level project overview will benefit an individual or team project.
- It is a particularly popular framework for agile software development.
- Issue tracking integrated with Kanban can help you stay organised, particularly for things like irregular bug tracking and customer service requests.

  Kaban type software include:

  a. Jira -
     i. Originally, Jira was designed as a bug and issue tracker. Today, Jira has evolved into a powerful work management tool for all kinds of use cases, from requirements and test case management to agile software development.
     ii. The Jira interface has boards where project managers can create user stories and issues, plan sprints, and distribute tasks across a team. Project managers can also prioritise and discuss their team's work in full context with complete visibility.
  b. Trello,
     i. a subsidiary of Atlassian (the people behind Jira), is a very popular KanBan style issue tracking tool that organizes projects into boards.
     ii. In one glance, Trello tells you what's being worked on, who's working on what, and where something is in a process.
     iii. It is akin to a white board filled with labelled and organized sticky notes with the ability to integrate attachments from many different applications.
  c. Github project boards
     i. Github's official project management and issue tracking tool which integrates with a Github repository.
     ii. It is located on every repository created on GitHub at the projects section.
     iii. These projects consist of pull requests, notes and issues which you organise as cards in columns of your choice,
     iv. GitHub gives you control over the project board and has options to automate every issue tracking event.

Step 5: Share ideas for visualisations with your colleagues

- share your initial ideas for visualisations for your project proposal:

  My idea -
  - Use the Kanban Board like facility within Git Project to provide activity status update
  - Types of visualisations to use - Github project boards
  - Why chose these visuals - it integrates with Github, the others are new knowledge area that I will need to learn.

4.2 Privacy, sovereignty and confidentiality in cybersecurity

Step 1: Thirteen key principles of Australian privacy law

Consider the 13 key principles of Australia privacy law:
What potential significance might each of these principles have for your project?
How could you mitigate their potential impact?

- The entity that is the subject of this project is not an APP entity and as such the 13 key principles of Australian privacy law are not applicable.
- That said, though there are no similar legislations in Nigeria, privacy of information is still of importance. Section 37 of the 1999 Nigerian Constitution provides that:
- "The privacy of citizens, their homes, correspondence, telephone conversations and telegraphic communications is hereby guaranteed and protected."
- In furtherance of the above provision, The National Information Technology Development Agency (NITDA) issued the Nigerian Data Protection Regulation, 2019 ('NDPR') as the main data protection regulation in Nigeria.
- Mitigation Plan

Issue	Potential significance for my project	If there is a potential impact, how might it be mitigated?
Duty of Care Sect 2.1.2	Duty of care is owed to all Data subject. Such duties include using the data only for the purposes for which they were collected – processing loans, establishing accounts and credit worthiness evaluations.	Ensure that the report excludes identifying Personal Data
Transfer of Personal Data Section 2.1.1 aii	Prohibition of data transfer from any entity carrying out data processing for research to any other person. This means that any personal data collected cannot be included in the project reports	The mitigation is in ensuring that the data obtained during the project are anonymized and any identifying details removed in any form of reporting and data transfer
Data Security Section 2.6	Any personal data must be protected from hackers and securely stored implementation by the enterprise	Promote an appreciation of cybersecurity risks through a vulnerability assessments and the development of a gap closure plan for implementation by the enterprise
Data Transfer to Foreign Country Sect 2.11	Not significant as there will be no transfer of Personal Data. If in the course of the project, personal data is received, such will be handled locally and not transferred	All storage devices for the Project will be located in Nigeria. Access through Remote Desktop connection will ensure that data is processed where resident and not transferred across border

Step 2: Company based policy

Does your project parent or purchasing company have a clear policy surrounding data storage?

Yes the company actually has a Data Privacy policy on its website. This is fairly detailed, addressing informed consent to data collection, processing modality and where data is stored as well as data subject's rights to request for the expunge of their data. It is available on the website of the company

Write down your considerations for data protection and responding to breaches for your own project.

1. Report to the DPO the breach and the circumstance of the breach

2. Inform the ECU Team of the event and the potential schedule impact to the delivery of the project
3. Consider a revision to the schedule

4.3 Sustainability and social responsibility

Social and Environmental Issue

Social/Environmental Issue relevant to my project: Awareness
Increasing the awareness of cyber security amongst the employees of the subject entity
X location: 48% (between short and long term).
Y location: 94% (positive ≈4).

Social/Environmental Issue relevant to my project: Security
Security of the data subjects from harm through unintentional breaches and cyber criminal access to their personal data
X location: 78% (long term).
Y location: 91% (positive ≈4).

Social/Environmental Issue relevant to my project: Accountability
Empasizing the accountability of the entity as a Data Controller to safeguard the personal data from exploitation and use for unintended purposes
X location: 15% (short term).
Y location: 76% (positive ≈3).

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Pitch element	Description	Your notes	Your pitch
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Glimmer of hope	What you can do to fix this problem.	Carry out an evaluation of current infrastructure and their resiliency to cyber-attack. By so doing, promote an appreciation of cyber-risks in the enterprise and understanding of the gaps and	Promote an appreciation of cybersecurity risks through a vulnerability assessments and the development of a gap closure plan for implementation by the enterprise
Novel solution	The idea you can have that can solve the problem.		
Credibility	Why you are the person to solve the problem.		I have tremendous influence on the management of the enterprise and I am the most informed, following my Graduate Cert and M.Sc program, in Cybersecurity issues.
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From <https://ao.ecu.edu.au/CYB6012/Week_1/Interactives/Wk1.7.4.Elevator_Pitch.html>

To Do List

Monday, 16 January 2023 8:28 PM

Read the Agile Handbook by PMI - Very important
Familiarize with Scrum Methodology

Security Testing:
Focus on Internal Actor as 78% of reported incidents relate to them/

Consider and reflect on any patterns you see in these QA failures. Add your notes to your project OneNote.

- Don’t treat security the same way you treat any other quality control.
- Delivering trustworthy pass/fail results is far more straightforward when dealing with functional requirements such as the behavior of a given button on a screen.
- security requirements focus on protecting against an infinite set of constantly shifting, difficult-to-predict, bad things.
- It is tough to automate, but not impossible
- Focusing externally leaves your organization vulnerable to the biggest threat: insiders.