

Analysis of shortcomings and ways to improve particular priority food supply chains

Business Process Analysis From Farm to Border

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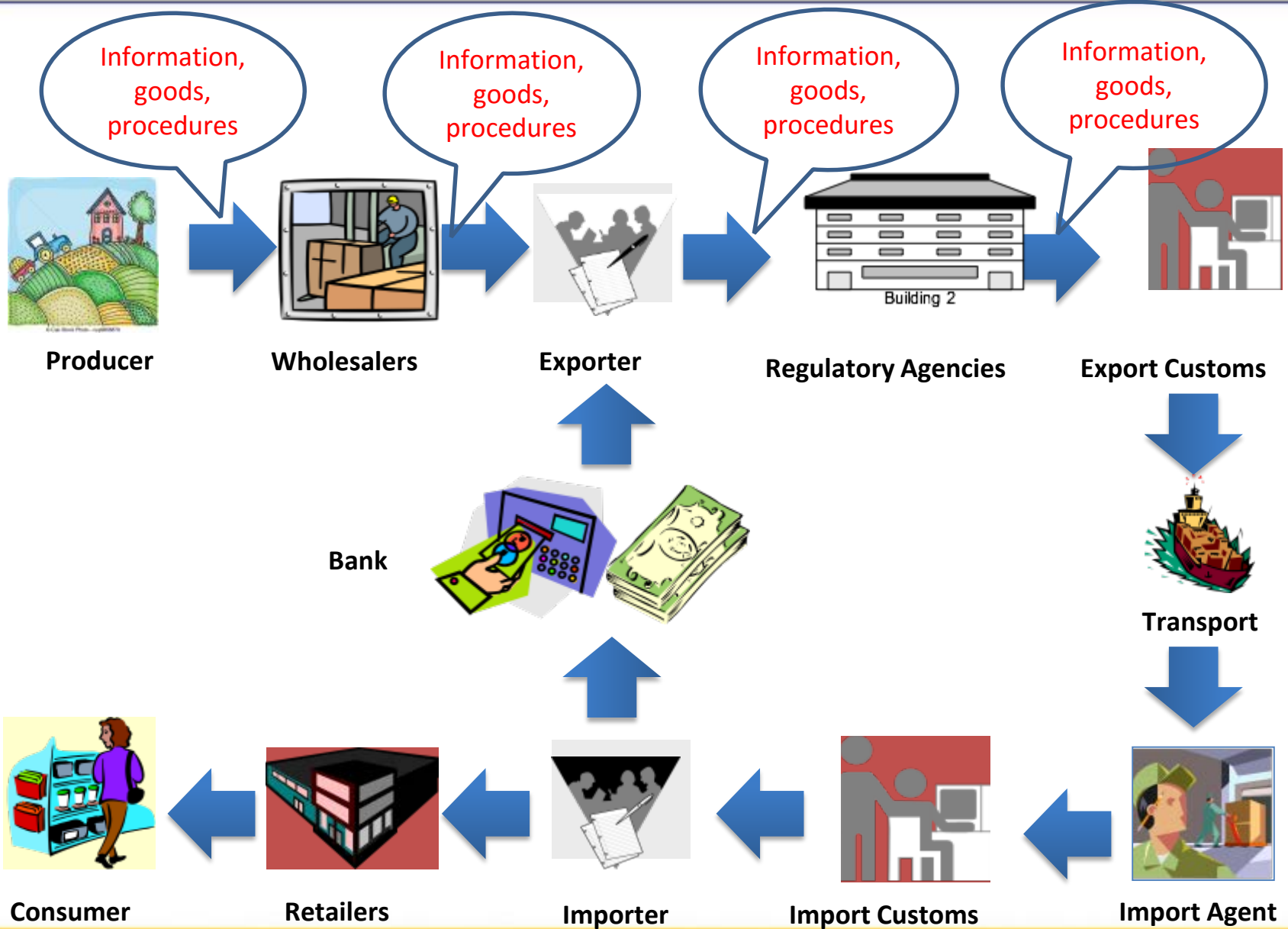
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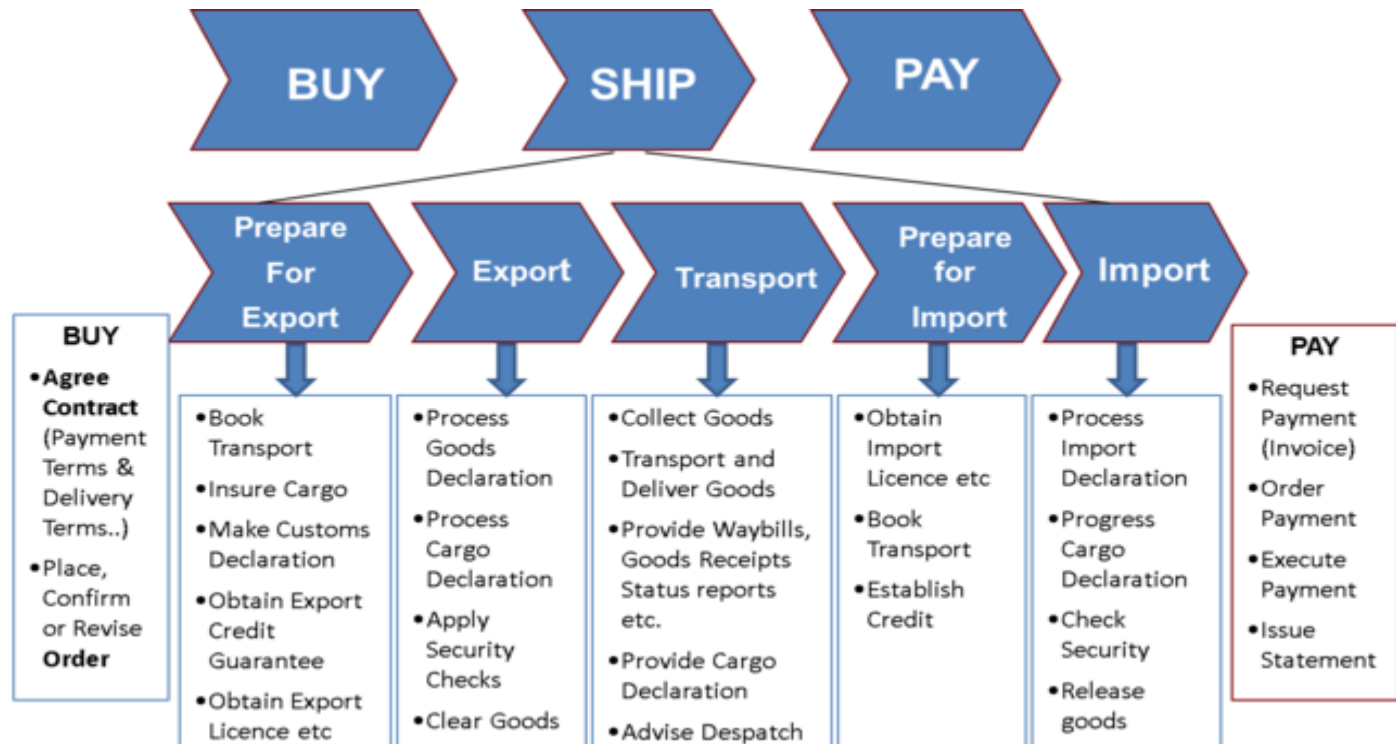
A Generic Agro Product Supply Chain Structure



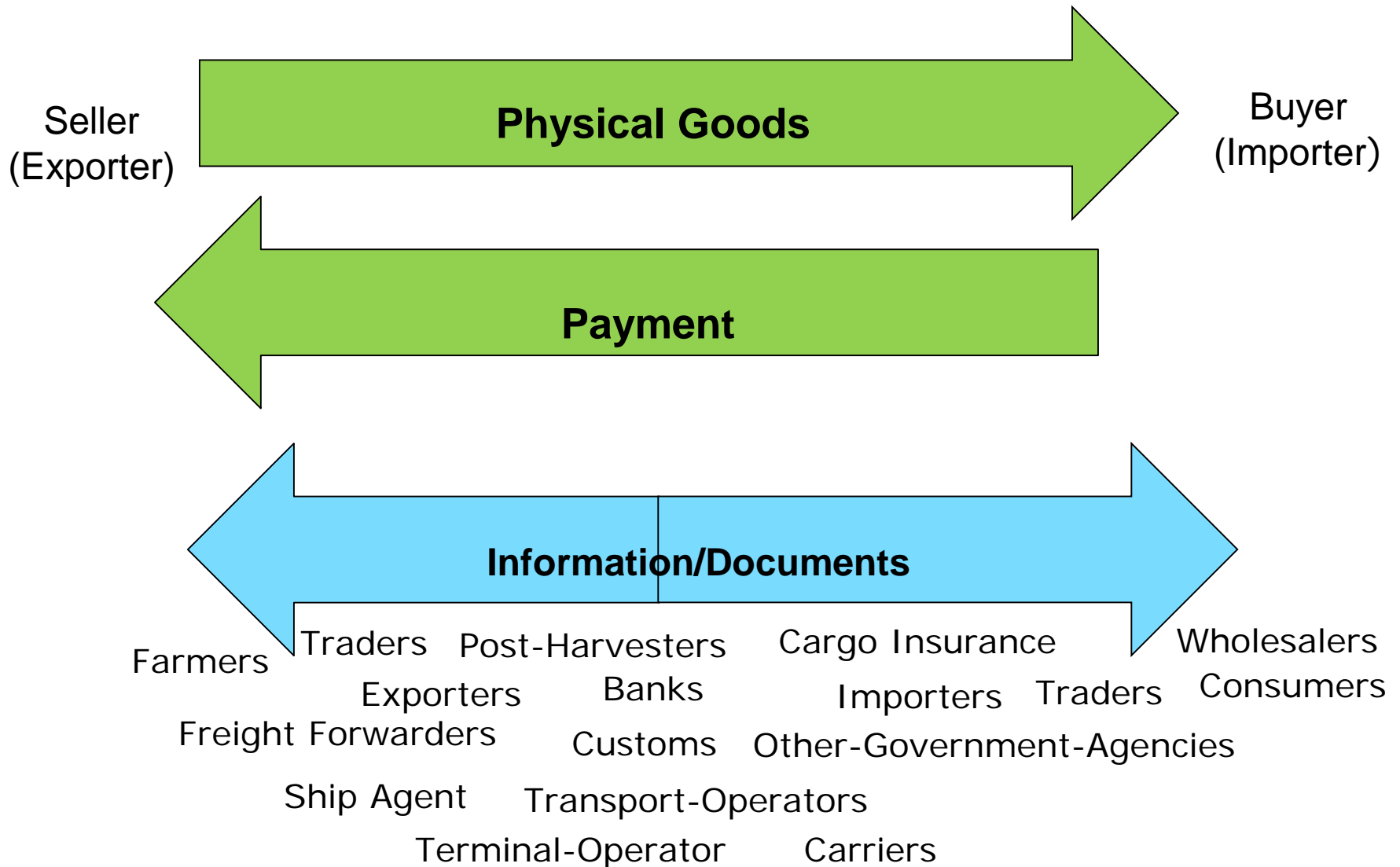
What is a Supply Chain?

An international supply chain is an end-to-end Business Process during which goods move from seller to buyer.

- Reference model: UN/CEFACT Buy-Ship-Pay Model



Trade Movement – 3 Kinds of Flow



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:
 - **Movement process of dried apricot** for example, from Malatya to Izmir port
 - **Applying and Issuing Process** for a Certificate of Origin
 - **Customs Clearance Process** at the Border Point

What is a Business Process Analysis?

- **Practical study**
- **An analysis and modelling of business processes for improvement (and, eventually, even automation)**

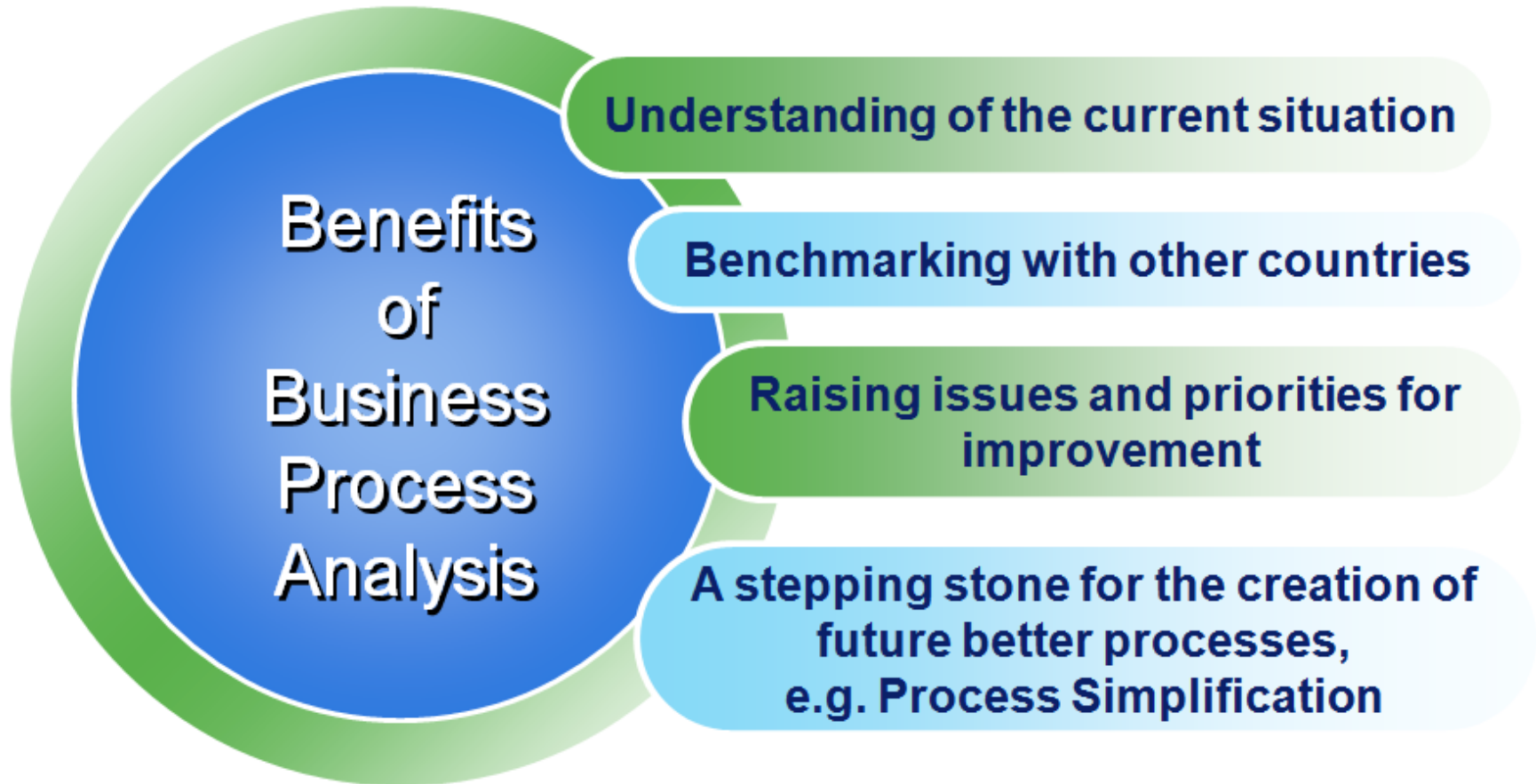
- **Examples**
 - Documenting existing practice in an administration/company
 - Describing a “Standard Procedure”
 - Identifying quantitative indicators
 - Providing a basis to measure time/costs at different steps
 - Providing a specification for automation of processes

Why conduct a Business Process Analysis on country level and in international trade?

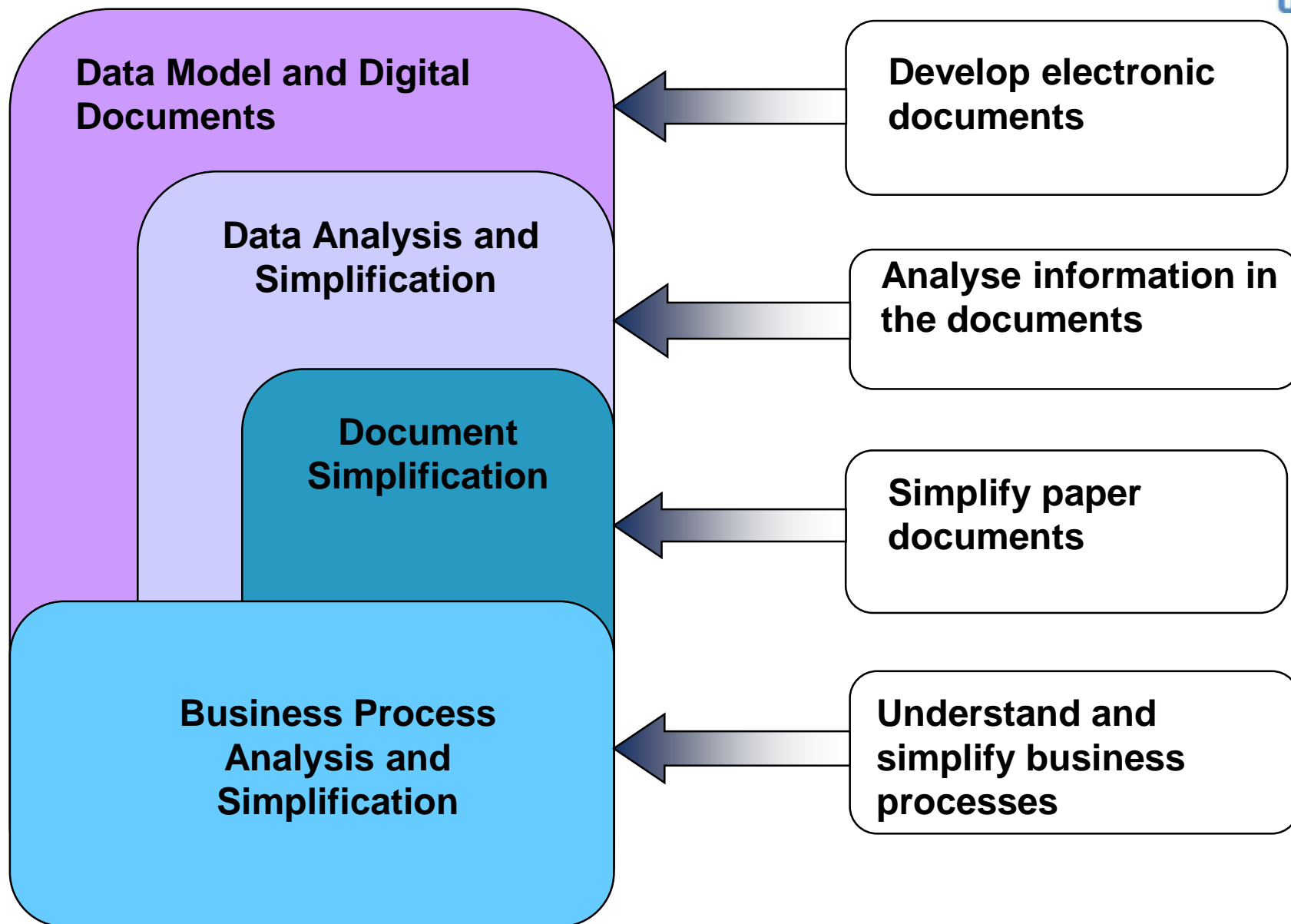
- to understand **how particular business processes work**, and **how they are interrelated**
- to understand how **practical, time-consuming and costly** the trade transactions are both for authorities and users



What are benefits of Business Process Analysis?



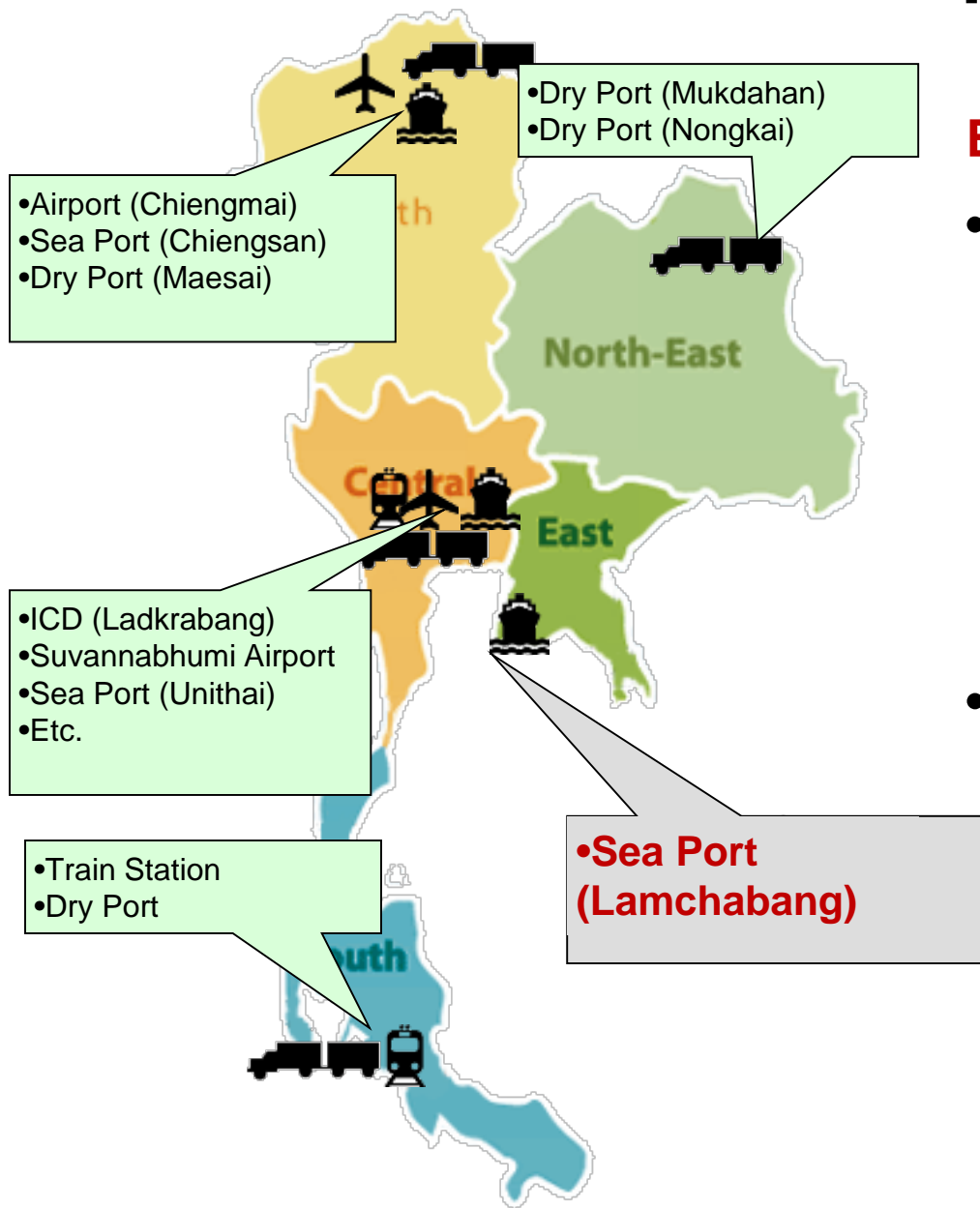
From Paper to Paperless Trade: A Stepwise Approach



Outputs of a BPA

	Step	Deliverable
Phase I	Step 1: Define project scope	<ul style="list-style-type: none"> ○ Use case diagram illustrating business domain, process areas, process participants, and key business processes
	Step 2: Develop a detailed plan and secure resources	<ul style="list-style-type: none"> ○ Detailed project plan including an estimation of human resources required, schedules, and software supported tools ○ A list of potential interviewees and their contact information
Phase II	Step 3: Acquire background information	<ul style="list-style-type: none"> ○ A folder of background information about the business processes under the investigation ○ A list of guiding questions for the interview
	Step 4: Conduct interview and document captured data	<ul style="list-style-type: none"> ○ A set of activity diagrams illustrating activities that come in a specific order and decision points, actors who perform those activities, defined inputs and outputs of each activity, criteria for entering and exiting the business process, relationships among actors, and information flow ○ A set of business process descriptions that describes activity diagram and lists all related rules and regulations ○ Activity diagram illustrating integrated processes in the business domain ○ Time-Procedure chart displaying time required to complete each business process
Phase III	Step 5: Analyze the "as-is" processes and identify bottlenecks	<ul style="list-style-type: none"> ○ A set of observations of the as-is business processes that have the potential for improvement
	Step 6: Develop and propose recommendations	<ul style="list-style-type: none"> ○ Final report with recommendations which may include diagrams of "to-be" business processes

Phase I: Scope Setting



Example:

- Regulatory and business requirements related to the operation and management of the seaport before, upon, and after the **import of containerized cargo** through all modes of transportations (road, rail, air, and sea)
- Import
 - Starting point:** when a carrier enters port
 - End point:** when cargo is picked up and transferred to an importer

Phase I: Scope Setting

Example: Importation by Sea

Draw a **use case diagram** to illustrate the business domain with the different process areas; the business processes and all partners and their links

Example: Identify and map all partners involved in imports by sea

- Vessel Agent
- Maritime Pilot's Station
- Marine Department
- Port Operator
- Customs
- Other Government Agencies
- Importer or Representative
- Terminal Operator
- Haulage/Truck

Business Processes

Prepare documents for import

Prepare to enter a seaport

Report cargo manifest

Enter a seaport

Unload cargo

Clear goods through customs

Arrange the transport for the pick-up of goods

Handle cargo at the terminal

Pay for goods

Maritime Pilot's Station

Marine Department

Port Operator

Vessel Agent

Customs

Other Government Agencies

Importer or Representative

Haulage/Truck

Terminal Operator

Bank

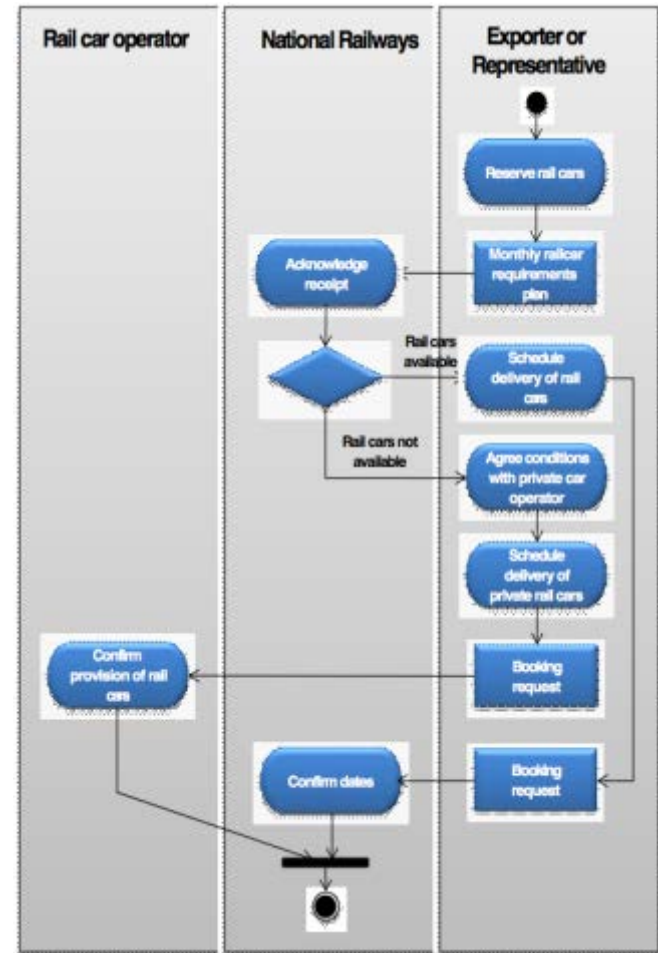
Actor

Step II: Data collection and process description

Objectives:

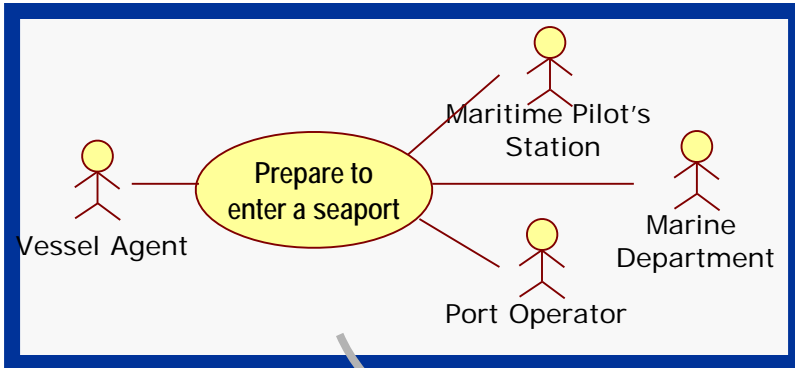
- Record the **process**
- Record **cost/time/risks..**
- **Validate data**
- Process description consists of **diagrams and text**

Name of process area	2. Ship
Name of business process	2.1. Arrange Rail Transport
Related laws, rules, and regulations	<p>Regulation of railways operations (available in Russian only):</p> <ul style="list-style-type: none"> • A list of commercial stations by office road • Order to approve the "Rules of cargo transportation," • Conventional bans • The organisation of transportation by freight cars, repair of freight cars and inventory accounting of freight cars. • Agreement on International Goods Transport by Rail (SMGS) • Application for SMGS consignment notes • Order № 554 of the Minister of Transport and Communications of Kazakhstan • Request for transportation (the application form PG-12), Annex 1 • National Transport Code • Agreement on the order of operation, repair, accounting and settlement for the use of freight cars inventory of the park, leased (temporary use), and use on international routes
Process participants	<ul style="list-style-type: none"> • Carrier - National Railway Company (Kazakh Railways or Russian Railways) • Rail car operating company • Exporter
Input and criteria to enter/begin the business process	<ul style="list-style-type: none"> • The Importer and the Exporter have already agreed about delivery of purchased products to a certain destination
Activities and associated documentary requirements	<ul style="list-style-type: none"> • The Exporter contacts a carrier to reserve rail cars to the designated destinations and pre-schedules a dispatch from the

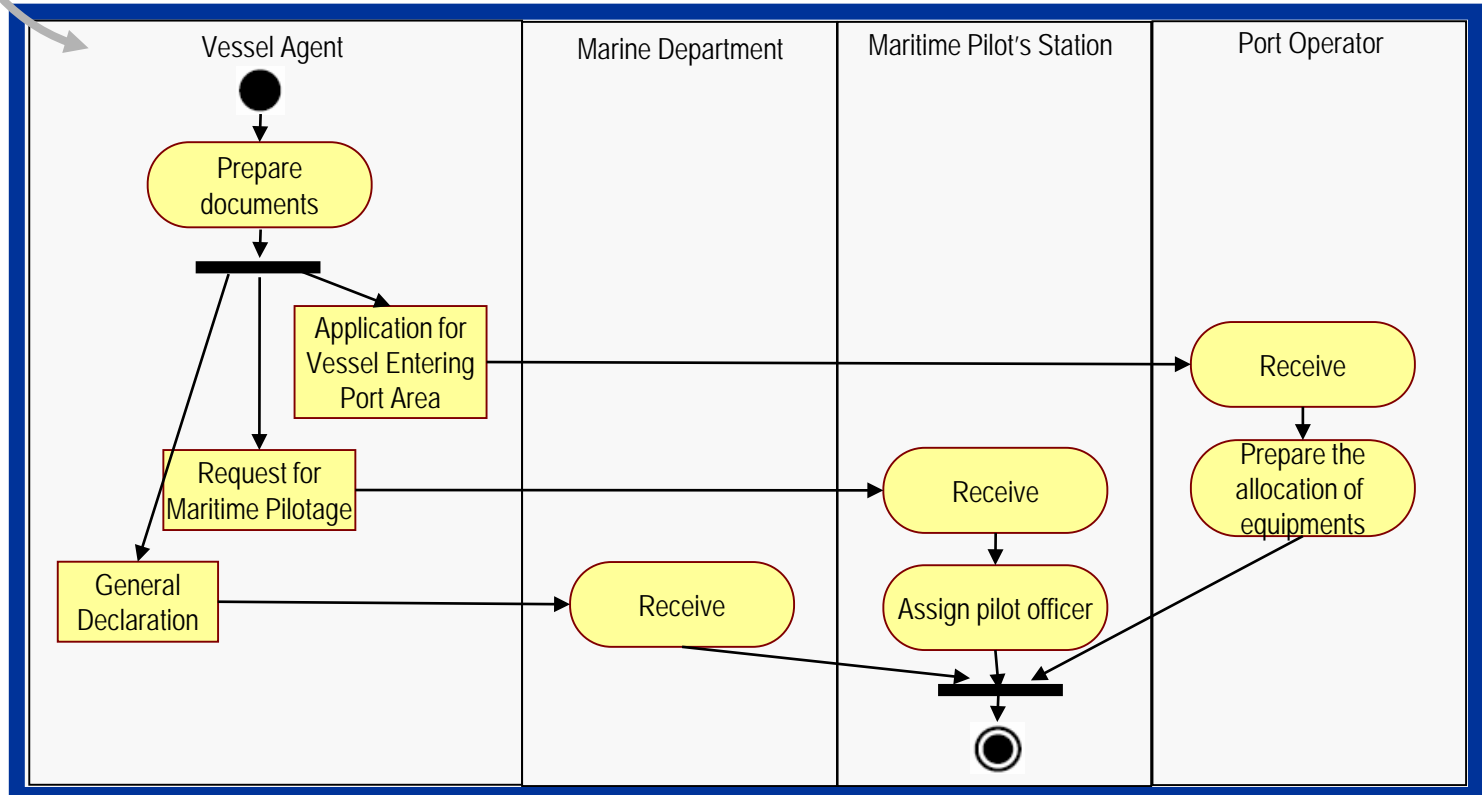


Phase II: Data Collection and Process Documentation

Example: Prepare to Enter a Seaport Process



For each process, draw an **activity diagram** that describes activities and associated documentary requirements



Step III: Bottlenecks and improvements

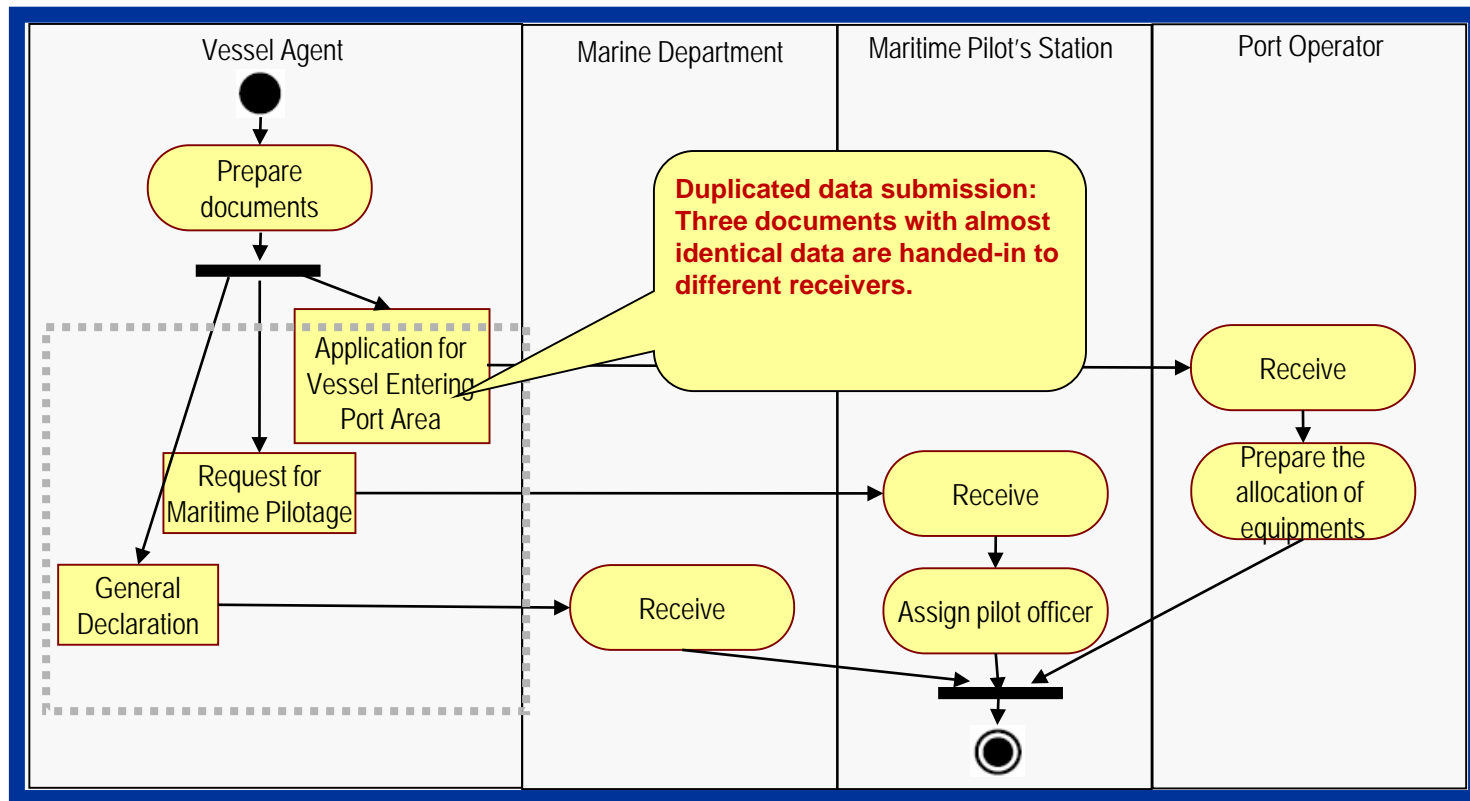
Objectives:

- **Identification:** What are the bottlenecks?
- **Actions:** How to improve them and what to improve?
- **Priority:** Where to start?

Low hanging fruit: biggest improvement with lowest cost (short-medium-long term)

Phase III-1: Process Analysis

Example: Prepare to Enter a Seaport Process (Existing Process)

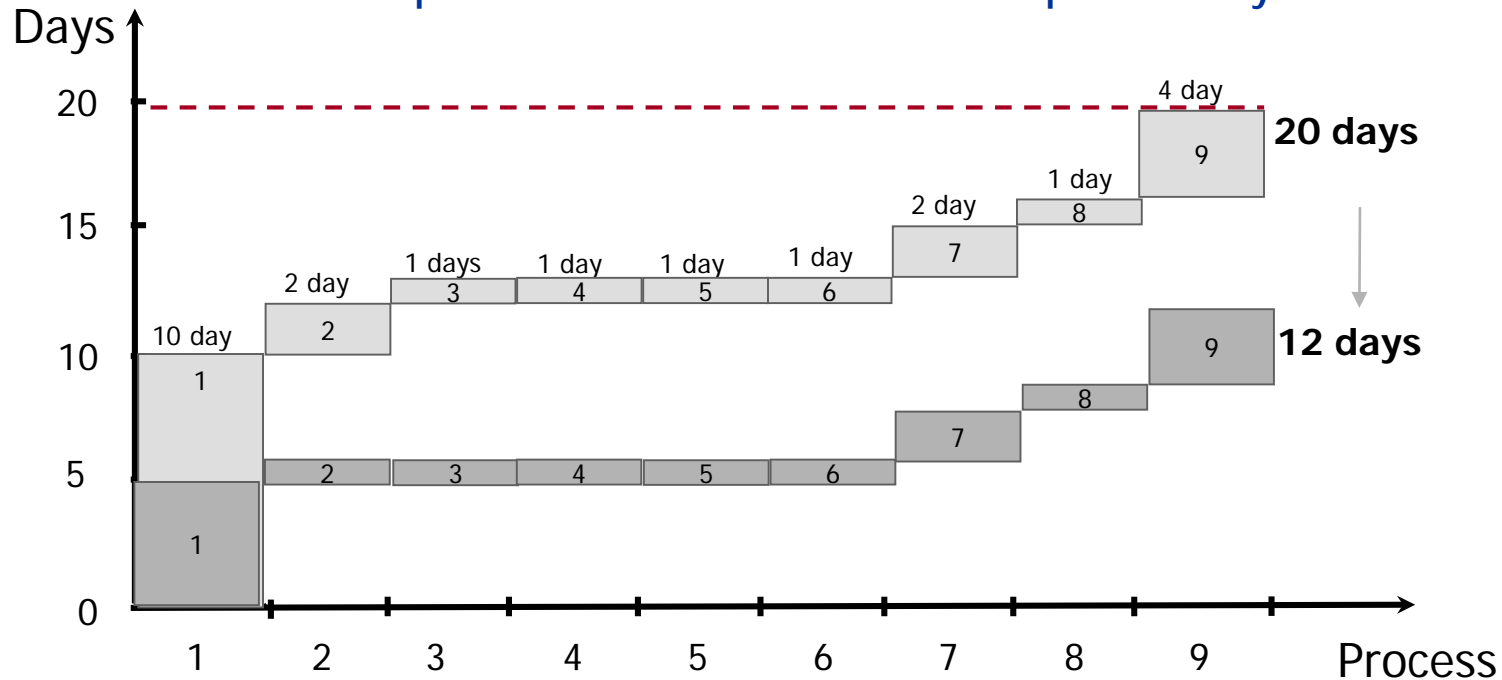


Problems :

- **Duplicated Information**
- **High Cost and Time for sending and receiving documents**
- **Data Inconsistency**

Phase III-2: Recommendation Development

Example: Time – Procedure Chart of Importation by Sea



9 Main processes:

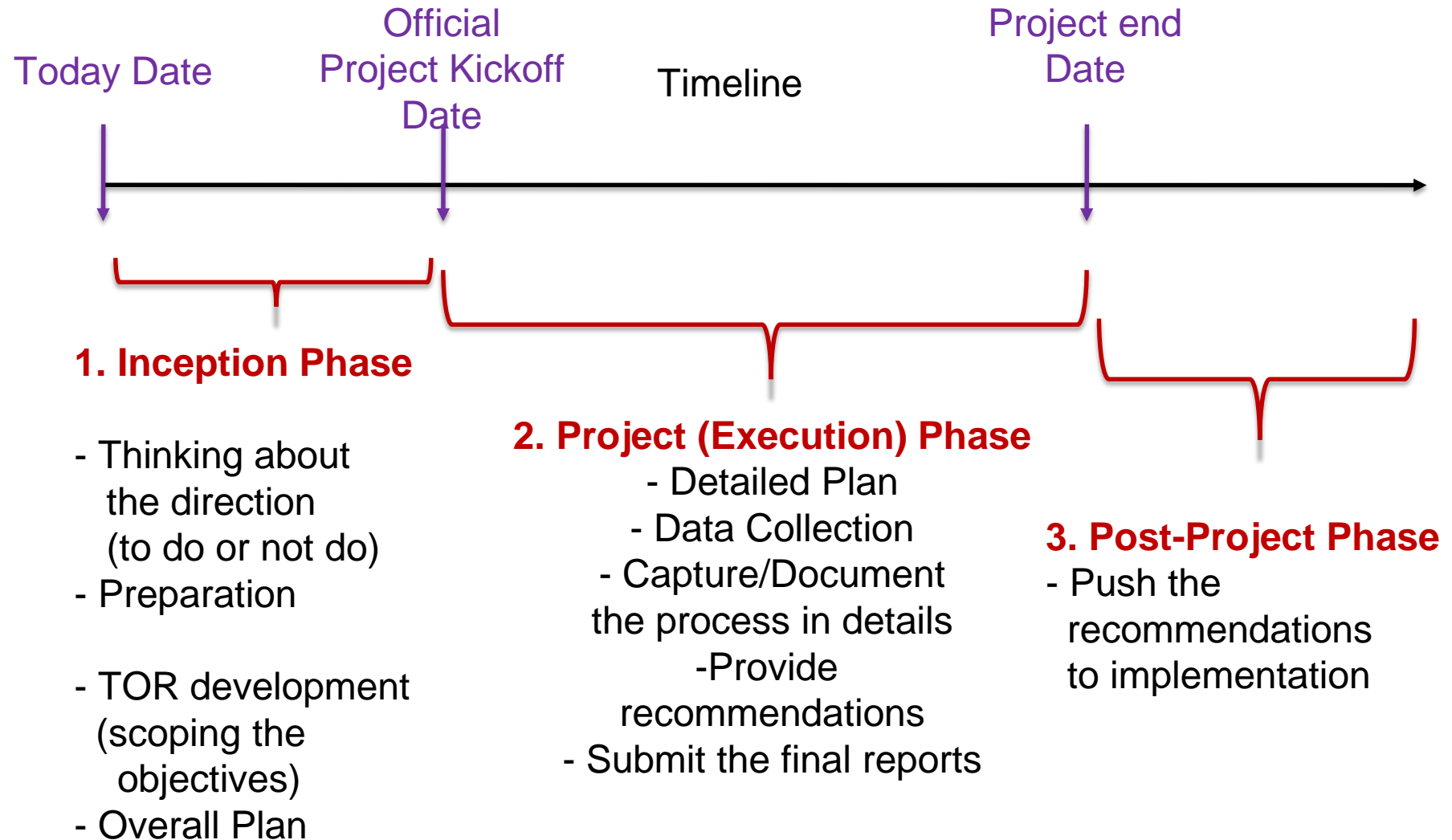
1. Prepare documents for import
2. Prepare to enter a seaport (Vessel)
3. Enter a seaport (Vessel)
4. Report cargo manifest
5. Unload cargo
6. Clear goods through customs
7. Arrange the transport for the pick-up of goods
8. Handle cargo at the terminal
9. Pay for goods

Summary of a study: Usage Time for Import



Transport Mode	As-Is Usage Time (day)	To-Be Usage Time (day)	Expected Reduced Time (day)	Expected Reduced Time (%)
Import by Ship	20	12	8	40.00
Import by Airplane	10	8	2	20.00
Import by Truck	10	7	3	30.00
Import by Train	11	9	2	18.18

Overall BPA Project Management

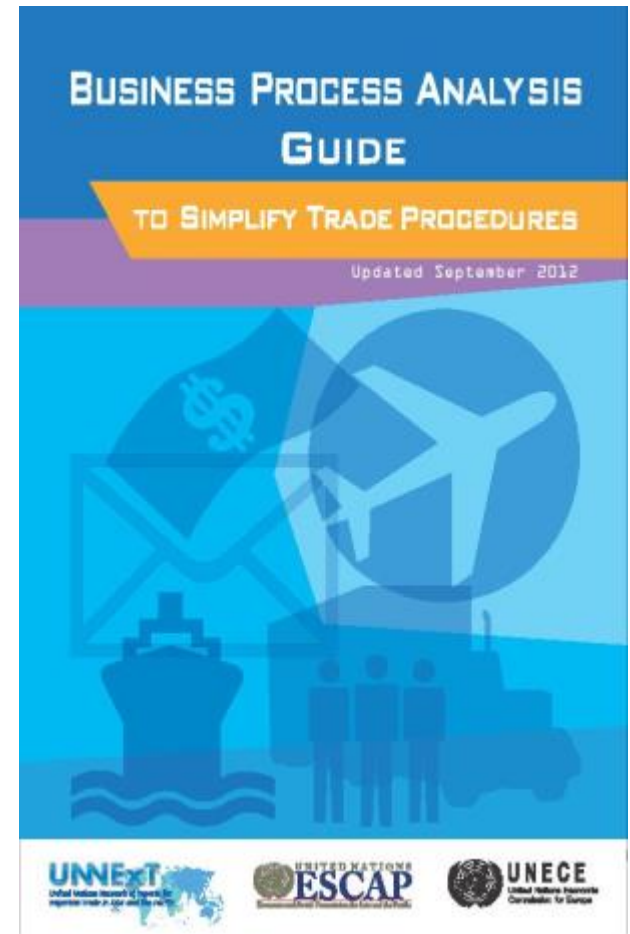


Recommendations – Export

Country	Processes	Recommendations
Cambodia a- Export of Maize/Cassava	Apply for Phytosanitary Certificate	Reduce activity 2.2 apply for Phytosanitary Certificate from 5-day to 3-day.
	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 profile 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)

In a BPA:

- An export transaction is seen as **an integrated process**, rather than a series of fragmented activities
- The emphasis is on the **overall improvement of the end-to-end value chain.**



Thank you

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The UNNEXT Business Process Analysis Guide, training materials and studies are available online at:
http://www.unescap.org/unnext/tools/business_process.asp

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