

Business Process Analysis to Simplify Trade Procedures

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Myanmar Capacity Building Programme
Training Workshop on Trade Facilitation:
Global Agenda and Regional Priorities
Yangon, 12-13 May 2016



Topics of this session

- **What/Why?:** Business Process Analysis for TF
- **Graphical Notations:** Unified Modeling Language (UML)
- **Summary & Conclusions**



Session based on the UNNEXt Business Process Analysis Guide for the Simplification of Trade Procedures (2010/12)
unnex.unescap.org

What is a Business Process?

❖ **A Business Process** is a collection of related and structured activities or tasks that produce a specific service or product.

❖ Examples

- ▶ Procedures (including document transactions) of importing processed fruits to Kazakhstan from Kyrgyzstan
- ▶ Export Customs Declaration and Clearance Procedures at the Border Point
- ▶ Applying & Issuing Process for a Certificate of Origin (e.g. as needed to import goods to Azerbaijan)
- ▶ Applying & Issuing Process for a Phyto-sanitary Certificate

What is...

❖ ...a Business Process Analysis (BPA)?

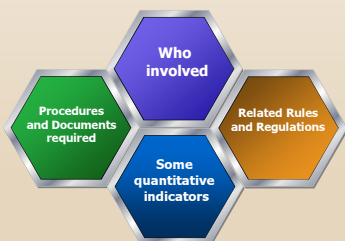
A modelling and analysis of business processes for understanding the current situations and proposing recommendations for improvement.

❖ Examples

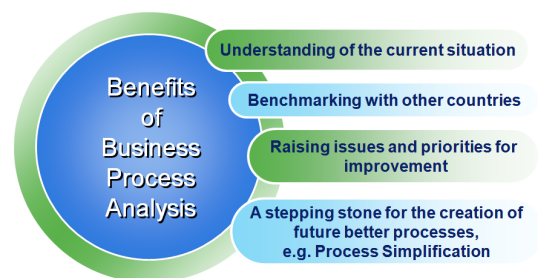
- ▶ Documenting some existing core processes of an organization in delivering some services to its customers
- ▶ Describing a "Standard Procedure," with some exceptional cases
- ▶ Identifying quantitative indicators related to a specified process, e.g. no. of documents, no. of steps, and time/cost of each step
- ▶ Analysis of bottlenecks or redundancies in procedures & documentation
- ▶ Providing recommendations for process simplification or process automation.

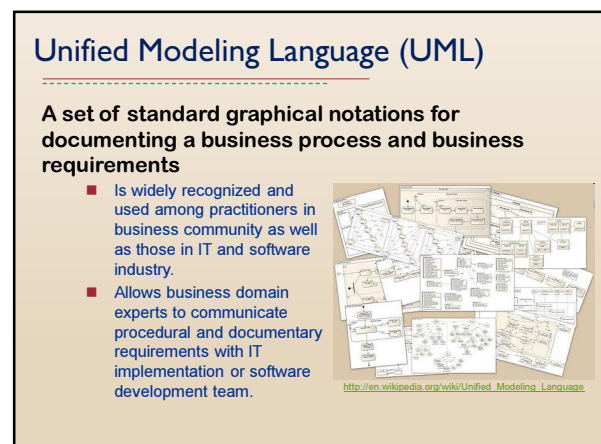
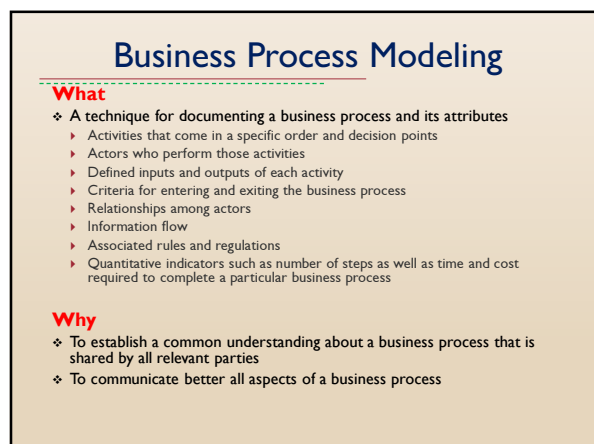
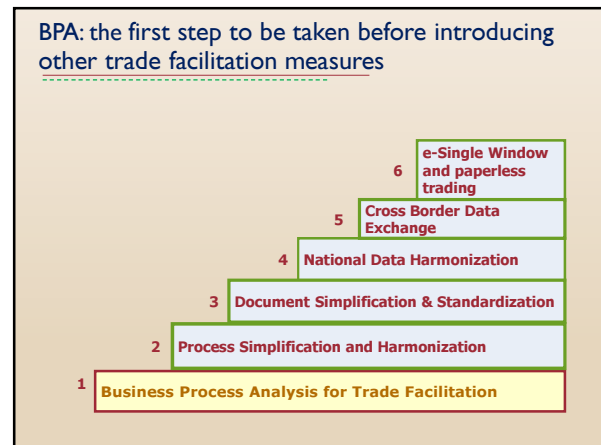
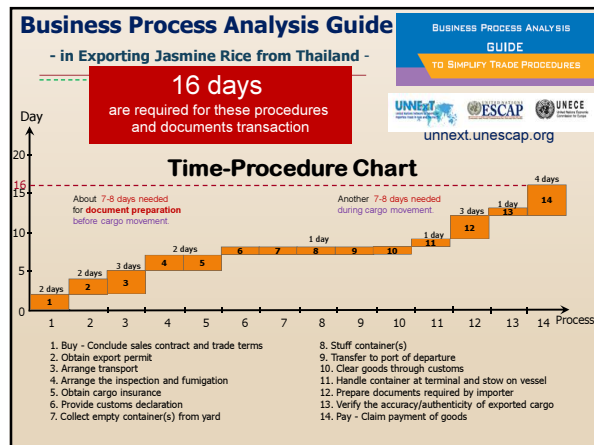
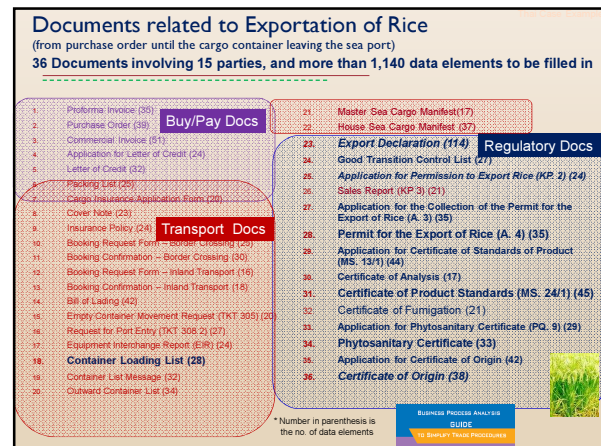
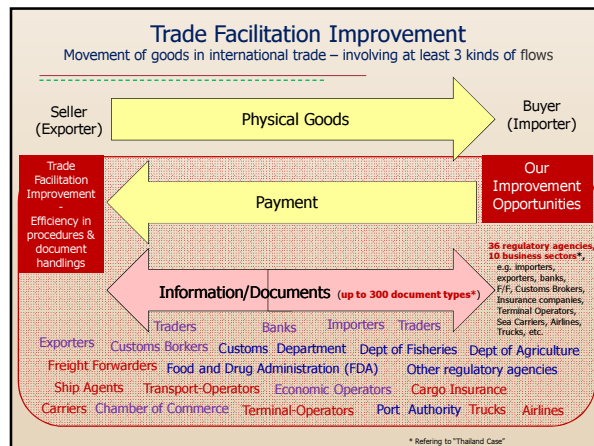
Why conduct a Business Process Analysis?

Business Process Analysis is a practical study
□ to understand attributes of business processes, and their relationships



What are benefits of Business Process Analysis?

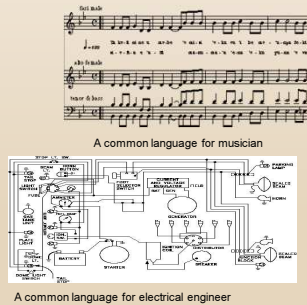




Unified Modeling Language (UML)

- ❖ A set of standard graphical notations for documenting a business process and business requirements

- Is widely recognized and used among practitioners in business community as well as those in IT and software industry
- Allows business domain experts to communicate procedural and documentary requirements with IT implementation or software development team



UML Notations for Use Case Diagram

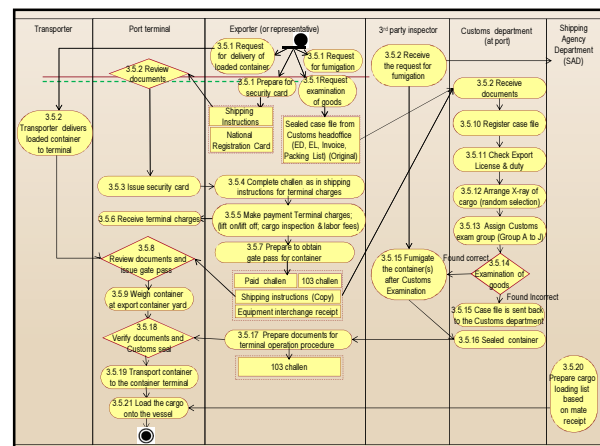
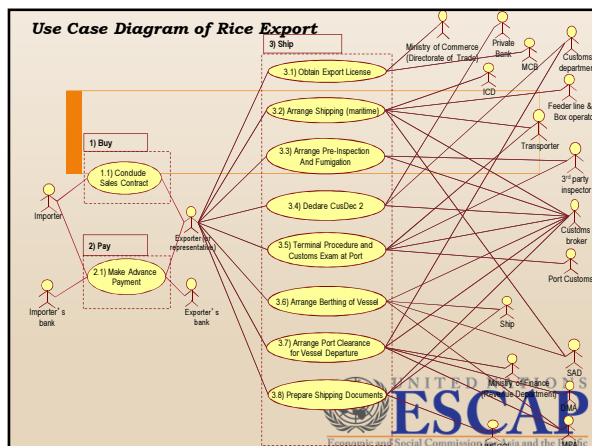
Notation	Description
	Actor □ Represents a role in a particular business process □ Is labeled with a role name
	Use Case □ Represents a business process □ Is labeled with a descriptive verb phrase
	Relationship Association □ Link actors with business processes that they participate in
	Subject Boundary □ Represents a process area □ Includes the name of a subject boundary on top

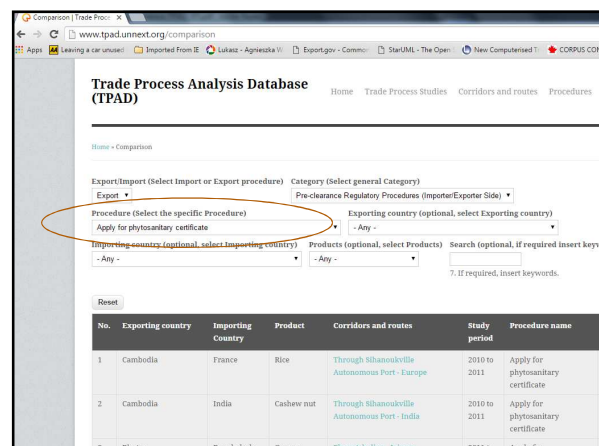
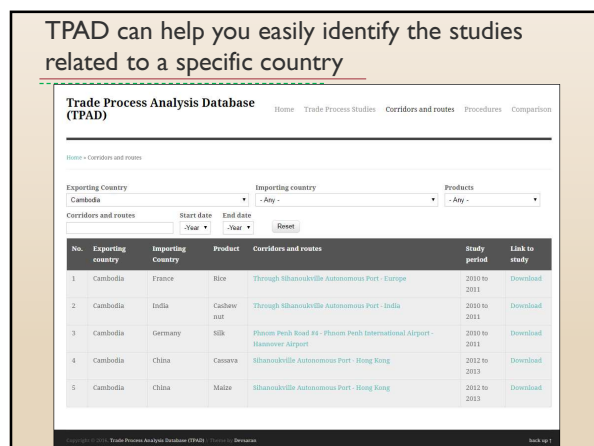
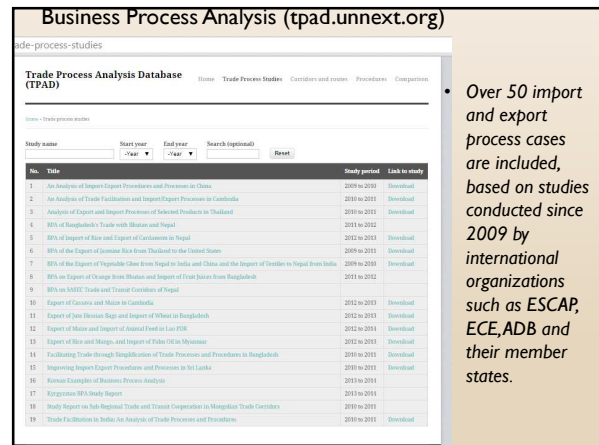
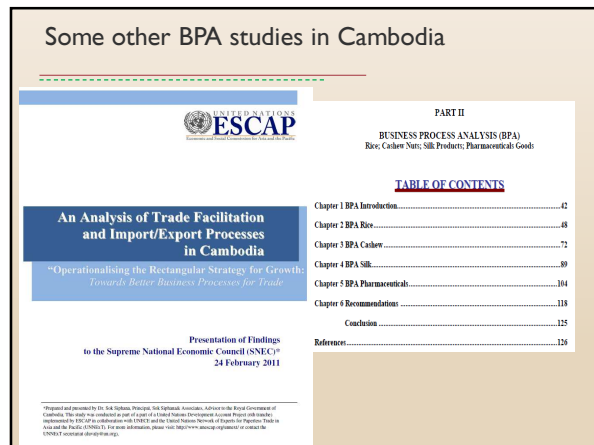
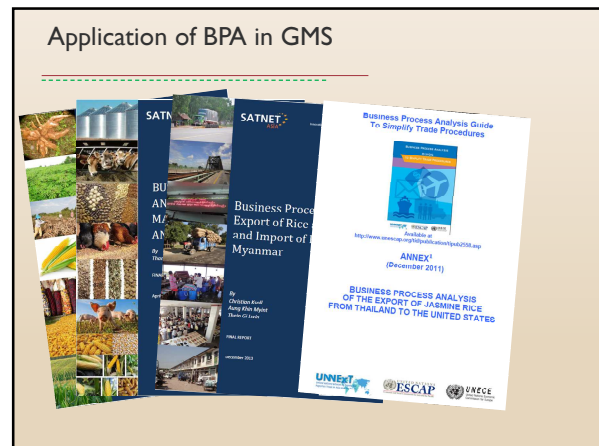
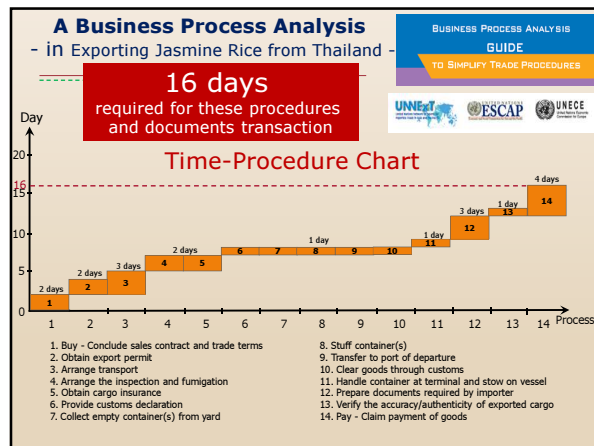
UML Notations for Activity Diagram

Notation	Description	Notation	Description
	Initial State □ Represents the beginning of a set of activities		Swimlane □ Is used to break up individual actions to individual agencies that are responsible for executing their actions □ Is labeled with the name of the responsible individual or agency
	Final Activity State □ Indicates the completion of the business process		Activity □ Represents a non-decomposable piece of behavior □ Is labeled with a name that 1) begins with a verb and ends with a noun, and 2) is short yet contain enough information for readers to comprehend
	Final Flow State □ Indicates that further activities cannot be pursued		Decision □ Represents the point where a decision has to be made given specific conditions □ Attached with labels addressing the condition on each transition line that comes out of an activities and connects to a decision point or vice versa
	Transition Line □ Indicates a sequential flow of actions and information in an activity diagram		
	Fork (Splitting of Control) □ Visualizes a set of parallel or concurrent flow of actions		
	Join (Synchronization of Control) □ Indicates the end of parallel or concurrent flow of activities		
	Object □ Represents a document or information that flows from one activity to another activity (labeled with the name of a document)		

Business Process Analysis (BPA) for trade facilitation

1. A **use case diagram** showing the scope of the business process analysis project;
2. A set of **activity diagrams**; each explains a core business process as represented by a use case in the use case diagram; (together with a set of process descriptions);
3. A list of trade forms and documents which may be accompanied with samples of physical copies;
4. Costs and time for each procedure;
5. A time-procedure chart;
6. A list of identified bottlenecks; and
7. Recommendations to improve the business process and/or to-be business process models.





Indicators related to Trade Procedures in GMS

Export country and product	Destination	No. of days	No. of actors involved	No. of procedures	Type of documents required	Cost (\$)
Cambodia – Maize	China	20	15	13	22	1250-1360
Lao PDR – Maize	Thailand	16	11	8	21	735
Myanmar – Rice	West Africa	19-23	20	10	>25	425

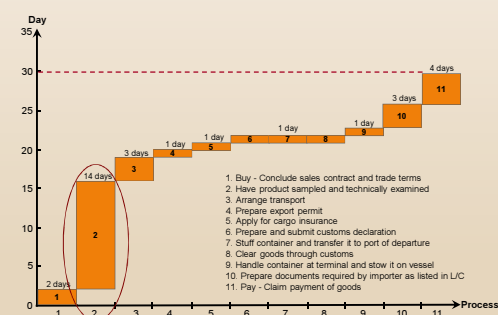
Source: ESCAP BPA Study Reports 2013-14, available at:
http://unnext.unescap.org/tools/business_process.asp

Comparison of a specific export procedure: apply for Sanitary and Phyto-sanitary Certificate for export of agro-food products

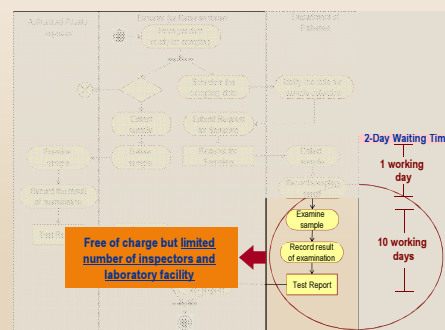
	Cambodia	Lao PDR	Myanmar
Trading partner	China	Thailand	West Africa
Product	Maize	Maize	Rice
Number of days required	2-5	2	2
Documents required	i. Phyto-sanitary Certificate application ii. Commercial invoice iii. Packing list iv. Release container v. Fumigation certificate	i. Phytosanitary application form ii. Packing list iii. Export license iv. Customs certification v. Business license from Vietnamese Capital Agricultural Dept. vi. Commercial contract among importer and exporter vii. Pro-forma invoice	i. Shipping instructions ii. National registration card iii. Sealed case file from Customs iv. Export declaration v. Export license vi. Invoice vii. Packing list
Stakeholders involved	i. Exporter ii. Ministry of Agriculture Forestry and Fisheries	i. Exporter ii. Vientiane Capital agriculture Division	i. Exporter ii. Ministry of Agriculture

Source: ESCAP BPA Study Reports 2013-14, available at:
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Case I: Thailand's Export Process of Frozen Shrimp



Example of identifying bottleneck: Thailand's Export Process of Frozen Shrimp



An example of recommendations for improvement of trade procedures

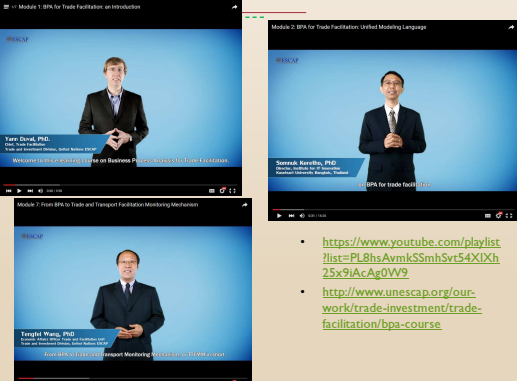
Country	Processes	Recommendations
Cambodia- Export of Maize/Cassava	Apply for Phytosanitary Certificate	Reduce activity 2.2 apply for Phytosanitary Certificate from 5 days to 3 days.
	Apply for Certificate of Origin (COO)	Reduce activity 2.7 apply for Certificate of Origin from 2-day to 1-day.
	All container goes through rigorous security check and scanning at the Port of entry.	Customs should use risks based assessment coupled with exporter and freight forwarder profiles for selective scanning. Waive mandatory scanning for export.
Lao PDR – Export of Maize	Issuance of Certificate of origin (COO) can be processed after or simultaneously with the phytosanitary and fumigation certification process.	The process of application and issuance of COO should be initiated simultaneously with the application for Phytosanitary and/or fumigation certification.
	Submission of documents in processes.	Automation of overall export system is very essential. It will reduce the time taken to travel from one place to another for submission of documents.
Bangladesh- Export of Jute Bags	Obtaining SAPTA certificate	Submission of Export Registration Certificate (ERC) should be removed.
	Obtaining Phytosanitary certificate	Submission of Certificate of Origin (COO) should be dropped
	Obtaining both COO and SAPTA certificates	One of them should be dropped as both serves the same purpose (showing country of origin)

Benefits of the BPA studies: An example in Cambodia

- ❖ Output of BPA projects in Cambodia was instrumental in raising awareness and building political will for on-going trade facilitation reform
- ❖ The outcome of the studies provided direct feedback for senior policy makers to effect trade facilitation reform, which, in turn, decreased the costs of rice exports

Source: <http://tfig.unecp.org/cases/Cambodia.pdf>

Online Videos to assist learning



- <https://www.youtube.com/playlist?list=PL8hsAvmkSSmhSvt54XIXh25x9JAeAg0VV9>
- <http://www.unescap.org/our-work/trade-investment/trade-facilitation/bpa-course>

Summary of this session

- ❖ Applying BPA is essential to identify the bottlenecks of trade facilitation and provide recommendations to removing such bottlenecks and streamlining trade procedures.
- ❖ Application of BPA is often cost-effective
- ❖ A variety of BPA training materials and tools are available and maintained by ESCAP – countries should take the advantage of them.