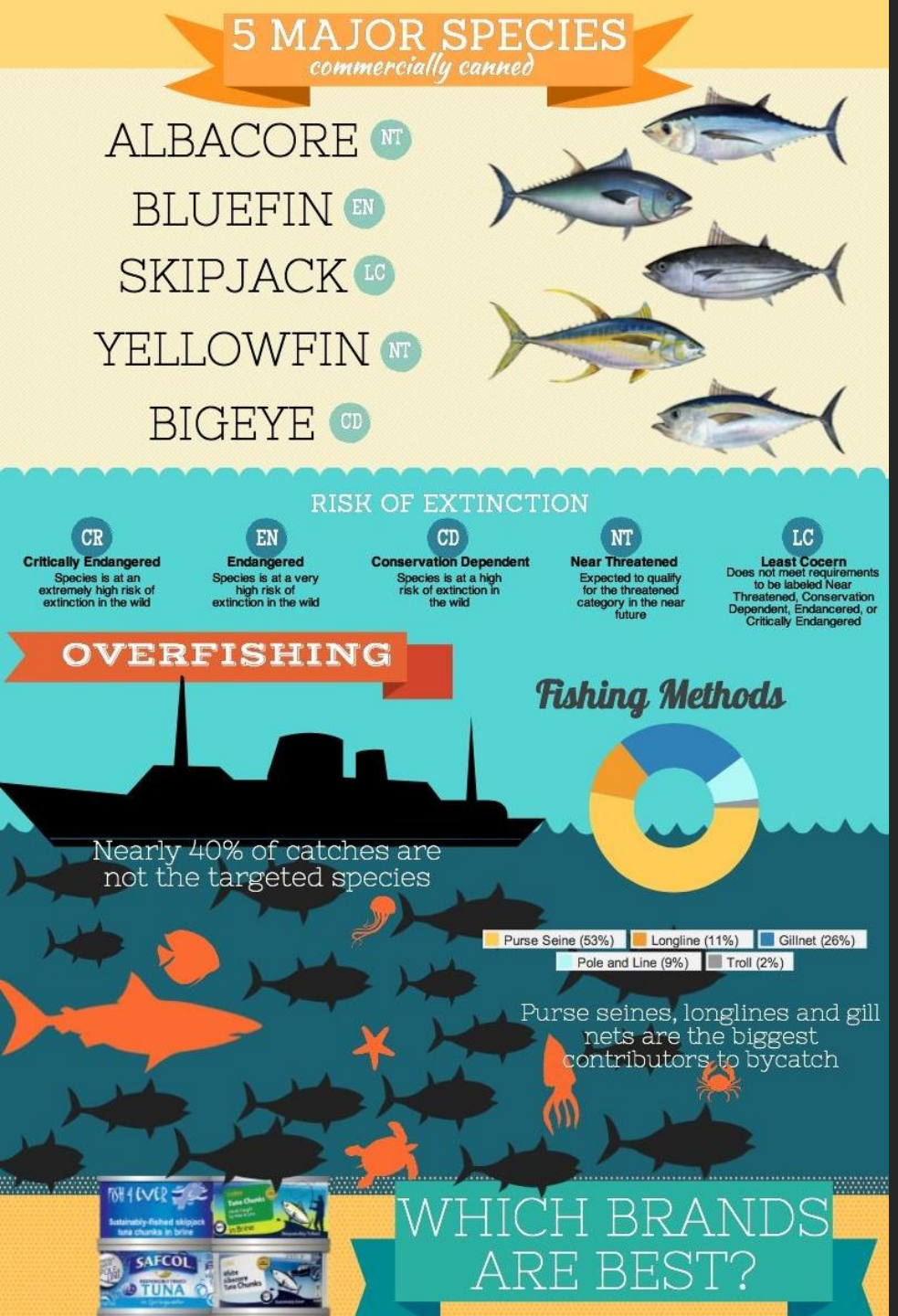
Business Process Modeling: Supply Chain Management Case

Workshop – Part 1



Use case introduction

D1P2.2

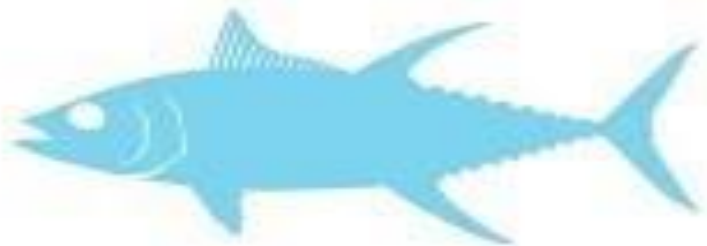
Part 1: Analysis: Modeling of the business environment

Background

"Seafood traceability is increasingly becoming a focal point to address the entry of illegally and unethically produced products into the supply chain. More and more, experts view full supply chain traceability and transparency as the only way to ensure against the continued entry of illegally or unethically produced seafood products into the seafood supply chain. Blockchain can be a significant part of the solution – providing the full transparency and traceability required to enable the market to reward responsible and ethical producers and push those that are illegal and unethical out of the supply chain. By providing this transparency and traceability, it can enable the market to both reward producers who engage in best practices and exclude illegal and unethical producers. This report describes a WWF-led pilot to prove blockchain supply chain traceability for use in seafood traceability, specifically for tuna caught in a Fijian longline fishery. The purpose of the report is to provide a description of the work undertaken, to offer lessons learned, and to provide a potential roadmap for others who wish to develop blockchain supply chain solutions."

- See report in Learn and https://www.wwf.org.nz/what_we_do/marine/blockchain_tuna_project/
- Also, see Sawtooth project: A Modern Approach to Seafood Traceability: https://youtu.be/-oxOas6cFXE
- And watch the video in the next slide.

WHERE DOES YOUR FISH COME FROM?



The General Problems

Illegal, unreported, and unregulated (IUU) fishing

secrecy hiding activity

buying and selling of Pacific tuna currently either tracked by paper records, or not at all.

Disturbing reports unsettle consumers

Consumers want fully-traceable seafood from legal fisheries

Wholesale and retail seafood buyers ask for improvements in transparency and traceability to reduce the risk of their brands.

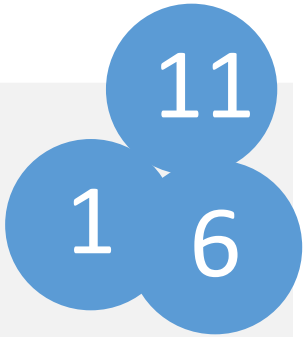
Overall Workshop Objective

- In your group, follow the instructions in the next slides that guide you in the development of a **rich picture** that represents a low-fidelity prototype of a seafood supply chain management solution, which addresses the pre-assigned requirements, as follows:

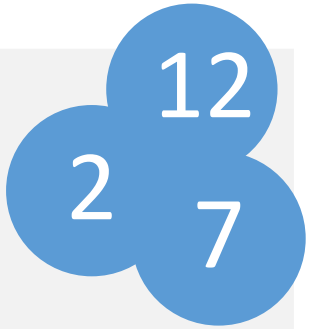
- Group 1/6/11: Generate credible evidence of proof of seafood origin
- Group 2/7/12: Generate credible evidence of seafood safety (e.g., time, temp, hygiene)
- Group 3/8: Track and trace the seafood across the supply chains
- Group 4/9: Maintain information integrity through processing (from whole fish to pieces)
- Group 5/10: Generate credible evidence of sustainable fishing practices and fair-trade

Class 3 Exercise: Design Requirements

In your group, follow the Soft Systems Methodology process to model a seafood supply chain management solution that addresses the pre-assigned requirements, as follows:



Group 1/6: Generate credible evidence of proof of seafood origin



Group 2/7: Generate credible evidence of seafood safety (e.g., time, temp, hygiene)

Group 3/8: Track and trace the seafood across the supply chains

Group 4/9: Maintain information integrity through seafood processing (from whole fish to pieces)

Group 5/10: Generate credible evidence of sustainable fishing practices and fair-trade

Task 1: Formulate the Root Definition

5 minutes

A Root Definition expresses the system's *Core Purpose* as a *Transformation* process in which some entity (*input*) is changed (*transformed*) into a new form (*output)*

Task 1: Frame objective as a key process (Identify the key activity performed by the system)

Project Title:
Description:

Task 2: Define core business processes and related data

10 minutes

Input–Transformation–Output (I/T/O)

Task 2: Define core business processes + related data (Identify the top-level activities; follow the data, and follow the money)

Business Process	Information Process	Data Input/ Output

Task 3: Identify CATWOE elements

10 minutes

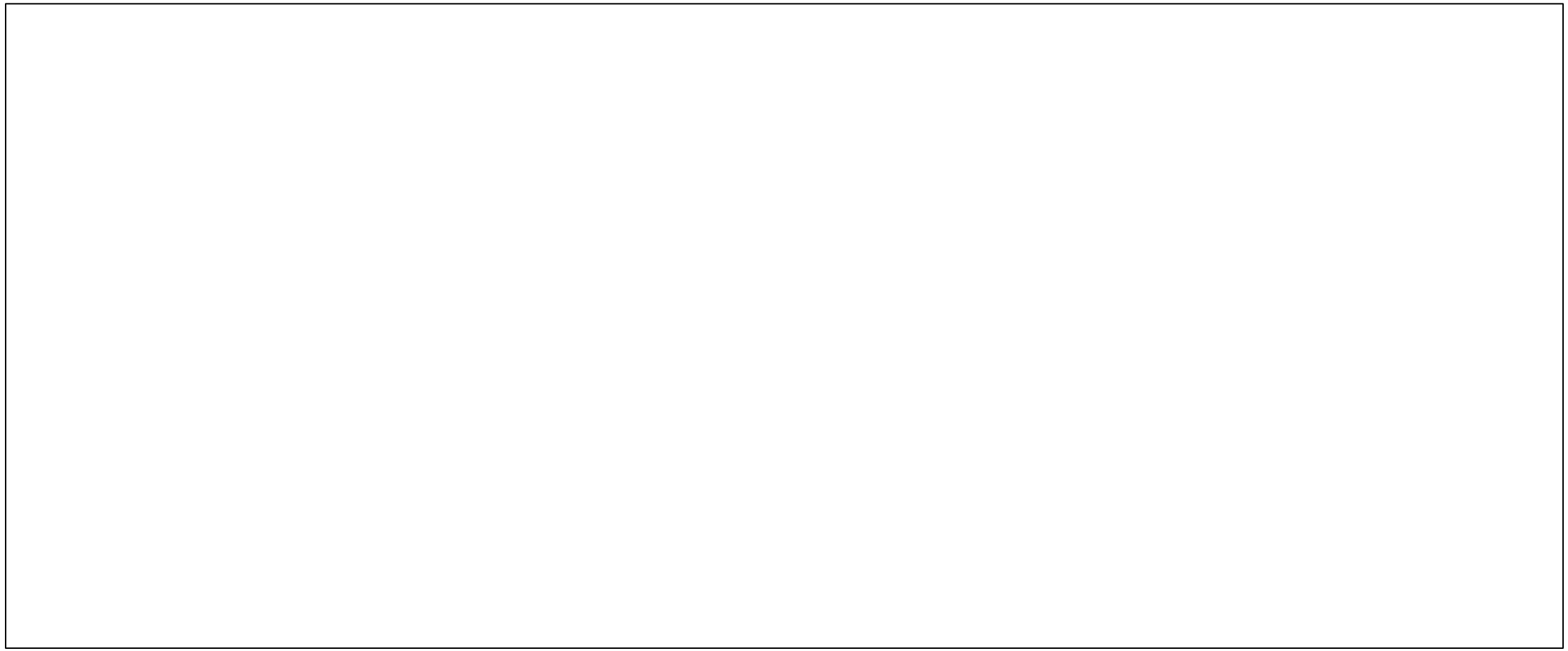
Task 3: Identify CATWOE elements

Customer(s)	Who is affected by the system?
Actor(s)	Who is performing the activities?
Transformations	What are the core business processes? (Refer to task 2)
Worldview(s)	What are the worldviews of the customers, actors, and owners? What is the framework of ideas and beliefs through which they watch and interpret the world and interact with it in the context of the underlying system?
Owners	Who has formal and informal control over the system?
Environment(s)	What are the environmental contingencies and constraints that affect the system? (e.g., regulation, culture, business domain)

Task 4-5: Draw a Rich Picture of the system

30 minutes

Draw a Rich Picture of the system

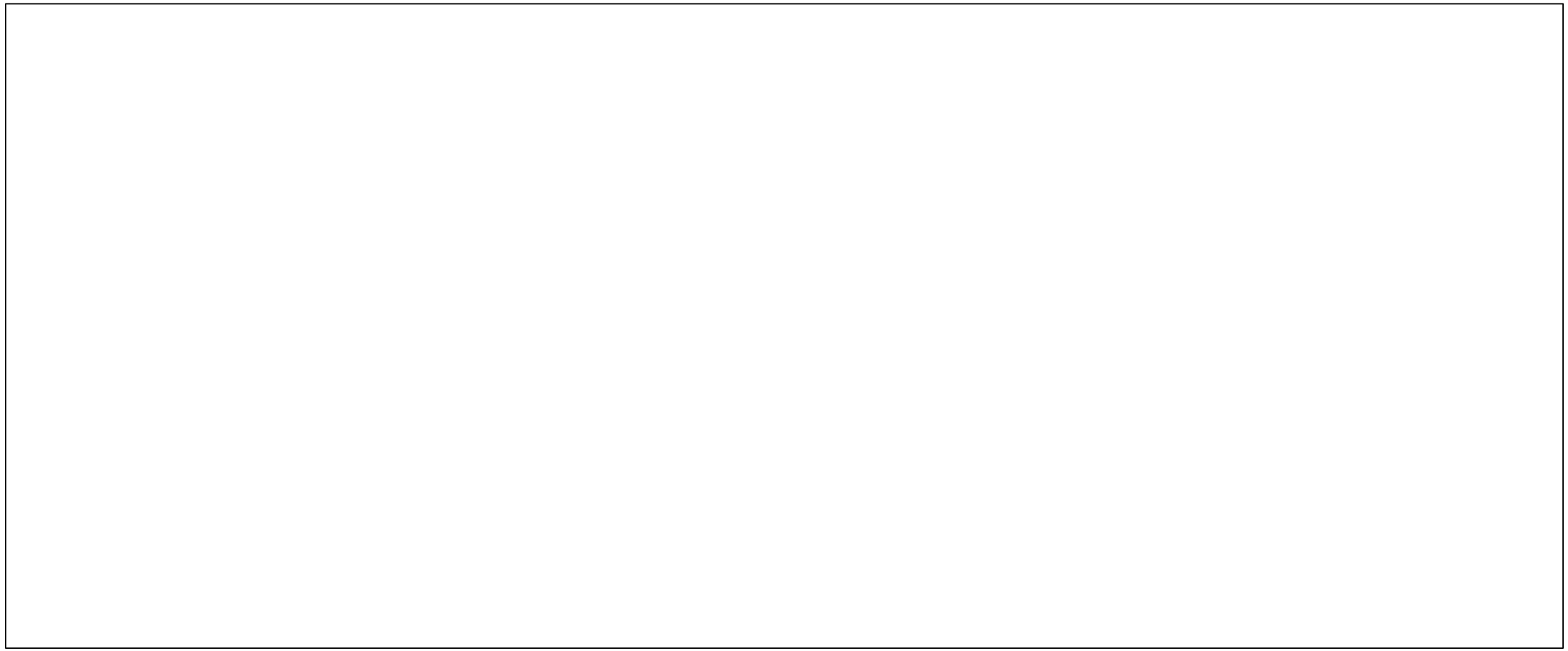


Task 6: Rich Picture Class Presentation

5 minutes

Use a flipchart

Class Presentation: Rich Picture of the system



Next Workshop:

Blockchain System Design Elements

- Nodes
- Transactions
- Storage
- Critical Data

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