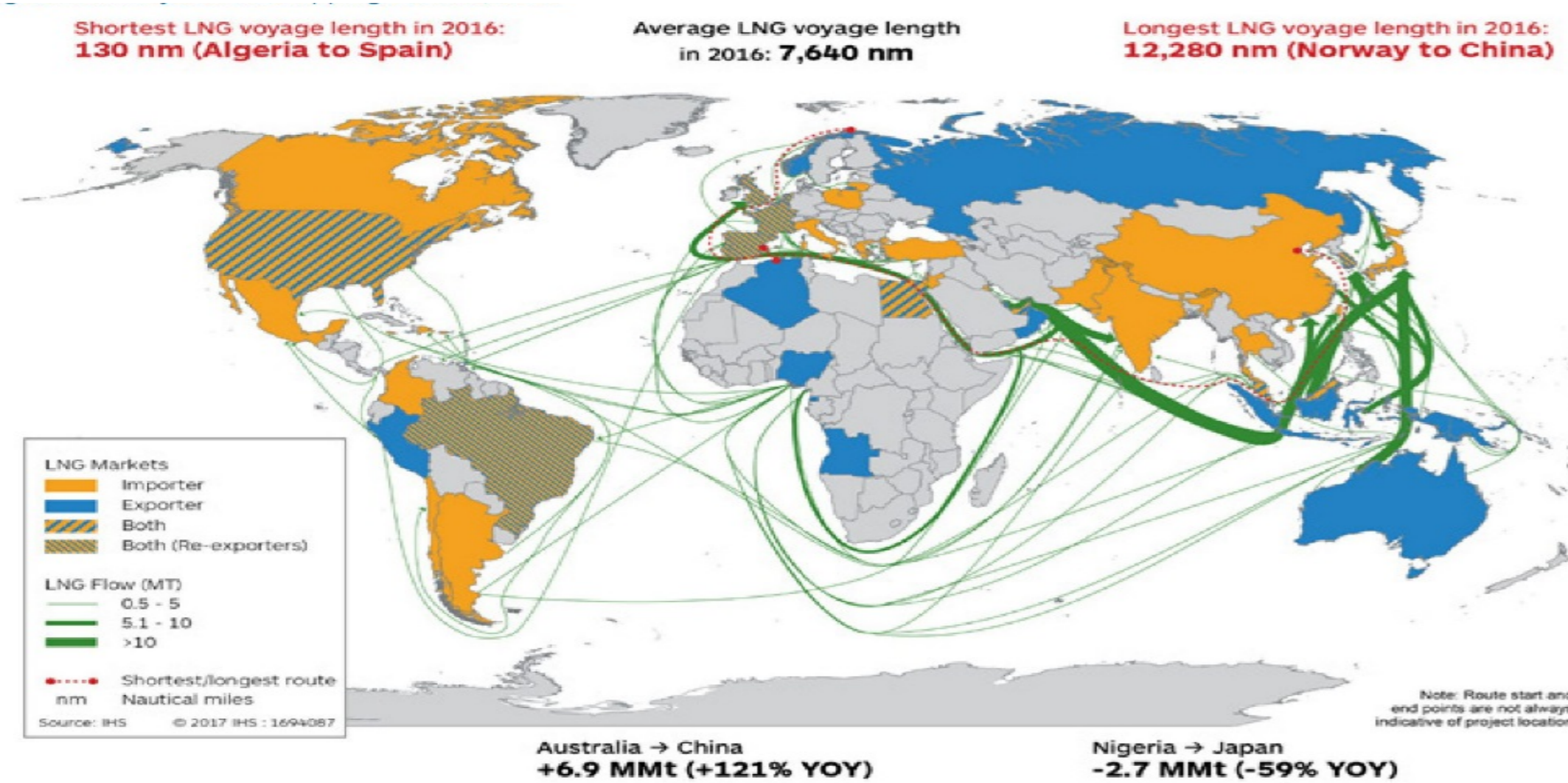
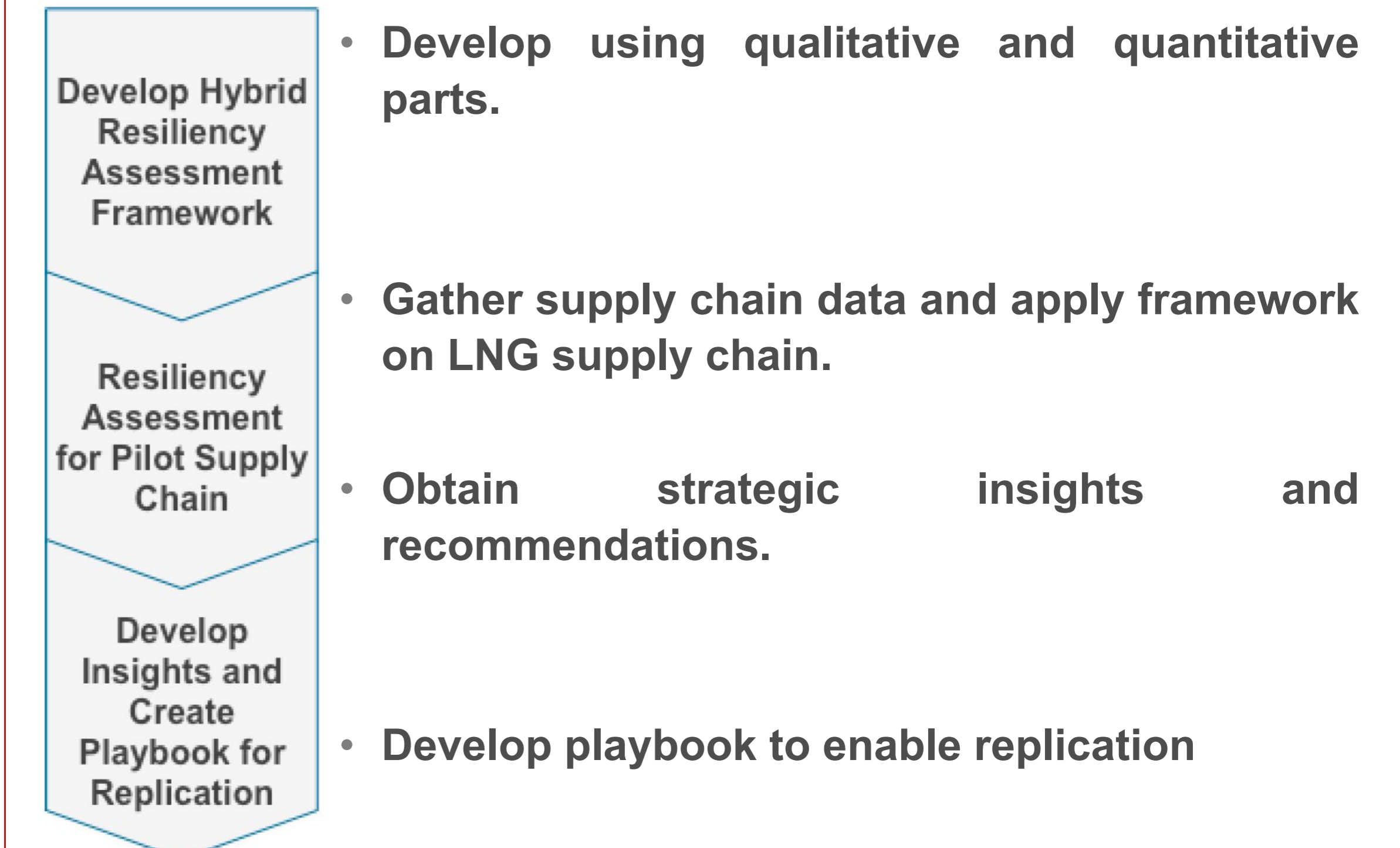


Motivation / Background

- Huge amounts of LNG trading volume flow through a few shipping routes.
- A framework for measuring resilience in the LNG market can enhance investments.



Methodology



Key Question / Hypothesis

$$\text{Expected Business Impact} = \text{Total Business Impact} \times \text{Probability}$$

- Quantify supply chain risk by combining financial data and probability statistics of risk events
- Is it applicable to the LNG market?
- Redundancy vs Flexibility.

Relevant Literature

- Stephen, S., & Siu, J. (2015). A Supply Network Resiliency Assessment Framework (M.Sc). Massachusetts Institute of Technology.
- International Gas Union. (2017). 2017 World LNG Report.

Expected Results

DEVELOP AND REFINE a hybrid framework for assessing the supply chain resiliency of the global LNG supply network.

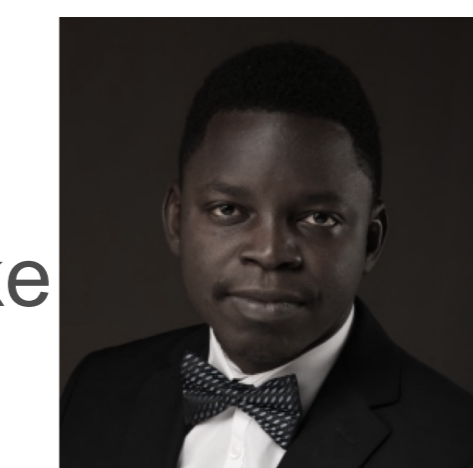
IDENTIFY AND QUANTIFY the main risks and challenges associated with the global LNG supply network by generating an overall business impact score.

OPTIMIZE AND ENHANCE the supply chain resiliency of the global LNG supply network by reducing the overall business impact score of the network.

Expected Contribution

- Measure resilience in LNG supply chain.
- Visualize supply chain risk.
- Quantify the value of mitigation options in enhancing energy Resilience.
- Reduce the business and energy impacts of disruptions.

Falaiye Adegoke



Fu Song Chiam

