# Module 3.2 - BPA Planning a BPA Project 

Dr. Somnuk Keretho Advisory Committee, UNNExT Director, iNOVA, Kasetsart University<br>sk@ku-inova.org

## Planning a BPA Project



## Identifying BPA Project Tasks

* Develop a work breakdown structure for a BPA project
- A work breakdown structure is an output-oriented description of project tasks. It typically starts with outputs. The work components of outputs are then broken down into tasks necessary to achieve them.



## Identifying BPA Project Tasks

* Use the Business Process Analysis Guide to Capture and Simplify Trade Procedures, as an input for identifying BPA tasks for each output
- Activity 3.I-3.3 and Activity 4.I-4.7 for the modeling of activity diagrams describing core business processes represented by use cases in the use case diagram
- Activity 4.8-4.10 for the development of process description for all activity diagrams
- Activity 4.1I-4.14 for the development of an integrated activity diagram
- Activity 4.12-4.14 for the development of timeprocedure chart
- Activity $4.15-4.16$ for the consolidation and submission of output no. I - 4 to project sponsor for perusal
- Activity 5.I-5.4 for the identification of bottlenecks
- Activity 6.I-6.4 for the development of recommendations and/or new business processes




## Use Case Diagram as an Input for Estimating Time Required to Complete Tasks to Product Output I and 2



Source: Case Study - Thailand's Export of Frozen Shrimp
Training Workshop on TTFMM, Bhutan, 10-14 March 2014

## Estimating Efforts for a BPA Project

Task Estimate $=$ Optimistic Time $+\left(4^{*}\right.$ Most Likely Time $)+$ Pessimistic Time
$($ PERT*)

| Task/Activity (Shrimp Case) | Predecessor | Optimistic Time (day) | Most-Likely Time (day) | Pessimistic Time (day) | Estimated Time (day) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A 3.1-3.3 | None | 5 | 8 | 10 | 7.83 |
| A 4.1-4.2 | A 3.1-3.3 | 2 | 4 | 5 | 3.83 |
| A 4.3 | A 3.1-3.3 | 2 | 3 | 5 | 3.16 |
| A 4.4 | A 4.1-4.2, A 4.3 | 3 | 5 | 10 | 5.5 |
| A 4.5 | A 4.4 | 3 | 4 | 10 | 4.83 |
| A 4.6 | A 4.5 | 5 | 8 | 10 | 7.83 |
| A 4.7 | A 4.6 | 1 | 1 | 2 | 1.16 |
| A 4.8 | A 4.7 | 3 | 4 | 10 | 4.83 |
| A 4.9 | A 4.8 | 5 | 8 | 10 | 7.83 |
| A 4.10 | A 4.9 | 1 | 1 | 2 | 1.16 |
| A 4.11 | A 4.10 | 2 | 4 | 5 | 3.83 |
| A 4.12 | A 4.10 | 1 | 1 | 2 | 1.16 |
| A 4.13 | A 4.11, A 4.12 | 5 | 8 | 10 | 7.83 |
| A 4.14 | A 4.11, A 4.12 | 1 | 1 | 2 | 1.16 |
| A 4.15 | A 4.7, A 4.10, A 4.14 | 1 | 1 | 2 | 1.16 |
| A 4.16 | A 4.15 | 1 | 1 | 5 | 1.66 |

* Project Evaluation and Review Technique

Training Workshop on TTFMM, Bhutan, 10-14 March 2014

## Developing Project Schedule

| Task/Activity (Shrimp Case) | Predecessor | Estimated Time (day) | Week 1 |  |  |  |  | Week 2 |  |  |  |  | Week 3 |  |  |  |  | Week 4 |  |  |  |  | Week 5 |  |  |  |  | Week 6 |  |  |  |  | Week 7 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | M | T | W | T | F | M | T | W | T | F | M | T | W | T | F | M | T | W | T | F | M | T | W | T | F | M | T | W | T | F | M | T | W | T | F |
| A 3.1-3.3 | None | 7.83 |  |  |  |  |  |  |  |  | 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.1-4.2 | A 3.1-3.3 | 3.83 |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.3 | A 3.1-3.3 | 3.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.4 | $\begin{gathered} \text { A 4.1-4.2, A } \\ 4.3 \end{gathered}$ | 5.5 |  |  |  |  |  |  |  |  |  |  |  |  | $\sqrt{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.5 | A 4.4 | 4.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |  |  |  |  |  |
| A 4.6 | A 4.5 | 7.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |  |  |  |
| A 4.7 | A 4.6 | 1.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.8 | A 4.7 | 4.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.9 | A 4.8 | 7.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.10 | A 4.9 | 1.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.11 | A 4.10 | 3.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.12 | A 4.10 | 1.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.13 | A 4.11, A 4.12 | 7.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.14 | A 4.11, A 4.12 | 1.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.15 | $\begin{gathered} \text { A 4.7, A 4.10, } \\ \text { A 4.14 } \end{gathered}$ | 1.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.16 | A 4.15 | 1.66 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Assigning Process Analysts

* Technology skills: The basic knowledge of UML notations, especially in use case diagrams and activity diagrams is desirable. Related work experience is complementary.
* Business/ organization skills: It is important that the selected process analysts know or have an access to the individuals of the business domain under investigation. It is also very useful if they have knowledge of a particular organization or industry associated with the targeted business domain.
* Interpersonal/ communication skills: Process analysts' ability to effectively communicate and interact with other project members is mostly crucial to project success. They should have the ability to create and sustain reasonably good relationships with project stakeholders and especially Process Participants/Business Domain Experts.
* Analytical skills: Process analysts should be able to capture relevant information from verbal expression and written documents, and then formalize them in various types of BPA output.


## Group Exercise - Planning your BPA project.

Discussing within your small group.

* More detailed \& more precise scope of your BPA project with a Use Case Diagram, e.g.
- Identify all stakeholders/agencies involved [actors]
- Identify all key business processes [use cases]
- Identify their relationships [which actors are associated with which actors]
* Who is or who should be the right sponsor?
* A Draft Plan, including
- Identify necessary tasks, e.g. data collection, process description, validation/verification of the findings, improvement recommendations
- all tasks for each use case/activity diagram, etc.
- Identify those who should be involved
- Roughly estimate the timeline/schedule, needed budget, ...
- How we are going to utilize and escalate the outcomes of this BPA project?

