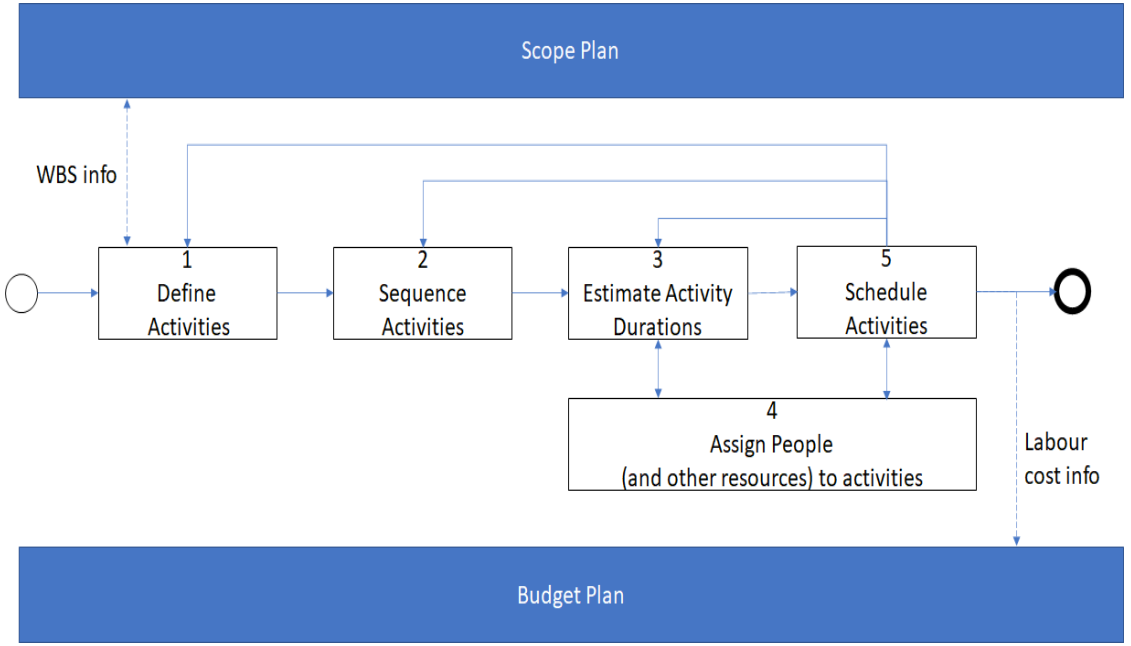
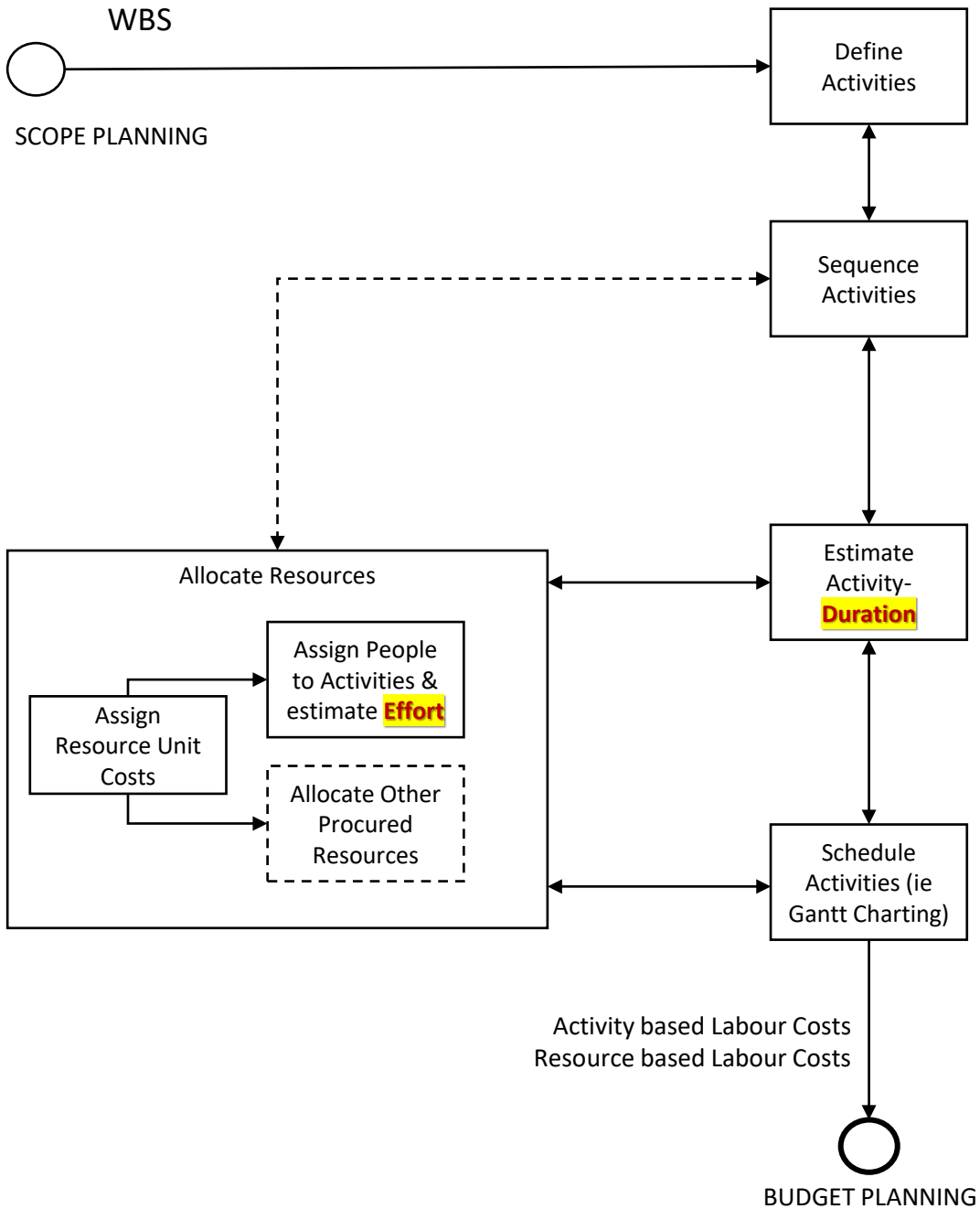
# Understanding what execution of PMBoK's Schedule Management processes really mean in practice

Source: PMBOK™, Chap 6 (PMI, 2017)

- Define Activities
- Sequence Activities
- Estimate Activity Duration
- Develop Schedule



# Scheduling Process Flow Flashcard




- Finalise WBS
- Enter into Schedule Software

- Decide the development sequence of user stories & milestones
- For each user story, decide the execution sequence of SDLC work per sprint; and sub-milestones if appropriate
- Use PERT chart notations to document these activity-sequencing decisions
- Guided by these PERT charts, decide task dependencies by either text inputs or using visual-Gantt chart linkages

- Decide which of the WBS level you want to monitor & control each user story's sprinted SDLC work (it can be at the lowest work-package level or higher)
- Guided by this decision, estimate the duration per SDLC activity (there are several estimation methods and you can choose a simpler one, ie Delphi method)

- Use GANNT chart technique to visually schedule the activities

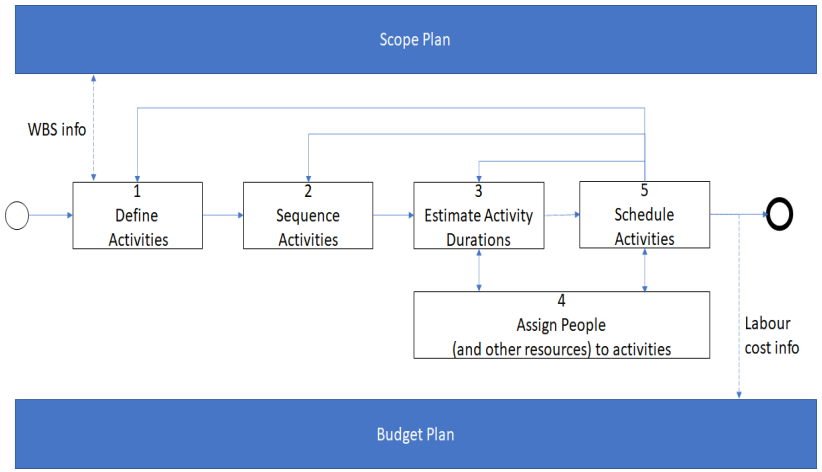
Special Note:

**Duration** – is a measure of the work-time taken, between start and end dates, to complete a task

**Effort** - is a measure of the work-time each person spends to complete a task, between its start and end-dates

Both schedule measures use the same measurement unit eg hours, days, etc

## Moodle Book View



# More on Sequencing Steps

From RTM, we can use the functional items to identify the user stories that related to existing services to be amended and new services to be developed

| Requirement | Functionality Description | Service | Category | Business Objective | Deliverable |
|---|---|---|---|---|---|
| 1 ESG capability in NFT Trading | Enables fans and Hybe's charity donations to registered charity-projects based on the following rules:<br>•Hybe contribute 2% of the NFT transaction settlement amount to the transacting fans' chosen charities' projects supported by BTS and other K-pop labels.<br>•Fans contribute 2% of the NFT transaction settlement amount and optionally more to their chosen charities' projects. | 1) Trade the original K-label;s NFT Resources<br>2) Trade K-label's NFT Resources | Non-functional<br>Non-functional | | ESG Enabled Original NFT Trading<br>ESG Enabled NFT Trading |
| 2 Register Charity & Projects | | New | Functional | | |
| 3 Setup Charity's NFT Exchange Accounts | | Dunamu Momentica NFT Account Setup | Functional | | |
| 4 Charity project Communication Websites on Weverse | | New | Functional | | |
| 4.1 Project Progress Dashboard<br>Click contribution or deliverable to see details of their accumulated contribution against each charity's project's deliverables and % complete information | | New | Functional<br>Non-functional | | |
| 4.2 Website links in Weverse social media contents | | New | Non-functional | | |
| 4.3 Catalogue of Charity's Projects, with the following capabilities | | New | Functional | | |
| Link to Charity own institutional websites & social media channels | | New | Non-functional | | |
| 5 Cybersecurity education service | | New | Functional | | |
| 6 Iconlink in Weverse Account Landing Page & External Links Panel | | Weverve Landing Page<br>Weverse URL Panel | Non-functional<br>Non-functional | | |
| 7 Weverse login authentication & other malware detection checks | | Weverse Login | Non-functional | | |
| Checks each user's country to residence to ensure legal elibility to trade NFT | | | Non-functional | | |

User Stories that amend existing software services

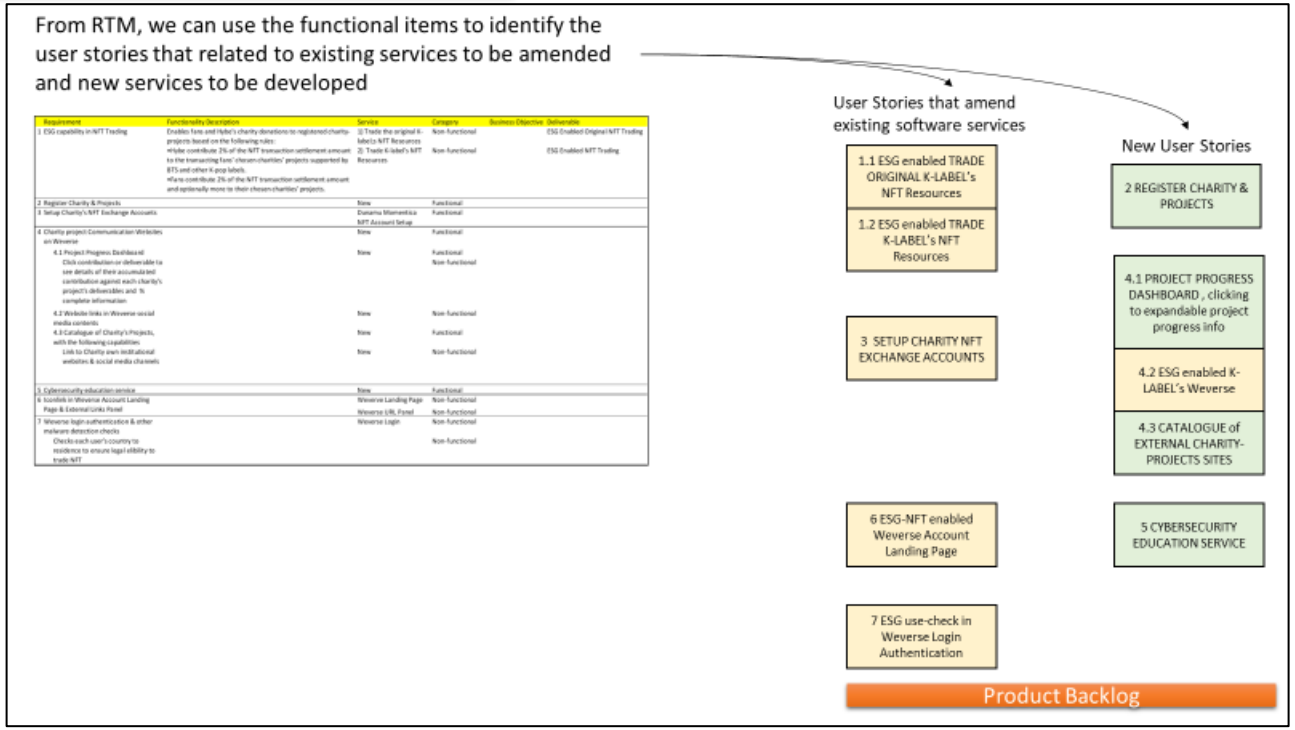
- 1.1 ESG enabled TRADE ORIGINAL K-LABEL's NFT Resources
- 1.2 ESG enabled TRADE K-LABEL's NFT Resources
- 3 SETUP CHARITY NFT EXCHANGE ACCOUNTS
- 6 ESG-NFT enabled Weverse Account Landing Page
- 7 ESG use-check in Weverse Login Authentication

New User Stories

- 2 REGISTER CHARITY & PROJECTS
- 4.1 PROJECT PROGRESS DASHBOARD , clicking to expandable project progress info
- 4.2 ESG enabled K-LABEL's Weverse
- 4.3 CATALOGUE of EXTERNAL CHARITY-PROJECTS SITES
- 5 CYBERSECURITY EDUCATION SERVICE

Product Backlog

# More on Sequencing Steps




**Group Decision 1**: What are other user stories we need to add on?

- Example Integrated Testing of all modified and new user stories
- Any platform interface testing? Your decision call, based on your design thinking

Include adding your group's consensus agreed new user stories in **product backlog**

**Group Decision 2**: Determine the development sequence of all these user stories using PERT Chart technique

**Group Decision 3**: For each user story, determine the SDLC execution sequence per user story.

**Group Decision 4**: As there are many user stories, trying to determine the SDLC sequence of each one will be very complicated in your PM learning. Hence pick 2 user stories that amend existing services and 2 new ones to detail their sequence flow / PERT charts. All the additional user stories that you included outside the RTM list must be sequenced in detail as well. For the unselected user stories, sequence them at the User-Story level.