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## Session 6.3 - Planning a BPA Project

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## How to conduct a BPA Project in 3 Main Phases.

I. Scope setting/Planning - Specify a scope of processes to be analyzed

- e.g. import and/or export processes of a specified product, through a certain mode of transportation (trucks, trains, ships or airplanes)...
- e.g. planning staffs, tasks, time schedule, other resources to conduct this BPA project,
II. Data collection and process documentation - Acquire information and document a sequence of steps in actual practices \& their attributes, e.g.
- Who involved (stakeholders/actors)
- Procedures and documents required (input to/output forms)
- Related rules and regulations
- Quantitative indicators, eg. no.of steps, time, cost, time, distance, ...
III. Process analysis - Locate bottlenecks, examine what causes them, and develop measurable and quantitative process indicators (e.g. the number of steps, time and costs required to fulfill those processes)
Recommendation development - Determine how to eliminate each bottleneck, propose and prioritize improvement actions


## Planning a BPA Project



## Identifying BPA Project Tasks

* Develop a work breakdown structure for a BPA project
- A Work Breakdown Structure (WBS) 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 3.1-3.3 and Activity 4.1-4.7 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 4.11 - 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. 1-4 to project sponsor for perusal
- Activity $5.1-5.4$ for the identification of bottlenecks
- Activity 6.1-6.4 for the development of recommendations and/or new business processes

Activity 3.1
Activity 3.2
Activity 3.3
Activity 4.1
Activity 4.2
Activity 4.3
Activity 4.4
Activity 4.5
Activity 4.6
Activity 4.7

6) Recommendations and/or to-be process models


Use Case Diagram as an Input for Estimating Time Required to Complete Tasks to Product Output 1 and



Source: Case Study - Thailand's Export of Frozen Shrimp

## Estimating Efforts for a BPA Project

## Task Estimate = Optimistic Time + (4 * Most Likely Time) + Pessimistic Time (PERT*) 6

| 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


## 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 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.1-4.2 | A 3.1-3.3 | 3.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |  |  |  |  | $\sqrt{w}$ |  |  |  |  |  | $\square$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A 4.5 | A 4.4 | 4.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |  |  |  |  |  |  |  |  |  |  |  |
| A 4.6 | A 4.5 | 7.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  |  |  | 7 |  |  |  |
| A 4.7 | A 4.6 | 1.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $k$ |  |  |  |
| 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 | $\begin{array}{\|c\|} \text { A 4.7, A 4.10 } \\ \text { A 4.14 } \end{array}$ | 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.
$\qquad$ Month 1


## WBS 2

- Collect information
- Capture \& Document the process
- Verify \& validate the findings



## WBS 4 <br> - Wrap-up \& submit the final report

## Group Exercise <br> - 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?


## A Case Study

## BUSINESS PROCESS ANALYSIS (BPA) <br> Rice; Cashew Nuts; Silk Products; Pharmaceuticals Goods

## An Analysis of Trade Facilitation and Import/Export Processes in Cambodia

## Presentation of Findings to the Supreme National Economic Council (SNEC)*

24 February 2011

[^0]
## BPA Team \& High-level Political Support


1.4. The BPA team is led by Dr. Sok Siphana, Principal of Sok Siphana and Associates and Advisor to the Royal Government of Cambodia, and is composed of the following individuals, all acting their personal capacity: Miss. Phanin Hei, Deputy Manager of Planning Office, Phnom Penh Autonomous Port; Mrs. Som Ny, Kamsab; You Mab, Ministry of Commerce; Loeung Ratha, Camcontrol; Meach Yadi, Ministry of Agriculture, Fisheries and Forestry; Mr. Lim Rady, Deputy Chief, Sre Ambel, General Department of Customs and Excise (GDCE); Mr. Iv Taing Phea, GDCE; Mr. Pha Eng Veng, GDCE; Hay Sovuthea, SNEC; Kaing Monika, Garment Manufacturers Association of Cambodia (GMAC); and Pith Prakath, Port Authority of Sihanoukville (PAS).
1.5. Important political support was given upstream by H.E. Dr. Aun Porn Moniroth, Minister attached to the Prime Minister; H.E. Dr. Pen Siman, Delegate of the Royal Government of Cambodia in charge of the General Directorate of Customs and Excise; H.E. Kem Sithan, Secretary of State, Ministry of Commerce; H.E. Mao Thora, Secretary of State, Ministry of Commerce; and H.E. Dr. Hang Chuon Naron, Permanent Vice Chairman of the Supreme National Economic Council (SNEC); H.E. Dr. Mei Kariyan, Senior Advisor, SNEC.

## Comparing with other countries

| Trading Across Borders data <br> Good Practice Economies | Documents to <br> export | Time to export <br> (days) | Cost to export <br> (USD per <br> container) |
| :--- | :---: | :---: | :---: |
| Other ASEAN countries plus Timor Leste |  |  |  |
| Indonesia | 5 | 20 | 704 |
| Lao PDR | 9 | 48 | 1,860 |
| Malaysia | 7 | 18 | 450 |
| Philippines | 8 | 15 | 675 |
| Thailand | 4 | 14 | 625 |
| Timor Leste | 6 | 25 | 1,010 |
|  |  |  |  |
| Selected Economy: Cambodia | $\mathbf{1 0}$ | $\mathbf{2 2}$ | $\mathbf{7 3 2}$ |
|  |  |  |  |
| BPA $\boldsymbol{-}$ Rice | $\mathbf{8}$ | $\mathbf{1 7}$ | $\mathbf{1 , 0 2 9}$ |
| BPA $\boldsymbol{-}$ Cashew | $\mathbf{6}$ | $\mathbf{1 5}$ | $\mathbf{8 3 9}$ |
| BPA - Silk products | $\mathbf{4}$ | $\mathbf{1 2}$ | $* *$ |

## EXPORT OF RICE TO EUROPE BPA through the Sihanoukville Autonomous Port

|  | No. of Documents | List of Documents |
| :---: | :---: | :---: |
| Documents for rice export | 24 documents: | Export documents |
|  |  | (1) Bill of Lading |
|  |  | (2) Certificates of origin (GSP Form "A") |
|  | - 8 export <br> documents | (3) Commercial invoice |
|  |  | (4) Phytosanitary Certificate |
|  |  | (5) Fumigation Certificate |
|  |  | (6) Packing list |
|  | process | (7) Inspection Survey Report |
|  | document | (8) Weight and Quality certificate issued by Camcontrol |
|  | - 5 receipts | Internal process documents |
|  |  | (1) Request for Export Permit |
|  |  | (2) Customs Export Declaration Form |
|  |  | (3) Insurance Certificate |
|  |  | (4) Business License/Patente Tax Certificate |
|  |  | (5) Purchase Order |
|  |  | (6) Phytosanitary Request Form |
|  |  | (7) Fumigation Request Form, |
|  |  | (8) Cargo Release Order |
|  |  | (9) Shipping Note |
|  |  | (10) Freight forwader Consignment Note |
|  |  | (11) Cargo Dispatch Note |
|  |  | Others: Receipts |
|  |  | (1) PAS Terminal Handling Receipt |
|  |  | (2) GDCE Payment Receipt |
|  |  | (3) Camcontrol Payment Receipt |
|  |  | (4) Equipment Interchange Receipt |
|  |  | (5) Terminal Handling Receipt |


| Agencies/ that <br> need to be <br> visited | 6 | (1) Ministry of Commerce <br>   <br>   <br>   <br>   <br>  (2) General Department of Customs <br> and Excise  <br> (3) Camcontrol <br> (4) Diy Port <br> (5) Port Autonomous of Sihanoukville <br> (6) Ministry of Agriculture, Fisheries <br> and Forestry  |
| :--- | :--- | :--- |

(1) Request for Export Permit
(2) Customs Export Declaration Form
(3) Insurance Certificate
(4) Business License/Patente Tax Certificate
(5) Purchase Order
(6) Phytosanitary Request Form
(7) Fumigation Request Form,
(8) Cargo Release Order
(9) Shipping Note
(10) Freight forwader Consignment Note
(11) Cargo Dispatch Note
Others: Receipts
(1) PAS Terminal Handling Receipt
(2) GDCE Payment Receipt
(3) Camcontrol Payment Receipt
(4) Equipment Interchange Receipt
(5) Terminal Handling Receipt

## Benefits of BPA \& Political Support

* BPA can provide much more detailed analysis of all procedures and documentary requirements, and more specific improvement recommendations.
* With the support of political will, those recommendations became the "Rice Export Policy" mandated by the Cabinet.

> Measure 1: "MEF/General Department of Customs and Excise (GDCE), MAFF and MoC/General Department of CAMCONTROL and relevant agencies shall: develop a specific strategy to identify and streamline export processing procedures including inspection, documentation requirements, fees and time required to process export applications; define clear and publicly transparent division of responsibilities among export regulating ministries/agencies; consider milled rice export as a top priority in order to reduce to a minimum informal payments and time required to export by extending "special treatment" similar to the garment sector."

Measure 2: Implement a single-stop service for export processing: MEF/GDCE, MAFF and MoC/ CAMCONTROL and relevant agencies shall set up a Single Stop Service for export processing and issuing certificates for SPS, fumigation, grading and quality, quantity and weight, and customs declaration.

## Tangible Impacts/Implementation Challenges

6.1. Overall positive effects of the Rice Export Policy: There has been some improvement in the export process after the launching of the new policy of paddy production and rice export. Many rice exporters with whom we have interviewed have enthusiastically stated that there is a clear efforts from the various government agencies along the institutional value chain to support the implementation of the rice export policy. There are visible improvements in reduction of government-related transaction costs related to Customs, Camcontrol, and Commerce. For some private services providers like the fumigation services, there are some efforts to reduce the fumigation fee, although the rice exporters still perceived it as high and not commensurate with the services provided. The Port Authority of Sihanoukville has made substantial efforts to streamline their port operations procedures with particular attention to support and facilitate rice and other agriculture products exports.
6.2. While there are general improvements in computerizing and standardizing documents for customs clearance and inspection, pre-export documents submission are still perceived as paper intensive and in sometimes superfluous, i.e. Certificate of Quality from Camcontrol.


[^0]:    *Prepared and presented by Dr. Sok Siphana, Principal, Sok Siphana\& Associates, Advisor to the Royal Government of Cambodia. This study was conducted as part of a part of a United Nations Development Account Project (6th tranche) implemented by ESCAP in collaboration with UNECE and the United Nations Network of Experts for Paperless Trade in Asia and the Pacific (UNNExT). For more information, please visit: http://www.unescap.org/unnext/ or contact the

