Subregional Capacity Building Workshop on Business Process Re-engineering (BPR) for Trade Facilitation
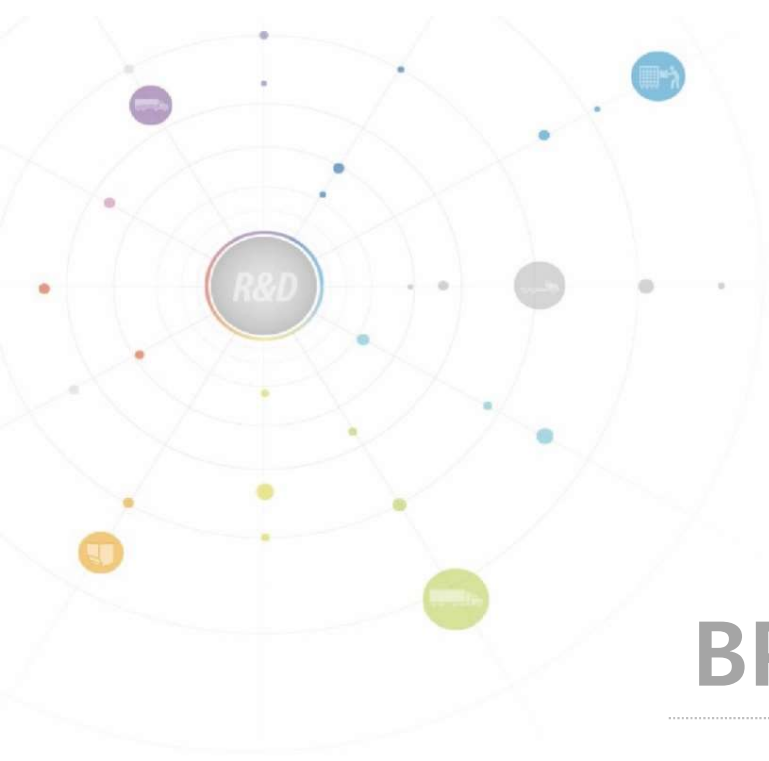
Bangkok, Thailand, September 2018.

ESCAP Consultant, Kerri Ahn

CONTENTS of Part 3

BPR Framework

BPR Framework

BPR Activities	Plan	AS-IS Analysis	TO-BE Design	Transformation Plan
	Organize Project Team	Establish how to capturing the needed data	Establish target goal per each process	Transformation Schedule & Team
	Define User Requirements	Current process and IT environment Analysis	Design TO-BE process	Prototyping
	Analyze Business direction	Organization Capability Analysis	Establish IT Plan	Define Configuration Management Strategy
	Define the scope of BPR	Extracts improvement opportunity	Analyze Cost, Risk, and Effects	
			TO-BE Model Simulation	

Deliveries				
	Business direction Analysis Report	Main issue of current process	Benchmark or survey Report	Transformation plan report
	BPR plan Report	Analysis report of AS-IS analysis	TO-BE Model Report	Recommendation on Transformation
		Analysis report of Organization capability	Analysis report of cost, risk, and effects	

BPR Activities

Steps	Activity	Input	Output	Actor	Remark
Determine target process	Determine selection criteria	Vision, strategic	• Process selection criteria	• Project team	
	Determine target process		• Target process		
	Project team Composition		• Project team		
AS-IS analysis	Process mapping	Process Work flow	• Process mapping	• Process analysis team	
	Status grasping		• Status Table		
	Extract main issue				
User Needs Analysis	Determine survey target	Survey Form	• Summary report of survey • Summary of user needs	• Survey Team • BPR Team	• Interview • Data Analysis
	Conduct survey (or interview)				
	Analyze the result of survey				
Innovation Point	Extract innovation point		• Report of innovation point		
Goal	Determine goal	Vision, strategic	• BPR goal report	• Project team	

(Continued)

BPR Activities

Steps	Activity	Input	Output	Actor	Remark
To-BE Process Design	Develop TO-BE process		• Process requirement table • TO-BE Process	• Project team	Team Discussion
	TO-BE process assessment				
	TO-BE process Map				
Execution tasks	Extract execution tasks	BPR goal/purpose	• Execution tasks list • Task schedule	• Project team	
Transformation	Transformation		• Result table of transformation		
Follow-up	Follow-up		Follow-up execution table	Project team Working team	
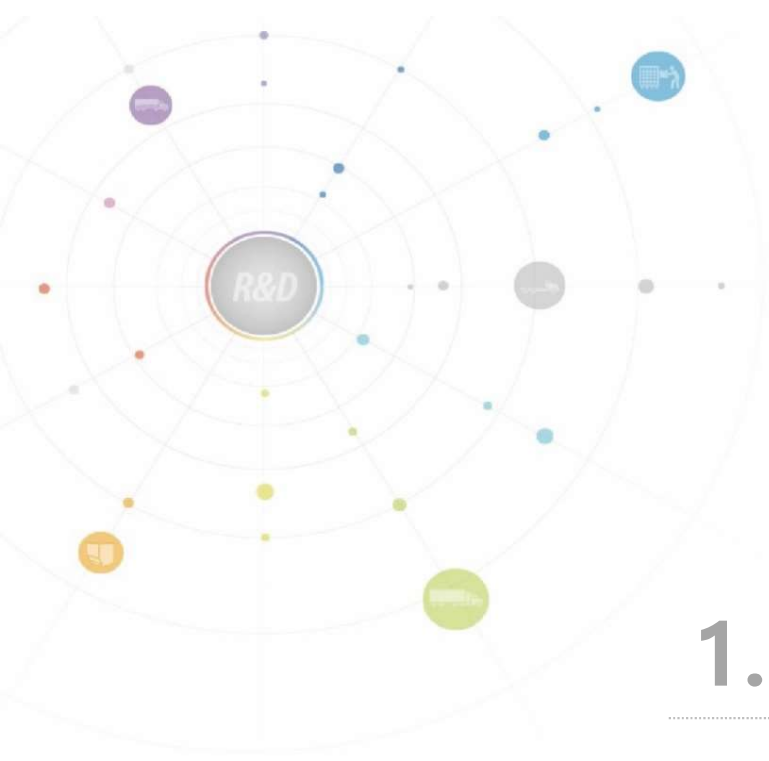
1. Determine Target process

- Define what application processes need to be re-engineered based on the company's vision and strategy

- That is, it is the task of finding the process that have a problem

- Need to prioritize the extracted processes,

- then selecting target process that is necessary to be improving

- Approach

    - Determine selection criteria

    - Determine target process

    - Project team composition

- Process Define;

    - ✓ is a set of activities that interact to achieve a result (output) with one more input

    - ✓ Provide this result to user

    - ✓ Example: transport, order, payment, shipping, resource management, etc.

- Which process is for re-engineering ?

    - Processes that have a significant impact on strategy and business goals

    - Sequential progression is a long process

    - Processes with many checks and adjustments

    - Processes that have a lot of inventory or assets

    - Processes that use a lot of special or temporary organizations

    - Processes with lots of information exchange or replay

    - Processes contain the duplicated work

2: AS-IS Analysis

Understanding approach of current process

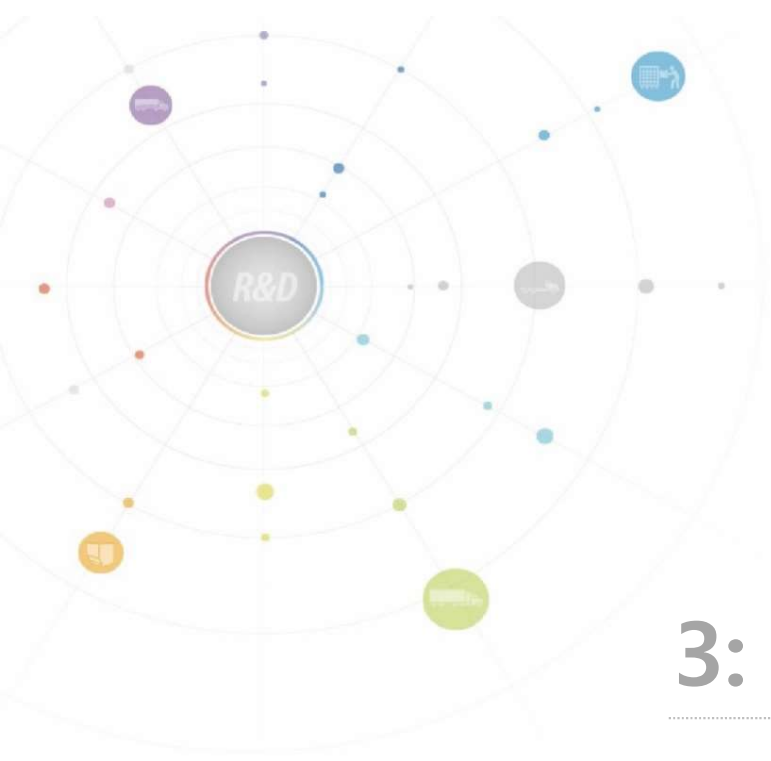| Process Mapping	Status grasping	Extract main issue
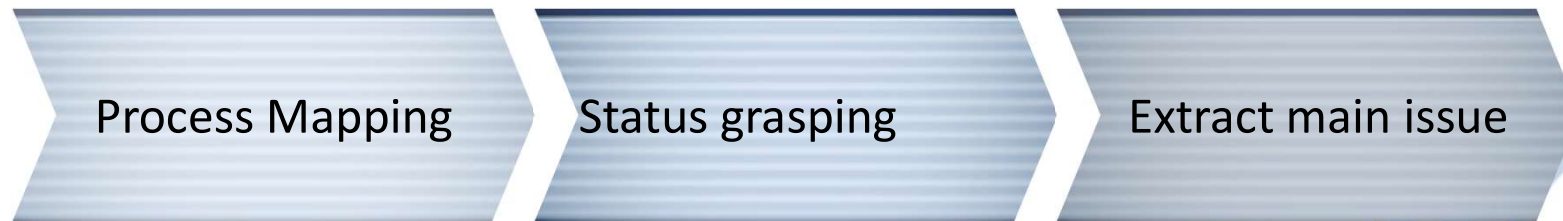
- Business process mapping refers to activities involved in defining what a business entity does, who is responsible, to what standard a business process should be completed, and how the success of a business process can be determined.

- The main purpose behind business process mapping is to assist organizations in becoming more effective.

- Business process mapping takes a specific objective and helps to measure and compare that objective alongside the entire organization's objectives to make sure that all processes are aligned with the organization's values and capabilities.

Process Mapping

Process Name	Custom Declaration			Owner	User	Customer	Customs
Purpose	Request to approve of Cargo exporting to Customs			Vision	Request to approve of Cargo exporting		
Occurrence	1 time per 1 Mon.	Scope	Custom-Export	Process time	120 Min.	Cycle time	200 Min.
Execution Team	**Step 1** Submit an Application		**Step 2** Checking an Application by Customs			**Step 3** Response	

User

Customs

User

Cross-Functional Process Map

Output	Application for Custom Declaration Response Message
Tool	Paper, Online, WEB, etc.
Lead time	30min. Or 1 day, …..

3: User requirements, Benchmarking

Why we need to capture user needs

- Extracts innovation points from user needs with main issues

- Reflects user needs to TO-BE process

- The way of capturing user needs

| Which user? | Select survey user | Survey or Interview | Summary of needs | Satisfaction assessment |

- Template of capturing user needs

Work process	Satisfaction assessment					Remark
	5	4	3	2	1	
	Very good	good	Medium	bad	Very bad	
Work Process 1						
Work Process 2						

Capture best practice

- The way of benchmarking

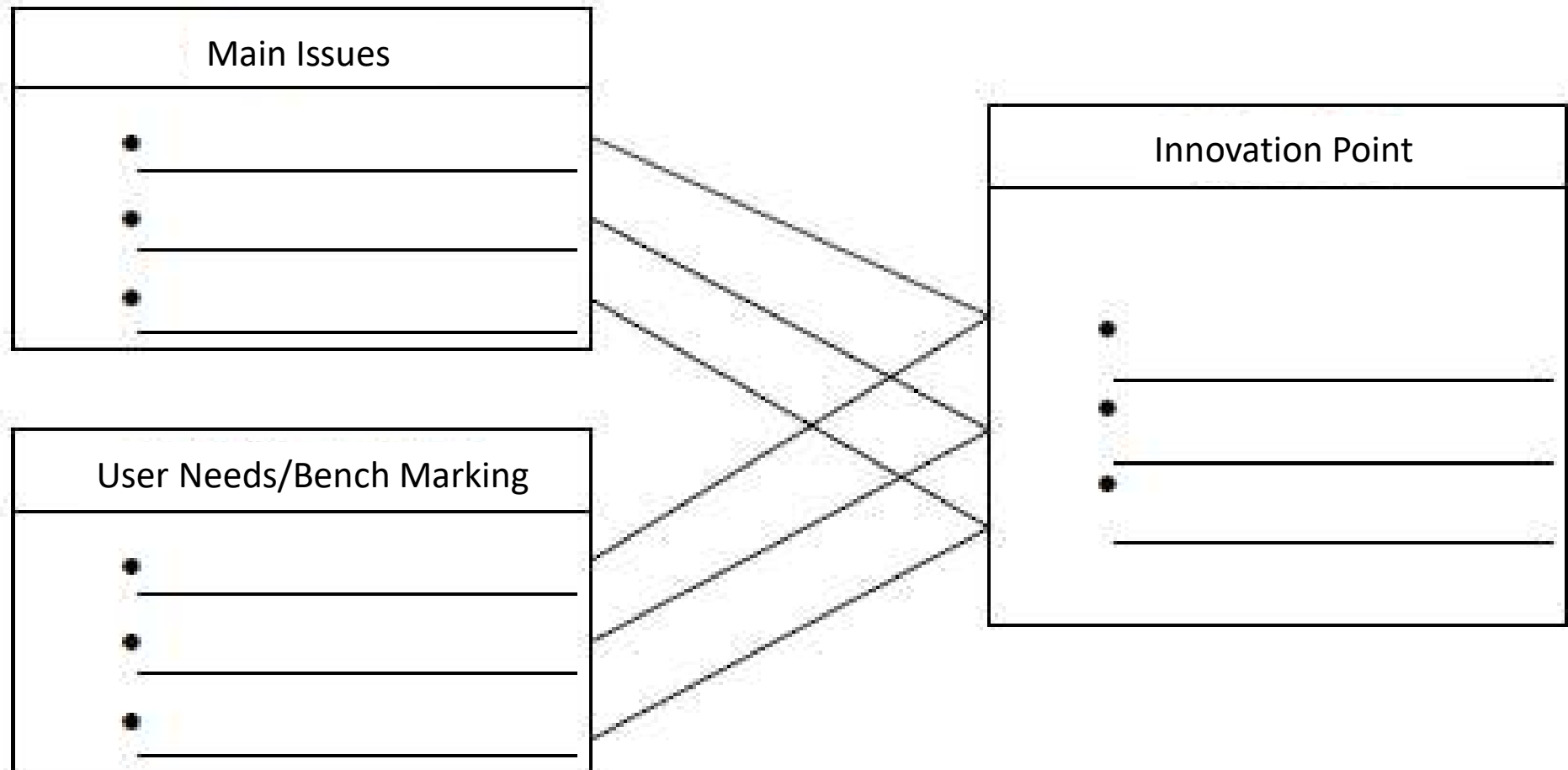| Benchmarking questionnaire | Analysis with interview, research, etc. | Gap analysis | Extracts applicable things | Extracts innovation points |

4. Extracts Innovation point

How to extract innovation point?

- Innovation point to be satisfying goal of BPR and user needs

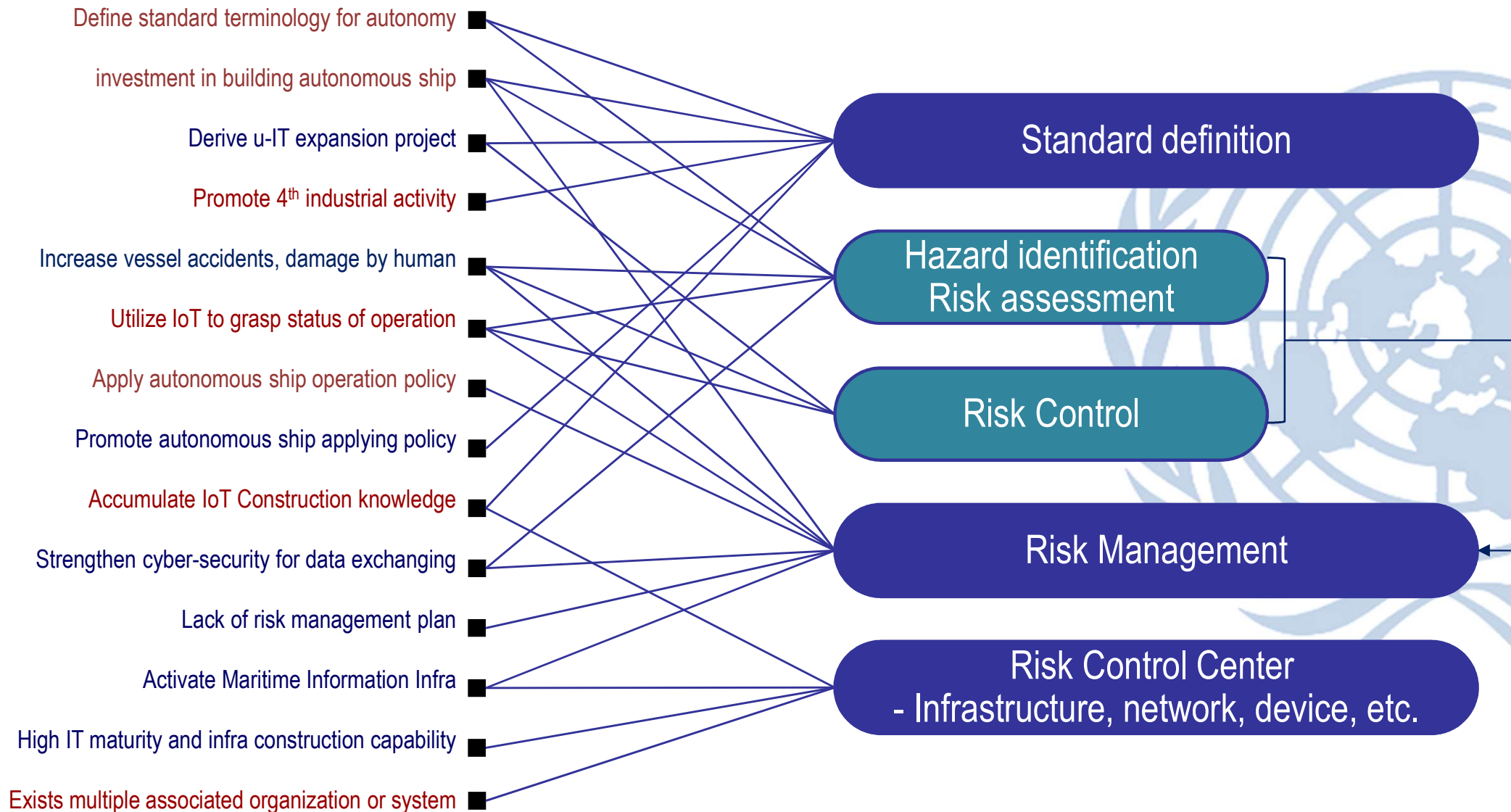# *Template of innovation point*

Part	Main Issue	User Needs/Benchmarking	Innovation Point
Process 1			
Process 2			
Process 3			

How to extract innovation point? (ex)

Define standard terminology for autonomy ■

investment in building autonomous ship ■

Derive u-IT expansion project ■

Promote 4th industrial activity ■

Increase vessel accidents, damage by human ■

Utilize IoT to grasp status of operation ■

Apply autonomous ship operation policy ■

Promote autonomous ship applying policy ■

Accumulate IoT Construction knowledge ■

Strengthen cyber-security for data exchanging ■

Lack of risk management plan ■

Activate Maritime Information Infra ■

High IT maturity and infra construction capability ■

Exists multiple associated organization or system ■

Standard definition

Hazard identification Risk assessment

Risk Control

Risk Management

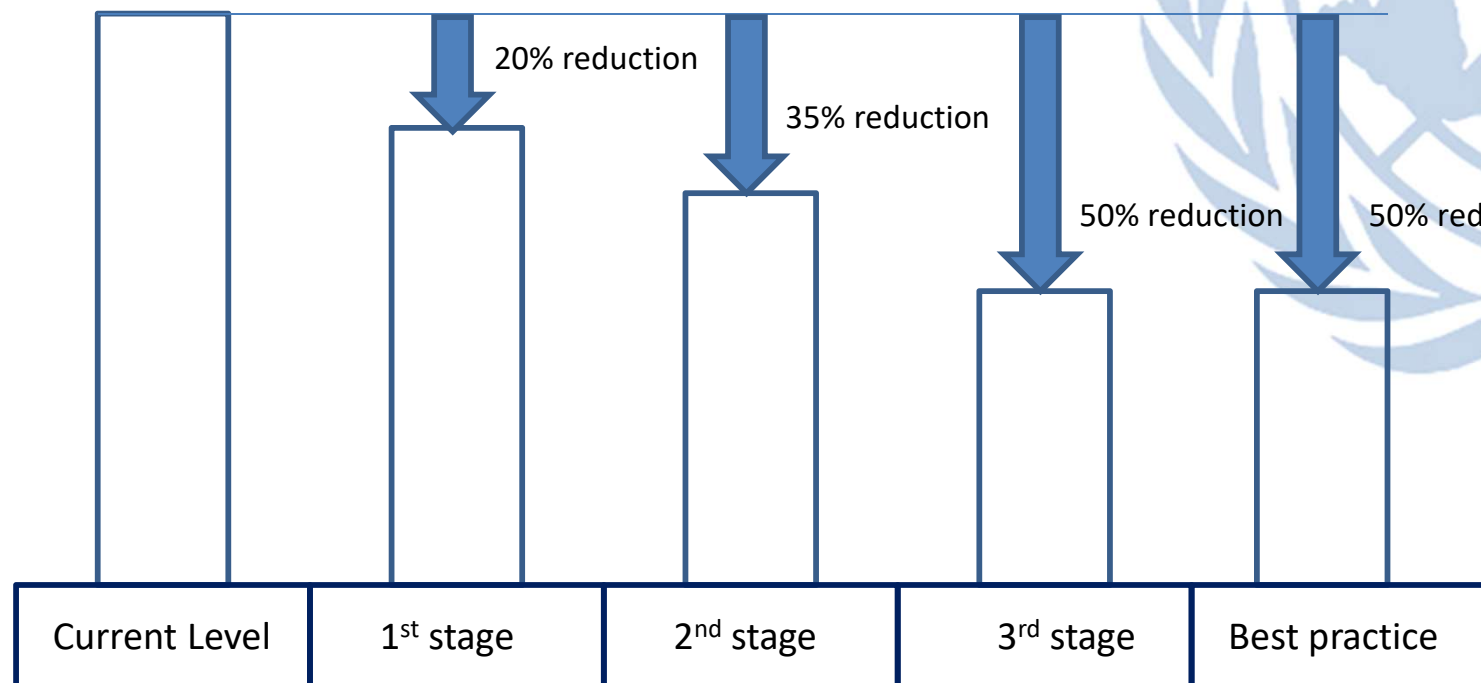**Risk Control Center - Infrastructure, network, device, etc.**

5. Establish Goal

How to setting

- Is expressed in quantified number

- Is focused on the expected effects not the ratio of achievement

- Example

| Current Level | 1st stage | 2nd stage | 3rd stage | Best practice |

20% reduction

35% reduction

50% reduction   50% reduction

Template of Goal setting

Part	Task	Goal			Innovation Point
		Now	Goal	%	
Process 1					
Process 2					
Process 3					

6: Design To-BE process

Design TO-BE process

- The way of designing TO-BE process

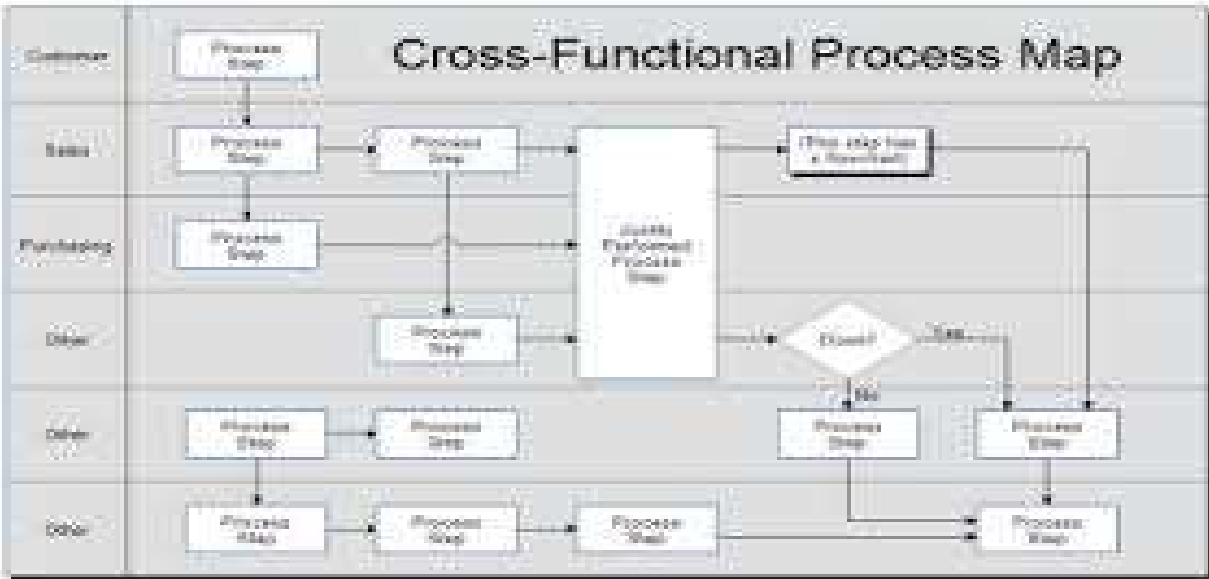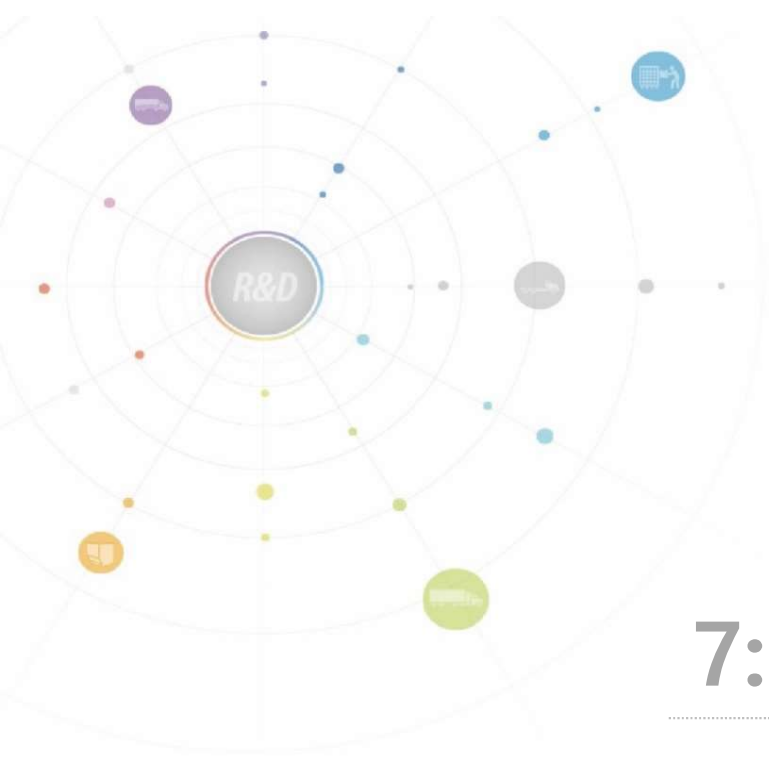| Brain storming - idea | Develop TO-BE process | TO-BE process assessment | Develop TO-BE process map |

Design TO-BE process

- Most important is to support user satisfaction

- Meets user needs and goal of BPR

- Enhance inefficient relay : simplified processing

- Work process re-engineering : eliminate the duplicated task, parallel

  processing

- Utilize Information Technology

TO-BE Process Mapping

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User Customs User							
Output	Application for Custom Declaration Response Message						
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Cross-Functional Process Map

7: Extract execution tasks

Definition

- It is the step of deriving the content or object to be executed in order for the completed innovation process to be implemented normally.

- List up the changed activities (activities added and activities that replace the existing activities)

- Draw up the implementation tasks and the detailed tasks for each process.

Derives execution tasks

Step	AS-IS Process	TO-BE Process		Execution Task	Detail tasks
					• • • • • • • •
					• • • • • • • •

8: Solving task

Definition
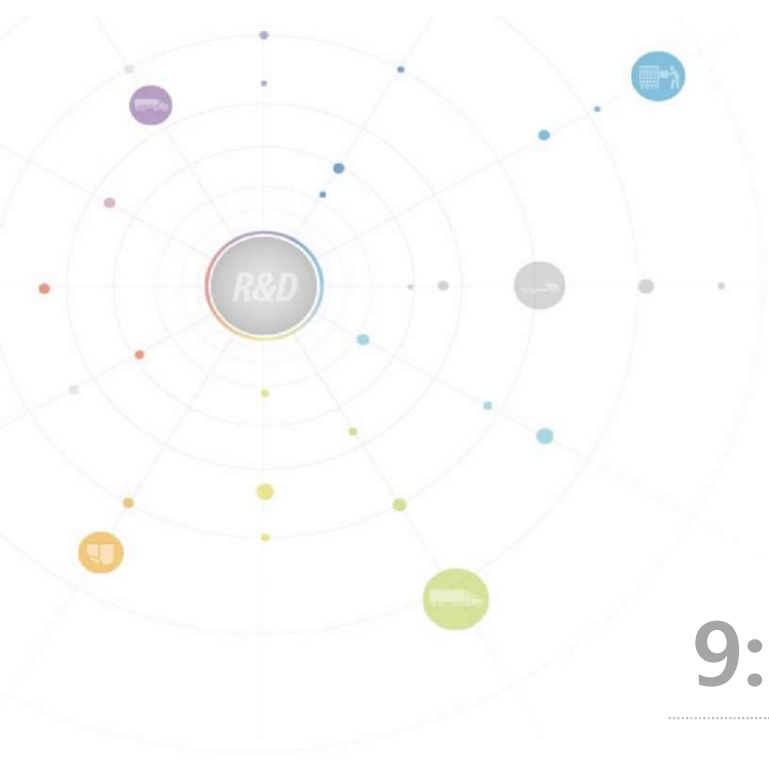
- The step of deriving the content or object necessary for the completed innovation process to be implemented normally

- Template of solving task

Execution task	Detail task	Who	Department	Schedule			
				D	D+1	D+2	D+3
Task 1							
Task 2							
Task 3							

9: Execution

Execute TO-BE process

- The process is conducting through a process that is actually implemented as a step to actualize the innovation process that has been established while solving execution tasks.

- The way of designing TO-BE process

Execute TO-BE process → Performance analysis → The ratio of Contribution analysis → Progress Management

Execute TO-BE process

- The way of executing TO-BE process

Execution task	Detail task	Who	Expected effects	The ratio of Contribution	
				Individual task	Whole task
Task 1					
Task 2					
Task 3					

10: Follow-up

Definition

- Compare the result of TO-BE process with goal and analyze

- Check whether it exists some problems or improvement

  point for future process

- Continuously maintain/develop improved business

  processes

Template of Follow-up

Part	Task	Goal			Execution task	Problems
		Now	Goal	%		
Process 1						
Process 2						
Process 3						

Q&A

감사합니다

Thank you