A TOOLKIT FOR INTERNAL STAKEHOLDER MANAGEMENT

IN OPERATING PORTS

Prepared for the

American Association of Port Authorities

Professional Port Manager (PPM) Program

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September 2024

TABLE OF CONTENTS

BIOGRAPHY

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Don Hutchinson, currently serving as the acting Deputy Port Director for the Port Authority of the Cayman Islands, is a seasoned professional with a wealth of experience. His journey with the Port Authority began in 2012, following a successful six-year tenure as the lead assurance professional. Since 2018, he has been the Head of Finance and Administration, offering strategic support to the Port Director and the Board of Governors. His expertise is evident in his seminal papers on policy development and execution, strategic financial analysis, capital adequacy, and legislative assessments for the port.

Don Hutchinson, a vital member of the executive management team of the Port Authority of the Cayman Islands, manages the Finance and Administration functions. His leadership and decision-making responsibilities span Budgeting and Financial Reporting, Finance and Accounting operations, Risk Management, Procurement, Compliance Management, Internal and External Public Relations, Human Resource Management, Safety and Crisis Management, and Information technology.

Don Hutchinson's professional qualifications are a testament to his expertise and dedication to his field. As a Chartered Accountant who holds fellowships at the Association of Chartered Certified Accountants in the UK (FCCA) and the Institute of Chartered Accountants of Jamaica (FCA), he brings a wealth of knowledge to his role. His undergraduate studies at the University of Technology and the Jamaica

Theological Seminary further honed his skills. He is also a member of the Cayman Islands Institute of Professional Accountants (CIIPA).

Don's professional life is complemented by his personal life. He is the proud husband of Denise, his partner of 30 years. Their union includes five children, who bring joy and balance to his life.

His broader interests include sports, mentoring, and community service, where he was involved for over two decades in advancing adult education, youth empowerment, and community engagement.

INTRODUCTION

Ports are a pivotal aspect of global commerce. Apart from the direct impact on immediate Port communities, the port's influence on other sectors of the economy of countries is extensive. According to the US Port & Maritime Industry 2024 Economic Impact Report (AAPA, 2024):

- The transport of $2.1 Trillion, or 40% of all US goods, involves Ports.

- The Port sector directly employs 1 Million workers and indirectly supports 803K more.

- Ports in the USA generate $311bn in economic activity and $214bn in wages and benefits.

In the UK, over 120 Ports and Harbors account for 95% of the movement of goods, support 100K jobs, and generate GBP14.5bn. (British Ports Association, 2024) and (Maritime UK, 2024) (NB: Ports.com listed 731 ports and harbors in the UK).

Trends in EU Port's Governance (2022) noted port stakeholders' increasing role in port strategic planning and development. In Europe, over 1200 seaports account for 3.9 billion tons of cargo and 400 million passengers, creating 2.5 million jobs. (ESPO, 2018).

In Caribbean ports, while the impact is equally pervasive on the small Island nations, the competing priorities of providing employment and attaining efficiency mean that the workforce has an even more integral stake in the ports.

As the opportunities for innovation and technology adoption grow in large and small ports alike, the impact on workers can be delayed for a limited time. CDB, 2015, noted that "Port labor is a sensitive topic, the demand for operational labor decreases in an industry that continues modernizing and innovating."

Internal stakeholder management will increasingly become necessary to facilitate ports' inevitable direction. These will likely have far better results if legacy and robust stakeholder relationships exist than where one does not, or if it does, it is less than ideal and fractious.

Apart from staff, the Board of Commissioners/ Directors is integral in delivering outcomes to all stakeholders. As the body is charged with the governance mandate, its activities, and decisions should be guided by the long-term interests and benefits of the port stakeholders.

The Board of Commissioners are stakeholders themselves with interests in the port's activities. Those activities and information feed into the planning, development, monitoring, and reporting of outcomes to the other stakeholders. They must engage with stakeholders to ensure they understand the port's needs and can set it in the right strategic direction to deliver its value propositions to the other stakeholder groups.

As the PPM project focuses on internal stakeholders, Commissioners must understand their varied needs and align the port to meet those as feasibly as possible.

Several ports do not have formal or robust internal stakeholder management practices. This may be due to a need for more funding, focus, or the relative novelty of the endeavor in the port industry. Given the importance of internal stakeholders in port success, a solution that can be applied without expensive consultants and hundreds of hours of work must be found.

To provide a solution for internal stakeholder engagement, ports need to know their stakeholders, what they want, and how the port can address their needs. Despite the unique focus of the various research undertaken, a foundational concept of stakeholder mapping is a critical part of any stakeholder management process. This capstone project will attempt to bridge that divide by providing templates as part of a toolkit for internal stakeholder mapping for ports. The internal stakeholder management process, advanced in this capstone, involves policy formulation, stakeholder and needs identification, vetting and prioritization, capacity assessment of ports to satisfy the stakeholder's needs, and strategy formulation. The latter includes action plans aligned with the available resources and consistent with the port's mission, vision, and values. After the plans are made, they must be executed, and then there is the follow-up process to ensure that the strategies' intended objectives are achieved.

Given the impact of ports around the globe and the plethora of projects and activities in which they are involved, opportunities would be lost if ports failed to harness the power of internal and broader stakeholder engagement and management. A vital aspect of this capstone is the survey of port use cases in stakeholder management to ascertain essential features and lessons learned and to determine whether the findings and templates recommended by this capstone are congruous with the experiences of professionals in the use cases. Due to the inability to find use cases for internal stakeholder management, the author had to pivot to available resources in general stakeholder management obtained from ports, mainly in Europe. The case studies were relevant and provided the necessary material to fulfill the objectives of the capstone. See the following for further information on the topic:

1. https://link.springer.com/article/10.1057/s41278-024-00294-0

2. https://porteconomicsmanagement.org/pemp/contents/part7/port-planning-and-development/stakeholder-participation-in-port-development-decision-making/

OBJECTIVES

The project will develop a toolkit to assist ports in designing and executing their internal stakeholder engagement policy and management. The toolkit will be supported by templates, use case examples, and other resources and references that can be utilized to devise a robust internal stakeholder management plan based on an analysis of internal stakeholder needs and the best approach to address them to benefit the port and the stakeholders.

While developed for operating ports and those with limited budgets who cannot deploy expensive consultants, the templates can be customized to adjust each port's unique features. They could also be further developed to include other port models and modified to apply to other stakeholder management projects. Ports can also use the templates to segment their stakeholder reviews and develop standalone action plans for each stakeholder group or create a document for their port-wide stakeholder policy and management programs.

This capstone focused on operating ports as the internal stakeholder group was perceived to be more diverse and have a more significant proportional stake in the port than other operating port models.

LITERATURE REVIEW

The academic literature and research on internal stakeholders at ports are not exhaustive. Some research was undertaken, and attempts were made to formulate a framework for understanding the stakeholders and incorporating their feedback in designing strategies to increase the success of various endeavors.

However, the areas of ports that traditionally attracted the most attention are those that demand more of the budget. As such, stakeholder concerns were focused on delivering value and success to these large budget items, such as infrastructure projects, port development, green initiatives, strategic planning, supply chain issues, and the impact of Regulations. Given this outwardly looking focus, the identified stakeholders were mainly external. They were more involved in the activities that concerned these projects than the internal stakeholders, who were, by default, along for the ride irrespective of the port's direction.

Consequently, the needs of these internal stakeholders were secondary, and although acknowledged in the literature by Notteboom and Winkelmans (2002), DeLangen (2007), Moglia and Sanguineri (2003), and Dooms (2010) and (2013), not much attention was paid to their importance in the port's achieving long-term strategic objectives. Underpinning this misaligned priority is the reality that the internal stakeholders or their proxies and successors are crucial in driving the activities to ensure value delivery to the other stakeholders. The entire port architecture fails if the internal stakeholders do not perform. The ports do not run themselves; even a well-oiled supply chain runs aground with an inoperable or inefficient port. A.S. Alamoush et al. (2024) noted that stakeholders could accelerate or decelerate any project and influence its outcome.

As such, internal stakeholders need their share of the fat (time, attention and financial resources). Their views, concerns, and perceptions of their place in the port world must be integral to port design, project planning and execution, and all aspects of strategic decision-making. Different frameworks to map stakeholders have been proposed. The seminal work in this area was done by Notteboom and Winkelmans

(2002), who mapped port stakeholders according to whether they are internal or external, how they are grouped based on shared interests, and organized them based on their geographical operating space.

This was a good starting point for the discipline of stakeholder mapping and management, but it needed to elaborate on the significance of internal stakeholder mapping and subsequent engagement. Other research, including that by Parola and Maureri (2013), Denktas-Sakar and Karastas-Cetin (2012), De Langen (2006), Dooms (2010), Dooms (2013), Moglia and Sanguineri (2003), focused 0n the broader port community and how the mainly external stakeholder groupings can contribute to the long-term strategic success of ports from economic, environmental, sustainability, and planning perspectives. Internal stakeholders were included, but like Notteboom and Winkelmans (2002), not much focus was placed on this group.

Dooms (2018) identified this shortcoming in the literature and noted the importance of internal stakeholder mapping and management to achieve buy-in and support from this group for long-term success. This was because of a broader absence of research and literature on day-to-day stakeholder management and practice. Dooms (2018) went on to identify internal stakeholders based on the following classification:

- Shareholders

- Board members

- Management

- Employees

However, he noted the lack of a dominant port-specific stakeholder mapping framework that is widely used. Despite the efforts of Mitchell et al. (1997) and others, only generic concepts are available. Port management can use them as a guide to determine the matrix of stakeholder identification, stratification, and strategy planning and execution. There also needed to be more focus on the internal stakeholders as a subset of the wider port stakeholder pool.

The earlier body of literature has been utilized in more recent attempts by ports and academics to further develop the theory and practice of stakeholder engagement in port environments. An analysis of recent studies and stakeholder engagement projects by ports and others reveals that thought development is taking place in this area. A.S. Alamoush et al. (2024), after a rigorous review of the existing literature, such as Freeman (2024), Lawer (2019), Koromila et al. (2022), Khaslavskaya (2021), Messner et al. (2015), Ashrafi et al. (2020) among others, who all had separate definitions for stakeholders and their role and functions in the supply chain and infrastructure development activities and related to separate and discrete industries. The study noted that despite the work produced by these port academics and practitioners, there still needs to be an agreement on who port stakeholders are, how to prioritize, develop, and engage them, and how to design strategies to maximize their value to the port community.

A stakeholder life cycle approach involving a five-step stakeholder management model was proposed in response to the perceived gap in the stakeholder academic literature and management practice in ports. This involves identifying, prioritizing, visualizing, engaging, and monitoring the stakeholders throughout the project's life cycle. Although the study made use of broader stakeholder knowledge and theories, which are well developed in general management circles, recent research, and papers produced to construct a structured path for stakeholder engagement and management, this was limited to the context of a port energy transition project and not a port entity or managing body, which exists in perpetuity.

The dynamics of a project and a perpetual entity would differ, though several similarities exist. Despite the exceptions, this study is still valuable for further development and understanding port stakeholder theories, providing a summary of academic approaches, and providing a practical stakeholder engagement model. Despite the limitations, the model found support from Manowong and Stephen (2010), Jawahar and Mc Laughlin (2018), and (Weiss, 2021), who saw vital elements such as prioritization, stakeholder identification, and strategy definition as generic concepts that can be applied to stakeholder engagement in other industries, such as ports, as well as to stakeholder engagement and practice generally.

Some ports have conducted stakeholder surveys and developed frameworks for stakeholder engagement, which have provided valuable insights into the ongoing work in port stakeholder management. This offers a different perspective as it is from a practitioner's viewpoint rather than an academic one. The Port of Melbourne, an operating port, produced a Stakeholder Engagement Framework in 2023. The framework identified the port's principal stakeholders and acknowledged that successful stakeholder engagement is pivotal to the port's success.

The port outlined the principles underpinning its stakeholder engagement effort and detailed what successful stakeholder engagement would look like. It also outlined its engagement process and gave examples of the strategic stakeholder initiatives underway and planned. This was a good model and could be consulted in the development of a port's stakeholder engagement framework. However, there was little mention of the internal stakeholders or defining any unique approach to addressing their needs. While more detailed and pragmatic, the model followed the academic trend by bundling the stakeholders and prescribing options for engaging with them. This is beneficial in some respects, but this approach fails to appreciate the pivotal role the internal stakeholders play in the long-term future of the port and the success of the rest of the stakeholder group.

The model would have benefitted from mapping stakeholder needs to eventual strategies for ease of adaptation. It would have also helped to have actual research and results to show the model's efficacy. In addition, no use case was included to demonstrate how the model worked, nor were the success stories or fail points for avoidance or lessons learned for instruction to potential users of the model. The document did detail a list of upcoming stakeholder engagement projects. Perhaps in the future, the results will be incorporated into an updated model for the benefit of the port community. For further details on this framework, see the link: [Port of Melbourne Stakeholder-Engagement-Framework](#)

Despite this paper's focus on operating ports, insufficient research exists on internal stakeholder management in operating ports, so this study was used as a substitute. Dooms et al. (2015) produced a

study entitled "Proactive Stakeholder Management in the Port Planning Process: Empirical Evidence from the Port of Brussels. In this study, which focused on the Port of Brussels master plan development process, the external stakeholders were seen as independent actors with their development agendas, simultaneously improving the legitimacy and sustainability of the port development in the broader regional space.

This study of a landlord port also emphasized the inclusion of the needs of the diverse stakeholder groups. It indicated principles underpinning this activity that can be applied to the broader port stakeholder engagement discipline. One critical admission in the study was that internal stakeholders had a significant role in implementing the strategy due to their vast knowledge of all the port's end user needs and processes. These concepts find synergies with the operating port model, where the internal stakeholders have significant expertise in all facets of port operations. This can determine the port's success or failure, so these stakeholders' needs should be prioritized and strategies formulated to keep them engaged, motivated, and satisfied.

For more details on this study, review Dooms et al. [Proactive stakeholder management in the port](#).

Results of the Port Stakeholder Engagement Survey

One of the approaches to this capstone was to determine the extent to which North American and Caribbean ports were involved in internal stakeholder management. Eleven questionnaires were distributed to operating and non-operating ports in North America and the Caribbean. The response rate was insufficient to proceed with this study.

Results of Research in Associations and NGO's

Several sources, such as the British Ports Association (BPO), the Caribbean Shipping Association (CSA), the Port Management Association of the Caribbean (PMAC), the International Association of Port Authorities (IAPA), the American Association of Port Authorities (AAPA), and the European Sea Ports Organisation (ESPO), were consulted for information on the capstone topic. The data gathered and used are appropriately referenced in the body of the capstone.

Results from Annual Reports and other port stakeholder engagement resources

Several sources, including academic, online, and port use case reports from Asia, Africa, and Europe, and publications, including trends in EU port governance, were used to prepare this capstone. These are reflected and appropriately referenced elsewhere in the capstone.

TOOLKIT FOR INTERNAL STAKEHOLDER POLICY DEVELOPMENT

The basis of any stakeholder management framework is the stakeholder policy. It provides the foundation that guides organizations' stakeholder activities. While the Port of Melbourne has a set of principles that guide its general stakeholder framework, including transparency, accountability, genuineness, timeliness, inclusivity, and continuous improvement (Port of Melbourne, 2021), such principles must be in line with the port's Mission, Vision, and Values.

Designing Stakeholder frameworks can be complex as there is often tension, interdependence, and conflict between stakeholder groups. Maloni and Jackson (2007) noted the inherent conflict between internal stakeholders, such as terminal operators and longshore labor, and external stakeholders, such as ships, freight forwarders, etc., over port capacity. Such conflicts are outside the scope of this study and could be an area for further research and template modification.

Designing a stakeholder policy starts with the port's overall guiding framework. In developing the policy, a port should analyze its Mission, Vision, and Values and find principles that can be used to outline its relationship with its stakeholders. These principles should be consistent with and representative of the truths that the port subscribes or aspires to.

After extracting those principles, statements should link them to the port's activities regarding its internal stakeholders. The third step involves creating the stakeholder policy incorporating principles and value statements in point form or well-structured paragraphs. This should define precisely how the port's activities will be conducted to fulfill its perceived obligation to its internal stakeholders. This is critical as this will be the springboard from which the engagement and management strategies will be formulated.

The accompanying guidance notes provide detailed instructions and a template for developing an internal stakeholder policy for operating ports. The Port of Virginia was used as a complete worked example of how the template is used. (See Appendix II)

Guidance notes-
Policy development

Links to further reading for Policy development:

- [Stakeholder Engagement Summary Report](#)

- [Stakeholder Pulse Survey 2023](#)

The Screenshots below (Figures 1 -4) comprise the Template for Stakeholder Policy Development

Figure 1

STEP 1	TYPICAL INCORPORATION DOCUMENTS		
IDENTIFY KEY CONCEPTS FROM INCORPORATION DOCUMENTS	MISSION STATEMENT	VISION STATEMENT	VALUE STATEMENT
• Key concept 1			
• Key concept 2			
• Key concept 3			
• Key concept 4			
• Key concept 4			
• Key concept 5			
• Key concept 6			

Figure 2

STEP 2	MISSION STATEMENT	VISION STATEMENT	VALUE STATEMENT
EXTRACT PRINCIPLES LINKED TO THE PORT'S KEY CONCEPTS			
• Principle 1			
• Principle 2			
• Principle 3			
• Principle 4			
• Principle 5			
• Principle 6			

Figure 3

STEP 3			
STAKEHOLDER RELEVANT LINKS	Value preposition	Commitment	Communication
DETERMINE HOW THE PRINCIPLES IDENTIFIED WILL IMPACT THE PORT'S RELATIONSHIP TO THE INTERNAL STAKEHOLDERS			
• Identification			
• Needs assessment			
• Prioritization			
• Communication & Feedback			
• Periodic reevaluation			
•			

Figure 4

STEP 4			
DRAFT STAKEHOLDER POLICY	Value preposition	Commitment	Communication

The policy development template guides the user through the process of identifying key concepts from incorporation documents, extracting principles linked to the concepts identified, and then extrapolating those principles to demonstrate their impact on five (5) broad areas of stakeholder relationship and management. These are;

1. Identification of stakeholders

2. Assessment of their needs

3. How their needs are ranked

4. The communication process with the stakeholders

5. The periodic evaluation of the stakeholder relationship

These five areas are assessed against the value proposition for stakeholders, how connected the port is to the stakeholder management endeavor, and how the port communicates their principles, positions and facilitates stakeholder participation.

TOOLKIT FOR STAKEHOLDER ANALYSIS

In order to design any framework for stakeholder engagement and management, a port must first define its stakeholders. The literature is not definitive on who port stakeholders are, but academic literature for general and port management has defined what stakeholders represent. The Project Management Institute defines stakeholders as individuals and organizations who participate in projects and are impacted by their success or failure (PMI, 2004), (Freeman & Reed, 1983). General management theory defines it as persons, immediate environment, groups, organizations, and the environment (Mitchell et al., 1997). Stakeholders are also defined as groups who claim interest and rights in the activities of an organization (Clarkson, 1995), (Carroll, 1993) and those who are affected by the achievement of the objectives of an organization (Freeman, 1984).

The literature on port stakeholder management is not cohesive, as the studies and papers generally define stakeholders based on the context of the discussion. So, stakeholders for one project may differ for another project, a port, or an organization. A sample of how port stakeholders have been identified is seen in a summary taken from Dooms (2018). The literature indicates that less than ten studies were explicitly applied to port-related Management. Some are listed below. These were focused on stakeholders as they relate to long-term planning, sustainability, and environmental concerns of ports.

Table 1 below summarizes six studies on port stakeholder management. It details the stakeholders identified by the studies, the research control, and the authors. The table shows the disparity in stakeholder definitions based on the context of the analysis. It exemplifies the variability in stakeholder management and perhaps the reason the port community has not coalesced on port stakeholder matters. It points to the need for robust analysis to work through a consensus or common framework on port stakeholder matters.

Table 1

Port Stakeholders	Context	Source
• **Managing Entity** • **Terminal operators** • **Port community** • **The general public** • **Related Government entities** • **Vested interest organizations** • **Service providers and partners**	Show how the supply chain impacts long-term prospects in ports	(Deaktas-Sakar, Karatas-Cetin,2012)
• **Internal- staff & others** • **External- contractors** • **Government** • **General Public**	Identify the stakeholder groups involved and their influence on strategic planning	(Notteboom and Winkelmans 2002)
• **Internal** • **External** • **Governmental** • **Associations** • **Media** • **NGO**	Strategic planning and Stakeholder Involvement	(Dooms, 2019)
• **Port community** • **Impacted groups**	Analysis of stakeholder perceptions	(Ha et al., 2019)
• **Shipping lines** • **Longshoremen** • **Freight forwarders** • **Truckers** • **Port community**	Stakeholder interests and perceptions about port operations	(Acheampong, 2022)
• **Immediate port locality** • **Population affected by project outcomes**	Infrastructure works and port stakeholders	(Lawer, 2019)

Given the apparent disparity in port stakeholder definitions, this capstone has refined the scope of internal stakeholders. The working definition synthesizes the Strategic Management and Dooms 2019 viewpoints. The internal stakeholder group should include Commissioners/Board Members, shareholders, management, staff (including all port labor), terminal operators, stevedores, equipment operators, and police/ security. Some ports may include other participants and operators on the port campus as internal stakeholders based on their features.

The refined definition of internal stakeholders for this capstone is - ***the parties who are routinely active participants and have a vested interest in the port's short—and long-term activities and work for and on behalf of the port managing entity to achieve the current and future objectives***.

Having identified the stakeholder group, the following steps will outline the detailed identification and definition processes. This involves understanding the stakeholders, their needs, and how the port can collaborate to achieve sustainable solutions aligning with its vision for the future and its long-term strategic plans. The toolkit will detail the steps and provide the templates to facilitate:

- Stakeholder identification and definition

- How to analyze stakeholder needs to optimize participation and deliver appropriate solutions

- The ranking and prioritization of stakeholders based on their relative impact on strategic and operational objectives

- The assessment of the port's capacity to meet the needs of the stakeholders (often, stakeholders' needs may conflict with the needs and interests of the port)

- Gap and what-if analyses

The toolkit will be complemented with links to additional resources for further research and support.

Stakeholder Identification

Existing literature on models of stakeholder identification in ports has gaps. However, stakeholder identification is a well-developed area of management theory in academia. Several approaches and theories have been proposed over the last several decades and have been subject to rigorous debate and analysis.

The table below gives a synopsis of some of these approaches, indicating their possible relevance to port contexts. It was adapted from Mitchel, Angle, and Wood (1997). A brief commentary follows.

SOURCE	APPROACH	ADVANTAGES	DISADVANTAGES	PORT APPLICABILITY
Freeman & Reed, 1983 Starik, 1994 Bowie,1988	Power and Proximity: The existence of power in the organization over those with whom it associates How close existing and potential stakeholders are to the activities of the organization	Narrows focus on the actors with meaningful influence over the organization Can assist ports in defining and identifying stakeholders	Not all stakeholders with power and proximity are equal. This needs further refinement Stakeholder saliency would be helpful here This approach could expand the stakeholder pool with an impact on scope, timing, and budget Could exclude stakeholders with significant influence who are neither close nor whose power is not evident	YES
Freeman & Evan, 1990 Clarke, 1994, Bremar, 1993	Determine stakeholders based on whether they have an established relationship with the entity based on: • Contractual • Implied • Obligatory • Morality • Corporate social responsibility	Enables a seamless identification of some stakeholders	Some relationships are challenging to define precisely Subjective approach implicit Could expand stakeholder pool immeasurably	YES
Evan and Freeman, 1988 Carroll, 1989 Langtry, 1994	Classify stakeholders based on their prescriptive or legal rights or other obligations.	Aims to include all stakeholders, including those who may not have written rights	Some may be difficult to determine and may be subject to legal challenge or interpretation	YES

The snapshot of stakeholder identification literature partly presented in Table A is quite extensive, reflecting the work of scholars over many decades. Scholars tackle the problem of stakeholder identification from many angles, presenting options for dissecting the corporate environment and its operations to identify the various stakeholder relationships.

This is crucial as entities need to know the actors in their universe and who they are obligated to on all fronts. This needs a comprehensive analysis, including legal, archival, financial, operational, and societal, as some of these entanglements may not be intuitive or apparent. These stakeholders may have been dormant for several years, only to resurface with costly implications when strategic decisions are taken and executed. This is particularly true for entities with a long history.

While not designed for port contexts, these theories are helpful in the stakeholder identification landscape. Being acquainted with Table A should be a first step for any port embarking on a stakeholder identification effort.

The port should examine its activities and its environment to identify the internal stakeholders and determine the active participants with vested interests routinely involved in delivering outcomes. Internal stakeholders also have significant time and financial investments and play a role in crafting and executing the mission, vision, values, strategy, plans, and operational tasks. Asalu, (2018)

These actors should be engaged to understand who they perceive the port's internal stakeholders to be. This will give practitioners a better picture and enable them to appropriately expand, contract, and contextualize stakeholder identification—the template and the instruction guide detail the processes to achieve successful stakeholder identification and definition. See Appendices V—VII for snapshots of the following Template and Guidance notes.

Guidance notes-stakeholder identific   Stakeholder identification templa   Template for stakeholder consult

Links to additional resources and case studies:

1. https://simplystakeholders.com/stakeholder-mapping/#heading-3

2. https://hha.co.uk/wp-content/uploads/2018/02/Stakeholder_consultation_survey_summary_final.pdf

3. https://www.iaphworldports.org/n-iaph/wp-content/uploads/2020/11/ReportOnPCSBenchmarkSurvey_TFPCS_Jun2011.pdf

4. https://researchonline.ljmu.ac.uk/id/eprint/6740/3/Revisiting%20port%20performance%20measurement%20A%20hybrid%20multi-stakeholder%20framework%20for%20the%20modelling%20of%20port%20performance%20indicators.pdf

5. https://portofblyth.co.uk/stakeholder-overview/

6. https://porteconomicsmanagement.org/pemp/contents/part7/port-planning-and-development/stakeholder-groups/

7. https://www.researchgate.net/publication/336037569_Stakeholder_salience_and_prioritization_for_port_master_planning_a_case_study_of_the_multi-purpose_Port_of_Isafjordur_in_Iceland

Use case example:

Several internal stakeholders were identified during a stakeholder analysis for the multi-purpose Port of Isajordur master planning in Iceland in 2019. As shown in the excerpt below (see Figure 5), several internal stakeholders were identified, ranging from the port staff to entities considered closely affiliated with the port. This segmentation appears to align with this capstone's definition of internal stakeholders, as they appear to be *routinely active participants and have a vested interest in the port's short—and long-term activities and work for and on behalf of the port managing entity.*

Figure 5

Table 1.   List of port stakeholders for the multi-purpose Port of Isafjordur master planning

| Stakeholder group | | | | |
Internal	External	Legislation and public policy	Academic	Community
1. Port Authority	1. Associations & NGOs	1. The Environment Agency of Iceland	1. University of Iceland	1. Small neighboring market/ activities
1.1. Harbor committee	1.1. The association of industries	2. Consumer agency	2. University of Akureyri	1.1. Local fish markets
1.2. Port director	1.2. The Federation of Icelandic industries	3. The Icelandic Directorate of Fisheries	3. Delft University of Technology	1.2. Local stores
1.3. Employees	1.3. The Association of Fisheries Companies	4. The Directorate of Internal Revenue	4. IHE Delft Institute for Water Education	1.3. Local heritage museum
2. Municipality	1.4. The Icelandic Association for Search and Rescue	5. The National Energy Authority	5. University Centre of the West Fjords	1.4. Kayak center
2.1. Town Council	1.5. The agricultural association of fisheries	6. The Icelandic Transport Authority		1.5. Viking ship association
2.2. Customs	1.6. The port association of Iceland	6.1. Maritime security		2. Landowners
2.3. Planning and building office	1.7. The Icelandic Regional Development Institute	6.2. Port installations and maritime navigation		3. Neighboring residences
2.4. Infrastructure, environment and asset management office	1.8. The Westfjords Development Association	7. The Icelandic Coast Guard		4. Ship/boat owners
2.5. Environmental office	1.9. The Icelandic Tourist Board	8. The Icelandic Road and Coastal Administration		5. Press/ media
2.6. Fire brigade	1.10. Cruise Iceland	9. National planning agency		6. The Blue bank company

Stakeholder Needs Identification

The next stage after we have identified who the stakeholders are is to find out what they want. The answers may seem obvious for internal stakeholders, as their classifications may appear to limit their interests to a very narrow range. However, establishing needs can be quite complex as there are interdependences in the port ecosystem, even for actors "within the fence" of the port campus. These interdependencies have a direct impact on stakeholders' needs. The process for need identification is two-fold.

Firstly, there is the intuitive aspect of internal stakeholder need identification. Often, the engagement process practitioners in ports are senior management and, therefore, themselves stakeholders, as are their colleagues and associates. At the appropriate seniority, they are also at the table where decisions are made, so they may have general knowledge about what each stakeholder group needs.

Secondly, the stakeholders' expectations from their perspective could differ from the port's perspective. Even within a stakeholder group, there may be differences in expectations at the individual or sub-group level. It is vital to explore this aspect and the dimension that stakeholders may have expectations that they find difficult to express but are negatively impacted when unmet.

Some stakeholders belong to different groups, so they may have different expectations based on the examined group. These same individuals may have another set of expectations when placed in another group context. They are the same people but with different expectations, and all are valid. Despite the validity of stakeholders' expectations, resources, management attention, and patience are not infinite; therefore, not all needs can be met. The port has to prioritize based on the balance of its needs and those of the stakeholders. Mitchel et al. (1997) suggest that management uses a trilogy of "power, legitimacy, and urgency" to determine what needs attention. This will be explored in a subsequent section. The additional literature review noted twenty-two approaches to stakeholder prioritization, expounded by several authors in various research and application contexts.

Stakeholder management practitioners in ports must contribute some views to the discussion about the stakeholders' needs. This will be largely intuitive and serve as an initial assessment. The engagement survey will refine this, seeking feedback from the stakeholders themselves about what they perceive as their needs. The following is a guide for an initial assessment of the stakeholders' needs. The template will explore this further and can be modified as appropriate. See the embedded files below and Appendices XI-XIII.

Shareholders want a return on capital, profitability, growth, and increased market share; Commissioners want to improve capacity, market access, and build resilience; and management intends to deliver good numbers, whether profitability, market share, growth in business, low staff turnover, grant application approvals for infrastructure projects, and successful project outcomes. On the other side, staff want a sustainable career, good wages, professional growth prospects, security of tenure, professional development, and excellent working conditions. Other port stakeholders, such as terminal operators, stevedores, and security companies, need growth and viable business opportunities. However, research indicates they perceive maintaining business relationships as just as desirable as their commercial interests. Vitsounis, T. and Pallis, A., (2012)

These are some examples of the various internal stakeholder needs. They must be adequately captured to proceed to the next stage, where they can be vetted.

It is critical that management not only reflect their perceptions of stakeholder needs in the identification process and eventual management strategy but also clarify their expectations from the stakeholders themselves to get a holistic picture of stakeholders' needs. A recommended template for this activity is also included. See Appendices VII – X.

This is a foundation for ports to adopt but customize to their unique circumstances. The templates developed for needs identification, accompanied by guidance notes, will help ports understand and document the needs of various internal stakeholders in order to prioritize and strategize for optimal and

sustainable strategies. See the embedded templates below and guidance notes for stakeholder needs

identification and stakeholder feedback. See also Appendices X-XIII.

Template for
stakeholder needs i

Guidance Notes to
complete Stakehold

Template for
capturing stakehold

Areas for further inquiry:

The focus of this section is identifying the internal stakeholder's needs. There was no emphasis at

this stage regarding the interdependence and conflict that may exist with and between internal stakeholder

groups. The external stakeholders also have their own needs, which would have to be factored into the

overall strategy, as the port has to contend with all the stakeholders, not just those internally. Often, the

dynamics between the internal (primary) and external (secondary) stakeholders are more complex, and the

web of external stakeholders is more voluminous and not confined geographically or spatially. These

conflicts and how they co-exist and are balanced in the entire process could be the subject of further

research , or perhaps another area for a future PPM project.

Vetting and Ranking of Stakeholder's Needs

After the arduous tasks of stakeholder identification and needs assessment, vetting and prioritizing the needs come next to enable a workable approach to solving them. The literature and use cases have outlined some options to achieve this. These are summarized in Table 2 below. These provide many options and approaches to identifying, ranking, and strategizing for stakeholders' needs. This is positive, as different approaches are suited to different contexts. Just as no two ports are similar, the approach to assessing stakeholders' needs may need some tweaking in any existing framework or template that will be developed.

Table 2

MODELS FOR STAKEHOLDER PRIORITIZATION			
Source	**Approach**	**Research Context/Use Case**	**Applicability**
Eskafi *et al.* (2019)	Power-interest Matrix	Port Master plan- Port of Isafjordur, Iceland	Yes. The use of mathematical models to prioritize stakeholders while scientific is outside the scope of this capstone
Alamoush *et al*, (2024) Mitchel et al. 1997 Westrenius and Barnes (2015) Looser and Wehrmeyer (2015)	Stakeholder salience attributes- Prioritize stakeholders based on characteristics	• Port energy transition projects. • Small businesses in Australia (Mitchel et al.) • Corporate social responsibility in Switzerland (Looser, Wehrmeyer) •	Yes. The principles are relevant and can be used port-wide
Newcombe, (2003) Olarius et al., (2016)	Power- predictability Matrix- plots stakeholders on a grid based on perceived predictability and power	Academia City Planning	Yes, with modifications in conjunction with aspects of other methods

Table 2 (continued)

MODELS FOR STAKEHOLDER PRIORITIZATION			
Source	**Approach**	**Research Context/Use Case**	**Applicability**
PMI, 2004 Bourne, L. & Kasperczyk, S. (2009)	Stakeholder Circle Methodology- This is a five-step system to rate and rank stakeholders	Introducing stakeholder circle methodology and software into the European Union	Yes. Ports can use Power, proximity, and urgency to rank stakeholders in various contexts
Turner, (2007)	Stakeholder Knowledge Base Diagram plots stakeholders based on their knowledge of the project and their level of support for it	Project management Academia	Applicable in project management contexts
Newcombe, R. 2003	Power interest and predictability- Power/ predictability and power/interest used to rank stakeholders	Academic literature with emphasis on construction projects	Yes. Port users can incorporate this method in conjunction with others in their stakeholder ranking exercise
Lusticky, et al (2015)	Importance, proximity, and urgency	Tourism sector in the Chech regions	Yes, with modifications in conjunction with aspects of other methods
Imperial College London (2017)	A stakeholder analysis grid using influence and interest ratings is used to plot a graph	Academia	Yes, with modifications in conjunction with aspects of other methods
Mendelow, 1991	Mendelow's Matrix- using power and interest to rank stakeholders. Highest powers and willingness to use it gets ranked high	Academia Project management	Yes, with modifications in conjunction with aspects of other methods
Freeman (2010)	Grid with two dimensions – Power and interest	Academia	**Yes**
Business for Social Responsibility (2011)	Use of Contribution, legitimacy, engagement willingness, influence, and involvement to rank stakeholders	Academia	Yes, with modifications in conjunction with aspects of other methods

Table 2 (continued)

MODELS FOR STAKEHOLDER PRIORITIZATION			
Source	**Approach**	**Research Context/Use Case**	**Applicability**
Eden and Ackerman (2013)	Modified matrix-classifying stakeholders as players, context setters, subjects, and the crowd	Academia	Yes, with modifications in conjunction with aspects of other methods
Martirosyan and Vashakmadze (2014)	Modifies Mendelow's matrix	Test stakeholder's views on Mergers and acquisitions	No. Limited and skewed to Merger and acquisition
Chinyoi, E. and Olomolaiye, P. (2009)	Influence / Interest/ Impact mapping- (Three I's)- stakeholders assign values in a range based on attributes. These can then be viewed graphically	Construction management Academia	Limited. Better suited to Construction
Wang et al (2022)	Stakeholder Relationship Network Diagram – shows stakeholders' relationship with each other	Academia Urban regeneration projects in China	Limited. The detailed stakeholder's relationship with each other is outside the scope of this capstone
Ian Alexander and Suzanne Robertson (2003) Ian Alexander. (2003)	Stakeholder Onion Diagram: The Stakeholders are placed on a chart, with the leading players closest to the inner circle and the others outside the circle	• Academia • Engagement survey • IT projects • Engineering projects	Limited applicability. It can be used in project management
Chevalier and Buckles, (2008) Dhirasasna & Sahin, (2019)	Stakeholder rainbow Diagram – High impact/ High influence stakeholders placed closest to the middle of the diagram. Others outside the middle-less impact/ less influence	• European and national legislation with regard to the different steps in a phytoremediation approach for metal-contaminated land • Climate change • Academic	It is more suitable for contexts where the variable changes over time, such as environmental/ climate change

Table 2 (continued)

MODELS FOR STAKEHOLDER PRIORITIZATION			
Source	Approach	Research Context/Use Case	Applicability
Plotitsina and Boyarov (2011)	Assess different conditions for prioritizing stakeholder groups- Corporations- long-term partnership, mutual actions relationships maintained by contract	Corporate Social responsibility and sustainability for Transport Business in Russia	Limited applicability
A. Mints, E. Kamyshnykova. (2019)	A two-axis matrix— level of opportunity and interest— classifies stakeholders into four groups: potential, strategic, weak, and others	Academic	Could be applied to external stakeholder analysis- A heavy mathematical model
A. Mints, E. Kamyshnykova. (2019)	Immediate environment proximity is used to classify stakeholders	Academic	Could be applied to external stakeholder analysis- A heavy mathematical model
Majumdar, Md. S. Rahman and Md. R. Rahman (2014)	Fuzzy Logic method- Using subjectivity and a system of indicators to prioritize stakeholders	Software development	Limited- applicable to software development and engineering spheres
Ignaccolo et al. Dooms, M. and Macharis, C. (2004)	SWOT Analysis	• Port Planning- EU PORTA project • Port of Brussels	Port context
Ignaccolo et al.	Social Network Analysis	Port Planning- EU PORTA project	Port context

Having reviewed the approaches to stakeholder mapping, both provided in academia and used by practitioners, and the reality that customization is inevitable, the model of choice for this capstone is the **Power-Interest grid**. The model can be further adjusted to include influence, involvement, and willingness to engage to synthesize two or more models. This was not included in this capstone but could be an area for

further empirical testing and research. Twelve from the list could be more appropriate and modified for port use with a limited budget and time constraints.

The apparent gap from the research is consistent with noted authors on the subject, who state that there is little empirical evidence of adopting these theoretical models in port practice. Of the 25 approaches observed from research (undoubtedly, there are many more), only four were seen used in port contexts. Perhaps this was due to the inherent limitations of time and resources for completing the capstone project. On the other hand, the reason may be that ports are in the early stages of stakeholder management, and not much has been achieved in the industry in this regard.

**Selection of Engagement Model**

The Power – Interest model was selected from the alternatives identified in the literature (see Figure 6). This model is suited for small operating ports with limited resources and those needing an effective solution to stakeholder management needs. It can also be adapted to suit larger ports.

a. Simple to use

b. Straightforward to understand and apply

c. Cost-effective

d. Gives insight into key stakeholders to lobby to ensure that projects and initiatives have an increased chance of success

e. Allows ports to effectively manage stakeholders and strategize for project or initiative delivery and success

The stakeholder needs template already developed will be used as the basis for the Power-Interest Grid template.

The Power- Interest Grid

Figure 6
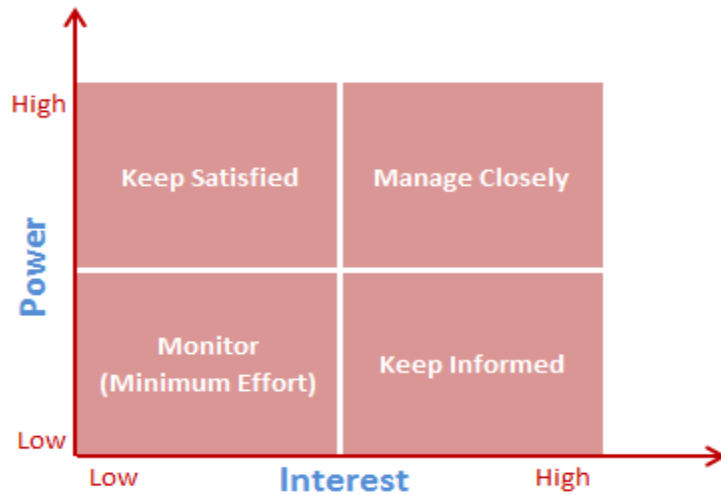
This model can be used to assist ports in prioritizing the needs of stakeholders. Stakeholders are assigned to the quadrants based on the following:

- Those with the influence to advance or block the activity are considered high-power

- Those who have little influence on the port are assigned low-power

- Stakeholders who have much interest in the port and the activity are assigned high-interest

- Stakeholders who have very little interest in the outcome of the port activity are assigned low-interest

- See the embedded files below for the Templates and User guides, which provide detailed instructions on how to use the Power- Interest Grid. (See Appendices XIV-XVI)

Template for stakeholder prioritiz   User guide for Power Interest Grid.   Stakeholder Register Template.d

Ports' use of the Power-Interest Grid in stakeholder prioritization will add empirical data and use cases to demonstrate its efficacy as a simple yet effective tool in stakeholder management efforts. After the

assessment, the Stakeholders Risk Register is completed (See Appendix XIV). This register houses the

stakeholders' details centrally for efficient use. The following are key benefits of stakeholder prioritization:

- The port will understand which stakeholders are critical to the port and target resources to that

  effort. This ensures efficient resource use for the highest benefit.

- The port will build strong networks and relationships with all the stakeholders, as they are all

  engaged, albeit to different degrees. This will allow stakeholders to build trust and equity with the

  port. This is important for stakeholder buy-in and the handling of contentious issues when they arise

  in the process.

- During the stakeholder engagement, identification, needs assessment, and eventual prioritization,

  stakeholders will engage with the port and its proxies enough for both sides to understand the

  expectations. This reduces conflict in the relationship and provides avenues for conflict resolution.

- Stakeholder prioritization forms the basis of the stakeholder management plan, where the

  strategies to meet the stakeholder's needs are designed.

- The benefits of stakeholder prioritization extend to risk management. The port's stakeholders have

  inherent risks, which must be understood and mitigated. Stakeholder prioritization will assist with

  the risk mitigation plan for the project/ initiative or the port itself.

Capacity Assessment of Ports to Respond to Stakeholder Needs

Using the Power-Interest Grid, the key stakeholders are prioritized. The next step is determining whether the port can meet their needs. The templates below in Tables 3 and 4, give the port tools to further rank the stakeholders' needs based on the number of points awarded using the port's assessment of the stakeholder's needs under the various classifications. The needs of the stakeholders would be prioritized based on the overall score obtained. Note that this is a management tool to assist in the process, and final decisions remain at the discretion of management despite the template's results.

Table 3

NEED CLASSIFICATION	QUESTIONS TO ANSWER BY STAKEHOLDER PROJECT TEAM	POINTS (N/Y)
Reasonable Justifiable	Are the needs or expectations of the stakeholders reasonable?	0-2
	Could they be justified to the commissioners or owners?	0-1
	Is there an urgent or compelling case that needs to be satisfied?	0-1
Feasibility	Is it possible to meet the needs or expectations?	0-1
Points Ranking based on grid. (See details below)	Points allocated for the stakeholder's needs	1-15
Timeliness	Can the port deliver the solution within the timeframe expected?	0-2
Financial resources	Does the port have the budget to fund the needs?	1-6
	How quickly can the funds be made available?	1-2
	Are there conditions that must be met before funding can be realized?	1-2
Human resources	Does the port have the personnel to dedicate or assign the needs to?	0-3
	Does the port have the skill sets to address the needs?	0-2
Technological Resources	Does the port have the technological expertise to provide the solution?	0-2
	Does the port have the equipment to provide the solution?	0-1
	Does the port have the technological experience to meet the needs?	0-2
	TOTAL POINTS	**4-32**

(Note: Original concept by author)

The stakeholder needs that score the highest points are ranked accordingly, and get priority attention and resource allocation. There should be a direct link between the ranking of stakeholder needs and the potential to contribute to the success of the project, initiative or port objective. This exercise is likely to be time-consuming but equally rewarding, so practitioners must exercise care and patience.

Table 4

POINTS RANKING OF STAKEHOLDER NEEDS (POWER INTEREST GRID)			
GRID PLACEMENT	Points range	Notes	Explanations
high power- high interest	10-15	Each quadrant has a range for further ranking	The most crucial need for a port given the highest ranking
high power-low interest	6-9	Each quadrant has a range for further ranking	Port assesses each stakeholder's needs in the quadrant and allocates points (6-9)
low power- high interest	3-5	Each quadrant has a range for further ranking	Port assesses each stakeholder's needs in the quadrant and allocates points (3-5)
low power- low interest	1-2	Each quadrant has a range for further ranking	Port assesses each stakeholder's needs in the quadrant and allocates points (1-2)

(Note: Original concept by author)

Other resources for further insight and use cases in stakeholder prioritization:

1. https://seanergyproject.eu/wp-content/uploads/2023/10/wp1-1.1-report-on-stakeholders-framework-and-database.pdf

2. https://ec.europa.eu/transport/infrastructure/tentec/tentec-ortal/site/brochures_images/ports2013_brochure_lowres.pdf

3. https://www.transport.gov.scot/publication/modern-trust-ports-for-scotland-guidance-for-good-governance/j249946-03/

4. https://www.linkedin.com/pulse/customer-value-container-terminals-stakeholder-pavlos-vlasopoulos

TOOLKIT FOR STAKEHOLDER ENGAGEMENT MATRIX

Having compiled the priority needs based on the scores attributed, the next step involves designing the plan and identifying the tools needed to meet the needs and ensure the port's objectives are achieved. While the plan design could be a voluminous document with charts, statistics, and detailed steps, the approach is to have bullet points summarizing the recommended strategies for each stakeholder or stakeholder group. Practitioners can flesh these out for their specific contexts and make detailed plans, including timelines, accordingly. These would depend on several moving parts and may be unique for each project or activity. The details may be best left to the project managers to refine. See Table 5 below for strategic options based on the internal stakeholder profiles identified earlier.

Table 5

STRATEGIC OPTIONS FOR STAKEHOLDER CLASSIFICATIONS				
STAKEHOLDER GROUP / INDIVIDUALS	**HIGH POWER- HIGH INTEREST- GOAL: MANAGE CLOSELY**			
	NEEDS IN ORDER OF PRIORITY- SNIT / PIGT	**METHODS**	**COMMUNICATIONS**	**CO-ORDINATION**
• Shareholders. • Commissioners, • C-Suite	Copy from Stakeholder Needs Identification Template AND Power -Interest Grid Template	• Establish working groups • Consult for critical decisions • Task sharing – co-authored documents • Assign responsibilities • Address concerns early • Stakeholder register • Group project /program review • Review and approves project • Approve funding, Including stakeholder engagement • Approve strategy	• Frequent updates- weekly, fortnightly • Pre and post-significant milestones • Desired channels- emails, stakeholder meetings • Seek feedback • Project briefings • Scheduled Meetings • Printed materials	• Online workspaces & tools • Project manager assigned to co-ordinate group activities • Secured file sharing tools • Formal coordination of efforts • Periodic reporting
STAKEHOLDER GROUP / INDIVIDUALS	**HIGH POWER- LOW INTEREST – GOAL: KEEP SATISFIED**			
	NEEDS IN ORDER OF PRIORITY- SNIT / PIGT	**METHODS**	**COMMUNICATIONS**	**CO-ORDINATION**
Shareholder (for Statutory Entities)	Copy from Stakeholder Needs Identification Template AND Power -Interest Grid Template	• Relationship-building activities – Lunch. Other social events, etc. • Seek ways to understand needs	• High-level updates periodically • Communicate confidence and competence • Send links to articles, relevant blogs	• Diarize contacts • Schedule recurrent updates • Match Needs with action plan

Table 5 (Continued)

	STRATEGIC OPTIONS FOR STAKEHOLDER CLASSIFICATIONS			
	LOW POWER – HIGH INTEREST- GOAL: KEEP INFORMED			
• Cruise Terminals / Operators. • Terminal Operators • Equipment Operators • Managers • Staff • Stevedores	Copy from Stakeholder Needs Identification Template AND Power -Interest Grid Template	• Group discussion/ Forums • Public consultations • Provide reports • Summarize issues and solutions • Segmented stakeholder meetings periodically for project and information updates • Electronic consultation on priority matters • Check for changing stakeholder needs	• Tailored messaging • Establish key messages • Surveys – online or electronic • Pulse updates on issues of concern • Emails, SMS • Social media, Flyers • Project websites • Coffee or water cooler conversations • Informal discussions at social events	• schedule the various outreach activities • Establish a senior contact for the stakeholder group as a liaison • Use several communications avenues to maximize penetration, reach, and impact
	LOW POWER – LOW INTEREST- GOAL: MONITOR (MINIMUM EFFORT)			
Police / Security Update as necessary	Copy from Stakeholder Needs (SNIT) Identification Template AND Power -Interest Grid Template (PIGT)	• Update periodically (two or three times per year) • Check for emerging problems	• General print publications • General Media coverage	• Minimal- schedule communication

Gap Analysis And Stakeholder Feedback

Ports engage in symbiotic relationships with internal and broader stakeholders as part of a healthy, balanced business model. Internal stakeholders must be taken care of so they can, in return, take care of the port's interests and needs. To ensure the well-being of internal stakeholders, ports invest in the following activities:

- Motivation and support

- Training and development of staff and other stakeholders

- Excellent compensation and benefits for employees

- Initiatives that promote inclusivity, collaboration and respect

- Stakeholder events hosting

- Public relations

- Information gathering processes- surveys, etc.

- Reporting

- Time and resources to understand and meet internal stakeholders' needs.

In exchange for this investment, ports expect returns, which could include the following:

- Good financial performance

- Growth, efficiency and effectiveness

- Increase in the competence of staff

- Increase in competitive advantage and market positioning

- Technological adaptation and digitization

- Process improvements

- Support and buy-in for projects and initiatives

- Staff satisfaction and camaraderie

- Grant funding application success and project execution

- Strong and effective management

- Leadership by Commissioners and Board of Directors

- Regulatory compliance

- Strong advocacy and government relations

The results or expectations must be tracked to determine whether the strategies identified and deployed in the strategic options section of the internal stakeholder management program deliver the desired outcomes. The gap analysis is the tool used to achieve this (See Appendix XVII). The gap analysis template documents the stakeholders, their needs, the strategies the port has decided on to address them, and the objectives or results the port wants to see in return. It shows where we expect the stakeholders to be based on the port's objective and where they actually are. This is a two-step process similar to stakeholder identification.

1. The port project team assesses the stakeholders' positions in relation to the set targets through observation or available data. They then determine the existence and extent of any gaps.

2. The second stage is to ask the internal stakeholders where they think they are in relation to the port's targets. This information is then plotted on the stakeholder feedback template to update the results(See Appendix VII).

3. The final step involves developing a revised strategy based on the updated stakeholder positions and management's interpretation of the results. This strategy is crucial in achieving the ports' desired goals.

See the Gap analysis, Stakeholder Feedback Templates, and Guidance notes below (See Appendices XVII and XVIII).

Gap Analysis
Template.docx

Stakeholder
Feedback template.

What If Analysis

In stakeholder management, actions can be planned to achieve targets. Despite the best efforts, results can be disappointing. What-if analysis is a partial solution for this (See Table 6). It is meant to project the worst possible outcomes from stakeholder actions or inactions and plan some strategies accordingly. The What-if analysis ensures that projects and initiatives are not derailed despite adverse outcomes from stakeholder actions.

The benefit of this tool is that the project team considers possible scenarios that may be devastating to the project or outcome. While this may not materialize, the project team or management still benefits from 360-degree thinking about the project journey, and these strategies could be deployed for other reasons incidental to the project to positively impact the outcome. This analysis differs from the risk analysis and risk register, as those tools document and analyze the project risks. This tool creates worse-case scenarios for the project, port, or initiative and provides possible solutions to remedy the potential problems if they materialize. Another benefit of this tool is the opportunity it affords to place resources and arrange logistics ahead of time, depending on the scenario analysis.

Table 6

Worse -Case Scenario	Plan of action	Resources required

Five (5) successful use cases

One methodology for achieving the objectives of this capstone is to examine how ports use stakeholder models, principles, and approaches in actual practice. The intent was to use this as a benchmark to test the potential and practicality of the templates developed. To satisfy this, research was conducted to identify use cases first in operating ports and, where this could not be found, in ports generally. Table 7 below compares the results of reviews of these use cases. A brief commentary will follow.

Table 7

	PORTS				
CATEGORIES	EU PORTA3 project (Spain, France, Italy, Greece and Slovenia)	Port of Melbourne (Australia)	Port of Isafjordur in Iceland	Port of Rotterdam	Port of Brussels
Port Type	Mixed port models	Landlord	Operating	Landlord	Landlord
Objectives	Framework for stakeholder involvement in port planning Guide on PAP (Port Action Plans)	• understand questions, • current processes • stakeholder • relationships • verify concerns • identify improvements	Stakeholder salience and prioritization for port master planning	To test the conceptual framework - disclosure as a tool in stakeholder relations management	The development of an inclusive long-term master plan
Theoretical models employed.	PAP (Plan- Do-check -Act) (See Figure 7)	Model by Practice: • Identify stakeholders • Set objectives for engagement • Engagement planning • Implementation and feedback	• Stakeholder Salience/ • Power - Interest • Quantitative and qualitative Methods • Fuzzy logic (See Figure 11)	Adapted stakeholder saliency and prioritization (See Figure 12)	SWOT, Profile chart to rank stakeholders Multi-criteria decision analysis (MCDA) Analytical Hierarchal process (AHP) (See Figure 13)

Table 7 (continued)

CATEGORIES	EU PORTA3 project (Spain, France, Italy, Greece and Slovenia)	Port of Melbourne (Australia)	Port of Isafjordur in Iceland	Port of Rotterdam	Port of Brussels
	PORTS				
Formal/ informal stakeholder management	Formal	Formal	Formal	Informal	Formal
Segmented or general approach	Segmented	Segmented	Segmented	Segmented	Segmented
Features of use-case	Direct stakeholder analysis. Interdependence and relationships between stakeholders SWOT analysis Literature/ best practices review Stakeholder feedback Strategy formulation based on analysis (See Figure 8)	Port of Melbourne focused on stakeholder engagement to understand the impact of their current practices The information was used to develop plans for current and future engagement efforts and to understand technical matters affecting stakeholders Focused on one segment of the stakeholder management enterprise (See Figure 10)	Expanded internal stakeholder identification and assessment Used multiple models and tools to achieve positive stakeholder engagement Extensive literature review Seven scholars authored this study	Indirect stakeholder saliency and prioritization method Survey method -use of academic experts to complete survey of initial stakeholder assessment No direct communication with Port of Rotterdam stakeholders Use of mathematical and statistical methods to rank stakeholders	Direct stakeholder involvement. Extensive literature review Segmentation and stratification of stakeholders Zones without port activities are excluded as stakeholders

Table 7 (continued)

CATEGORIES	EU PORTA3 project (Spain, France, Italy, Greece and Slovenia)	Port of Melbourne (Australia)	Port of Isafjordur in Iceland	Port of Rotterdam	Port of Brussels
			PORTS		
Success achieved	Design of multi-stakeholder solutions to interconnected sectoral problems Funding secured for EU port projects Standard planning tools across stakeholder network	Received feedback Gain information to help understand stakeholders' needs Was able to adjust current and future stakeholder engagement plans	Developed a solid and structured framework for stakeholder engagement. Discovered through standard deviation the importance of internal stakeholders in port planning	Showed declining importance of financial and governance stakeholders Highlight the increasing focus on external stakeholders (port community and regulators) in annual reports	Inclusive stakeholder participation in port planning
Critical success factors	Multi-agency/ stakeholder involvement Sponsorship from EU. Significant resources used over an extended period	Broad stakeholder participation Availability of resources for activity Structure and mature stakeholder engagement principles	Broad participation of stakeholders Availability of resources – funded by: • Doctoral grants • Icelandic Road and Coastal Administration Research Fund	Empirical evidence from published annual reports The criteria for port selection were robust: a prominent port, solid market share, mature governance, vital stakeholders, and communication strategies	Port users remained stable Adequate resources allocated to the project

Table 7 (continued)

CATEGORIES	EU PORTA3 project (Spain, France, Italy, Greece and Slovenia)	Port of Melbourne (Australia)	Port of Isafjordur in Iceland	Port of Rotterdam	Port of Brussels
	PORTS				
Fail points/ lessons learned	Funds invested in ports have limited value if not connected to other transport modes Problems due to structural performance gaps in some EU ports	None reported	Stakeholder prioritization is challenging to achieve in practice Time-consuming Risk of inaccurate or incomplete information The experience of a project manager could limit success	No empirical testing of stakeholder salience assumptions was made Scope limitation (single data source) reduces the value of the assessments and conclusions	Bottom-up approach limits the consideration of external factors The implementation time horizon will Require periodic reassessments
Limitations	Bottlenecks in port access Rapid technological changes Limited to port planning	None reported	Specific to port planning Limited to domestic Stakeholders Essential stakeholders are excluded from consideration Results may be skewed	No direct stakeholder involvement Subject to the port's bias, the study relied on one source: the annual report Lack of similar approaches to stakeholder assessment	Inland port. Features may not apply to seaports Specific to port planning

Table 7 (continued)

CATEGORIES	PORTS				
	EU PORTA3 project (Spain, France, Italy, Greece and Slovenia)	Port of Melbourne (Australia)	Port of Isafjordur in Iceland	Port of Rotterdam	Port of Brussels
Applicability to capstone approach and templates	General concepts of stakeholder analysis, stakeholder interdependence Stakeholder engagement	Engagement principles and approach	Yes - The process undertaken showed similarity to the approach taken in the capstone in several areas Lack of policy footing and strategy options for implementation The capstone templates would be suited to several aspects of this use case • Small port	Yes- limited. Use of general concepts of stakeholder salience and prioritization Templates not suited to the approach used in this study	Generally Stakeholder identification, ranking, and feedback Literature review Templates may be applicable

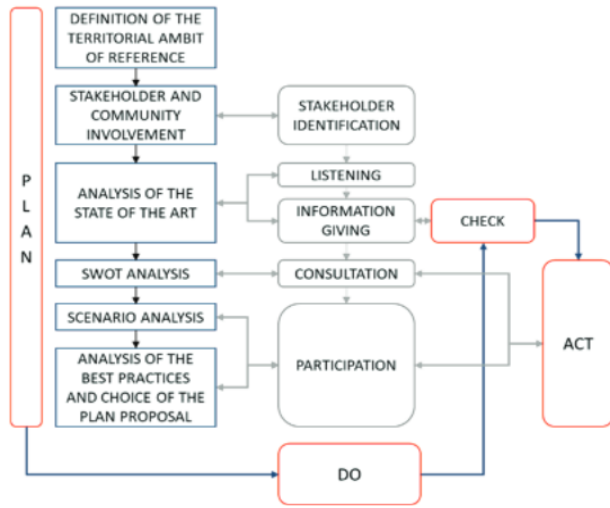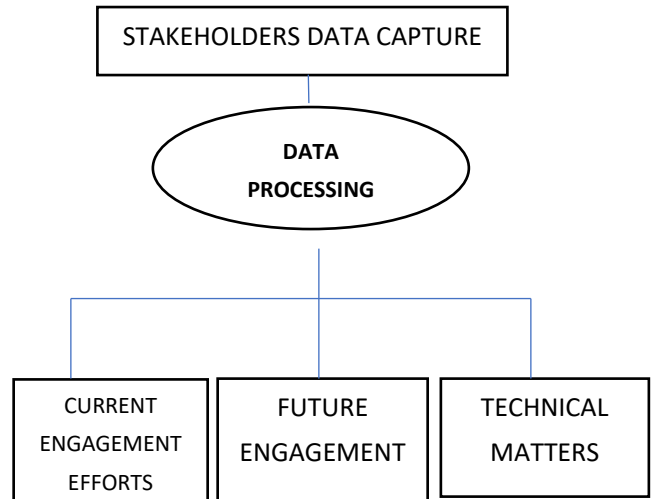## Figure 7 - PAP Model used by EUPTA 3 Project

Figure 2.
Framework of stakeholder involvement in PAP process (Source: arranged from Ignacolo et al., 2013).

Matteo Ignaccolo et al.: Framing Stakeholder Involvement in Sustainable

Figure 9 – Port of Melbourne Model (Developed)

(Author's rendition)

Figure 8 - Features of PAP

Table 1.
Framing stakeholder involvement in PAPs.

PDCA phase	PAP Phase	Level of involvement	Suggested methods
P	Territorial ambit of reference	-	-
P	Stakeholder and Community Involvement	Stakeholder identification	Stakeholder mapping, social analysis
P	Analysis of the state of the art	Listening, Information giving	Workshops, interviews
P	SWOT analysis	Consultation	Focus groups
P	Scenario Analysis	Participation	Workshops + MCDM methods
P	Analysis of the best practices and choice of the plan proposal	Participation	Consensus conferences + ABM
D	Implementation of the operative measures, actions and strategic lines	-	-
C	Monitoring of the Plan	Information giving	Public meetings
A	Revision and re-assessment of the plan	Consultation, Participation	Focus groups, workshops + MCDM methods

Trans. marit. sci. 2018; 02: 136-142

TRANSACTIONS ON MARITIME SCIENCE

Figure 10 - Features of Port of Melbourne Stakeholder Engagement
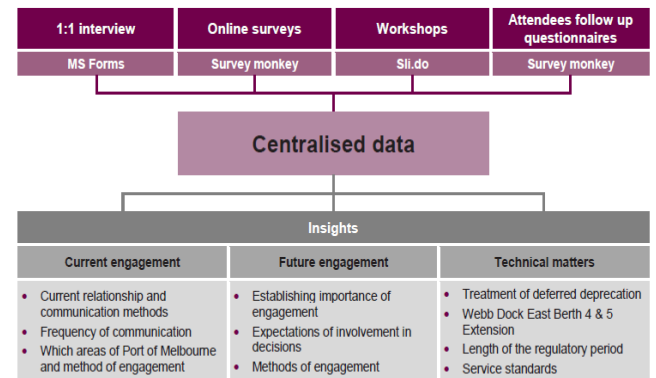
Figure 3-1 Data capture and insights plan

Figure 11 – Stakeholder Model used by Port of Isafjordur in Iceland
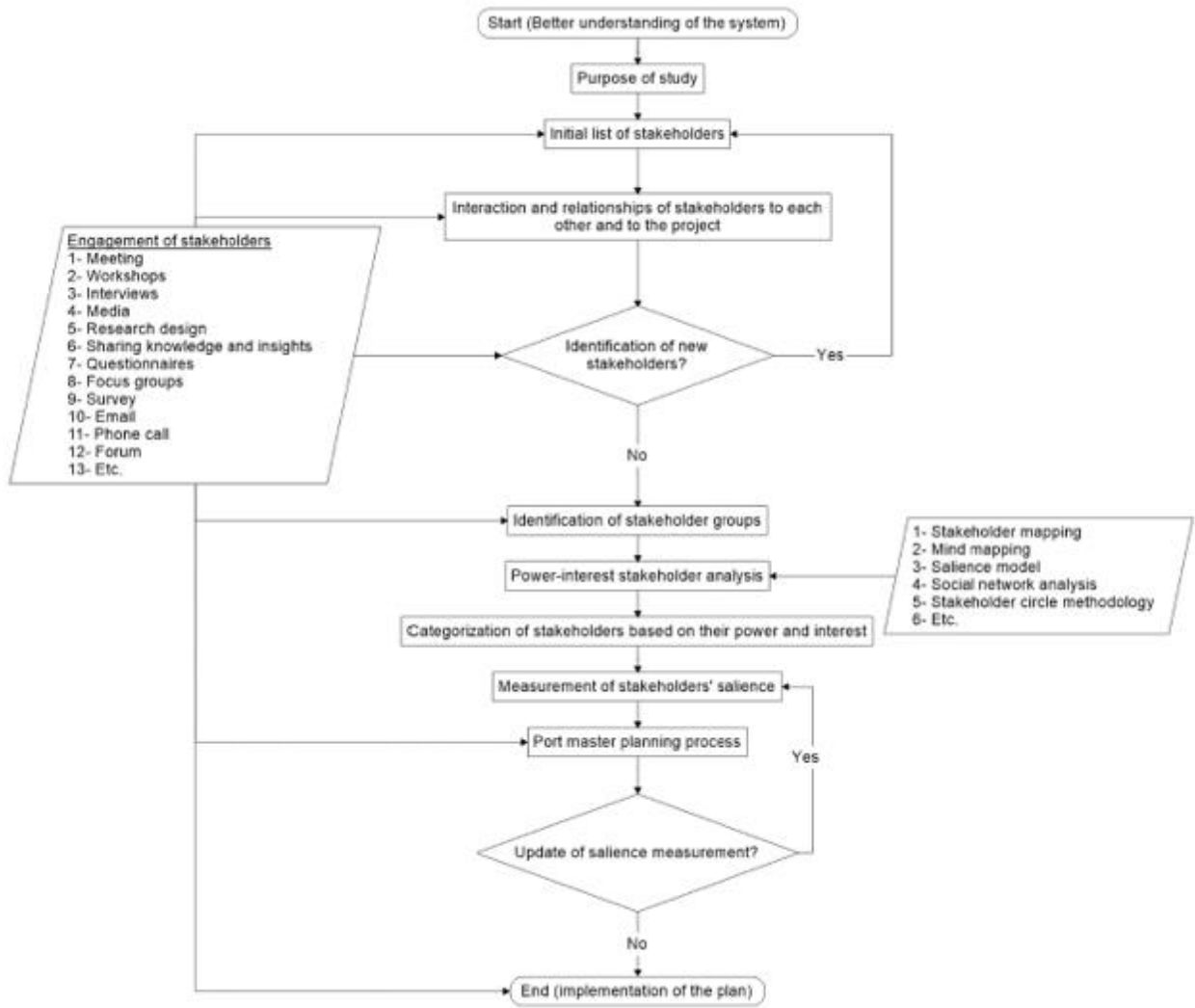
Figure 12 - Indirect Stakeholder Saliency Model- Port of Rotterdam
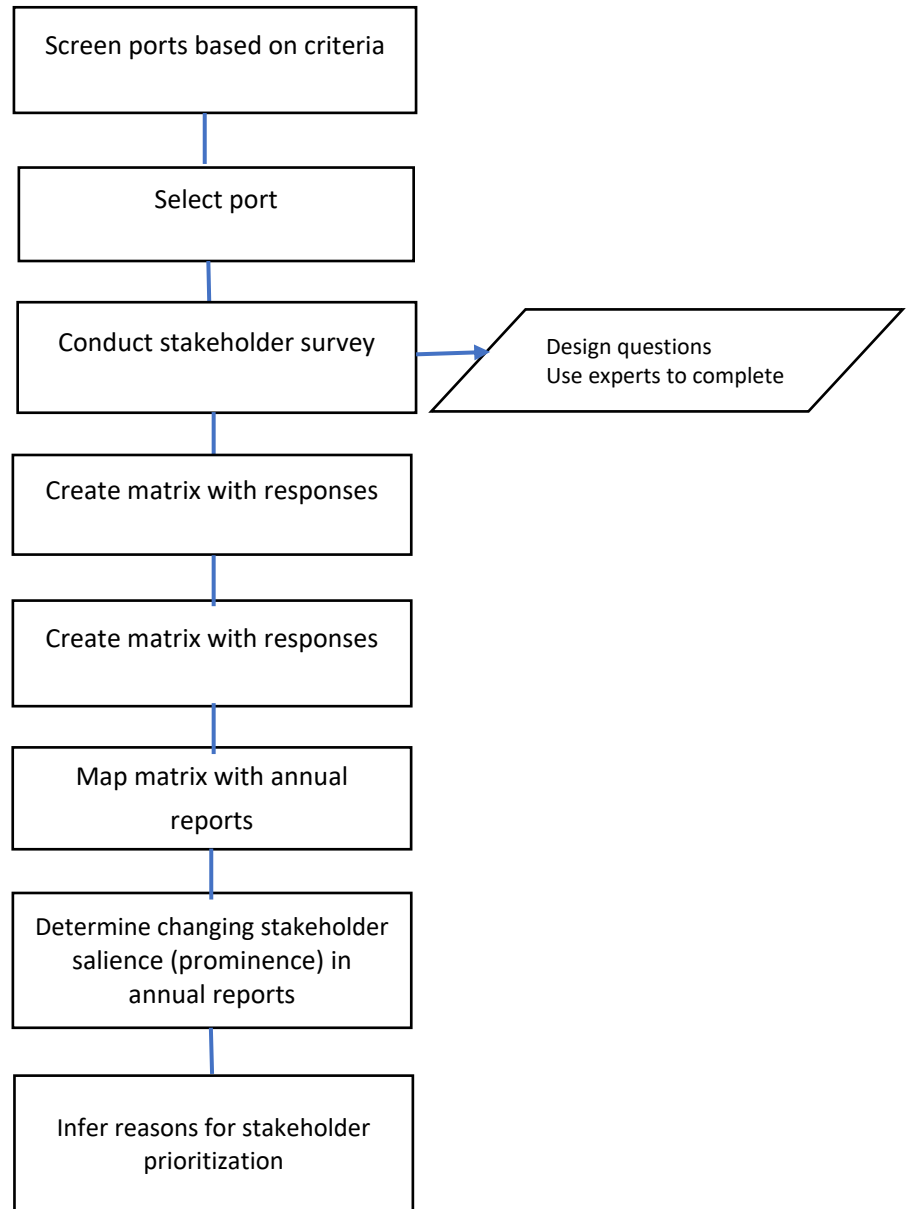
Key Findings - Communication in the annual reports expanded from 52 pages in 2000 to over 200 in 2012. Time orientation statistics were used to prove an improvement in the quality of information submitted. Forward-looking information was disclosed more as time progressed, while backwards-looking information declined. This showed that the Port of Rotterdam was more interested in communicating forward-looking information to all the stakeholders in the annual report.

Figure 13 - Port of Brussels

Port area

Step 1
Decompose the port area in different zones, according to social, economic, spatial and regulatory environment characteristics.

Define main stakeholder categories.

Step 2
Overall and zonal analyses of the existing, actual situation from all different perspectives.

Step 3
Perform in-depth interviews with different key-stakeholders, both on quantitative and qualitative basis.

Step 4
Perform SWOT-analysis, using results of steps 2 and 3.

Step 5
Define long-term strategic alternatives for each zone, using results form steps 3 and 4, and multidisciplinary workshops.

Step 6
Define criteria and weights

Step 7
Edit profile charts, fill-in scores on each criterium
(For each strategic alternative and each stakeholder).

Step 8
Perform Multicriteria Analysis, by pairwise comparison of scores on profile charts of each strategic alternative/stakeholder
Allow feedback from stakeholders.

Step 9
Implementation

Social characteristics
Economic characteristics
Spatial design
Regulatory environment

Define Port zones

Port Zone 1 ... **Port Zone N**

Define stakeholders

Analysis of current situation
Social/Economic
Spatial/Environmental
Security
Mobility

In-depth Interviews
Port users
Local Community

SWOT-analysis
Researchers
Port Authority

Define Long-Term Strategic Alternatives

Define Criteria
Define Weights

Profile Charts

Feedback

Multicriteria Analysis

Implementation

Conclusion on port use - cases

The five use cases reviewed provided an appreciation of the experiences of other ports in stakeholder management. Most of the use case samples have a defined or implied structure or format for their activity. This generally included the identification of objectives or scope, a method, identification, evaluation, assessment, and prioritization of stakeholders, the implementation of the strategy, and feedback. Some skipped a few areas, while others aligned more closely to the principles outlined in the capstone model.

Some in the port industry have been using the models in part or whole, directly and indirectly, in their stakeholder management activities. Based on the number of ports in the various regions, the uptake has not been pervasive. While harmonization is still far off, the principles and ideas underpinning the models are being used, and the ports are having some success in achieving their objectives. There was ample evidence of extensive literature review by consultants engaged in these stakeholder management activities. This was particularly the case for comprehensive stakeholder activities. Once shared, this provides an opportunity for best practices in ports to be used globally as practitioners are looking for examples to guide them in their work.

What was unexpected was the prominence of these models being used in Europe, Asia, and Africa, as well as fewer use cases in the American and Caribbean port contexts. Perhaps the literature is not easily accessible, but it appears that while the academic pursuits have good contributions from North American academics, the practice remains, for now, predominantly in other regions. Another thought maybe that these regions have some of the world's largest ports and a rich history of shipbuilding and maritime activities. They would naturally be the early adopters of these maritime developments.

There was also an absence of use cases in operating ports despite, in some cases, the studies emphasizing the importance and value of internal stakeholders in ports. Internal stakeholders would be

more prominent in operating ports than other models, so it would make a valuable contribution to stakeholder management where focus was placed on operating ports.

Another observation from the sample was how many resources were required to successfully perform the stakeholder management enterprise, from the engagement of several scholars and administrators, comprehensive surveys, and analyses to teams of internal staff routinely engaged in the stakeholder process. The need for a robust stakeholder management program was evident even in project contexts. This would not be for small ports with limited budgets and a daunting prospect for large ports with many projects, activities, programs, and stakeholders for each. It is now understandable why ports have been slowly embracing this discipline en masse, even for basic stakeholder engagement activities- it is expensive, time-consuming, and has no guarantee of success.

Finally, ports' uniqueness was reflected in their varying approaches to stakeholder management. The general tools and models were referenced or inferred, but the practice was not cohesive. Each port designed and implemented an approach based on its objectives, research and practice contexts, and social, geographical, economic, and political factors. This observation is consistent with the author's conclusion that each port may need to customize the templates, models, and approaches to suit its circumstances rather than deploy a standard toolkit. This does not reduce the toolkit's value but enhances it, as practitioners would have realistic expectations. The toolkit is comprised of foundation documents which provide great value to practitioners. The documents may need revision to apply to different stakeholder contexts, especially those involving extensive stakeholder management with complex interactions among the different stakeholders, as well as modifications to reflect the uniqueness of the port utilizing the toolkit. The stakeholder framework proposed by the author provides a generic port stakeholder management model that provides tremendous value for the entire stakeholder management process. The model and accompanying templates and worksheets incorporate extensive literature reviews reflecting thought leaders' perspectives and use cases by ports around the globe. This gives some assurance to potential

readers that the approach is cutting-edge and reflects the latest research and experience in the field.

Operating ports and other port models now have a considered stakeholder management model designed

specifically for port communities, which is a good place to start their own stakeholder management journey

rather than trying to reinvent the wheel and spend considerable time and effort understanding what has

already been done and carving out an approach to suit their own needs.

Port practitioners are very pressed for time and would find the prospect of a rigorous academic

exercise daunting. They also need something straightforward and practical to assist them in their work. The

model and templates provided by this capstone offer these solutions. Links for further examples and

information:

- https://www.portofmelbourne.com/wp-content/uploads/POM-Stakeholder-Engagement-Framework-FINAL.pdf

- https://www.tandfonline.com/doi/abs/10.1080/03088839.2019.1627013

- https://digitalcommons.kennesaw.edu/cgi/viewcontent.cgi?article=3534&context=facpubs

IMPLICATIONS FOR PRACTICE FOR OPERATING PORTS

The templates developed in this capstone will be valuable for operating ports and other port models. These ports can use them to perform internal and other stakeholder analyses and develop strategies to meet stakeholders' expectations as part of their internal and external stakeholder management program. Despite attempting to make the templates generic to internal stakeholders at ports, the author understands and expects each port will customize them to suit its peculiarities when utilizing them. The list of valuable tables, worksheets, templates, and guidance notes developed are reproduced here:

1. Stakeholder policy development template with accompanying guidance notes

2. Stakeholder needs identification template

3. Guidance notes to complete the stakeholder needs identification template

4. Template for capturing stakeholders' needs from their perspective

5. Guidance notes for completing the stakeholder capture template

6. Template for stakeholder needs survey

7. Template for stakeholder consultation and accompanying guidance notes

8. Template for stakeholder prioritization- the Power-Interest Grid

9. User guide to complete the Power- Interest Grid

10. Templates for further prioritization of Power–Interest Grid results

11. Models of stakeholder prioritization table

12. Capacity assessment worksheets

13. Strategic options worksheet for stakeholder classification

14. Gap analysis template and guidance notes

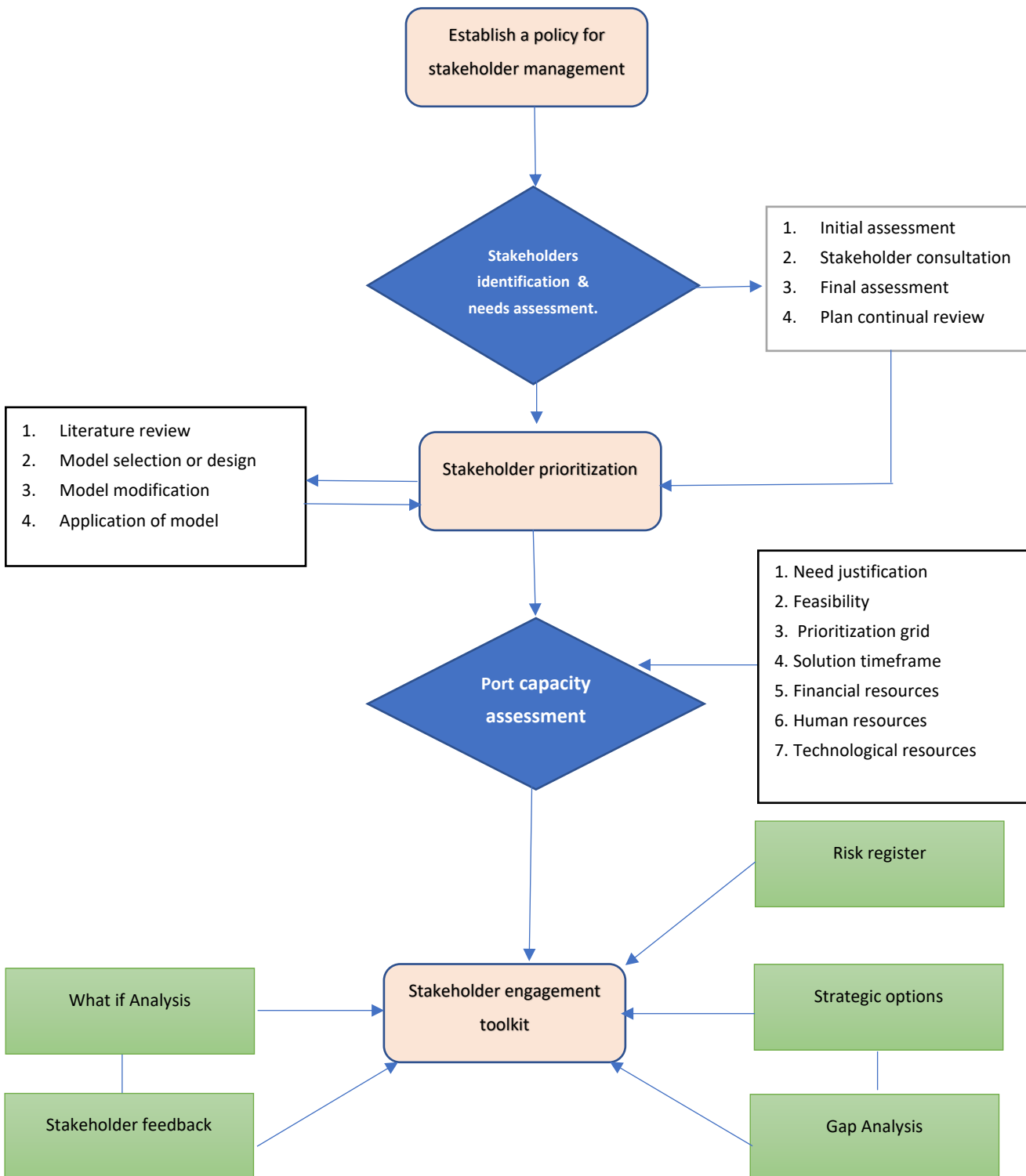15. Stakeholder feedback analysis template and guidance notes

In addition, the spreadsheet tabulating the models surveyed for stakeholder prioritization is a valuable resource. It allows for a quick selection of options, reducing the time for managers

who need a swift solution without spending extensive time conducting and assessing the literature review themselves. This feature will surely bring a sense of relief to the audience.

Another benefit operating ports can obtain from this capstone is using the outline provided as a framework to conduct their stakeholder management activities and design their templates or modify the ones developed in this capstone. This is especially so as the framework was purposefully formed from an operating port perspective, making the audience feel valued and understood.

The author has not seen a comprehensive stakeholder framework designed specifically for operating ports. The other frameworks in the use cases are not designed for port-wide use but for particular scenarios. Using these approaches would involve significant modifications to the models. This unique framework proposed in the capstone provides the inspiration upon which practitioners and academics can build, fostering innovation and progress in stakeholder management. The model is reproduced below as a port stakeholder management framework.

Figure 14- Framework for Stakeholder Management in Ports

Establish a policy for stakeholder management

Stakeholders identification & needs assessment.

1. Initial assessment
2. Stakeholder consultation
3. Final assessment
4. Plan continual review

1. Literature review
2. Model selection or design
3. Model modification
4. Application of model

Stakeholder prioritization

Port capacity assessment

1. Need justification
2. Feasibility
3. Prioritization grid
4. Solution timeframe
5. Financial resources
6. Human resources
7. Technological resources

Risk register

What if Analysis

Stakeholder engagement toolkit

Strategic options

Stakeholder feedback

Gap Analysis

(Framework created by author)

The port industry needs a workable framework and templates specially designed for ports that can be customized for various scenarios. This framework and templates are customized for the port industry, as despite having nuances in configuration and contexts in each port, the industry is specialized with general characteristics that require specialized treatment. Despite the nuances, the challenges faced by ports are generally similar. A framework and customizable templates designed for ports would leverage industry knowledge and benefit from development and refinement the more it is deployed.

Another implication for operating ports is the cost of not engaging in stakeholder management—the risk of unsuccessful ports, projects, and initiatives increases where stakeholder considerations are omitted. Ports depend on internal stakeholders for their survival and success, so it is pivotal that they are engaged as a part of everyday business practice. Although the cost and time commitment may appear daunting, operating ports and other port models can use these templates and guides to begin their journey in stakeholder management. These can be scaled up depending on the project, initiative, or another use case. However, a basic stakeholder engagement policy, framework, and strategy should be in every port manager's toolbox. Additional reading on frameworks for analyzing port stakeholders:

1. Energy transition- https://seanergyproject.eu/wp-content/uploads/2023/10/wp1-1.1-report-on-stakeholders-framework-and-database.pdf

2. Energy transition - Anas S., Fabio B., Aykut I. (2024) Management of stakeholders engaged in port energy transition, World Maritime University, Malmo, Sweden.

3. https://www.portofmelbourne.com/wp-content/uploads/POM-Stakeholder-Engagement-Framework-FINAL.pdf

4. https://www.researchgate.net/publication/336037569_Stakeholder_salience_and_prioritization_for_port_master_planning_a_case_study_of_the_multi-purpose_Port_of_Isafjordur_in_Iceland

REFLECTIONS ON LEARNING

Before beginning this journey with the capstone proposal, I had no experience in stakeholder management. The ideas and methods proposed were largely intuitive and informed by limited reading and research. As the process unfolded, I had to revisit some of the assumptions, and the AAPA Professional Development Board's (PBD) recommendations on the proposal were on point. Some concepts were difficult to define, such as who exactly the internal stakeholders are. Given the constellation of port architecture (operating, landlord, hybrid, and a myriad in between) and the gaps in the literature, it became apparent from early on that internal stakeholders needed a definition that would incorporate most of the port systems. This was not an easy task.

However, the toolkit presumption is that amendments will be made to the templates to include the various port configurations. So, the author's definition was pliable and could accommodate variations in port systems and modifications to the model and templates. In addition, a limited survey of operating ports was conducted, and the initial feedback from the ports was how they determined who their internal stakeholders were, as this was the subject of the survey questions. This led to a pause in the process to ensure that this was resolved.

Another learning outcome was the continual literature review to be informed of the work already done on the subject. The readings made it clear that there are gaps both in the literature and in practice, and the port community did not have the details all agreed upon. I was not prepared to find that so much work has been done in several areas of stakeholder management, such as stakeholder mapping, stakeholder prioritization, and strategy. The challenge was compounded by the author's attempt to contribute original thoughts and approaches on the subject while navigating the established works.

There is a menu of models and approaches to choose from, either as a whole or in combination with others. Empirical evidence of their efficacy and appropriateness in port contexts is often lacking. The

absence of sufficient use cases for these models indicates they are still in the infancy stage, and that may pose problems or uncertainty for practitioners seeking proven solutions to their stakeholder management needs.

As a PPM, this will assist my continual professional development. I will leverage my networks of port colleagues, the AAPA, and other affiliations to keep abreast of developments in the port industry and port practices. Being continually aware of these changes will impact the day-to-day activities that I am engaged in as a port professional.

The capstone project highlighted the lack of empirical stakeholder management data and use-cases in the port industry. At the capstone proposal stage, it was expected that a plethora of cases would be seen where the models were tested or consulted to inform internal and external stakeholder management practice. Perhaps the information was not uncovered due to the capstone's inherent limitations. However, with advanced search tools now available, and utilized by the author, any wide-scale deployment of stakeholder management models by ports would have been located.

The observation was that the models appear to be more of an academic pursuit. While this is important, port managers who interact with stakeholders daily should use the tools to assist them in their work. Where they are deployed, the results should be shared with the rest of the port community so that we can grow together and fully take advantage of best practices and mistakes made by port managers who adopt the models in various contexts. The availability of a diverse use case pool showcasing stakeholder management in a plethora of port systems and in divergent contexts would be an invaluable resource for port managers and academics alike. It would leapfrog the advancement of port stakeholder management theory and practice.

Perhaps the AAPA could spearhead this via the PPM program, where members are encouraged to submit their stakeholder management use cases. The AAPA could archive these use cases and make them accessible to academics and the broader port community on its platform. The author intended to and

succeeded in designing templates for several aspects of stakeholder engagement and management. While a fair attempt was made, further review of this work by other PPM candidates and academics may extend these templates and models as more perspectives and experiences are incorporated. The author would welcome this development. Given each port's uniqueness, the key to any template was its ability to be customized for each port's use. However, as the study unfolded, the concept of standardization of the templates for wide-scale port deployment became increasingly challenging to achieve.

There are over 300 ports in the USA, an estimated 30 ports in the Caribbean, and 1200 in Europe. These ports serve a diverse market impacted by geopolitical, sociological, and economic factors. Some are engaged in general container handling, specialized ports, breakbulk, liquid, all cargo types, different energy products, dry and frozen commodities, and a wide variety of infrastructure, modalities and functionalities. It was increasingly herculean even to conceptualize templates that would be standardized for these different port systems with varying ownership structures and stakeholder contexts. While this is the big picture across ports, the same applies to operating ports, which come in various sizes, complexity and ownership structures, all with attendant stakeholder management needs.

While standardized templates are possible in some instances, it became apparent that frameworks were probably more applicable for wide-scale adoption in port systems than standard templates in all situations. This was seen in the lack of consistency between the models used by ports in their stakeholder management projects. The rest of the models seen may have been applied successfully in one port or general use case. However, I could not see how these could apply to others. One case of note is the model, which used advanced mathematical formulas to index stakeholder attributes at the port of Isafjordur.

It is more pragmatic to give guidelines for executing an activity rather than design the steps for all activities. This may be the reason for the theoretical models being primarily academic rather than templates for adoption by practitioners. The practitioners at the ports are the ones best suited to design the

actual steps based on the theories and other use cases, as they are more intimate with their ports'

uniqueness.

Other reasons for the difficulty of standardizing templates for port use are the wide array of ports

with differences in governance, funding, influence, purpose, resources, and cultural orientations, and even

more diverse activities that need stakeholder management expertise. If designed, such templates would

perhaps not be suited to replication port-wide. However, they would be appropriate and more valuable in a

sub-category of port types, such as energy or commodity port systems.

So, the templates in this capstone are recommended starting points, which each port could examine

through its lens to make it workable. This may mean major modifications of the template or minor changes

to make it fit for purpose., In some cases, the templates created in this capstone can be much more helpful

and used as presented.

This process enhanced the author's skillset in using the Microsoft suite. From creating linked tables

to creating links and embedded files, particularly as files became "lost" after the embedded process and had

to be recovered, stretched, and tested, the author's patience and anxiety. Given the length of the paper,

shortcuts had to be learned for efficient proofing and checking for the internal consistency of the paper, as

well as editing and setting tools. The process has led to a more aware and better-skilled author in Microsoft

Word. The intent was to use Excel a lot, but it became more pragmatic based on the content to limit the

templates to Microsoft Word, so no opportunity to increase the author's Excel skills was afforded.

While completing the capstone, several hours were spent reading materials from various sources

spread over a vast geographic region. A number of the sources consulted did not make it to the reference

list as nothing was used from them to make citing the source feasible. However, the reading gave the author

valuable insight and understanding into stakeholder management across various scenarios, from academic

and Management practice to ports and other industries such as transportation, environmental applications,

and the technology space.

The diverse manner in which the theories were conceptualized and, in some instances, applied was particularly noteworthy. This improved and, in some cases, added new visualization, modeling, and interpretation skills. Explaining how the models were used in some cases in China, Russia, and Europe was challenging to follow and interpret.

Finally, as the process unfolded, the author's expectation that small island states would greatly benefit from the templates quickly faded, as their context often vastly differs from that of larger countries with more resources and populations. The perception is not about the templates' value to the ports but rather that, in many cases, they have more pressing priorities that are not aligned with what the templates are meant to achieve. Despite the author's anecdotal perception, the templates could have value to these ports for stakeholder management if deployed. Some of the features of ports in these countries, such as the Caribbean, are:

- Small- with annual throughput volumes that can hold on one medium-sized container vessel or less. (See graph below- extracted from CSA, 2006)

- Single port—there is no competition, so the benefits, opportunities, and challenges that come with competition are lost.

- A few are transshipment ports (such as Kingston, Nassau, Barbados) which have their own unique operating nuances

- Under-resourced – no significant government funding to tap for infrastructure development.

- State-controlled—there is often no incentive for private sector involvement, except in the cruise business. So, the port is often left to be run by government bureaucracy.

- The strategic plan for many of these ports is based on the country's election cycles rather than driven by long-term considerations. Consequently, stakeholder management has little practical relevance.

This context lends itself to very different notions of stakeholder management. These ports' primary motive is to service the islands for economic survival. As such, little room and priority is available for stakeholder navigation after critical items are considered, such as ensuring continuity of service from vessels with little incentive to service the Islands. Security, equipment, and machinery are other top priorities, which can be prohibitive given the low revenue associated with the small annual throughput and lack of direct government funding due to broader economic pressures.

The AAPA could place this on their agenda to see how they could lobby various NGOs, such as the Caribbean Development Bank, the World Bank, the United Nations, and others, to see what can be done to assist these small ports with these unique challenges, particularly with infrastructure and human capital development.
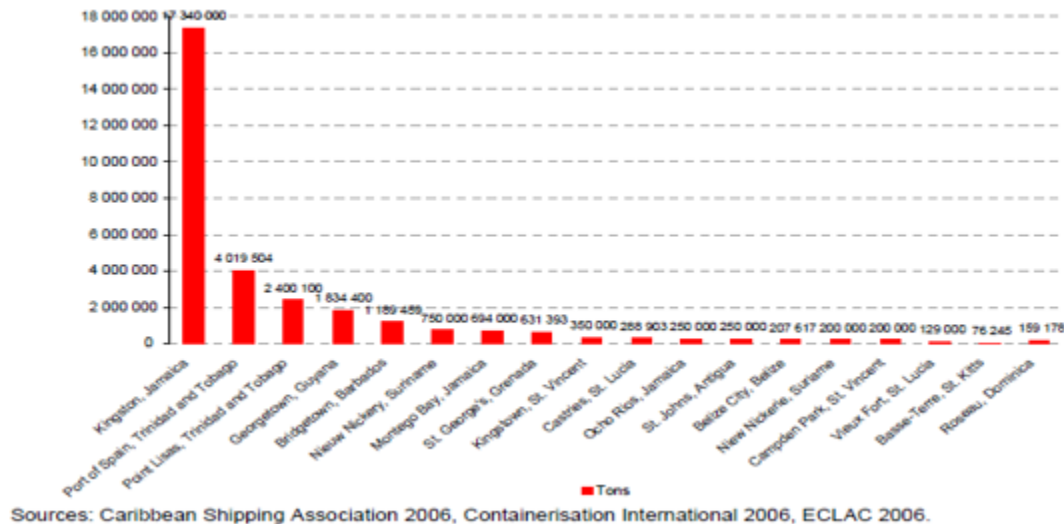
Figure 14- CARICOM Ports Movements, Metric Tons, 2004
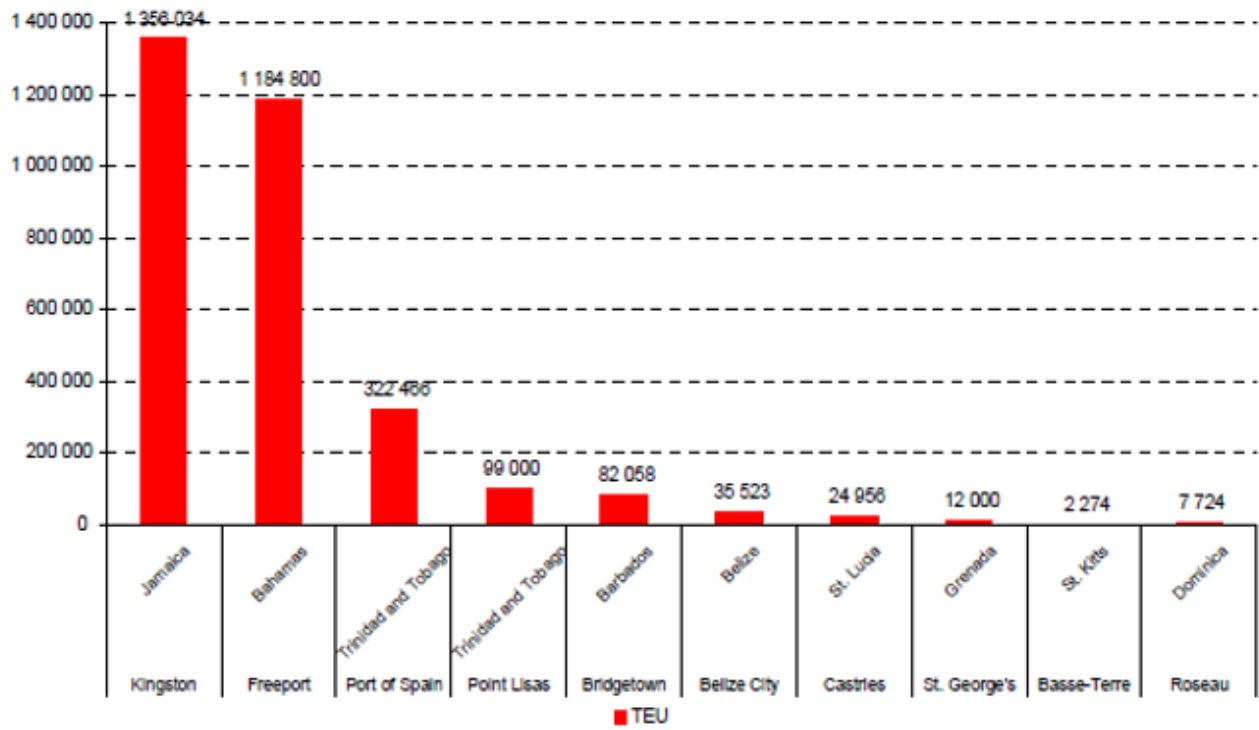

Sources: Caribbean Shipping Association 2006, Containerisation International 2006, ECLAC 2006.

Figure 15- CARICOM Ports Movements, TUE, 2004

Sources: Caribbean Shipping Association 2006. Containerisation International 2006. ECLAC 2006.

AREAS FOR FURTHER RESEARCH

The capstone was focused on internal stakeholders and their stakeholder management activities. While writing the paper, several areas of concern arose, which the author thought could be valuable to explore. Several recommendations were made throughout the paper, as placing them with the discussed matters seems more practical. So, in addition to these areas, see the list below, which should be the subject of a further PPM study or a more comprehensive industry consultation and working group.

1. Empirical research on the efficacy of port stakeholder management theories from use cases

2. Even when an agreed-upon set of expectations exists in stakeholder needs assessment, they may exist at different levels of importance based on personal circumstances and group dynamics. Stakeholders would "trade" different needs for others based on changing contexts. These dynamics should be explored as best as possible to develop a flexible and functional stakeholder engagement and management framework. This is outside the scope of this capstone and could benefit from further research.

3. The effect of structural challenges on the ports in developing economies, particularly in infrastructure development and stakeholder management.

4. The impact of worst-case scenario planning on port projects.

CONCLUSION

The capstone provided an opportunity to research a dynamic field in port management that is "under construction." It also allowed the author to contribute by designing templates to assist ports in conducting internal and broader stakeholder management activities. The toolkit developed contains over fifteen templates, guidance notes, worksheets, use case analysis, and data points to assist ports in their stakeholder management endeavors. It covers the entire process from initial conceptualization to feedback mechanisms after strategy implementation.

The toolkit includes a list of references to further information to advance the practice of stakeholder management and increase the users' knowledge and resources. These are all very valuable tools that ports can utilize as is, or modify to meet their unique circumstances. This will save time and money that would have otherwise been spent gaining a grasp of the industry's state regarding stakeholder management practice and identifying resources for knowledge and application. This is critical, as ports that engage in internal and external stakeholder management have to spend significant resources and often get separate funding, as seen in the cases examined.

The processes involved in conceptualizing, planning, consulting, engaging, managing, and monitoring stakeholders for discrete projects, units, and activities can be extensive, demanding, and expensive. It often involves external experts, as the talent and experience are usually unavailable in the port. The toolkit provides a foundation or starting point. It can be deployed with little customization for some internal and broader stakeholder activities and scaled up for more extensive and budget-sensitive projects. This affords ports great value as they can begin their stakeholder management journey without significant investment, then scale and increase funding as the need becomes apparent.

There is also the reduction in further lost opportunities, which often cannot be quantified as there is no metric to evaluate the absence of an effective stakeholder management mechanism for ports, port projects, and port-related initiatives. Given the demonstrated benefits both in academia and practice, the absence of a robust internal and broader stakeholder management program would no doubt have resulted in unsubstantiated losses and adverse outcomes.

Though designed primarily for internal stakeholders, the templates can also be customized for external stakeholders and used for different stakeholder analyses, either independently, by project, or together to form the basis of a port-wide stakeholder engagement and management manual. The guidance notes provide a good instruction manual that affords changes based on the different stakeholder management activities being considered. This condenses the time and effort required for customization, as a working template is already provided, and the thought processes and flow can easily be understood, facilitating changes to different contexts where required.

The outline for the capstone also provided a valuable framework for instruction to ports seeking to develop a stakeholder management program. Ports need a source that is understandable, relatively easy to apply, and has templates and guidelines that can be modified. As it was designed specifically for general port use, it is pliable and can be used in various port contexts. This differs from most of the frameworks designed or used, which are limited to specific applications and would need significant modification to allow use for other port contexts.

This effort in the capstone will also contribute to the existing literature in the field, providing unique perspectives and dimensions to stakeholder management, such as emphasizing internal stakeholder needs and not just stakeholders as a homogenous group, capacity assessment of port managing bodies to accompany the stakeholders and needs assessment, and

establishing a policy framework to give stakeholder management the requisite executive

attention and profile.

Despite the challenges with port size and configuration and the difficulty of finding an

approach that could be applied across the port spectrum, this capstone selected the Power/

Interest Model, which has excellent potential for widescale port deployment, along with the

templates and guidance notes developed. While these can be combined with other approaches

best suited to the circumstances, every port community, project, and initiative has these general

stakeholder characteristics that need management to help the ports achieve their goals.

Although buttressed by substantial academic works by noted scholars, the project's

practical nature is an added benefit. The tools are easy to use and need not bother port managers

with complex options and analysis that, while essential, would steal the necessary energy, time,

and effort from the primary goal of stakeholder engagement and management to achieve their

targets.

Overall, this capstone is worth reading. Academics may find stimulating ideas on which to build or

challenge, and practitioners may grab the tools and experiment immediately. Sharing the use

cases would serve the port community well, improving the port universe and reducing the current

deficit of use cases.

APPENDICES
Appendix I

GUIDANCE NOTES AND TEMPLATE FOR INTERNAL STAKEHOLDER POLICY DEVELOPMENT

STEP 1	TYPICAL INCORPORATION DOCUMENTS		
IDENTIFY KEY CONCEPTS FROM INCORPORATION DOCUMENTS	MISSION STATEMENT	VISION STATEMENT	VALUE STATEMENT
• Key concept 1			
• Key concept 2			
• Key concept 3			
• Key concept 4			
• Key concept 4			
• Key concept 5			
• Key concept 6			

STEP 2	MISSION STATEMENT	VISION STATEMENT	VALUE STATEMENT
EXTRACT PRINCIPLES LINKED TO THE PORT'S KEY CONCEPTS			
• Principle 1			
• Principle 2			
• Principle 3			
• Principle 4			
• Principle 5			
• Principle 6			

STEP 3			
STAKEHOLDER RELEVANT LINKS	Value preposition	Commitment	Communication
DETERMINE HOW THE PRINCIPLES IDENTIFIED WILL IMPACT THE PORT'S RELATIONSHIP TO THE INTERNAL STAKEHOLDERS			
• Identification			
• Needs assessment			
• Prioritization			
• Communication & Feedback			
• Periodic reevaluation			
•			

STEP 4			
DRAFT STAKEHOLDER POLICY	Value preposition	Commitment	Communication

Appendix II

SAMPLE A – Port of Virginia

Mission Statement

The Port of Virginia delivers opportunity by driving business to and through the Commonwealth of Virginia.

Values

FORTITUDE - We are clear in our intent, thoughtful in our approach, and professional in our execution.	**INNOVATION** - We embrace challenges as opportunities. We leverage technology and experience to move our business and our industry forward.
ACCESSIBILITY- We build strong, enduring relationships with our partners by listening, fostering dialogue, and creating solutions	**MINDFULNESS**- We drive business and deliver opportunities today while keeping our eyes trained on the future.
SUSTAINABILITY - We are responsible stewards of the communities in which we operate and all of the resources entrusted to our care.	**SAFETY**- We maintain the highest safety standards for the wellbeing of our colleagues and communities.

Appendix III

STEP 1	INCORPORATION DOCUMENTS	
KEY CONCEPTS FROM INCORPORATION DOCUMENTS	**MISSION STATEMENT**	**VALUE STATEMENT**
	Delivers opportunity	Clarity in goal-setting
	Driving business to Virginia	Thoughtfulness
	Driving business through Virginia	Professionalism
		Innovation
		Relationship building
		Thoughtful Leadership
		Responsible stewardship

STEP 2	MISSION STATEMENT	VALUE STATEMENT
PRINCIPLES LINKED TO THE PORT'S KEY CONCEPTS- what does the critical concept represent	Value Creation	Robustness & thoroughness
		Thoughtfulness
		High standards
		Commitment to growth and development
		Inclusivity and teamwork
		Consistency and longevity
		Sustainability

STEP 3			
STAKEHOLDER RELEVANT LINKS	Value preposition	Commitment	Communication
DETERMINE HOW THE PRINCIPLES IDENTIFIED WILL IMPACT THE PORT'S RELATIONSHIP TO THE INTERNAL STAKEHOLDERS			
• **Identification & needs assessment**	Determination of stakeholders, what they want, and how the port can partner with them to achieve mutually beneficial goals.	Continue to invest in internal stakeholder development now and in the future.	Solicit and incorporate the views of stakeholders in determining their needs and objectives.
• **Prioritization**	Achieving internal stakeholders' objectives will be given executive attention and included in strategic planning.		
• **Communication & Feedback**	Seek creative ways to connect with stakeholders and always keep communication lines open.		
• **Periodic reevaluation**	Commit to periodic review of stakeholder goals and achievements and keep abreast of changing objectives.		

STEP 4			
DRAFT STAKEHOLDER POLICY	Value preposition	Commitment	Communication
	The Port of Virginia will proactively invest in internal stakeholders to enhance their desire and ability to create sustainable value for themselves and the port community.		
		The port will design solutions with stakeholder input to address their interests and prioritize achieving those solutions, providing updates, and obtaining feedback.	

Appendix IV- Guidance Notes for Stakeholder Policy Development

Guidance notes

❖ To complete the template, the following should be noted in addition to the steps provided:

❖ At least two persons of appropriate seniority and grasp of the organization's high-level workings should create this template.

❖ In addition, the C-suite should have their input throughout the policy design process to ensure it aligns with the strategic vision and other components of the long-term direction of the port.

1. Extract the Mission, Purpose, Vision, and Value statements and paste them into a Microsoft Word document. This facilitates better mind mapping as the texts remain in complete focus.
2. Focus on key words- Verbs that indicate the intended actions the port plans to do.
3. Attempt to summarize as best as possible in single words or simple sentences
4. Document these keywords, phrases, or summaries under the respective headings in the template. (Note that the Template may have to be amended to reflect the types of documents produced by the port.)
5. In moving from step 1 to step 2- consider the underlying meaning of these critical concepts in the various statements. Then, key those in. Sometimes, the concepts can be evident and stand as principles without further subdivision.
6. In step #3, the concepts in #2 should be translated into actionable strategies the port can implement for the internal stakeholders. The structure provides guidance but can be modified to better suit each port's unique circumstances.
7. To complete the final section, the strategies can be summarized into bullet points or well-crafted paragraphs to consolidate the ideas in the stakeholder-relevant links. This should then be communicated to the stakeholders to get feedback and appropriate modifications after internal review and discussion. The final policy for release should then follow the necessary port protocols, including Executive approval.

Appendix V

Guidance Notes for Stakeholder Identification		
Notes	**Action Points**	**Additional procedures**
1	Assemble a team of appropriate seniority with a diverse skill set and experience in the port to contribute to the template completion.	No less than three persons. One should be at least at the Director level / senior management.
2	Review the organizational chart of the port to gain an understanding of : • The reporting structure of the port • The divisions /departments • The staff distribution	• Document the layers of authority • Document the span of control (number of subordinates) per manager or reporting line- this can be expressed as a ratio • Document the scope of activities for the reporting heads- narrow/ broad/ extensive
3	Review the information about the activities of the port from various sources, such as: • Annual Report • Website • Internal Documents • Observation and site inspections	• Document what the port does • Who does it? • Why is it done? • How often is it done? • What skills are required- low, medium, high? •
4	• List the active participants according to the : • Reporting structure – how many commissioners, C-suite, managers, operators, etc.? • List the number and categories of staff closest to the activities the port is engaged in • Determine the financial impact or weight of the categories of stakeholders (Revenue/expenditure) • Assess the influence of the group- High, medium, low	The financial impact could be determined by: • Average revenue earned per annum • Proportion of revenue earned vs. rest of business • Staff cost • Overheads Influence is determined by the ability to direct the course of events
5	The people identified who perform the tasks are the internal stakeholders.	They can either be classified as groups, sub-groups, teams or as key individuals or influencers
6	Design a plan to extract the opinions from a representative quota of the list of stakeholders - their view of who the port stakeholders are.	Plan should be simple and enable the results to be tabulated for further analysis.
7	Refresh the list of stakeholders based on the initial stakeholder feedback	

Appendix VI

NAME OF PORT			
TEAM COMPOSITION	**STAKEHOLDER DISCOVERY TEAM**	**SENIORITY/ POSITION**	**SKILL SET**
	Team member A		
	Team Member B		
	Team member C		
ORGANIZATIONAL CHART REVIEW	**LAYERS OF AUTHORITY**	**SPAN OF CONTROL RATIO**	**SCOPE OF ACTIVITY**
	Governance		
	Executive management		
	Senior management		
	Middle management		
	Supervisory / Operations management		
	Operations staff		

Appendix VII

	WHAT DOES THE PORT DO	PEOPLE WHO DO IT	ACTIVE PARTICIPANTS	FREQUENCY	SKILL SET	IMPACT	INFLUENC
	Strategic planning and direction	Commissions / Board members/ C-suite					
	OPERATIONAL EXECUTION AND CONTROL	Senior managers					
S	• Finance /administration • Project management • Engineering • Facilities management • Legal • Environmental / sustainability						
	REVENUE GENERATING ACTIVITIES	Line /Middle managers/ Supervisors					
	• Terminal operations						
	• Cargo handling						
	• Leasing operations						
	• Vessel services						
	• Cruise activities						
	• Grant programs						

Appendix VIII

STAKEHOLDER CONSULTATION TEMPLATE

METHODOLOGY

The process for stakeholder consultation follows the diagram below.

IDENTIFY THE STAKEHOLDERS	
SELECT ENQUIRY METHOD	DESIGN QUESTIONS

TEST THE METHOD	
ENGAGE THE STAKEHOLDERS	DOCUMENT THE RESULTS

REVIEW THE OUTCOMES	
UPDATE STAKEHOLDER PROFILE	DIARIZE ENGAGEMENT REVIEW

Further resources:
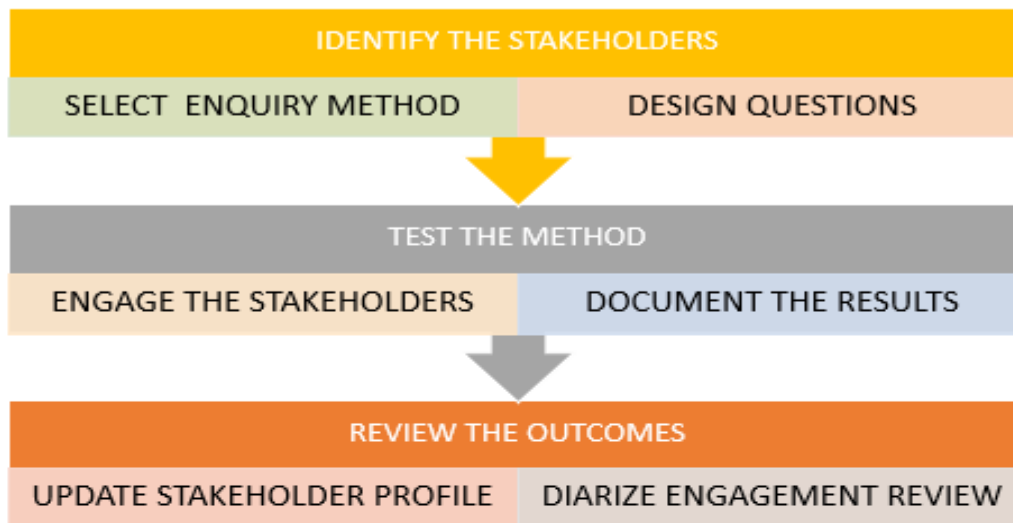
1. https://simplystakeholders.com/stakeholder-diagrams/
2. https://assets.publishing.service.gov.uk/media/5a7b8ad8ed915d41476210e1/dh_134407.pdf
3. https://jshippingandtrade.springeropen.com/articles/10.1186/s41072-023-00152-x#Sec3
4. https://www.mhpa.co.uk/latest-news-and-blog/port-of-milford-haven-launches-stakeholder-survey-to-help-shape-future-plans/

The initial stakeholder engagement must ensure that stakeholder identification and definition are not a 'one-way street' or a top-down approach. Stakeholders must not only be identified from the process outlined but also envision themselves and others as stakeholders. This is important to ensure appropriate engagement strategies and stakeholder buy-in.

Stakeholders may see themselves as such but have an outsized or undersized vision of their importance as stakeholders. Given the weighting assigned to different stakeholders based on their collective contributions, areas of focus, and knowledge/ skill attributes, there may be a gap between how stakeholders perceive themselves and how the port engagement designers see the stakeholders. This mismatch need not be brought to the attention of the stakeholders, but steps should be taken to identify this possibility and provide clarity for stakeholder documentation and strategy formulation.

Appendix IX

STAKEHOLDER CONSULTATION TEMPLATE

GUIDANCE NOTES		
Identify the stakeholders	Refer to the stakeholder identification template here Stakeholder Identification Templ	❖ Select a representative from each stakeholder group ❖ Ensure that adequate coverage is given to potential stakeholders ❖ Ensure selection is proportional- high impact/ high influence given more sample units
Select Enquiry Method	Different methods can be used to get stakeholder opinions. The selection should be based on what is best for the port's circumstances.	❖ Surveys (Survey monkey) other. ❖ Face-to-face meetings ❖ Social media / secured online ❖ Interviews ❖ Group discussions
Design questions/ survey plan	The goal is to obtain the stakeholder's perception of their role and place in the port.	❖ Flexibility is needed as different questions or approaches may be needed for different groups. ❖ The design must factor in ease of documentation of the results- closed answer questions (y/n) or agree/ disagree discussion points
Test the method	Use a further sample from the pool to test the efficacy of the method chosen.	Refine the approach or method based on the results of the testing process.
Engage the stakeholders	Proper planning for optimal results	❖ Adequate time allocation for each group. ❖ Adequate space design – appropriate location and schedule for the comfort of participants ❖ Prepare for information sharing session to sample units to facilitate understanding of the process and enhance research quality
Document the results	Documentation should be statistics-friendly.	Results should be summarized for easy interpretation.

Appendix X

Guidance Notes to complete Stakeholder need identification template

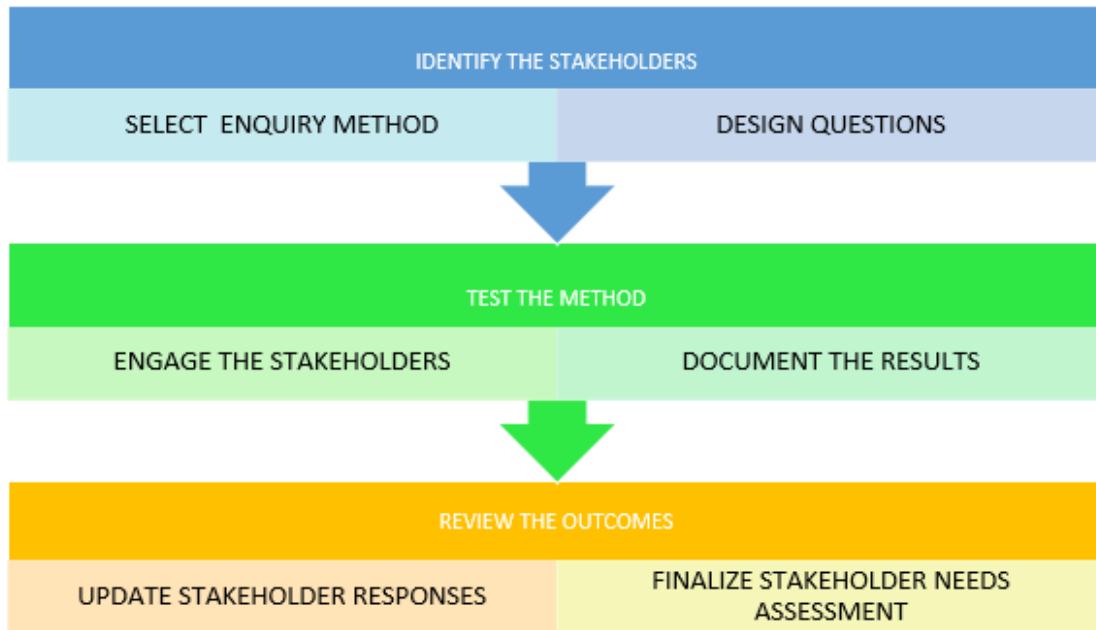|		
The goal of the template is to identify and confirm what the stakeholder's needs are. This must be the guiding principle in the steps performed, and any modification made to the steps or the template should enhance the ability to achieve the goal		
Step 1	List the stakeholder group in the first column identified using the stakeholder identification template.	Stakeholder Identification Templat
Step 2	The "Interest looking in" column should be populated per stakeholder based on the intuitive needs (Stakeholder interest) the team can ascribe to the particular stakeholder	A list of needs is already populated based on experience and the literature review, so they can be updated as necessary by users
Step 3	The "interest looking out" column should be populated based on the results of the port stakeholder survey	
Step 4	The " verified needs" column should be the agreed needs of the team based on the initial assessment and the results of the survey.	

TEMPLATE FOR STAKEHOLDER NEEDS IDENTIFICATION			
STAKEHOLDER GROUP	INTEREST LOOKING IN- (INITIAL ASSESSMENT)	INTEREST LOOKING OUT- (STAKEHOLDER FEEDBACK)	VERIFIED NEEDS – (FINAL ASSESSMENT)
Shareholders	Profitability- Specific number or range based on circumstances		
	Market Share & Growth		
	Stability		
Commissioners	Reputation		
	Competent management		
	Trust in their C-suite		
	Performance of Port		
C-suite	Leadership from Commissioners		
	Confidence and trust		
	Freedom to act		
	Reward and recognition		
Managers	Leadership and direction from CEO		
	Inclusivity		
	Support from C-suite		
	Incentives/reward/ recognition		
	Competent staff		
Staff	Good compensation		
	Security of tenure		
	Regular Communication		
	Training and development		
	Career growth		
	Respect and recognition		
Terminal Operators	Investments in infrastructure		
	Competitiveness		
	Data Sharing		
	Sustainability		
	Safety & Security		
Equipment Operators	Modern Equipment		
	Training		
	Good compensation & Incentives		

Appendix XII

TEMPLATE FOR CAPTURING STAKEHOLDER'S NEEDS

METHODOLOGY

The stakeholder needs consultation process mirrors what was done for stakeholder identification, with changes as necessary, especially in the accompanying notes. See the diagram below.

IDENTIFY THE STAKEHOLDERS	
SELECT ENQUIRY METHOD	DESIGN QUESTIONS

TEST THE METHOD	
ENGAGE THE STAKEHOLDERS	DOCUMENT THE RESULTS

REVIEW THE OUTCOMES	
UPDATE STAKEHOLDER RESPONSES	FINALIZE STAKEHOLDER NEEDS ASSESSMENT

Further resources are available here:

- https://link.springer.com/article/10.1186/s41072-023-00152-x
- https://www.annualreviews.org/content/journals/10.1146/annurev-polisci-101513-113724
- https://www.econstor.eu/bitstream/10419/117262/1/ERSA2004_632.pdf

Appendix XIII

GUIDANCE NOTES – STAKEHOLDER NEEDS SURVEY		
Identify the stakeholders	Refer to the stakeholder needs identification template here. Template for stakeholder needs i	❖ Select a representative from each stakeholder group ❖ Ensure that adequate coverage is given to the stakeholders identified ❖ Ensure selection is proportional- high impact/ high influence given more sample units
Select Enquiry Method	Different methods can be used to get stakeholder opinions. The selection should be based on what is best for the port's circumstances.	❖ Surveys (Survey monkey) other. ❖ Face-to-face meetings ❖ Social media / secured online ❖ Interviews ❖ Group discussions
Design questions/ survey plan	The goal is to obtain the stakeholder's perception of their needs at the port.	❖ Flexibility is needed as different questions or approaches may be needed for different groups. ❖ The design must factor in ease of documentation of the results- closed answer questions with a range of options starting with the needs done at the initial assessment (first column)
Test the method	Use a further sample from the pool to test the chosen method's efficacy.	Refine the approach or method based on the results of the testing process.

GUIDANCE NOTES – STAKEHOLDER NEEDS SURVEY		
Engage the stakeholders	Proper planning for optimal results	❖ Adequate time allocation for each group. ❖ Adequate space design – appropriate location and schedule for the comfort of participants ❖ Prepare for information sharing session to sample units to facilitate understanding of the process and enhance research quality
Document the results	Results should be summarized for transcription to the template.	
Review the outcomes	Analyze the results of the inquiry	Ensure that the summary is consistent with the responses
Update the stakeholder profile.	The results should be used to complete the second column in the stakeholder needs identification template.	Results to be assessed with the initial effort to get a final list of needs (last column)
Diarize engagement review	Determine an appropriate period for reperforming the procure.	Stakeholders perceptions change over time. It is essential to ensure the stakeholder profile remains current.

Appendix XIV

POWER GRID TEMPLATE FOR STAKEHOLDER PRIORITIZATION				
STAKEHOLDER GROUP	POSITION	POWER	INTEREST	GRID PLACEMENT
Shareholders	Owners			
Commissioners	Governance			
C-suite	Executives			
Managers	Senior Management			
Staff	Operations			
Terminal Operators	Partners			
Equipment Operators	Service Providers			
Stevedores	Practioners			
Police / Security	Partners			
Cruise Terminals / Operators	Partners			
Others- update as necessary				

Appendix XV

Appendix XVI

Guidance Notes to complete Stakeholder Power- Interest Grid Template		
The goal of the template is to determine the stakeholders' priorities and design strategies for engaging them to achieve successful project or initiative outcomes. This must be the guiding principle in the steps performed, and any modification made to the steps or the template should enhance the ability to achieve the goal.		
Step 1	List the stakeholder group in the first column identified using the stakeholder needs identification template.	
Step 2	List the positions of the various stakeholders alongside their respective stakeholder groups.	The stakeholder groups can be further subdivided into individual stakeholders for a more detailed analysis.
	These can be modified for each port's unique makeup.	
Step 3	The following positions should be assigned to groups:	
	• Owners	Shareholders
	• Governance	Commissioners / Board of Directors
	• Executives	CEO / C-Suite
	• Senior Management	Department Heads- Heads of Service Providers and Partners
	• Line management	Supervisors of sections and units
	• Operations	Practitioners and operations staff
	• Service providers	Equipment operators, stevedores
	• Partners	Terminal operators, Cruise operators
Step 4	To assess the power of each stakeholder group, answer the following:	
	• What position the group is assigned?	• Owners/Governors/partners/ Executives have high Power • Other positions have low power
	• How much decision-making authority does the group exercise over the project initiative or port? • Authority can be formal, based on skillset, resource access, or professional associations	• Owners/Governors/partners/ Executives have high Authority • Other positions have low Authority • Others may lack formal authority but have authority through skills, networks, or access to resources
	• What is their level of influence? Can they influence others' opinions or actions about the project/ initiative/port?	• Influence is more subjective and must be assigned based on knowledge and experience with the stakeholder groups.
Step 5	In assessing the interest of the stakeholder groups, determine the following:	
	• How will the project/initiative or port impact their group?	Significant impact should be assigned a high interest.

		Limited or no impact should be assigned a low-interest
	• How will the group be assessed in the project/initiative or port?	• If their assessment is linked to the project/ initiative or port, they should be assigned a High Interest • If their assessment is low or none, then they should be assigned a low-interest
	• How much involvement does the group have in the project/initiative or port?	• If the group is heavily involved, assign a high Interest; if not, assign a low interest
Step 6	Note where they rank on the grid. Plot the stakeholders on the quadrants based on the assessment of power and interest.	
Step 7	Write them on the grid for identification and further strategy formulation.	

Appendix XVII

Stakeholder Name, Title, and Contact Information OR Stakeholder group	Organization Name	Stakeholder's needs	Engagement Strategy & Tactics (list action plans to satisfy needs)	Targets set for stakeholder (What the port expects to gain)	Current Performance (What the Port manager observes) (Select as appropriate)	Performance Gap (Select as appropriate)	Ranking as % success	Issues & Concerns\(Note here briefly)
		1. 2. 3. 4.	1. 2. 3. 4.	1. 2. 3. 4.	Met target/ Did not meet target/ Will not meet target/ Neutral	H/M/L	25% 50% 75% 100%	

INTERNAL STAKEHOLDER GAP ANALYSIS TEMPLATE (Adopted from PMBOK Guide 6th Edition)

Appendix XVIII

STAKEHOLDER FEEDBACK MATRIX

(Adopted from PMBOK Guide 6th Edition)

STAKEHOLDER	NEEDS	PORT'S EXPECTATIONS (%)	INITIAL SCORE (%)	PERFORMANCE GAP (INITIAL)	PERFORMANCE RATING BY STAKEHOLDER	STRATEGIES FOR IMPROVEMENT
1	A. B. C. D.	A. 70 B. 75 C. 80 D. 80	A. 50 B. 65 C. 72 D. 80	H/M/L	A. 80 B. 85 C. 82 D. 80	
2						
3						

Appendix XVIX

STAKEHOLDER RISK REGISTER

STAKEHOLDER GROUP OR INDIVIDUAL	CATEGORY (INTERNAL/ EXTERNAL/MAIN/ SUBSIDIARY)	CONTACT DETAILS/ ADDRESS/ EMAILS	ROLE, POSITION OR RESPONSIBILITIES	KEY RISKS IDENTIFIED	STAKEHOLDER ASSESSMENT (GRID PLACEMENT)	COMMENTS

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