

World Maritime University

# The Maritime Commons: Digital Repository of the World Maritime University

---

World Maritime University Dissertations

Dissertations

---

11-3-2019

## Optimizing the start-up of a public maritime education training institute: a case study of the Philippine Coast Guard Academy

Dorothy Degala Manglicmot

Follow this and additional works at: [https://commons.wmu.se/all\\_dissertations](https://commons.wmu.se/all_dissertations)



Part of the [Education Commons](#)

---

### Recommended Citation

Manglicmot, Dorothy Degala, "Optimizing the start-up of a public maritime education training institute: a case study of the Philippine Coast Guard Academy" (2019). *World Maritime University Dissertations*. 1219.

[https://commons.wmu.se/all\\_dissertations/1219](https://commons.wmu.se/all_dissertations/1219)

This Dissertation is brought to you courtesy of Maritime Commons. Open Access items may be downloaded for non-commercial, fair use academic purposes. No items may be hosted on another server or web site without express written permission from the World Maritime University. For more information, please contact [library@wmu.se](mailto:library@wmu.se).

**WORLD MARITIME UNIVERSITY**

Malmö, Sweden

**OPTIMIZING THE START-UP OF A PUBLIC  
MARITIME EDUCATION TRAINING  
INSTITUTE: A CASE STUDY OF THE  
PHILIPPINE COAST GUARD ACADEMY**

By

**DOROTHY DEGALA MANGLICMOT**  
**Philippines**

A dissertation submitted to the World Maritime University in partial  
fulfilment of the requirement for the award of the degree of

**MASTER OF SCIENCE**  
**In**  
**MARITIME AFFAIRS**

**(MARITIME EDUCATION AND EDUCATION AND TRAINING)**

2019

## Declaration

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

(Signature):  .....

September 24, 2019

(Date): .....

Supervised by: .....

Supervisor's affiliation.....

## **Acknowledgements**

Words are not enough to express my heartfelt thanks to all those who have been there for me and shared with me in this challenging journey.

First and foremost, I am thanking God for his infinite goodness and mercy, for all the blessings, for the strength to complete this work and for all the wonderful people around me who add more meaning and make life worth living.

I take this opportunity to offer my appreciation to my organization, the Philippine Coast Guard for believing in me and nominating me to the World Maritime University.

I want to express my profound gratitude to the International Chamber of Shipping for awarding me the fellowship in support to my professional development.

My highest recognition goes to my supervisor Professor Michael Ekow Manuel for his unbending support, guidance, caring attitude and patience, which made this grueling scholastic exercise less exacting.

I sincerely acknowledge Dr Jennifer Ketchum, Mr. Cleto del Rosario, Ms. Sandra Hernandez, Ms. Alina Prylipko, and Ms Ann Pazaver for providing suggestions, critique, editing services and opportunity for scholarly discourse.

I humbly acknowledge my pillars of support Tita Dolores Odelstig, Tita Linda Sorrenson, Tita Eden Lovgren, Tita Aileen Runquist, Tita Linda Crebillo, Ate Jacqueline Sanchez, Tita Glo Crebillo, Tita Myrna Calag and other Titas of Malmo.

Special thanks to all my friends Layla, Sir Bob, Ninang Babes, Zen, Tere, Thea, MATATAG Class 02-2001 and my MET family Yut, Yvette, Cho, Nomz, Miatta, Mercy, Kirtan, Taslim, John, Talib, Enock and Emiliano who have supported and cheered me on this journey.

I am truly grateful to my mother Mamang Teresita, brothers Kuya Dexter and Jimuel and their respective families who have been my tower of strength.

Finally, my heartfelt gratitude goes to my husband Ryan for his unconditional love, sacrifice, assistance and constant encouragement through the trying times of this research work and to my inspiration and bundles of joy Ivy Gabrielle, Feona Marie and Jeff Paul.

To you all, I dedicate this work - a labor of love.

To God be the glory.

## **Abstract**

Title of Dissertation: **Optimizing the start-up of a public maritime education training institute: A case study of the Philippine Coast Guard Academy**

Degree: **Master of Science**

The dissertation is an inquiry into optimizing the start-up of a public maritime education training institute, as applied to the creation of a Philippine Coast Guard Academy.

The creation of a formal training institution such as a Philippine Coast Guard Academy will not only address the issue of the competency and appropriateness of Coast Guard personnel but will also provide a platform for their continuous learning and capacity development.

This research aimed at interrogating an optimal model of a public maritime education institute such as a Philippine Coast Guard Academy. Through the analyses of areas of concern relevant to such institutions at their inception and comparisons with other jurisdictions, models and best practices, a potentially suitable model for the Philippine Coast Guard Academy is developed and presented. The study employs a mixed methods approach derived from the philosophy of triangulation using review of literature, the conduct of a survey targeted at selected Maritime Education and Training Institutions and Coast Guard Academies, and interviews of maritime professionals with a vast knowledge of the study area.

With the aim of conceptualizing the optimal start-up, the research examines various theoretical concepts and their applicability to the case in point. It also examines the legal framework within which the Philippine Coast Guard operates with a view to determining the legal basis for the creation of its own Coast Guard Academy.

The perceptions of top-level management of Maritime Education and Training Institutions and maritime experts as regards the aspects relevant to the start-up and a model institution are analyzed. Recommendations are made with due consideration to the three critical factors of optimal start-up: Organizational Capacity, Organizational Motivation and External Environment.

The work concludes with the presentation of a suggested organizing framework for the optimal start-up of a public maritime education training institute.

**KEYWORDS:** Optimal, Start-up, Public maritime education training Institute, Philippine Coast Guard Academy

## Table of Contents

<b>Declaration .....</b>	<b>ii</b>
<b>Acknowledgements .....</b>	<b>iii</b>
<b>Abstract.....</b>	<b>v</b>
<b>Table of Contents .....</b>	<b>vi</b>
<b>List of Tables .....</b>	<b>viii</b>
<b>List of Figures.....</b>	<b>x</b>
<b>List of Abbreviations .....</b>	<b>xii</b>
<b>Chapter 1 Introduction .....</b>	<b>1</b>
1.1 Background of the Study.....	1
1.2 Problem Statement .....	2
1.3 Aims and Objectives .....	3
1.4 Research Questions.....	4
1.5 Research Methodology and Methods.....	4
1.6 Anticipated Outcomes .....	5
<b>Chapter 2 Literature Review .....</b>	<b>6</b>
2.1 Introduction.....	6
2.2 Analyzing Start-up based on organizational concepts and model.....	7
2.2.1 Start-up hinging on Organizational Life-Cycle Concept.....	7
2.2.2 Start-up relating to McKinsey's 7S Model.....	10
2.2.3 Start-up with reference to Balanced Scorecard Model.....	14
2.2.4 Start-up construct emanating from Organizational Performance Assessment (OPA) Model.....	15
<b>Chapter 3 Methodology and Methods .....</b>	<b>25</b>
3.1 Purpose and Outline .....	25
3.2 Methodological Approach.....	25
3.3 Selection of Participants.....	26
3.4 Instrumentation .....	27
3.5 Data Collection.....	27
3.5.1 Primary Sources of Data.....	28
3.5.2 Secondary Sources of Data .....	29
3.6 Data Analyses .....	29
3.6.1 Quantitative Analyses .....	29
3.6.2 Qualitative Analyses .....	29
<b>Chapter 4 Findings and Analysis .....</b>	<b>30</b>
4.1 Introduction.....	30
4.2 Data Presentation and Analyses: Survey Questionnaire.....	30
4.2.1 Demographic Information .....	30
4.2.2 Influencing factors of organization start-up .....	33
4.2.3 Issues and Challenges of the Institution and solutions.....	36
4.2.4 Perception of the Respondents in view of the start-up variables .....	44

4.2.5 Advantages, areas to improve and best practices of current organizational set-up .....	77
<b>4.3 Data Presentation and Analyses: Interview .....</b>	<b>81</b>
4.3.1 Areas of concern relevant in the start-up of a maritime-related educational institution .....	82
4.3.2 Curriculum design and development process .....	84
4.3.3 Decision-making process.....	85
4.3.4 Criteria for measuring organizational performance.....	85
4.3.5 Importance of international and national policies, rules and regulations to METIs.....	86
4.3.6 How organizations learn and grow .....	87
4.3.7 Best practices that can be used to design the best model for the PCGA .....	87
<b>Chapter 5 Conclusion and Recommendations .....</b>	<b>88</b>
5.1 Introduction.....	88
5.2 Summary of the Results .....	89
5.3 Recommendations.....	92
5.4 Conclusion .....	96
5.5 Limitations and Future Research.....	96
<b>References.....</b>	<b>97</b>
<b>Appendices.....</b>	<b>101</b>
Appendix 1. Informed Consent Form .....	101
Appendix 2. The Survey Instrument.....	102
Appendix 3. Semi-Structured Interview Guide.....	107

## List of Tables

Table 1. Major Organization Characteristics in Clusters of Shirokova’s Model.....	10
Table 2. Scaling Approach.....	44
Table 3. Mean Response if Organizational Structure is Optimum for the Operation.....	45
Table 4. Mean Response if Structure works for the operations.....	46
Table 5. Mean Response if Institution has clear reporting lines.....	47
Table 6. Mean Response if Institution has clear-cut responsibilities and authority for all personnel.....	48
Table 7. Mean Response if Institution has no silos .....	49
Table 8. Mean Response if Institution has documented vision and mission statement that are articulated across the organization.....	50
Table 9. Mean Response if Institution has measurable goals and objectives set.....	51
Table 10. Mean Response if Institution has mapped out strategic plans.....	52
Table 11. Mean Response if Institution has proper mechanisms to recruit and retain qualified employees .....	53
Table 12. Mean Response if Institution has personnel morale and welfare development plan.....	54
Table 13. Mean Response if Institution has formal staff development program.....	55
Table 14. Mean Response if Institution has interpersonal and communication skills training for its employees .....	56
Table 15. Mean Response if Institution has a program for team-building skills.....	57
Table 16. Mean Response if Institution has a Quality Management System .....	58
Table 17. Mean Response if Institution has a Knowledge Management System.....	59
Table 18. Mean Response if Institution has an information processing system.....	60
Table 19. Mean Response if Institution has top management who facilitates heightened employee involvement .....	61
Table 20. Mean Response if Institution has corporate values focused on social responsibility and ethics.....	62
Table 21. Mean Response if Institution has interest and cooperation from all levels of management .....	63
Table 22. Mean Response if Institution has customer satisfaction index/service rating analysis.....	64
Table 23. Mean Response if Institution has benchmarking procedures .....	65
Table 24. Mean Response if Institution has mechanism or measures to check its financial performance .....	66
Table 25. Mean Response If Institution has a tool to check its internal process effectiveness by using performance-based targets.....	67
Table 26. Mean Response If Institution has initiatives to identify critical technologies needed.....	68
Table 27. Mean Response If Institution has a learning and development culture .....	69
Table 28. Mean Response If Institution is a good model of an educational institution .....	70
Table 29. Mean Response If a new education institution is set up, they believe that their institution will be a model/example to follow .....	71

Table 30. Correlation between variables/elements of growing institution and perception of a start-up model institution .....	72
Table 31. Major variables associated to start-up model institution .....	74
Table 32. Questions grouped according to themed variables .....	76
Table 33. Themed variables in correlation to the perception of Start-up model institution .....	76
Table 34. SWOT Analysis of Responses.....	77

## List of Figures

Figure 1. Organizing Framework for Interrogating the Optimal Model for the Start-up of a Philippine Coast Guard Academy .....	7
Figure 2. Considerable Variables in the stages of the cycle of Growing Institution ...	9
Figure 3. McKinsey’s 7S Model.....	11
Figure 4. Balanced Scorecard Model.....	14
Figure 5. Organizational Performance Assessment (OPA) Model.....	17
Figure 6. Criteria for measuring organizational performance. ....	18
Figure 7. Organization’s resources and the processes used to manage resources .....	19
Figure 8. Systems and Processes employed in the organization.....	19
Figure 9. Components of Organizational Motivation.....	20
Figure 10. Components of External Environment.....	22
Figure 11. Mixed Methods derived from Triangulation Method.....	26
Figure 12. Countries of Respondents.....	31
Figure 13. Gender of Respondents .....	31
Figure 14. Age of Respondents.....	32
Figure 15. Highest Educational Attainment .....	32
Figure 16. Type of Institution .....	33
Figure 17. Years of Experience .....	34
Figure 18. Source of Funding of the Institution.....	34
Figure 19. Faculty and Staff Strength.....	35
Figure 20. Age of the Institution.....	35
Figure 21. Type of Organizational Structure .....	36
Figure 22. Financial Resources Challenges.....	37
Figure 23. Faculty and Staff Recruitment Challenges.....	38
Figure 24. Equipment/Infra Funding Challenges .....	41
Figure 25. STCW Consideration in the curriculum.....	43
Figure 26. Frequency of Perception that Organizational Structure is optimum for operation. ....	45
Figure 27. Frequency of Perception that Organizational Structure works for their operations.....	46
Figure 28. Frequency of Perception that institution has clear reporting lines .....	47
Figure 29. Frequency of Perception that Institution has clear-cut responsibilities and authority for all personnel.....	48
Figure 30. Frequency of Perception that Institution has no silos.....	49
Figure 31. Frequency of Perception that Institution has documented vision and mission statement that are articulated across the organization. ....	50
Figure 32. Frequency of perception that Institution has measurable goals and objectives set.....	51
Figure 33. Frequency of Perception that Institution has mapped out strategic plans.	52
Figure 34. Frequency of Perception that Institution has proper mechanism to recruit and retain qualified employees. ....	53
Figure 35. Frequency of Perception that Institution has personnel morale and welfare development plan.....	54

Figure 36. Frequency of Perception that Institution has a formal staff development program.....	55
Figure 37. Frequency of Perception that Institution has interpersonal and communication skills training for its employees.....	56
Figure 38. Frequency of Perception that Institution has a program for enhancing team building skills.....	57
Figure 39. Frequency of Perception that Institution has Quality Management System.....	58
Figure 40. Frequency of Perception that Institution has a knowledge management system.....	59
Figure 41. Frequency of Perception that Institution has Information processing system.....	60
Figure 42. Frequency of Perception that Institution has top management who facilitates heightened employee involvement.....	61
Figure 43. Frequency of Perception that Institution has corporate values focused on social responsibility and ethics.....	62
Figure 44. Frequency of Perception that Institution has interest and cooperation from all levels of management.....	63
Figure 45. Frequency of Perception that Institution has customer satisfaction index/service rating analysis.....	64
Figure 46. Frequency of Perception that Institution has benchmarking procedures.....	65
Figure 47. Frequency of Perception that Institution has mechanisms or measures to check its financial performance.....	66
Figure 48. Frequency of Perception that Institution has a tool to check its internal process effectiveness by using performance-based targets.....	67
Figure 49. Frequency of Perception that Institution has initiatives to identify critical technologies needed.....	68
Figure 50. Frequency of Perception that Institution has a learning and development culture.....	69
Figure 51. Frequency of Perception that Institution is a good model of an educational institution.....	70
Figure 52. Frequency of Response that if a new education institution is being set up, they believe their institution will be good model to follow.....	71
Figure 53. Sequence of Interview.....	82
Figure 54. Organizing Framework for the Start-up of Public Maritime Educational Institution.....	91
Figure 55. Curriculum Design and Development Process Model.....	93

## List of Abbreviations

BSC	Balanced Scorecard
CGETC	Coast Guard Education and Training Command
CGOS	Coast Guard Officers School
DOTr	Department of Transportation
MET	Maritime Education and Training
METIs	Maritime Education and Training Institutions
OLC	Organizational Life-Cycle
OPA	Organizational Performance Assessment
PCG	Philippine Coast Guard
PCGA	Philippine Coast Guard Academy
PMA	Philippine Military Academy
PMMA	Philippine Merchant Marine Academy
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 as amended
WMU	World Maritime University

# **Chapter 1 Introduction**

## **1.1 Background of the Study**

The era of Coast Guards in the Asia Pacific is upon us. The relevance of Coast Guards in Asia and other countries is becoming more apparent to the maritime sector (Bateman, 2006). In some countries, in particular the United States, the Coast Guard plays an indispensable role in maritime administration by fulfilling an array of maritime responsibilities ranging from ensuring safe and lawful commerce to performing search and rescue operations. According to the United States Coast Guard (2019), included in its eleven-part official mission is the prevention of “accidents and property losses at sea by establishing maritime standards, managing aids to navigation, conducting inspections and investigations, partnering with boating safety organizations and licensing United States mariners.” In Japan, the Coast Guard is also committed to keeping the ocean safe by not only enforcing maritime laws in its jurisdiction but also by conducting maritime safety operations (Japan Coast Guard, n.d). Some Coast Guards also conduct port state control on foreign-flagged vessels entering the Coastal State. This is a quality assurance mechanism to “eliminate sub-standard shipping so as to promote maritime safety, to protect the marine environment and to safeguard working and living conditions on board shipping” as espoused by ASIA-PACIFIC PSC TOKYO MOU (2019). Moreover, Coast Guards of Asian-Pacific countries like India, Philippines, Japan and China can serve as a mechanism for regional cooperation by way of conducting joint maritime security, search and rescue, and marine environmental protection exercises. All these initiatives contribute much to the development of the countries’ maritime industry. Indeed, the Coast Guard’s role in the maritime industry has expanded and has achieved a higher degree

of relevance as it evolved through time. This emerging trend has also been manifested in the Philippine Coast Guard (PCG) which faces the same daunting task of protecting the maritime industry within the wider context of the country's maritime jurisdiction and economic interest.

As a corollary to this, the appropriate human resource is needed to effectively carry out the mandate of the Philippine Coast Guard including safety, search and rescue, security and environmental protection in a maritime context. It may therefore be argued that, the creation of a formal training institution such as a Coast Guard Academy will not only address issues of competency and appropriateness of Coast Guard personnel but will also provide a platform for their continuous development/learning and capacity building.

## **1.2 Problem Statement**

Considering the pressing mandates of the PCG, the challenges in the maritime environment where it operates, and how constantly the organization is evolving, there is a need to enhance its capacity by equipping its human resource with the necessary knowledge, core competencies and essential skills unique and peculiar to its Coast Guard functions. Given that human resource is viewed as the most essential asset in every organization (Guest, 2001), it is vital to consistently train and develop them. As Aguinis & Kraiger (2009) opined that training potentially generates substantial benefits spanning from individual and team performance to the advancement of the entire organization.

The present situation of the PCG calls for the promotion of capacity building and professional enhancement of its Education and Training System. Since the inception of the Philippine Coast Guard Service, its primary sources of personnel (particularly its officers) have been the Philippine Military Academy (PMA), the Philippine Merchant Marine Academy (PMMA) and the Coast Guard Officer's School (CGOS)

under the Coast Guard Education and Training Command (CGETC). These institutions, however, do not fully offer the necessary knowledge, understanding, skills, proficiencies and competencies required to sustain the production of competent and qualified Coast Guard officers ready to perform the multifarious mandates of the organization. The prevailing situation suggests the need for the creation of a premier education and training institution, particularly a Coast Guard Academy that can produce a competent and well-trained PCG Officer Corps, comparable to other eminent Coast Guards in the world.

In light of the foregoing, and after securing a recognized place/role in the Department of Transportation (DOTr), the PCG is now envisioning creating and operating a Philippine Coast Guard Academy (PCGA). For this to happen, a bill will have to be sponsored by a legislator for the creation of the Philippine Coast Guard Academy, thereby starting a legislative process that is often tedious. Moreover, the prevailing issue at hand relates to the intricacies of the start-up of the PCGA. It is expected that the organization's setting up will be confronted with issues and challenges that will eventually necessitate well-thought out and researched solutions.

### **1.3 Aims and Objectives**

The research aims to analyze the issues, challenges and potential solutions relating to the start-up of a public maritime educational and training organization using the proposed academy of the Philippine Coast Guard as a case study. The following are the specific objectives of this study:

- a. To identify, examine and review the areas of concern which are relevant to the start-up of the Philippine Coast Guard Academy
- b. To identify and analyze comparable jurisdictional models
- c. To identify best practices and evaluate their applicability to the development of a suitable model for the Philippine Coast Guard Academy

## **1.4 Research Questions**

The researcher delves into the following research questions to achieve the objectives of the study.

- a. What are the areas of concern which are relevant to the start-up of a maritime-related educational institution such as the Philippine Coast Guard Academy?
- b. What models are available from other jurisdictions and sectors and how do they compare with each other?
- c. What best practices can be used to design an optimal model for the Philippine Coast Guard Academy?

## **1.5 Research Methodology and Methods**

This study was carried out as a mixed of quantitative and qualitative analysis derived from triangulation method with secondary data obtained from government reports, previous literature, official websites, relevant publications from authentic sources and other data sources. In this study, a systematic literature review was conducted focusing on peer-reviewed publications and reports in grey literature. A survey, conducted via an open-ended questionnaire, was administered to key personnel of various Maritime Education and Training Institutions (METIs) and Academies aiming at evaluating their perception of an optimal model for the start-up of an institution. Further, interviews were conducted with selected respondents based on their expertise and recognized experience in the related field of study to corroborate the evidence gathered from the survey.

Furthermore, as advocated by Resnik & Shamoo (2017), it is of paramount importance for every researcher to foster research integrity and exemplify moral standards in their research. From this perspective, the research processes and instruments were assessed and approved by the WMU Research Ethics Committee. The aims and requirements of the research instrument were explained to respondents in accompanying instructions

with assurances of anonymity and confidentiality. All respondents voluntarily gave their informed consent to participate in the research and answer the survey questions.

A detailed presentation of the methodological approach and specific methods is given in Chapter 3 of this research.

### **1.6 Anticipated Outcomes**

At the outset, this research anticipated coming up with a comprehensive analysis that would address the issues and challenges and arrive at solutions in setting up a Coast Guard Academy in the Philippines responsive to the needs and growing demands of the Philippine maritime industry. The outcome of this research may be used for the development of a paradigm or framework for the start-up of Coast Guard Academy.

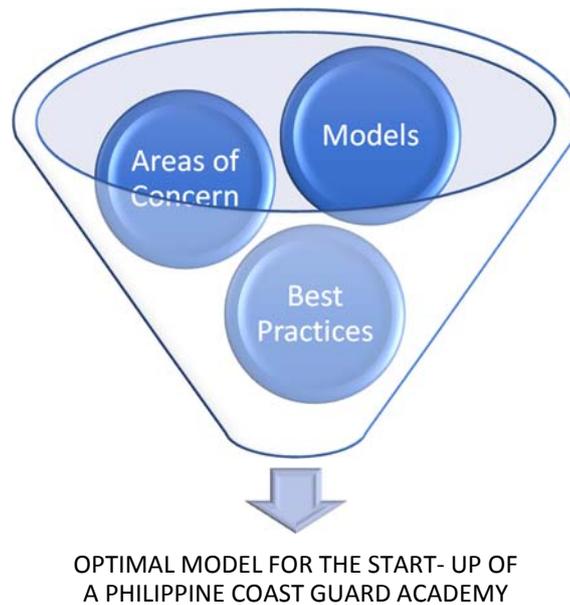
## **Chapter 2 Literature Review**

### **2.1 Introduction**

How does one start an organization? There exists a vast but focused work of literature across manifold academic domains that relate directly or indirectly to the start-up of an organization. The literature described in this chapter addresses the aspects of how to optimize the start-up of a public maritime education training institute as this is the focal point of study. Despite this restriction of the scope of the literature, there is still a great deal of variation in concepts attached to the constructs of organizational life cycle, organizational development and its relation to organizational effectiveness and performance, elements of all of which could form part of the optimal start-up of a new organization/institution.

This chapter integrates and summarizes the extant literature concerning the start-up of organizations in an effort to deduce and relate it to the object of study and to mainstream the topic towards organizational research.

To set this review in motion, an organizing framework is presented for discourse and then a conceptualization of an optimal start-up explored. Second, characteristics of and factors influencing such a start-up are discussed. Third, the outcomes or consequences of the influencing factors are discussed.



*Figure 1. Organizing Framework for Interrogating the Optimal Model for the Start-up of a Philippine Coast Guard Academy*

Figure 1 introduces an organizing framework that leads to a discussion and emphasizes the vital element for the start-up of a public maritime institution. The start-up of an organization is presumably influenced by several factors and should consider some areas of concern, jurisdictional models and best practices.

## **2.2 Analyzing Start-up based on organizational concepts and model**

### **2.2.1 Start-up hinging on Organizational Life-Cycle Concept**

In essence, the start-up is viewed as part of the organizational life-cycle (OLC) with a number of coined terminologies but typically referred to as “Birth”, “Inception”, or “Conception”. The OLC model has been theorized to have a number of stages varying from three to ten. Although there is a plethora of OLC research for private companies that could be found in the literature, there is a notable dearth of such research for a public organization.

The adaptation of the biological or organismic notion of the life cycles - birth to death - concept to organizations by researchers has long been observed. However, Lester, Parnell, & Carraher (2003) questioned the notion because of its linear and deterministic nature. In the traditional biological sense, most private institutions/organizations do not move inevitably from one stage of development to another. Likewise, a number of researchers have posited different and distinct views of the OLC's. Lester et al. (2003) & Shirokova (2009) proposed that organizations progress through diverse phases in a life cycle as the organizations evolve and develop like the OLC models of the following organizational researchers: "Birth-Adolescence-Maturity" (Lippitt & Schmidt, 1967), "Growth-Maturity-Revival-Decline" (Miller & Friesen, 1984), "Birth or early growth-Middle of life-Organization maturity" (Schein, 2010), "Inception-High Growth-Maturity" (Smith, Mitchell, & Summer, 1985), "Inception-Survival-Growth-Expansion-Maturity" (Scott & Bruce, 1987), "Existence-Survival-Success, Revival-Decline" (Lester et al., 2003) and "Birth-Growth-Maturity-Decline/renewal-Death" (Hoy, 2006). It can be concluded that organizational life cycles are viewed differently by various researchers in terms of the stages and the activities associated with each stage (Kiriri 2002). Nevertheless there are some commonalities (Hanks, 1990).

These commonalities - related to organizational context and structure - have been synthesized in this study and applied to the start-up of a public maritime institution. As postulated by Shirokova (2009), a number of antecedent variables or factors are commonly perceived to affect the growing institution as illustrated in Figure 2 including age, size, formalization level, hierarchy levels, organizational structure, institution head, centralization level and objectives. It can be deduced that said factors would have a consequential effect on the optimal start-up of the public maritime institution.



*Figure 2. Considerable Variables in the stages of the cycle of Growing Institution*  
 Source: Adapted from Shirokova (2009)

As noted by Lester et al. (2003) “almost all life cycle models have relied on some measure of organizational context or situation, strategic orientation, decision-making responsibility, and structural characteristics to describe each stage of development”.

After considering the different models, the present study support the life-cycle model developed by Shirokova (2009). This three-stage approach, which includes Start-up, Growth and Formalization, is consistent with and applicable to the public organization. The three stage-approach is considered in this research because it is in consonance with the other five-stage models, is comprehensive and evidences parsimony as some of the development periods are integrated into one broader stage. There are, however, some ways in which the model is distinct from the existing 5-stage approaches. It is relevant to all organizations as it is not solely designed for small or large private organizations/entities and it incorporates the best features of some of the leading OLC models. Considering the applicability of the Shirokova model to a public organization, major organization characteristic/ indices may be developed as depicted in the adaptation of the model shown in Table 1.

Table 1. *Major Organization Characteristics in Clusters of Shirokova's Model*

Source: Adapted from Shirokova (2009)

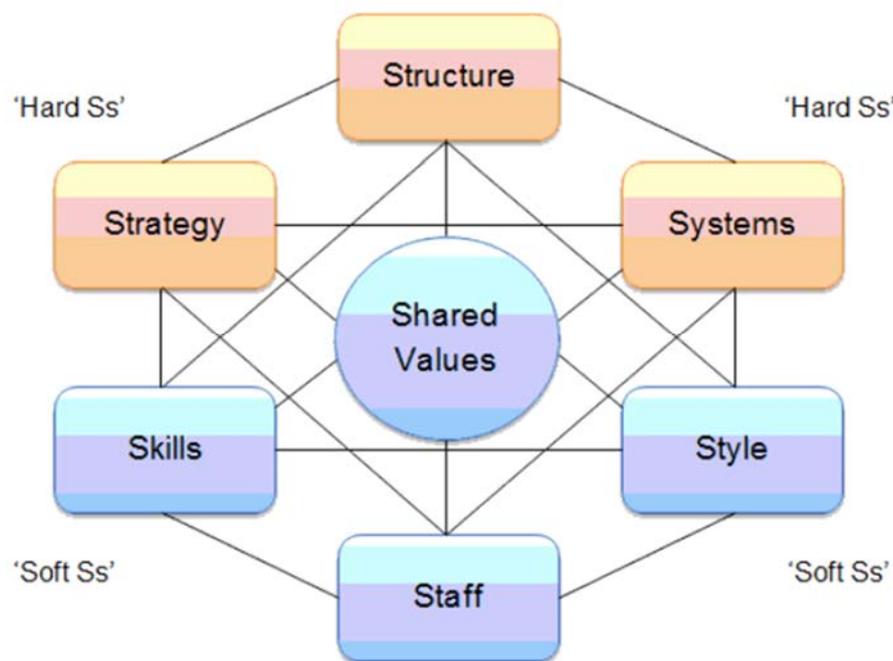
Indices	Cluster 1 Start-up	Cluster 2 Growth	Cluster 3 Formalization
Age	1-4	4-10	10-15
Size	Small (3-100 employees)	Small-Medium (3-200)	Small-Large (3-500)
Formalization Level	Low	Low, First Documents Appear	High
Number of Hierarchy Levels	1-2	1-3	2-3
Most Frequent Organization Structure	Simple, Functional	Simple, Functional, Mixed	Functional, Division, Matrix
Organization Head	Owner(s), Government Appointee	Owner(s), Government Appointee	Owner(s), Hired Manager, Government Appointee
Centralization Level	High	Medium	Low
Key Development Objectives	To build a reputation, to resolve human resource/staffing issues	To ensure stability, to build a reputation	To ensure stability, to create uniqueness

The Shirokova's OLC model creates a picture of the likely circumstances or characteristics of a start-up organization. Further, as opined by Phelps, Adams, & Bessant (2007), focusing on OLC issues implies, knowledge and learning. Knowledge and awareness of the stage of development and status of the organization can help the leader or executive management in understanding and application of the relationships between OLC, strategy and performance.

### 2.2.2 Start-up relating to McKinsey's 7S Model

Organizational optimal performance is not only dependent on the structure of the organization ( Waterman Jr, Peters, & Philipps, 1980). Other factors are important. Similarly, structure is not the only thing that is of concern in the start-up of an organization.

As pertains to the particular case in point, the start-up of a Coast Guard Academy, the institution must uphold excellence in contemporary maritime education. According to Manuel (2019a), to attain excellence in maritime education, there must be a “strategic focus on leadership, governance and management structures, faculty and staff, programme offerings, facilities and systems, financial sustainability, and acceptability of product”. This very same concept holds true with the McKinsey’s 7S model as presented below in Figure 3 which depicts the mutual link between the 7 areas of significance for organizational performance.



*Figure 3. McKinsey’s 7S Model*  
Source: Reprinted from Ravanfar (2015)

As Ravanfar (2015) notes, “McKinsey 7S model is a tool that analyzes organization’s design by looking at how 7 key internal elements: strategy, structure, systems, shared

values, style, staff, and skills,”. These 7S are inter-related and need to be harmonized to accomplish organizational objectives and effectiveness.

The seven elements are classified into “soft” and “hard” areas. Soft areas include Staff, Style, Skills and Shared Values; hard areas are Structure, Strategy and Systems. The hard areas are more explicit and relatively easier to verify/manage (Ravanfar, 2015). On the other hand, soft elements, though harder to manage, are more likely to establish sustainable competitive edge (Ravanfar, 2015).

**Structure** constitutes how the organization or business units are organized. It represents how responsibility, accountability and power are distributed and tasks are accomplished among the constituents of the organization. It includes particulars of who has the authority, who is responsible and accountable to whom. Simply put, the institution’s formal organizational chart is the structure, on the face of it. It can be regarded as one of the most apparent and changeable variables of the 7S model. While most of the structure’s elements are internal, it is still believed to be affected partly by the external environment (Hrebiniak & Snow, 1980; Ravanfar, 2015). Some research argues that organization structured in a stable and well-grounded market cannot (or may find it difficult to) thrive in an external environment where rapid change and complexity exists (Gordon & Narayanan, 1984; Ravanfar, 2015). It is presumed that a more certain the external environment, the more credible and appropriate is the organizational structure and procedures of the institution, while in an environment that is volatile and uncertain, it is more likely to find (and better to resort to) decentralization of decision-making and less rigid flatter hierarchies of the institution (Ravanfar, 2015).

**Strategy** is a blueprint or plan mapped out by an organization to sustainably position it as having competitive and comparative advantages in the market (Ravanfar, 2015). A stable and well-aligned strategy is one that is expressly stipulated through the organization’s vision, mission and values and is usually long-term in nature.

**Systems** are the procedures and processes of the organization, that spell out how the organization operates and decisions are made (Waterman Jr et al., 1980). It is the aspect of the organization that shows the daily routine or how the internal business process is done. This area could be the focal points for managers during transition or change and start-up of the organization.

**Skills** connote the capabilities, competencies, and abilities of the personnel of the organization. During a change in the organization, the questions is raised as to what skills are needed for the reinforcement of its new structure, systems and strategy. This same question can also be applied to the inception of a new organization.

**Staff** concerns the number and quality of personnel required to fill the organization's human resource requirements and how they are recruited, motivated, upskilled, retained, and remunerated (Ravanfar, 2015; Waterman Jr et al., 1980).

**Style** constitutes the method or the way the organization is managed by the top-level management, how they interact, what steps and measures they take and their corresponding "symbolic value" (Ravanfar, 2015). It constitutes the management and leadership style of the head(s) of the organization.

**Shared Values** is at the heart of the McKinsey 7s framework. It is the core of every institution or organization as it depicts the standards and norms that lead personnel conduct and organizational actions and culture (Ravanfar, 2015; Waterman Jr et al., 1980).

The 7S model emphasizes that for the organization to function effectively, all the seven elements are interconnected and a change in one element would affect the entire organization.

Further, Ravanfar (2015) suggested that the model is valuable and applicable to many circumstances or different scenarios like the implementation of new strategies, implications of future innovations and most of all, organizational change. It can, therefore, be applied to the start-up of an organization. As Waterman Jr et al (1980) aptly puts it “when all seven needles are all pointed the same way, you’re looking at an organized company.”

### 2.2.3 Start-up with reference to Balanced Scorecard Model

The Balanced Scorecard (BSC) is a model to manage and affect strategy. BSC ties the mission and vision of an organization to its strategic objectives, targets, measures and project/initiatives. It strikes a balance between financial measures, non-financial/performance measures and objectives across all functions of the organization (Kaplan & Norton, 1992). This model as illustrated in Figure 4, establishes balance by looking at the organizations across four areas of the organization: Financial, Internal Business Process, Customer, and Learning and Growth perspectives/areas.

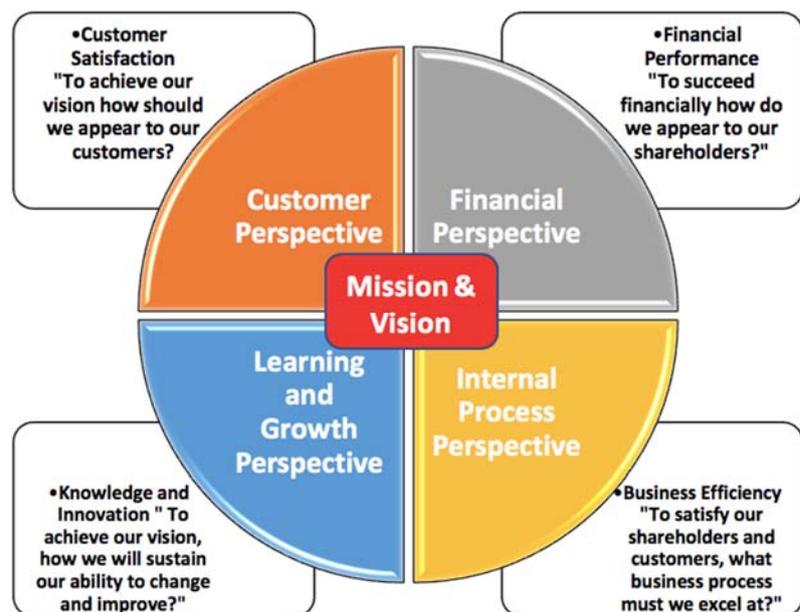


Figure 4. Balanced Scorecard Model  
Source: Adapted from Kaplan & Norton (1992)

**The financial perspective** relates to executive-level financial objectives and measures of the organization that guide in answering the query, How does the organization appears to its shareholders?

**The customer perspective** focuses on customer satisfaction and is associated with objectives and measures that are customer-driven and also guide in answering the question of how the organization should appear to its customers.

**The internal process perspective** connects objectives and measures that ascertain how the organization is faring and whether or not the organization's processes and procedures result in products and services that meet the expectations of the customers/stakeholders and answers the question of what internal process the organization should focus on?

**The learning and growth** perspectives are synonymous with organizational capacity. It correlates with the objectives and measures that concern the people's skills, knowledge base, leadership, infrastructure, technology, organization culture and how well people in the organization optimally perform their jobs and continue to do so in changing environments. It focuses on knowledge and innovation and answers the question of how the organization will improve and sustain its ability to change.

Finally, it is worth noting that a causal relationship between the perspectives prevails. The objectives are looped causally from the bottom to the top or either way or across all levels.

#### **2.2.4 Start-up construct emanating from Organizational Performance Assessment (OPA) Model**

Over the course of the existence of the organization, and hinging on the stages and development in the OLC, said organization battles with different challenges. For the

organization to cope with these, it is necessary to carry out regular organization analyses. Mangham (1987) defined organization analysis as a “diagnostic process that helps to better understand the performance of an organization”. The framework for organization analysis can be conducted after the rudimentary assessment of the organization’s capacity to gain an in-depth understanding of the organizational weaknesses and to spot looming opportunities. Further, it provides a platform for the leaders and constituents of the organization to appraise its internal strength and external challenges.

In the process of organizational assessment, variables of performance that are usually not regarded in the assessment of capacity should be considered. Mangham (1987) observed that there are two different levels of analysis that could be undertaken. One is the assessment of the internal capacity and motivation of the organization and the other is the external environment analysis which includes factors such as “rules of the game” and the “actors” (referred herein as stakeholders) that impact on the organization.

The Organizational Performance Assessment (OPA) Model is a framework that can be employed for detailed accounts, analysis and assessment of an organization. Mangham (1987) opined that like all other models, the OPA, “is a simplification of reality”. Nevertheless, it is all-encompassing and applies to all kinds of organization be they government agencies or private organizations among others. The OPA framework is inspired by the idea that any organization can be construed as a system which is: vision- or goal-oriented; with external environment influences; and varied internal subsystems or factors, that interfaces ad infinitum. In organization or system analysis, the point of convergence are the so-called elements of the system, their relationship and interlinkages with the external environment. The approach is multidimensional which requires examination of all the elements and the interactions between them.

In this regard, Mangham (1987) advocated that the framework of OPA as shown in Figure 5 shows that “organizational performance is a function of three wide-ranging categories: Organizational Motivation, Organizational Capacity and the External Environment.”



*Figure 5. Organizational Performance Assessment (OPA) Model*  
Source: Reprinted from Mangham (1987)

The ensuing sections will describe the features of the four categories:

The first category - **Organizational Performance** - is assessed and measured through the use of indicators or criteria. Most private organizations use the idea of profit in gauging performance, while for public organizations, on the other hand, other parameters namely relevance, efficiency, effectiveness and sustainability in measuring performance are applied. Figure 6 illustrates the indicators for assessing the performance of an organization.



*Figure 6.* Criteria for measuring organizational performance.  
Source: Adapted from Mangham (1987)

The second category is **Organizational capacity** which alludes to the endowment of the organization’s resources, namely “human, physical and financial capital and to the systems and processes used for managing this capital” such as programming, process and leadership, management and strategic management (Mangham, 1987). Two distinct parts of organizational capacities are identified relating to 1) resources and to 2) systems and processes (Food and Agriculture Organization of the United Nations, n.d).

Mangham (1987) enumerated the organization’s resources and how they are managed, as shown in Figure 7.

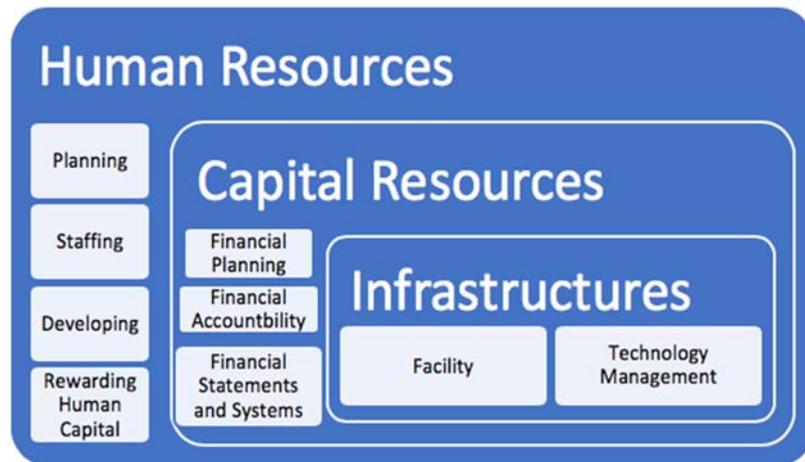


Figure 7. Organization's resources and the processes used to manage resources  
Source: Adapted from Mangham (1987)

Further, Mangham (1987) sets forth in Figure 8 the systems and processes that will be utilized by an organization:

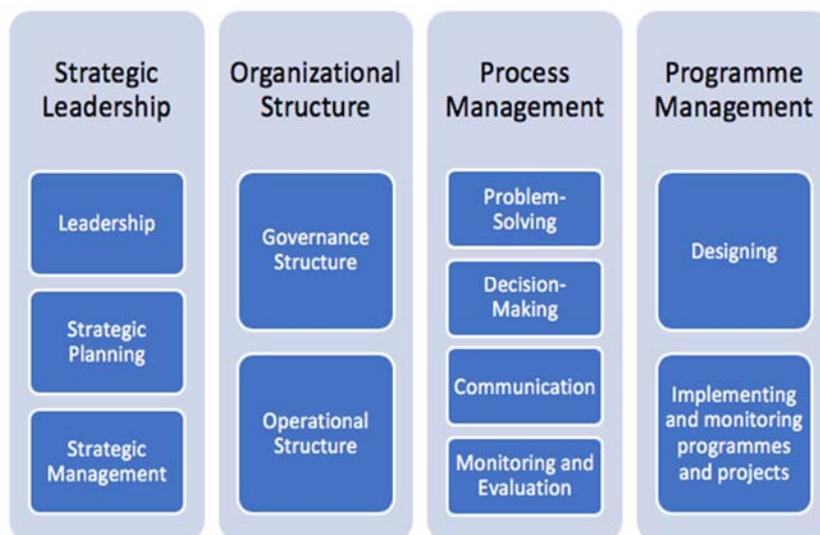


Figure 8. Systems and Processes employed in the organization  
Source: Adapted from Mangham (1987)

In theoretical concept and practice, the governance aspects of the organization often relate to strategic leadership and organizational structures as depicted in Figure 8. Thus the organization's politics and power dynamics clearly manifest in this category.

Further, part of the systems and processes is programme management, which is highly important in the research given its focus on the start-up of a public educational institution. Programme management relates to the design, implementation and monitoring of the project and, since this is an educational institution, the object of discourse in this research is the process of curriculum design and development, determination of learning outcomes with a reflection on educational philosophy.

The third category of OPA is **Organizational motivation** which refers to the organization's ability to urge its human capital to achieve its goals and objectives. Organizational performance depends largely on motivation or the mobilization of internal energy within the organization. Motivation incites interest, efforts, energy and commitment of the members of the organization to their tasks and roles and endeavors to attain their common goals. According to the Food and Agriculture Organization of the United Nations (n.d), "Motivation is rooted in an organization's vision and mission, culture, values and incentive systems - all of which are influenced by the organization's history" or OLC. Organizational motivation is a function of four interactive components as illustrated in Figure 9.



*Figure 9. Components of Organizational Motivation*  
Source: Adapted from Mangham (1987)

Manghan (1987) briefly described the components of organizational motivation:

**Vision and mission** are compelling statements of the organization, the former relating to aspirations of the organization mid- or long-term and the latter to the core purpose of the organization. A well-crafted mission statement conveys the fundamental goals, attributes and moral principles that mold an organization; and articulates, and cascades a sense of direction and purpose to all personnel of the organization.

**Organizational culture** speaks about the shared values, beliefs and common identity of an organization. This culture has been described in some theories as an iceberg with aspects that are visible and invisible (Wokurka, Banschbach, Houlder, & Jolly, 2017; Matkó & Takács 2017). The visible aspects dwell on the organization's vision and mission statements and policies, rules and regulations, whereas the invisible ones refer to the feelings, beliefs, perception, values and implicit behaviors of the members of the organization.

**Organization history** can be ascribed to OLC. Different theories conceptualize the varying attributes of organizations at particular stages of the life cycle (Shirokova, 2009). As the organization progresses through the developmental phases of OLC, changes in the requirements and emerging opportunities and threats in every phase fuel change or redirection of the goals of the organization.

**Incentives System** is an important component of the organizational motivation and is also instrumental in shaping the personality of the organization. Incentives are considered as rewards that stimulate motivation for a specific actions and behaviors of the personnel in the organization. Incentives may cover tangible or intangible benefits. Tangible benefits refer to pay or remuneration, learning opportunities and professional advancement while intangible benefits connote job satisfaction, job security, openness to innovation, freedom and work-life balance.

The fourth and last component is **External Environment** which refers to the external factors influencing (either facilitating or impeding) the performance of the organization. Any initiatives and endeavors to assess and boost the organization's performance necessitates cognizance of the factors/forces influencing the organization in its environment. Rowlinson (1996) stated that the external environment of the organization is composed of two levels: the "rules of the game" and the "actors". These levels, as shown in Figure 10 comprise the country's laws, rules and regulations, its economic condition, sociocultural beliefs and norms, the extent of interlinkages and partnerships with other organizations and stakeholders.

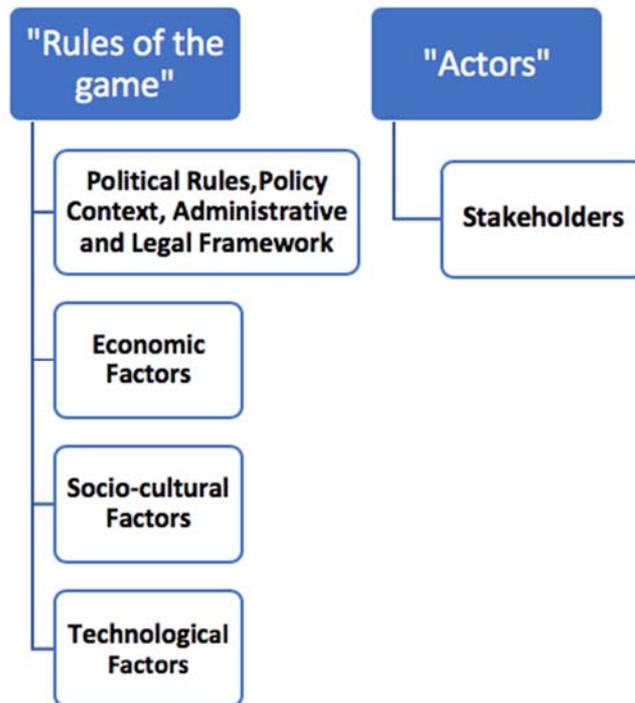


Figure 10. Components of External Environment  
Source: Adapted from Mangham (1987)

In the prevailing economy, **economic** rules and their enforcement is instrumental in the determination of the structure of organizations. Generally, the hereinafter described economic variables are rooted in laws and are included in partnership agreements, contracts and embedded in fiscal incentives.

**Sociocultural** beliefs, norms and behaviors in a given community can have overwhelming impacts on the way institutions oversee their jobs and how they are putting a premium on their institutional outputs.

**Technology** coupled with innovation stirs creativity and creates new processes and products or concepts. As innovation emanates from within the organization, it opens the door of opportunities for the organization's growth through development of new markets and improvement of quality to meet customer's needs.

It is a must to understand the strength of the relationship of the organization with other **actors** or the so-called **stakeholders**, to effectively reinforce the design and process of change, transformation or start-up of new activity in the organization.

One of the critical components of external environment under the "rules of the game" is the **political, administrative and legal framework**. The general policy context encompasses the policies per se, the process of policy-making, the mechanisms used in policy implementation, monitoring and feedback where it empowers the organization to have an interpretation of the impacts and the extent to which inconsistencies emerge among policies in different sectors.

It is then important to examine the legal framework within which the PCG operates to determine the legal basis for the creation of the PCGA.

The PCG is considered as the "oldest humanitarian armed service of the Philippines". It was established on 17 October 1901 when the insular government through the Philippine Commission, instituted the Bureau of Coast Guard and Transportation (Philippine Coast Guard, 2013c). Since then, it has been restructured organizationally a number of times and seen changing mandates as it was transferred from the organizational umbrella of the Department of National Defense to the Office of the President, and then to the DOTr. With these transfers came the assumption of roles in

different capacities and the progressive transformation into a multi-mission-ready agency to address the ever-increasing demands of the maritime industry.

One breakthrough of the organization is the enactment of the “Philippine Coast Guard Law of 2009” or Republic Act No. 9993, which established the PCG as an armed and uniformed service attached to the Department of Transportation and Communications now DOTr. The law provides the PCG with a higher level of autonomy for managing all its resources – workforce, equipment, funds, and plans, programs and activities. The law is part of a broader effort to reform the maritime sector and for stronger government involvement in the maritime sector through enhanced enforcement of regulation, among others. The PCG’s relevance in national development is given legal fiat and has been expressed in its mission: “We are a uniformed armed service that implements and enforces all national and international maritime safety, security, search and rescue, and marine environmental protection laws in support of the Integrated Maritime Transportation Network objectives, national security and economic development of the Philippines” (Philippine Coast Guard, 2013b).

With the new law, the multifaceted character of the PCG is intensified through its five major functions; namely; Maritime Safety; Maritime Search and Rescue; Marine Environmental Protection; Maritime Law Enforcement and Maritime Security (Philippine Coast Guard, 2013a).

## **Chapter 3 Methodology and Methods**

### **3.1 Purpose and Outline**

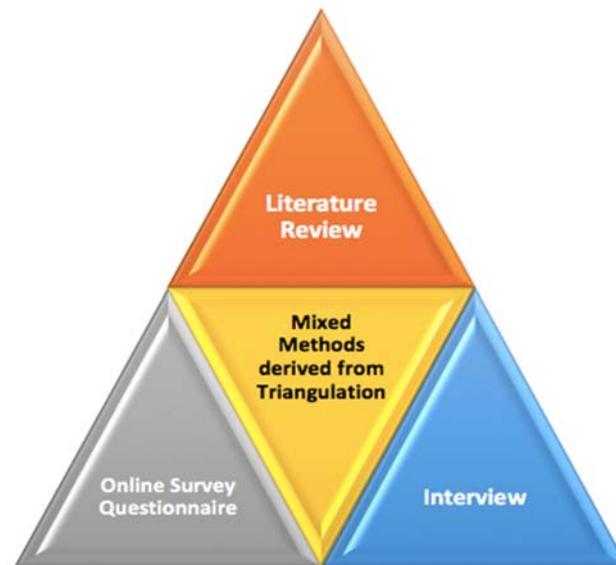
The overall purpose of this chapter is to discuss how the research was conducted. This chapter looks into the methodological approach, specific methods and tools, to find answers relevant to the issues, challenges and potential solutions relating to the start-up of a public maritime education and training (MET) organization using the proposed academy of the PCG as a case study. For this purpose, the researcher sought answers related to the following areas:

- a. Areas of concern relevant to the start-up of a maritime-related educational institution such as the Philippine Coast Guard Academy
- b. Models available from other jurisdictions and sectors and how they compare with each other
- c. Best practices that can be used to design an optimal model for the Philippine Coast Guard Academy

### **3.2 Methodological Approach**

The mixed methods research approach (as derived from the philosophy of triangulation) was used in the study as the researcher concurred with Johnson & Christensen (2019) who saw positive value in its use. The use of only quantitative or only qualitative research is viewed as incomplete and limiting (Creswell & Creswell (2017). Triangulation approach helps in reinforcing one method with another and makes its results more grounded (Flick, 2018). The research employed three methods

for complementary and cross-validation purposes: literature review, internet-based survey questionnaires and in-depth open-ended interviews as shown in Figure 11.



*Figure 11.* Mixed Methods derived from Triangulation Method

### **3.3 Selection of Participants**

Purposive sampling was used in this study in selecting participants. As Etikan, Musa, & Alkassim (2016) & Patton (2005) affirm, this kind of sampling is typically used in eliciting in-depth and vital facts for analysis from specific respondents. In this particular research/case study of the creation of a PCGA in the Philippines, key personnel currently connected with the METIs/Academies from different countries/jurisdictions were selected to respond to the survey questionnaire. Moreover, targeted respondents for the interview were education experts. United States Coast Guard Academy in USA, Japan Coast Guard Academy in Japan, The Fleetwood Campus of Blackpool and the Fylde College in UK and Maritime Academy of Asia and the Pacific in the Philippines were part of the chosen subjects of interest. These institutions are regarded as and premier Coast Guard Academies and standard METIs that could share lessons learned and best practices for critique and possible application

to PCGA. There were also other respondents from countries that were considered based on their advancement and significant contribution in the field of MET.

### **3.4 Instrumentation**

The researcher used the Google form questionnaire which was designed in four-folds. All the questions were aimed at getting quantitative and qualitative data/responses. In Section A of the questionnaire, answers were required to 6 demographic questions. Section B contained 8 general questions and 4 questions requiring “yes/no” answers with options to give more information. In section C, there was one “identification of image” question and in Section D, there are 27 questions in Likert format and 3 open-ended questions that encouraged compact and relevant answers using the respondent's own knowledge and opinions. The respondent’s name was an optional field.

Validity and reliability of the questionnaire were verified through a pilot test involving 10 WMU MET students and WMU alumni from Japan, Kenya, Thailand, Nigeria, South Africa, Myanmar, Argentina, Fiji, and the Philippines. As a result of the pilot testing, some questions were fine-tuned.

### **3.5 Data Collection**

The study utilized primary and secondary data sources for this research. Primary data is defined by Hox & Boeije (2005) & Neelankavil (2015) as information gathered directly from an original source for the specific exploratory research purpose or project, employing procedures that are tailored fit to answer the research problems at hand. Secondary data, on the other hand, is explained as the act of gathering information and materials created by another researcher related to the object of study which can be reused by the research community (Hox & Boeije, 2005). In most cases, secondary data, as believed by Johnston (2017), is a viable option for cases of limited time and resources as was the case of this research. However, the researcher highly

valued the existing data in the elucidation of the research problems. Gaps identified therein were filled through the primary data collection.

### **3.5.1 Primary Sources of Data**

The primary data for this study was collected through an online survey, which was forwarded to Coast Guard Academies and METIs/universities and internet-based interviews with maritime experts. Described below are the research tools that were employed in the study.

#### **.1 Online survey**

As opined by Keusch (2015) web/internet/online surveys have been viewed in recent years as a widely accepted means of collecting primary data as regards to social research. This is because, it is convenient both for the researcher and respondents with its underlying accessibility and cost-effectiveness (Philbrick, Smith, & Bart, 2010). Further, the use of electronic questionnaires in data collection has also been highlighted as bridging the geographical gap between the researcher and respondent (Callegaro, Manfreda, & Vehovar, 2015; Gillham, 2008). This method is the most pragmatic and logical method since it addresses the heterogeneity of respondents who are widely dispersed across the globe as well as providing a quick way to collect the required data and have it collated seamlessly in an online spreadsheet.

#### **.2 Internet-based Interviews**

The purpose of the internet-based interviews was to collect in-depth views from experts in academia and training institutions to supplement the literature review and online survey conducted. Considering the distance and limited time factors, the interviews were conducted electronically through audio-visual internet-based calls using Skype instead of the face-to-face interviews.

### **3.5.2 Secondary Sources of Data**

Data from journals, books, academic articles, reports, research and other forms of literature for desk review was collected using the WMU Library (physical and online library portal).

## **3.6 Data Analyses**

### **3.6.1 Quantitative Analyses**

In the instrument, there were descriptive questions as well as Likert format questions. The quantitative data collected from general and descriptive questions was analyzed using MS Excel and results presented in graphs and pie-charts (numbers and percentages). The Likert format questions were subjected to descriptive and correlation analysis.

### **3.6.2 Qualitative Analyses**

In order to facilitate a systematic understanding of the collected data, this study used an open-coding approach for the qualitative data collected, based on overarching themes and concepts identified during the collection. The researcher used Excel sheets to tabulate the responses. The answers were coded and grouped into themes and the number of occurrences of each theme was counted. The answers were analyzed collectively and other data were subjected to SWOT Analysis. The themes are presented in Chapter 4 and 5 based on the observation, and the recurrence or emphasis of specific statements by the respondents to the questionnaires and interviews.

## **Chapter 4 Findings and Analysis**

### **4.1 Introduction**

This Chapter presents the statistical data, discussion and analyses of the research findings based on the review of the two instruments used such as the data/responses received from the survey questionnaire and interviews.

### **4.2 Data Presentation and Analyses: Survey Questionnaire**

The researcher received a total of 40 responses after the online questionnaire (using Google forms) was sent out to selected METIs/Universities and Academies. All 40 respondents belong to top management. The following shows the results of the quantitative and qualitative analysis of the four sections of the survey questionnaire:

#### **4.2.1 Demographic Information**

In section A, the intention was to understand the respondents' profile, which contains the following demographics:

- Countries of Respondents
- Gender
- Age
- Highest Educational Attainment

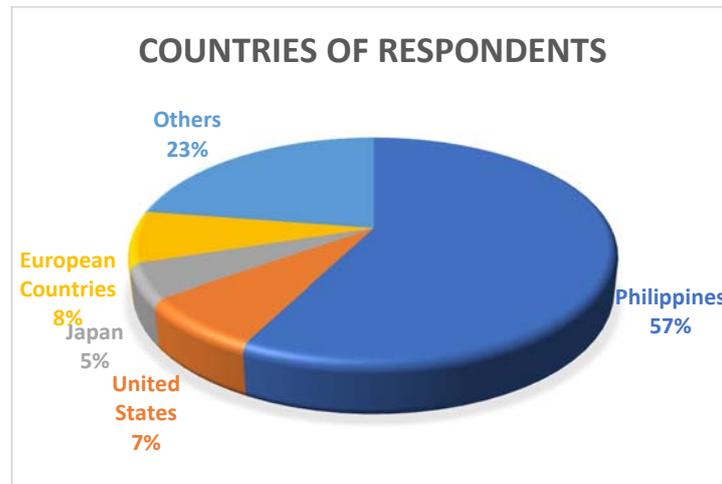


Figure 12. Countries of Respondents

Figure 12 shows the countries from which respondents came: United Kingdom, Sweden, United States, Japan, Malaysia, Thailand, South Africa, Fiji, Kenya, Myanmar, Vietnam, India and Philippines with the highest percentage of 57%.

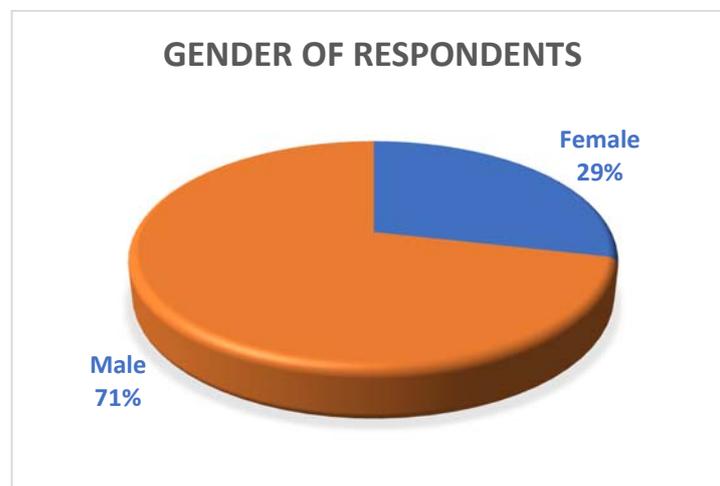
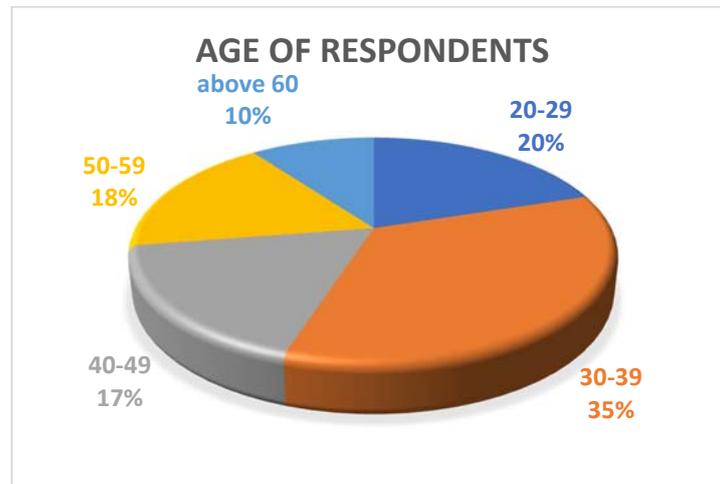


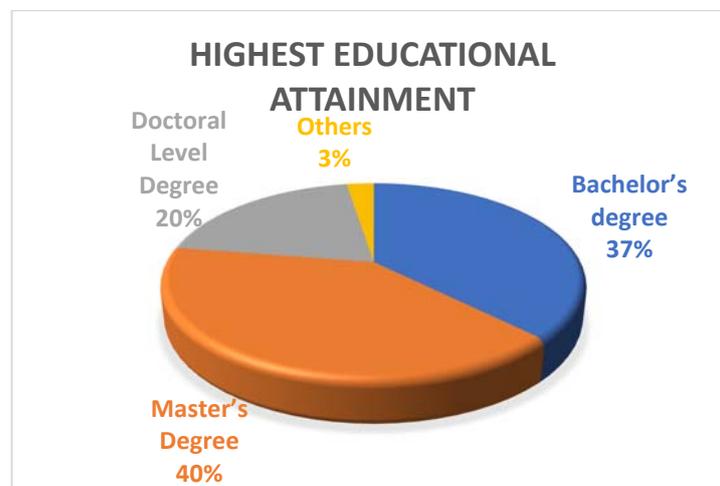
Figure 13. Gender of Respondents

Figure 13 shows the gender of the respondents. There were more males, constituting 71% than females with 29%.



*Figure 14. Age of Respondents*

Figure 14 shows the age of the respondents. Respondents in their 30s occupy the majority, comprising 35% of the total, followed by 20% in their 20s, 18% in their 50s, 17% in their 40s and 10% above 60s.



*Figure 15. Highest Educational Attainment*

Figure 15 shows the highest educational attainment of the respondents. Most of the respondents have Master's degree, encompassing 40% of the total population, while 37% of the respondents have Bachelor's degree, 20% have Doctoral degrees and the 3% were Master Mariners with Professional General certificates in Education.

#### 4.2.2 Influencing factors of organization start-up

In sections B and C, the areas or aspects of organizational behavior that could influence the start-up of an organization were considered, including:

- Type of institution where the respondent is working
- Years of experience of respondent
- Type of funding of the institution where the respondent is working
- Faculty and staff strength of the institution where the respondent is working
- Years of existence of the institution where the respondent is working
- Type of organizational structure of the institution where the respondent is working

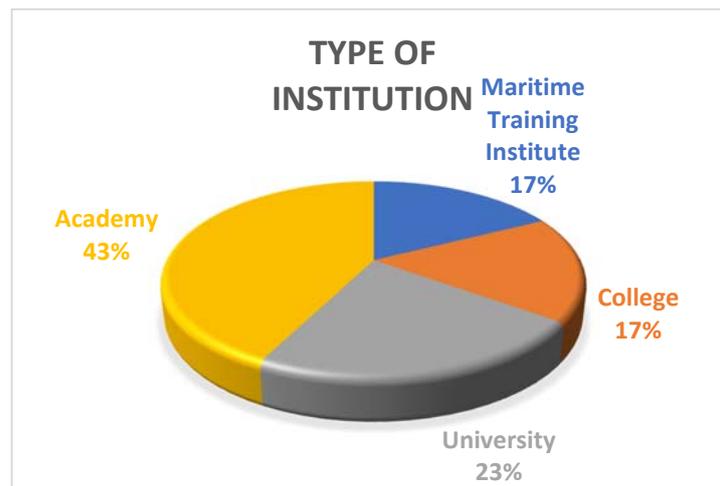


Figure 16. Type of Institution

Figure 16 shows the type of institution of the respondents. The majority come from Academies with 43%, 23% from Universities, and 17% from Colleges and Maritime Training Institutes.



Figure 17. Years of Experience

Figure 17 shows the years of experience of the respondents. Forty-three percent have worked more than 10 years in the institution, while 37% have less than 5 years' experience, and 20% have 5-10 years.

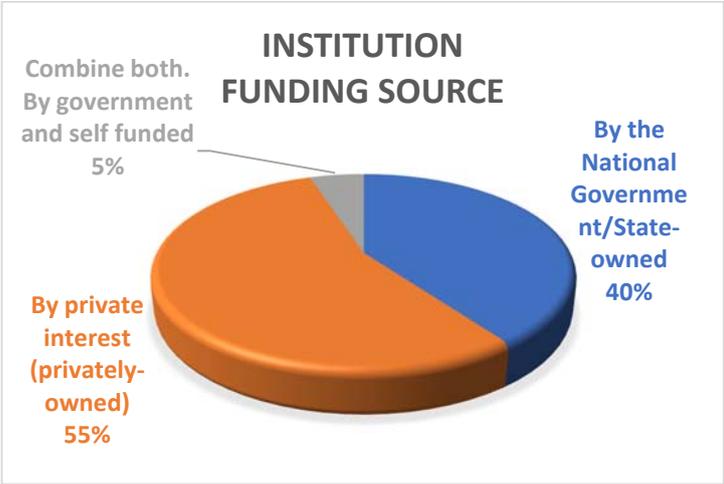
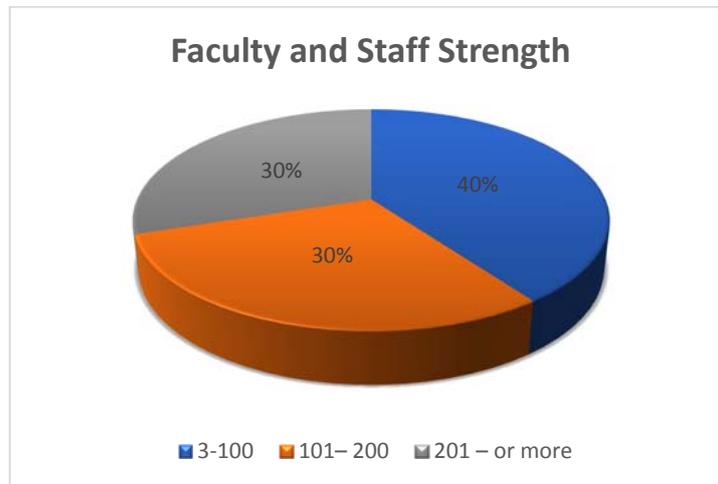


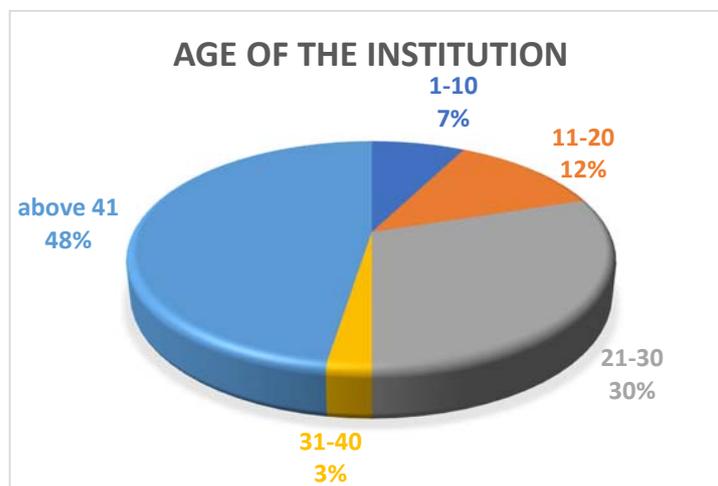
Figure 18. Source of Funding of the Institution

Figure 18 shows the source of funding of the institution of the respondents. Fifty-five percent are funded by private interests while 40% are funded by the national government. Five percent are funded by both the government and private interests.



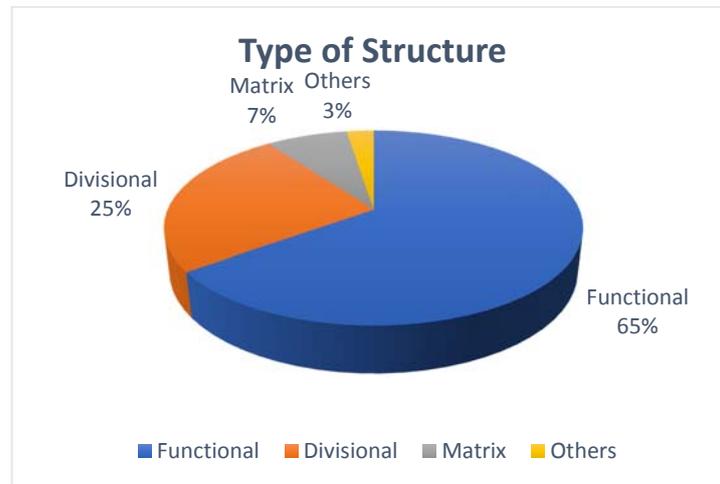
*Figure 19. Faculty and Staff Strength*

Figure 19 shows the number of faculty and staff at the respondents' institutions. Most of the institutions (40%) have 3-100 employees, while 30% have 101-200 and 30% have 201 or more faculty and staff employed.



*Figure 20. Age of the Institution*

Figure 20 shows that 48% of the respondents belong to organization older than 41 years which can be considered as established and institutionalized. Thirty percent, 12%, 7%, and 3% are connected to 21-30, 11-20, 1-10, and 31-40 year-old organizations respectively.



*Figure 21. Type of Organizational Structure*

Figure 21 shows that most of the respondents have functional organizations comprising 65%, while 25% are divisional, 7 % matrix, and 3% other types.

#### **4.2.3 Issues and Challenges of the Institution and solutions**

In section B of the survey questionnaire, some questions had “yes”, “no” or “not sure” as answer options. These questions also required further elaboration on the responses. They include the following:

##### **.1 Problems encountered with getting adequate resources for the institution**



*Figure 22. Financial Resources Challenges*

In Figure 22 half of the respondents have experienced financial problems while 35% are financially stable and 15% are uncertain whether there exists economic sufficiency of funds.

There are myriad financial problems encountered by the “Yes” respondents and how their organization addresses them is elaborated below.

Typically, government institutions are funded through the national treasury or come from the legislature (in the case of the Philippines and United States, the Congress). However, more often than not, budget allocation from the government coffers does not reflect the real financial requirements for public institutions. Most respondents say that in their state-owned institution, the allotted budget/appropriated funding is limited and most of the time the annual budget is only allocated to salaries of employees, operation and maintenance of equipment, and seldom for construction of buildings or purchase of new equipment. Some institutions are subject to continuing budget appropriations and government shutdowns. As their government has cut budgets, they have seen decreases in their funds. Institutions was funded by the legislature sometimes experienced delay in receiving the allotted budget due to government restrictions in fund releases with knock-on delays to even the payment of salaries. At the institutional level, budgetary allocation to each college/department is not also

clearly defined. Further, the competitive MET market requires all institutions to be up-to-date with the latest development requirement considerable investments in simulation. Attracting lecturers at the right level also often means higher levels of pay. Indeed, more money is needed to sustain the operation of the programs, invest in infrastructure, upgrade facilities and equipment, train faculty, encourage research, hire qualified, licensed faculty, and comply with the changing requirements imposed by national and international policies, laws and regulations.

These issues are confronted and solved by seeking external funding through alumni associations, applications for funded projects and grants. Some respondents have partner shipping companies, association of shipowners and other partnerships which give generous support for acquiring some teaching and training materials. As a solution to Government fund limitations and restrictions, some public institutions prepare their procurement plans conscientiously with correct specifications and justifications and prioritize the most urgent needs when budgeting.

## **.2 Challenges in obtaining qualified teachers in the institution**



*Figure 23. Faculty and Staff Recruitment Challenges*

Figure 23 shows that the “Yes” responses occupy the biggest portion of the pie with 75%. Problems that are highlighted are the following:

Half of the “yes” respondents spoke about the difficulty in recruitment of faculty and staff. There are multiple issues regarding qualifications of faculty and staff and the maritime professionals specifically in terms of Nautical Science and Marine Engineering and other Engineering programmes. Even for STCW and Commission of Higher Education/University compliance, the combination of Certificate of Competency holders and postgraduate degree holders has been a significant challenge. In countries like Philippines, part of the accreditation requirements of the Philippine Association of Colleges and Universities Commission on Accreditation (PACUCOA) has faculty with Doctoral and Master’s degrees so as a solution some institutions offer in-house Master’s degree for their instructors. Half of the respondents believe that the second challenge after recruitment is the retention of the maritime professionals. Remuneration/incentives are not competitive. There is a dearth of maritime instructors since majority of the faculty members hired are active seafarers. Most of the time, they cannot finish a semester leaving behind students waiting for another faculty member that will handle and take over the subject. Experienced maritime personnel prefers better-paid positions at sea rather than lecturing.

Some public and private institutions cannot pay teachers a high salary because of the limited budget. Moreover, the government has a standard salary rate for government teachers, thus teaching in government school is a matter of personal commitment.

The respondents also shared the following solutions that institutions have implemented to counter the recruitment and retention issues:

On recruitment issues, some of the institutions have tried to address these challenges by expanding searches to diverse populations and professional organizations, being more aggressive in advertising the benefits of working in their institutions, and ensuring that salaries are competitive.

This particular challenge of making attractive compensation packages/schemes was addressed by some government institutions by allocating money from the income of the school and submitting a proposal for budget appropriation.

Some also attract and encourage qualified maritime officers/graduates to teach especially female maritime officers who have stopped sailing.

Some institutions in the Philippines indicate that part of their recruitment scheme is motivating the qualified prospects that they will soon be promoted to higher academic ranks.

For institutions with a limited budget, there is also an indication that they resort to hiring management level instructors who enjoy teaching, with personal commitment and values for imparting knowledge rather than putting so much weight on receiving high income. Some also tried to negotiate individual terms of service with identified potential candidates while others make arrangements for teachers to take up part-time jobs outside the institution.

Some indicated that they addressed the recruitment problem through the employment of alumni with shipboard experience as part of their training agreement signed prior to graduation. Others just encourage their alumni through the Alumni Association to extend help and show commitment to the Academy by serving their Alma mater as technical faculty of their institution. Finally, some respondents emphasized the revisiting of policy on hiring/recruitment that includes the criteria for hiring lecturers, instructors and professors.

On retention issues, some institutions provided shipboard leave to maritime teaching staff with the assurance of security of tenure and other incentives. Moreover, there was consensus on the value of formal staff development programs which equip faculty with the appropriate knowledge and skills.

### **.3 Challenges in funding equipment resources**

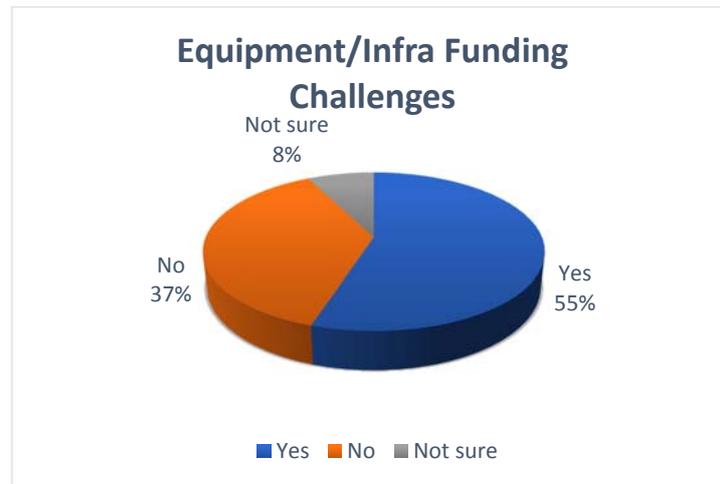


Figure 24. Equipment/Infra Funding Challenges

As shown in Figure 24, the majority of respondents were confronted with equipment and infrastructure funding challenges, 55% to be exact while 37% have no issues at all and 8% were uncertain.

The biggest issue is that resources for MET are relatively expensive. As one respondent noted, “All Marine equipment is expensive i.e a single-arm davit and Rescue boat to SOLAS standards £130k. Each course place is only £900 so the payback is slow. We use local government LEP funding, Local Enterprise Partnership”

Respondents stressed the challenge to both private and public institution in the procurement and maintenance of equipment like simulators and marine engineering center as it entails significant amounts of money and also comes with peripherals like the expertise of the instructor, update of software and the upgrade of facilities and equipment. There is also an indication that there is a lack of local expertise to provide equipment or teaching aid service and maintenance. Additionally, some institutions failed to develop SOP to operate and schedule periodic maintenance of technical equipment teaching aids. On the other hand, the budgetary allocations in public intuitions take long to be effected and pose challenges to the acquisition of key training aids and resources for MET.

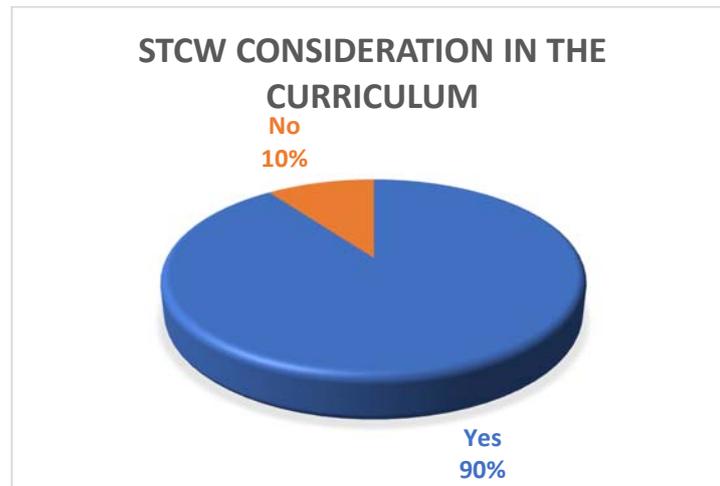
To address this problem partly, some respondents indicated that their institutions have set-up cooperation agreements with foreign corporation/partner shipping companies like Dutch partners or employers. Some seek funding from external donors, grants, alumni associations, parents, teachers and employees associations and even student organizations.

Since most equipment is expensive, others indicate that they come up with a long-term strategic plan showing priority projects. They procure it one time while identifying the most important. Some also often resort to loans taken from the bank or soft loans for the government.

Some also employ the technique of reducing cost. The institution informs everyone for collaboration and they calculate the recovery time of the capital cost of training aids over five-year periods since most regulations are bound to change or be reviewed every 5 years.

Some government institutions lobby their proposals for supplementary budget even though it may take a long time and the request will undergo a tedious approval process. Given government restrictions in procurement, the institution will have to submit a well-documented request clearly specifying its requirement with justifications.

#### **.4 Consider STCW Convention in the curriculum**



*Figure 25. STCW Consideration in the curriculum*

In Figure 25, 90% of the respondents consider the STCW Convention and 10% responded that the international convention is not considered due to their institution does not offer courses for Merchant Mariners.

The 90% of the respondents whose institutions consider STCW, made mention of the following challenges:

The challenges faced by the institution are the frequent changes in requirements set by the government agency, the Flag administration. There is an issue in the implementation of the Convention due to the continuous revision of the National Regulations in the Maritime Sector, which align with STCW. Some practices and processes required of the institution at National Level, lead to challenging debates when justifying them at the International Level.

However, the most important thing is that to have a smooth implementation of the STCW. They believed that the institutions should also have a deeper understanding of the STCW and be aware that STCW requirements are minimum standards to develop training courses in every country. As one respondent said, “industry requirements are higher than STCW requirement so, institutions will develop advanced training courses beyond the requirements of STCW.”

#### 4.2.4 Perception of the Respondents in view of the start-up variables

Section D of the survey questionnaire showed the respondents agreement or disagreement with the statements about their current institution and were expressed based on a scale of 1 to 5: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. This section is analyzed using frequency count, percentage, rank and weighted mean. The responses were rated by scaling the answers from 1 to 5. Summing up the weight of each subject category and dividing it by the total number of respondents, the result is the weighted mean. Each mean represents the over-all impression, opinion or perception attributable to the respondents. This is used as an approximate statistical test and as the most reliable and stable measure for the assessment of the perceptual responses of the selected respondents for this study. The perception assessment made use of a scaling technique/process derived from the Likert format used (see Table 2 below).

Table 2. *Scaling Approach*

<b>Rating Scale</b>	<b>Range Interval</b>	<b>Description</b>	<b>Interpretations</b>
5	4.50 – 5.00	Strongly Agree	This indicates that the current condition described in the item is <b>very satisfying</b> and that the practice is perceived as <b>very effective</b> .
4	3.50 – 4.49	Agree	This indicates that the current condition described in the item is <b>satisfying</b> and that the practice is perceived as <b>effective</b> .
3	2.50 – 3.49	Moderately Agree	This indicates that the current condition described in the item is <b>fairly satisfying</b> and that the practice is perceived as <b>moderately effective</b> .
2	1.50 – 2.49	Disagree	This indicates that the current condition described in the item is <b>almost not present</b> and that the practice is perceived as <b>ineffective</b> .
1	1.00 – 1.49	Strongly Disagree	This indicates that the current condition described in the item is <b>missing</b> but needed and that the practice is perceived as <b>very ineffective</b> .

The findings and analysis are discussed below.

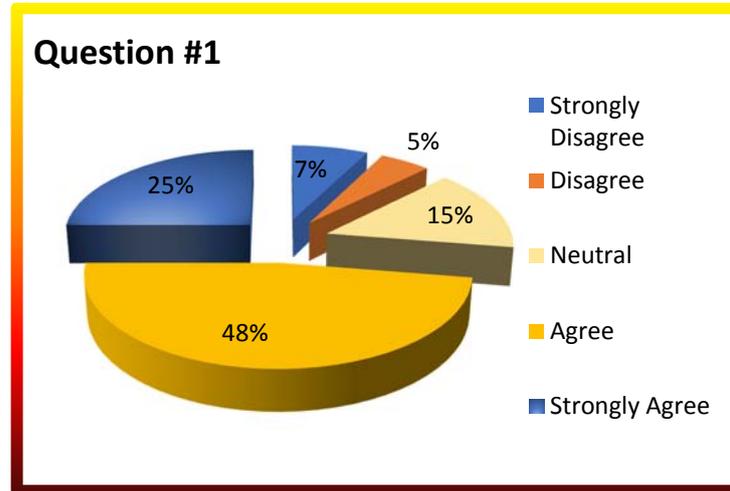


Figure 26. Frequency of Perception that Organizational Structure is optimum for operation.

Figure 26 shows that 25% “Strongly Agree”; 48% “Agree”; 15% “Moderately Agree”, 5% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the organizational structure is optimum for the operations.

Table 3. Mean Response if Organizational Structure is Optimum for the Operation

PARTICULARS	RESPONSE		
<p><i>1. An organizational structure that is optimum for our operations</i></p>	3.775	AGREE	<p>This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.</p>

Table 3 shows a mean response of 3.775 denoting that respondents “Agree” that the current organizational structure of their institutions is optimum (the best) for the operations.

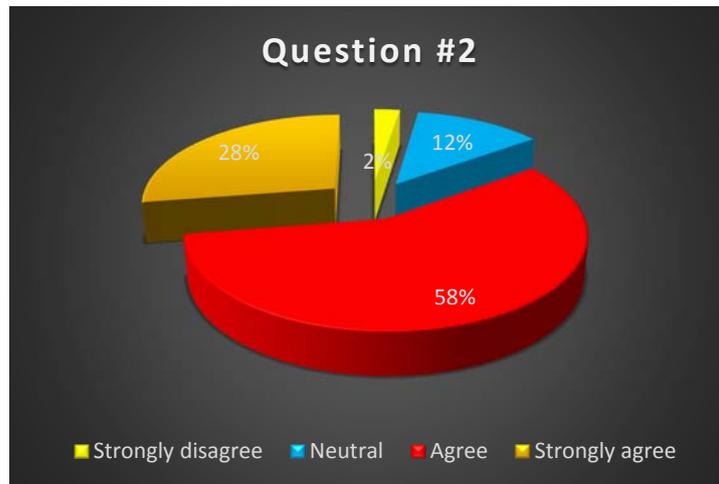


Figure 27. Frequency of Perception that Organizational Structure works for their operations

Figure 27 shows that 28% “Strongly Agree”; 58% “Agree”; 12% “Moderately Agree” and 2% of respondents “Strongly Disagree” with the statement that the organizational structure works for the operations.

Table 4. Mean Response if Structure works for the operations

PARTICULARS	RESPONSE		
2. <i>A structure that works for our operations</i>	4.075	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 4 shows a mean response of 4.075 denoting that respondents “Agree” that the current organizational structure of their institution works for the operations.

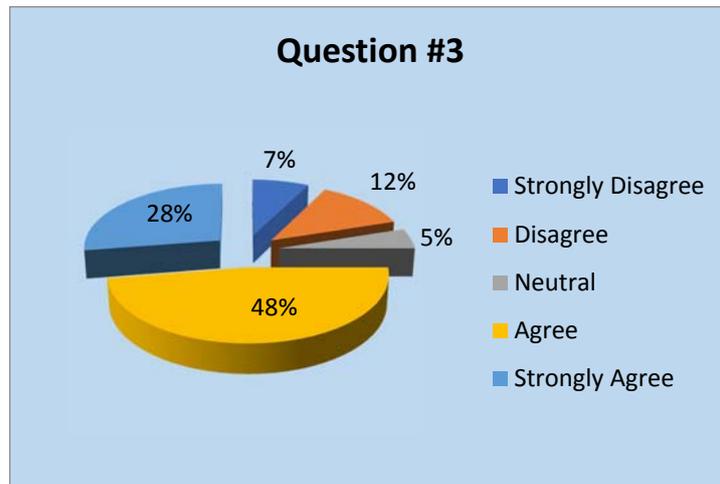


Figure 28. Frequency of Perception that institution has clear reporting lines

Figure 28 shows that 28% “Strongly Agree”; 48% “Agree”; 5% “Moderately Agree”, 12% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has clear reporting lines.

Table 5. Mean Response if Institution has clear reporting lines

PARTICULARS	RESPONSE		
3. <i>clear reporting lines</i>	3.75	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 5 shows a mean response of 3.75 denoting that respondents “Agree” with the statement that the institution has clear reporting lines.

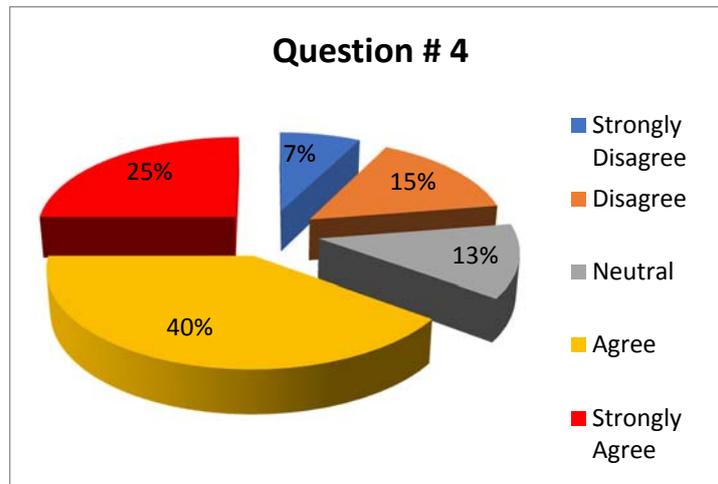


Figure 29. Frequency of Perception that Institution has clear-cut responsibilities and authority for all personnel.

Figure 29 shows that 25% “Strongly Agree”; 40% “Agree”; 13% “Moderately Agree”, 15% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has clear-cut responsibilities and authority for all personnel.

Table 6. Mean Response if Institution has clear-cut responsibilities and authority for all personnel

PARTICULARS	RESPONSE		
<b><i>4. clear-cut responsibilities and authority for all personnel</i></b>	3.60	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 6 shows a mean response of 3.60 denoting that respondents “Agree” with the statement that the institution has clear-cut responsibilities and authority for all personnel.

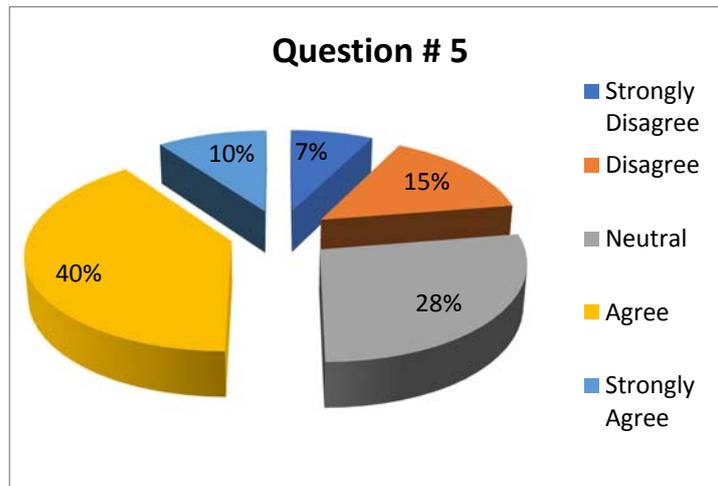


Figure 30. Frequency of Perception that Institution has no silos.

Figure 30 shows that 10% “Strongly Agree”; 40% “Agree”; 28% “Moderately Agree”, 15% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has no silos.

Table 7. Mean Response if Institution has no silos

PARTICULARS	RESPONSE		
<p><b>5. No silos (information is shared across all departments)</b></p>	<p>3.30</p>	<p>MODERATELY AGREE</p>	<p>This indicates that the current condition described in the item is fairly satisfying and that the practice is perceived as moderately effective.</p>

Table 7 shows a mean response of 3.30 denoting that respondents “Moderately Agree” with the statement that the institution has no silos.

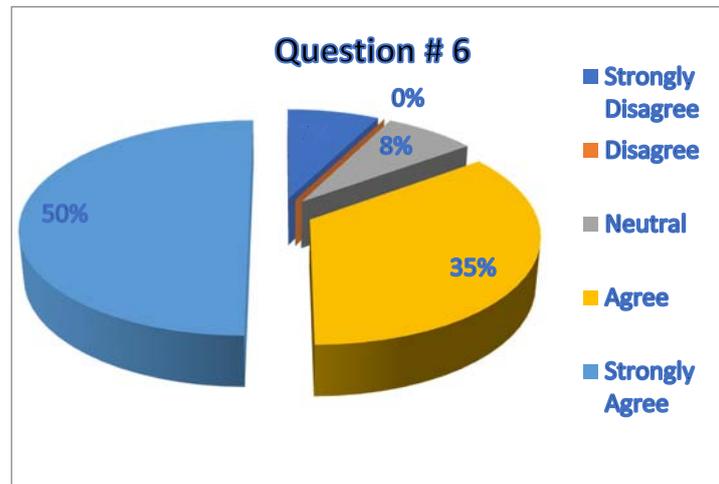


Figure 31. Frequency of Perception that Institution has documented vision and mission statement that are articulated across the organization.

Figure 31 shows that 50% “Strongly Agree”; 35% “Agree”; 8% “Moderately Agree”, 0% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has documented vision and mission statement that are articulated across the organization.

Table 8. Mean Response if Institution has documented vision and mission statement that are articulated across the organization

PARTICULARS	RESPONSE		
<p><b>6. Documented vision and mission statement that are articulated across the organization</b></p>	4.2	AGREE	<p>This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.</p>

Table 8 shows a mean response of 4.2 denoting that respondents “Agree” with the statement that the institution has documented vision and mission statement that are articulated across the organization.

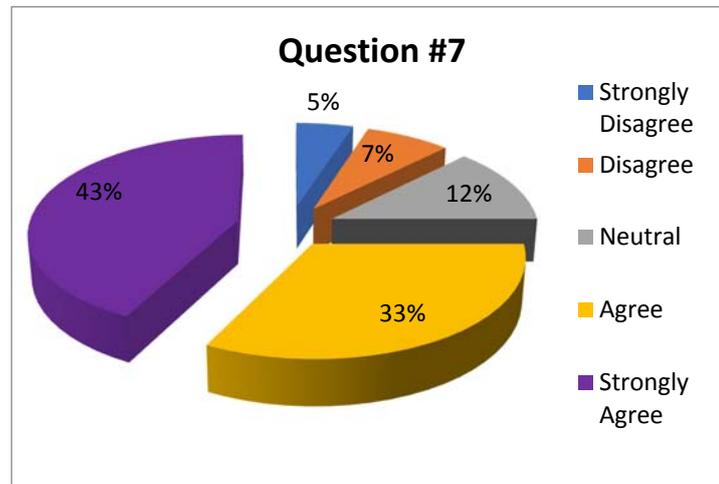


Figure 32. Frequency of perception that Institution has measurable goals and objectives set.

Figure 32 shows that 43% “Strongly Agree”; 33% “Agree”; 12% “Moderately Agree”, 7% “Disagree” and 5% of respondents “Strongly Disagree” with the statement that the institution has measurable goals and objectives set.

Table 9. Mean Response if Institution has measurable goals and objectives set

PARTICULARS	RESPONSE		
7. Measurable goals and objectives set	4.0	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 9 shows a mean response of 4.0 denoting that respondents “Agree” with the statement that the institution has measurable goals and objectives set.

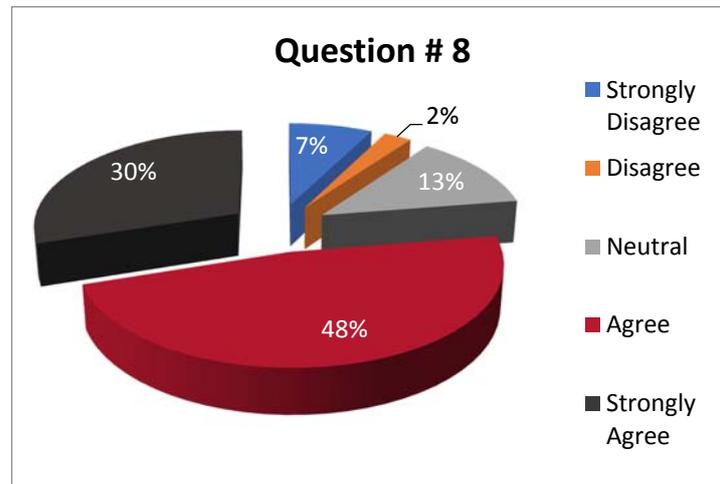


Figure 33. Frequency of Perception that Institution has mapped out strategic plans.

Figure 33 shows that 30% “Strongly Agree”; 48% “Agree”; 13% “Moderately Agree”, 2% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has mapped out strategic plans.

Table 10. Mean Response if Institution has mapped out strategic plans

PARTICULARS	RESPONSE		
	Plot Area		
<b>8. Mapped out strategic plans</b>	3.90	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 10 shows a mean response of 3.9 denoting that respondents “Agree” with the statement that the institution has mapped out strategic plans.

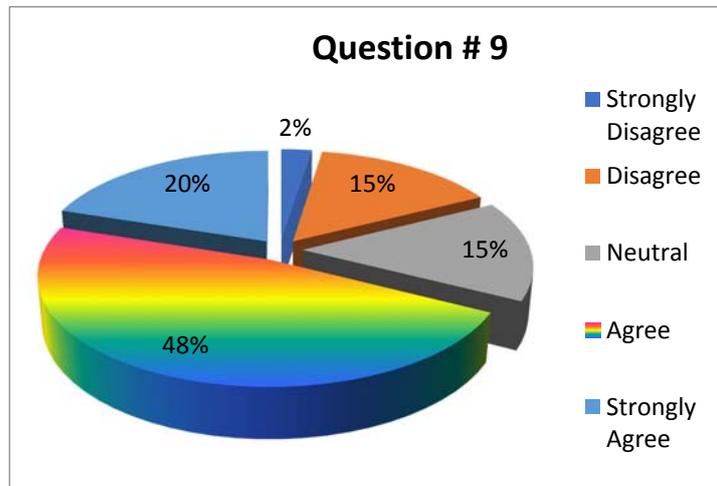


Figure 34. Frequency of Perception that Institution has proper mechanism to recruit and retain qualified employees.

Figure 34 shows that 20% “Strongly Agree”; 48% “Agree”; 15% “Moderately Agree”, 15% “Disagree” and 2% of respondents “Strongly Disagree” with the statement that the institution has proper mechanisms to recruit and retain qualified employees.

Table 11. Mean Response if Institution has proper mechanisms to recruit and retain qualified employees

PARTICULARS	RESPONSE		
<b>9. Proper mechanisms to recruit and retain qualified employees</b>	3.675	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 11 shows a mean response of 3.675 denoting that respondents “Agree” with the statement that the Institution has proper mechanism to recruit and retain qualified employees.

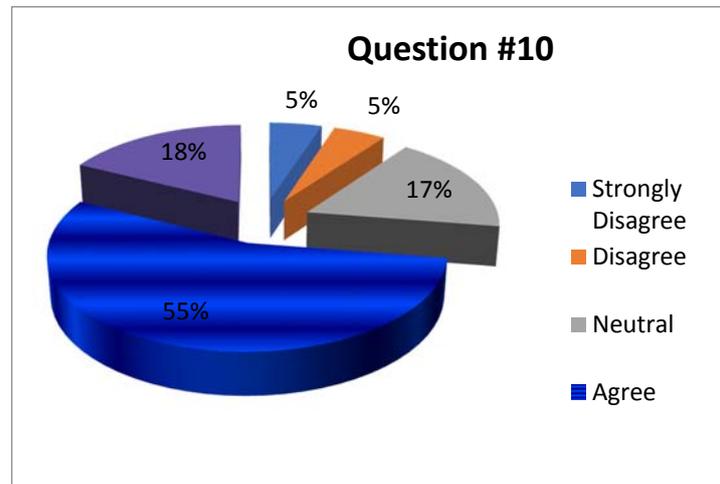


Figure 35. Frequency of Perception that Institution has personnel morale and welfare development plan.

Figure 35 shows that 18% “Strongly Agree”; 55% “Agree”; 17% “Moderately Agree”, 5% “Disagree” and 5% of respondents “Strongly Disagree” with the statement that the institution has personnel morale and welfare development plan.

Table 12. Mean Response if Institution has personnel morale and welfare development plan

PARTICULARS	RESPONSE		
<b>10. Personnel morale and welfare development program</b>	3.75	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 12 shows a mean response of 3.75 denoting that respondents “Agree” with the statement that the institution has personnel morale and welfare development plan.

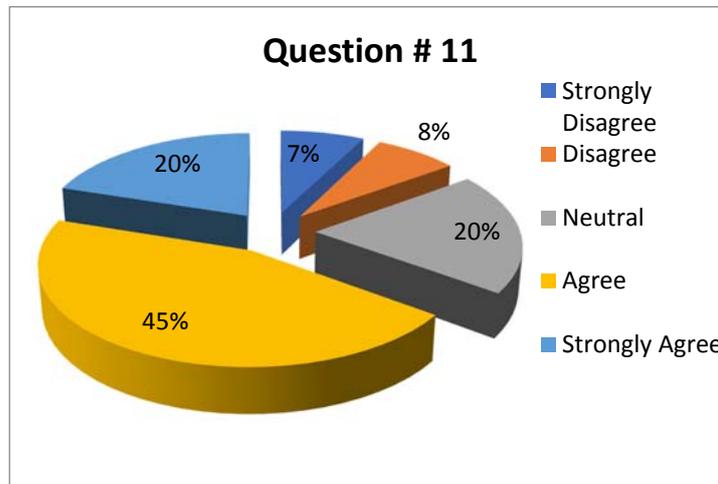


Figure 36. Frequency of Perception that Institution has a formal staff development program.

Figure 36 shows that 20% “Strongly Agree”; 45% “Agree”; 20% “Moderately Agree”, 8% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has a formal staff development program.

Table 13. Mean Response if Institution has formal staff development program

PARTICULARS	RESPONSE		
<b><i>11. Has a formal staff development program</i></b>	3.625	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 13 shows a mean response of 3.625 denoting that respondents “Agree” with the statement that the institution has a formal staff development program.

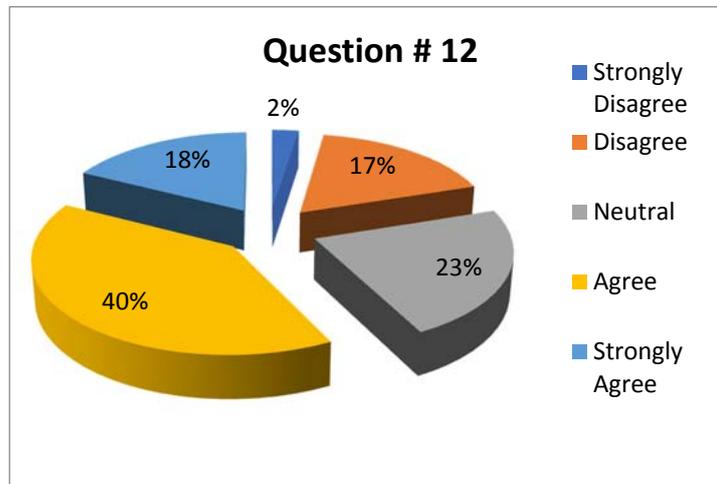


Figure 37. Frequency of Perception that Institution has interpersonal and communication skills training for its employees.

Figure 37 shows that 18% “Strongly Agree”; 40% “Agree”; 23% “Moderately Agree”, 17% “Disagree” and 2% of respondents “Strongly Disagree” with the statement that the Institution has interpersonal and communication skills training for it employees.

Table 14. Mean Response if Institution has interpersonal and communication skills training for its employees

PARTICULARS	RESPONSE		
<b>12. Interpersonal and communication skills training for its employees</b>	3.525	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 14 shows a mean response of 3.525 denoting that respondents “Agree” with the statement that the institution has interpersonal and communication skills training for its employees.

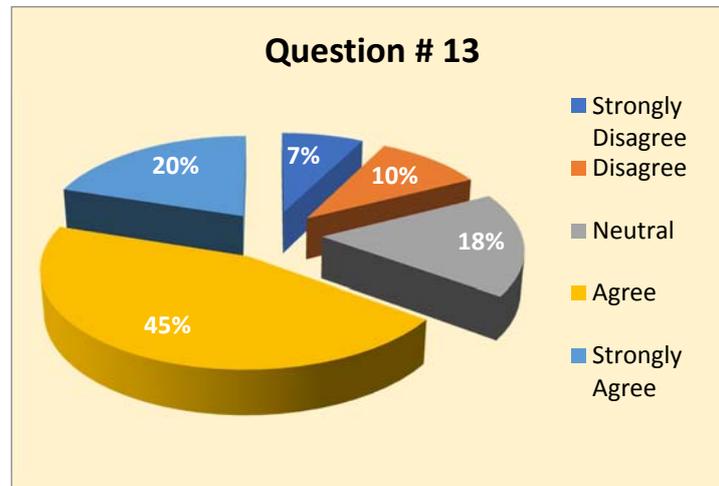


Figure 38. Frequency of Perception that Institution has a program for enhancing team building skills.

Figure 38 shows that 20% “Strongly Agree”; 45% “Agree”; 18% “Moderately Agree”, 10% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has a program for enhancing team building skills.

Table 15. Mean Response if Institution has a program for team-building skills

PARTICULARS	RESPONSE		
<i>13. Program for enhancing team-building skills</i>	3.60	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 15 shows a mean response of 3.60 denoting that respondents “Agree” with the statement that the institution has program for enhancing team-building skills.

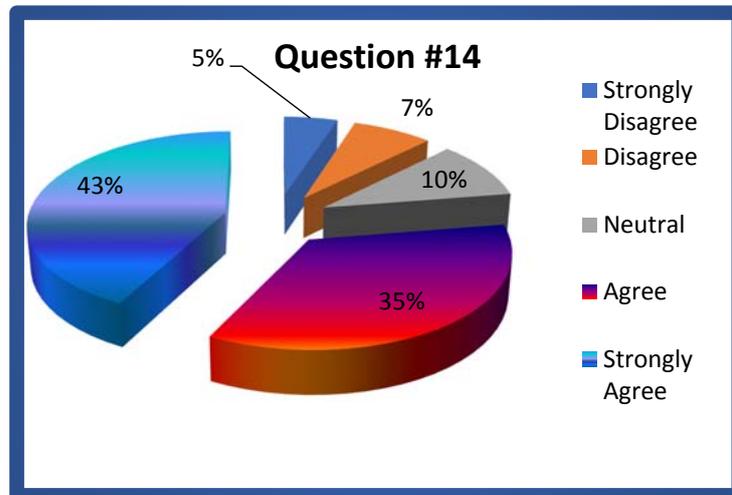


Figure 39. Frequency of Perception that Institution has Quality Management System.

Figure 39 shows that 43% “Strongly Agree”; 35% “Agree”; 10% “Moderately Agree”, 7% “Disagree” and 5% of respondents “strongly disagree” with the statement that the institution has a quality management system.

Table 16. Mean Response if Institution has a Quality Management System

PARTICULARS	RESPONSE		
	<b>14. Quality management system</b>	4.025	AGREE

Table 16 shows a mean response of 4.025 denoting that respondents “Agree” with the statement that the institution has a quality management system.

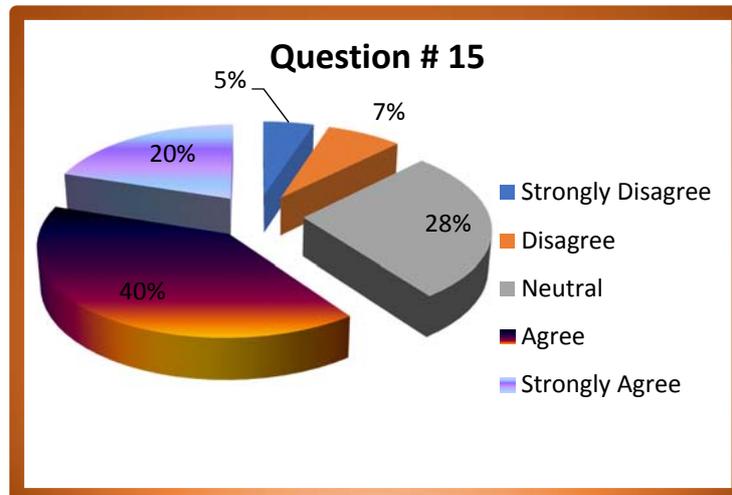


Figure 40. Frequency of Perception that Institution has a knowledge management system.

Figure 40 shows that 20% “Strongly Agree”; 40% “Agree”; 28% “Moderately Agree”, 7% “Disagree” and 5% of respondents “Strongly Disagree” with the statement that the institution has a system for storage of the knowledge and expertise gained from employees.

Table 17. Mean Response if Institution has a Knowledge Management System

PARTICULARS	RESPONSE		
<i>15. A system for storage of the knowledge and expertise gained from the employees</i>	3.625	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 17 shows a mean response of 3.625 denoting that respondents “Agree” with the statement that the institution has a system for storage of the knowledge and expertise gained from the employees.

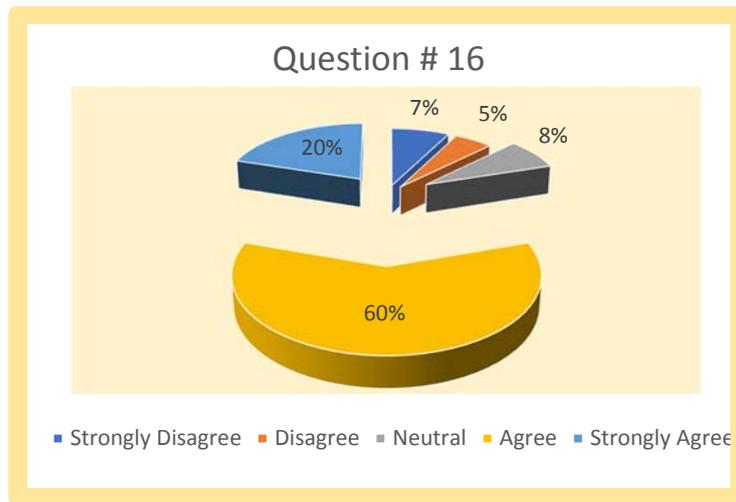


Figure 41. Frequency of Perception that Institution has Information processing system.

Figure 41 shows that 20% “Strongly Agree”; 60% “Agree”; 8% “Moderately Agree”, 5% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has information processing systems for performance monitoring and improvement.

Table 18. Mean Response if Institution has an information processing system

PARTICULARS	RESPONSE		
<b>16. Information processing systems for performance monitoring and improvement</b>	3.80	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 18 shows a mean response of 3.80 denoting that respondents “Agree” with the statement that the institution has information processing systems for performance monitoring and improvements.

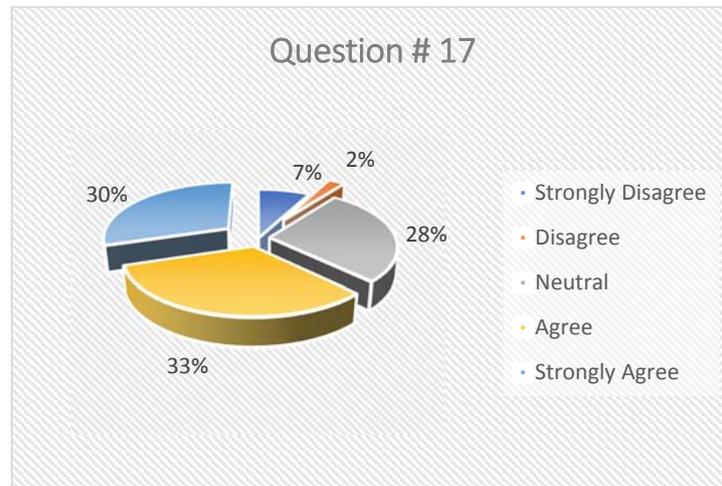


Figure 42. Frequency of Perception that Institution has top management who facilitates heightened employee involvement.

Figure 42 shows that 30% “Strongly Agree”; 33% “Agree”; 28% “Moderately Agree”, 2% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has top management who facilitates heightened employee involvement.

Table 19. Mean Response if Institution has top management who facilitates heightened employee involvement

PARTICULARS	RESPONSE		
<b>17. Top management/leader who facilitates heightened employee involvement</b>	3.75	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 19 shows a mean response of 3.75 denoting that respondents “Agree” with the statement that the institution has top management who facilitates heightened employee involvement.

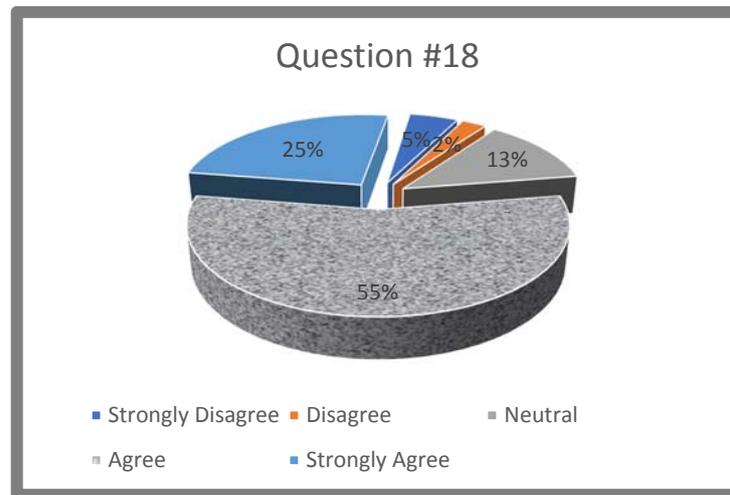


Figure 43. Frequency of Perception that Institution has corporate values focused on social responsibility and ethics.

Figure 43 shows that 25% “Strongly Agree”; 55% “Agree”; 13% “Moderately Agree”, 2% “Disagree” and 5% of respondents “Strongly Disagree” with the statement that the institution has corporate values focused on social responsibility and ethics.

Table 20. Mean Response if Institution has corporate values focused on social responsibility and ethics

PARTICULARS	RESPONSE		
<b>18. Corporate values focused on social responsibility and ethics</b>	3.925	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 20 shows a mean response of 3.925 denoting that respondents “Agree” with the statement that the institution has corporate values focused on social responsibility and ethics.

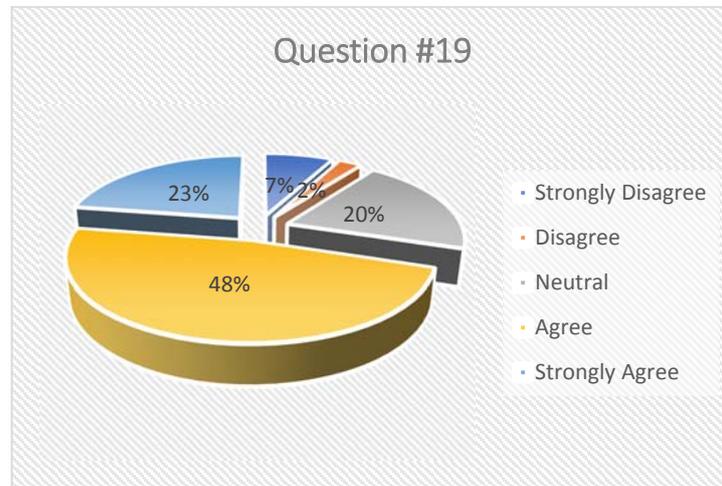


Figure 44. Frequency of Perception that Institution has interest and cooperation from all levels of management.

Figure 44 shows that 23% “Strongly Agree”; 48% “Agree”; 20% “Moderately Agree”, 2% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has interest and cooperation from all levels of management to support the overall goals of the institution.

Table 21. Mean Response if Institution has interest and cooperation from all levels of management

PARTICULARS	RESPONSE		
<p><b><i>19. Interest and cooperation from all levels of management to support the overall goals of the institution</i></b></p>	3.75	AGREE	<p>This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.</p>

Table 21 shows a mean response of 3.75 denoting that respondents “Agree” with the statement that the institution has interest and cooperation from all levels of management to support the overall goals of the institution.

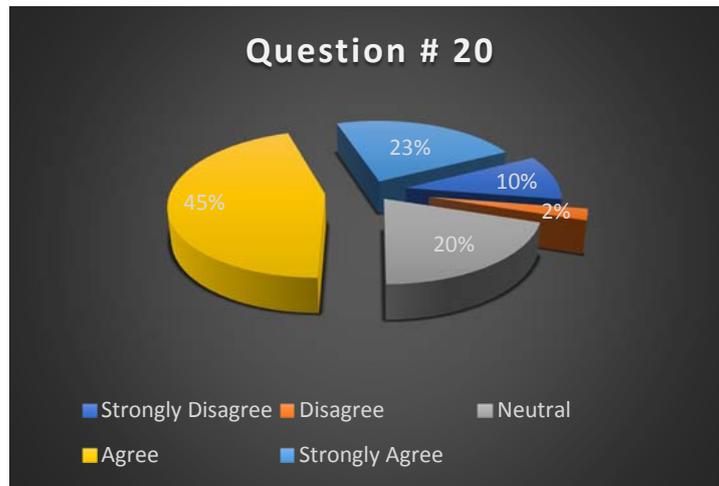


Figure 45. Frequency of Perception that Institution has customer satisfaction index/service rating analysis.

Figure 45 shows that 23% “Strongly Agree”; 45% “Agree”; 20% “Moderately Agree”, 2% “Disagree” and 10% of respondents “Strongly Disagree” with the statement that the institution has customer satisfaction index/service rating analysis.

Table 22. Mean Response if Institution has customer satisfaction index/service rating analysis

PARTICULARS	RESPONSE		
<b>20. Customer satisfaction index/service rating analysis</b>	3.675	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 22 shows a mean response of 3.675 denoting that respondents “Agree” with the statement that the institution has customer satisfaction index/service rating analysis.

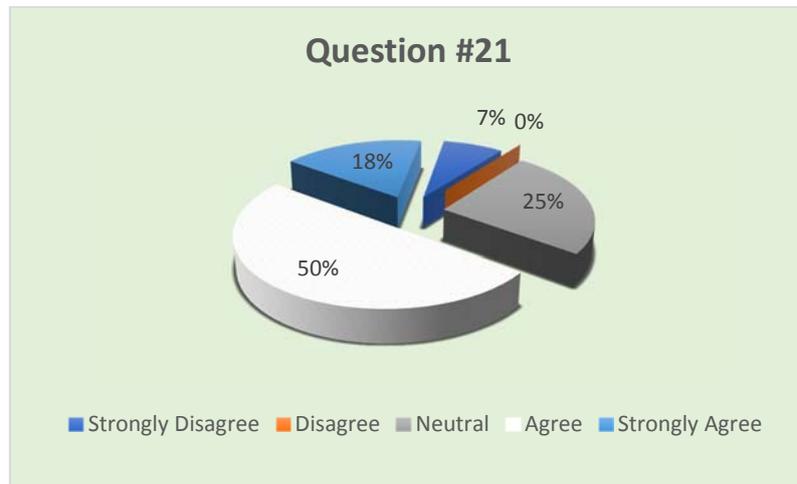


Figure 46. Frequency of Perception that Institution has benchmarking procedures.

Figure 46 shows that 18% “Strongly Agree”; 50% “Agree”; 25% “Moderately Agree”, 0% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has benchmarking procedures or techniques employed to compare performance against standards/best practices.

Table 23. Mean Response if Institution has benchmarking procedures

PARTICULARS	RESPONSE		
<p><b>21. Benchmarking procedures or techniques employed to compare performance against standards/best practices</b></p>	3.70	AGREE	<p>This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.</p>

Table 23 shows a mean response of 3.70 denoting that respondents “Agree” with the statement that the institution has benchmarking procedure or techniques employed to compare performance against standards/best practices.

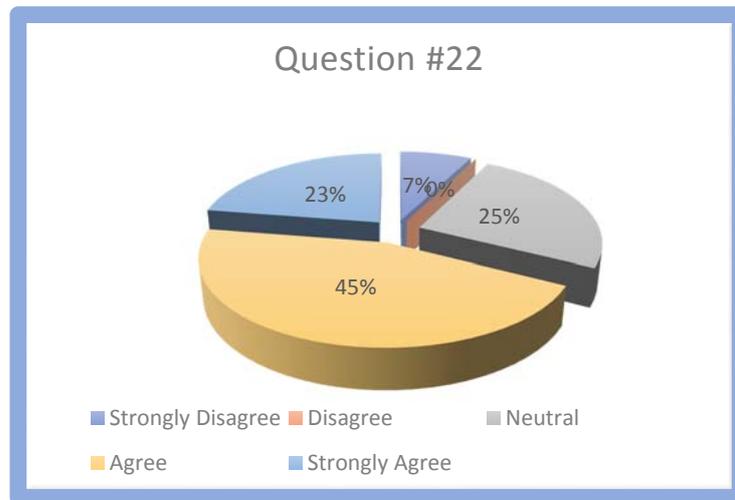


Figure 47. Frequency of Perception that Institution has mechanisms or measures to check its financial performance.

Figure 47 shows that 23% “Strongly Agree”; 45% “Agree”; 25% “Moderately Agree”, 0% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has mechanisms or measures to check its financial performance.

Table 24. Mean Response if Institution has mechanism or measures to check its financial performance

PARTICULARS	RESPONSE		
<b>22. Mechanisms or measures to check its financial performance</b>	3.75	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 24 shows a mean response of 3.75 denoting that respondents “Agree” with the statement that the institution has mechanisms or measures to check its financial performance.

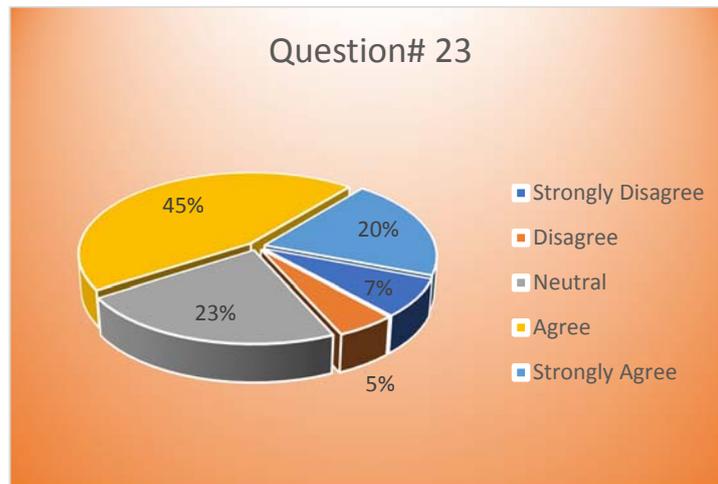


Figure 48. Frequency of Perception that Institution has a tool to check its internal process effectiveness by using performance-based targets.

Figure 48 shows that 20% “Strongly Agree”; 45% “Agree”; 23% “Moderately Agree”, 5% “Disagree” and 7% of respondents “Strongly Disagree” with the statement that the institution has a tool to check its internal process effectiveness by using performance-based targets.

Table 25. Mean Response If Institution has a tool to check its internal process effectiveness by using performance-based targets

PARTICULARS	RESPONSE		
<p><b>23. A tool to check its internal process effectiveness by using performance-based targets</b></p>	3.65	AGREE	<p>This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.</p>

Table 25 shows a mean response of 3.65 denoting that respondents “Agree” with the statement that the institution has a tool to check its internal process effectiveness by using performance-based targets.

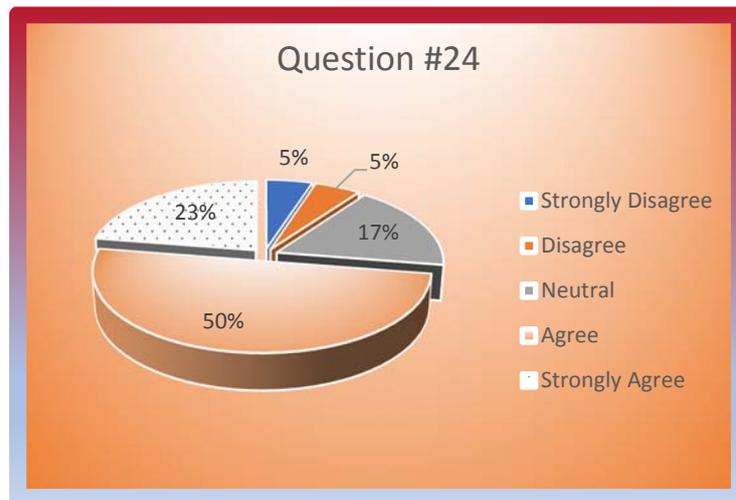


Figure 49. Frequency of Perception that Institution has initiatives to identify critical technologies needed.

Figure 49 shows that 23% “Strongly Agree”; 50% “Agree”; 17% “Moderately Agree”, 5% “Disagree” and 5% of respondents “Strongly Disagree” with the statement that the institution has initiatives to identify critical technologies needed.

Table 26. Mean Response If Institution has initiatives to identify critical technologies needed

PARTICULARS	RESPONSE		
<b>24. Initiatives to identify critical technologies needed</b>	3.80	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 26 shows a mean response of 3.80 denoting that respondents “Agree” with the statement that the institution has initiatives to identify critical technologies needed.

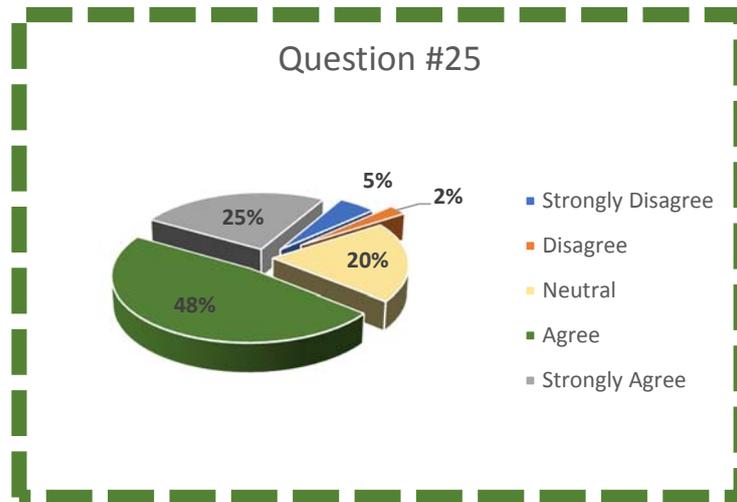


Figure 50. Frequency of Perception that Institution has a learning and development culture.

Figure 50 shows that 25% “Strongly Agree”; 48% “Agree”; 20% “Moderately Agree”, 2% “Disagree” and 5% of respondents “strongly disagree” with the statement that the institution has a learning and development culture.

Table 27. Mean Response If Institution has a learning and development culture

PARTICULARS	RESPONSE		
<b>25. A learning and development culture</b>	3.85	AGREE	This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.

Table 27 shows a mean response of 3.85 denoting that respondents “Agree” with the statement that the institution has a learning and development culture.

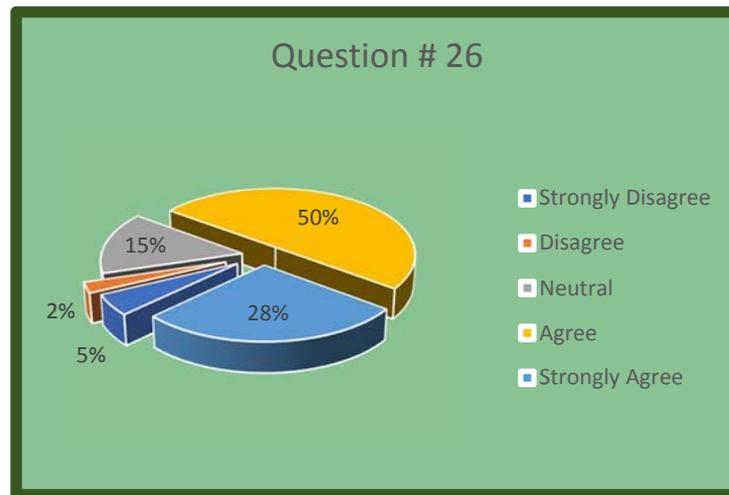


Figure 51. Frequency of Perception that Institution is a good model of an educational institution.

Figure 51 shows that 28% “Strongly Agree”; 50% “Agree”; 15% “Moderately Agree”, 2% “Disagree” and 5% of respondents “Strongly Disagree” with the statement that the institution is a good model of an educational institution.

Table 28. Mean Response If Institution is a good model of an educational institution

PARTICULARS	RESPONSE		
<p><b>26. I think that my institution is a good model of an educational institution</b></p>	3.925	AGREE	<p>This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.</p>

Table 28 shows a mean response of 3.925 denoting that respondents “Agree” with the statement that institution is a good model of an educational institution.

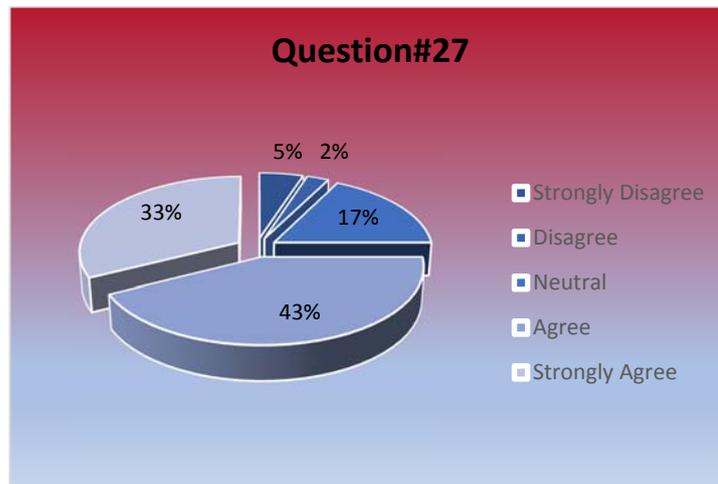


Figure 52. Frequency of Response that if a new education institution is being set up, they believe their institution will be good model to follow.

Figure 52 shows that 33% “Strongly Agree”; 43% “Agree”; 17% “Moderately Agree”, 2% “Disagree” and 5% of respondents “Strongly Disagree” with the statement that if a new education institution is set up, they believe that their institution will be a model/example to follow.

Table 29. Mean Response If a new education institution is set up, they believe that their institution will be a model/example to follow

PARTICULARS	RESPONSE		
<p><b><i>27. If a new educational institution is being set up, I believe my institution will be a good model/example for it to follow</i></b></p>	3.95	AGREE	<p>This indicates that the current condition described in the item is satisfying and that the practice is perceived as effective.</p>

Table 29 shows a mean response of 3.95 denoting that respondents “Agree” that if a new education institution is set up, they believe that their institution will be a model/example to follow.

To further substantiate the significant aspects of the start-up of the institution, the elements of a growing institution and the perception of the respondent of a model institution were correlated as depicted in Table 30.

Table 30. *Correlation between variables/elements of growing institution and perception of a start-up model institution*

	QUESTIONS	VARIABLES/ ELEMENTS	CORRELATION WITH Q.27 <i>[If a new educational institution is being set up, I believe my institution will be a good model/example for it to follow]</i>
Q.1	The institution I work for has... [1. an organizational structure that is optimum for our operations]	Structure	0.83
Q.2	The institution I work for has... [2. a structure that works for our operations]	Structure	0.45
Q.3	The institution I work for has... [3. clear reporting lines]	Structure	0.72
Q.4	The institution I work for has... [4. clear-cut responsibilities and authority for all personnel]	Structure	0.78
Q.5	The institution I work for has... [5. no silos (information is shared across all departments)]	Structure	0.65
Q.6	The institution I work for has... [6. documented vision and mission statement that are articulated across the organization]	Strategy	0.79
Q.7	The institution I work for has... [7. measurable goals and objectives set]	Strategy	0.69
Q.8	The institution I work for has... [8. mapped out strategic plans]	Strategy	0.76
Q.9	The institution I work for has... [9. proper mechanisms to recruit and retain qualified employees]	Staff	0.69

Q.10	The institution I work for has... [10. personnel morale and welfare development program]	Staff	0.69
Q.11	The institution I work for has... [11. has a formal staff development program]	Staff	0.64
Q.12	The institution I work for has... [12. interpersonal and communication skills training for its employees]	Skills	0.47
Q.13	The institution I work for has... [13. program for enhancing team-building skills]	Skills	0.61
Q.14	The institution I work for has... [14. quality management system]	System	0.67
Q.15	The institution I work for has... [15. a system for storage of the knowledge and expertise gained from the employees]	System	0.66
Q.16	The institution I work for has... [16. information processing systems for performance monitoring and improvement]	System	0.71
Q.17	The institution I work for has... [17. top management/leader who facilitates heightened employee involvement]	Style	0.83
Q.18	The institution I work for has... [18. corporate values focused on social responsibility and ethics]	Shared Beliefs	0.73
Q.19	The institution I work for has... [19. interest and cooperation from all levels of management to support the overall goals of the institution]	Shared Beliefs	0.74
Q.20	The institution I work for has... [20. customer satisfaction index/service rating analysis]	Customer Perspective	0.69
Q.21	The institution I work for has... [21. benchmarking procedures or techniques employed to compare performance against standards/best practices]	Customer Perspective	0.84
Q.22	The institution I work for has... [22. mechanisms or measures to check its financial performance]	Financial Perspective	0.74

Q.23	The institution I work for has... [23. a tool to check its internal process effectiveness by using performance-based targets]	Internal Business Process Perspective	0.79
Q.24	The institution I work for has... [24. initiatives to identify critical technologies needed]	Internal Business Process Perspective	0.79
Q.25	The institution I work for has... [25. a learning and development culture]	Learning and Growth Perspective	0.81

It can be gathered from Table 30 that all the elements form part of the factors needful of consideration in the start-up of an educational organization. There are prominent variables that emerged according to the perception of the respondents highlighting the variables in Q21, Q17, Q1, Q25, Q23, Q24 and Q6. These had correlations of 0.79 and above. They are shown in Table 31.

Table 31. *Major variables associated to start-up model institution*

QUESTIONS	Variables/elements	Correlation Coefficient
The institution I work for has...		<i>[If a new educational institution is being set up, I believe my institution will be a good model/example for it to follow]</i>
[21. benchmarking procedures or techniques employed to compare performance against standards/best practices]	Customer Perspective	0.84
[17. top management/leader who facilitates heightened employee involvement]	Style	0.83
[1. an organizational structure that is optimum for our operations]	Structure	0.83
[25. a learning and development culture]	Learning and Growth	0.81

[23. a tool to check its internal process effectiveness by using performance-based targets]	Internal Business Process Perspective	0.79
[24. initiatives to identify critical technologies needed]	Internal Business Process Perspective	0.79
[6. documented vision and mission statement that are articulated across the organization]	Strategy	0.79

In Table 31 the variables show the significance of customers perspective, style of leadership, the structure of the organization, learning & growth perspective and strategy. All these factors correlate highly with the perception of the respondents that if a new educational institution is being set up, their institution would be a good model/example to follow.

Moreover, in section D, the 27 questions relate to the variables adopted and anchored on the McKinsey's 7S and Balanced Scorecard- models, which can be used in the assessment of the design, development and performance of the organization. These are termed themed variables. In Table 32 , the following questions were grouped and are deemed to measure the related perception of the indicated variable.

Table 32. *Questions grouped according to themed variables*

<b>Question (Q)</b>	<b>Variables</b>
Q 1-5	Structure
Q 6-8	Strategy
Q 9-11	Staff
Q 12-13	Skills
Q 14-16	System
Q 17	Style
Q 18-19	Shared Beliefs
Q 20-21	Balanced Scorecard- Customer Perspective
Q 22	Balanced Scorecard- Financial Perspective
Q 23-24	Balanced Scorecard-Internal Business Process Perspective
Q 25	Balanced Scorecard- Learning and Growth Perspective

The following correlation results relate to the themed variables as indicated in Table 33.

Table 33. *Themed variables in correlation to the perception of Start-up model institution*

<b>VARIABLES</b>	<b>CORRELATION WITH THE PERCEPTION OF A START-UP MODEL</b>
STRUCTURE	0.83
STRATEGY	0.80
STAFF	0.74
SKILLS	0.57
SYSTEM	0.73
STYLE	0.83
SHARED BELIEFS	0.77
CUSTOMER PERSPECTIVE	0.80
FINANCIAL PERSPECTIVE	0.74
INTERNAL BUSINESS PROCESS PERSPECTIVE	0.85
LEARNING AND GROWTH PERSPECTIVE	0.81

From these results it can be seen that, though all the different themes/elements/variables are considered necessary in the start-up of an organization, the “internal business process” element - with 0.85 correlation coefficient - is of paramount importance and correlates significantly with a suitable model in the start-up of a new institution. “Style” and “structure” come second with 0.83, followed by “learning and growth” elements with 0.81 and “strategy” and “customer perspective” elements coming in a notch lower with 0.80.

#### **4.2.5 Advantages, areas to improve and best practices of current organizational set-up**

Also included in Section D were other questions - Q28, Q29 and Q30 - that promoted open responses, particularly Q28 on *advantages of their current organizational structure and systems*, Q29 on *areas to improve in their current organizational structure and systems* and Q30 on *the best organizational practice of the organization*.

These results are collated in Table 34 showing 40 responses in SWOT Analysis format.

Table 34. *SWOT Analysis of Responses*

	<b>Positive factors</b>	<b>Negative factors</b>
	<b>Strengths</b>	<b>Weaknesses</b>

<p><b>Internal factors</b></p>	<ul style="list-style-type: none"> <li>• Clear structure and commitment to raise accountability of each unit.</li> <li>• Well defined goals and quick decision making</li> <li>• strong commitment of top management</li> <li>• Rationality</li> <li>• Well defined individual roles in our organizational structure</li> <li>• Open and easy access to top management</li> <li>• Administrators are empowered to make decisions.</li> <li>• Focus on cadets' total development</li> <li>• Concrete curriculum</li> <li>• Clear goals and organizational culture</li> <li>• Functional and effective</li> <li>• Knowledge and skills aligned with their tasks and duties.</li> <li>• Functional quality management system certified under ISO 9001:2015.</li> <li>• Satisfy the customer</li> <li>• Clear Reporting Lines</li> <li>• Lecturers are not burdened with compliance issues,</li> <li>• Offers a high level of specialization</li> <li>• Employees are highly motivated</li> <li>• strong commitment</li> <li>• transparent and quality service</li> <li>• Strong industry linkages</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of technological advancements</li> <li>• Lack of professor level and number</li> <li>• Lack of system for assessment and appraisal, promotion</li> <li>• Poor teaching methods</li> <li>• More flat organization and interactions</li> <li>• Lack of awareness of the different type of task</li> <li>• unclear in different positions</li> <li>• Lack of knowledge management, curriculum design and development</li> <li>• Middle manager development</li> <li>• Weak in leadership, unfamiliar with that high degree of practical education</li> <li>• No knowledge of sharing system</li> <li>• Lack of IT experts to cope up with the fast advancement in technologies</li> <li>• Overlapping of authority and responsibility</li> <li>• Lack of interactions/communications between divisions/departments to improve mission effectiveness</li> <li>• Lack of training implemented and courses developed to</li> </ul>
--------------------------------	---	--

		<p>correspond with department strategic plan</p> <ul style="list-style-type: none"> <li>• Slow reaction in response to environmental changes</li> <li>• Narrow viewpoint and lack of overall perspective.</li> </ul>
	<b>Positive factors</b>	<b>Negative factors</b>
	<b>Opportunities</b>	<b>Threat</b>
<b>External factors</b>	<ul style="list-style-type: none"> <li>• There is always a room of improvement</li> <li>• Employees are possible to become experts</li> <li>• Staff working skills can be effectively improved</li> <li>• Could enhance work efficiency and productivity due to the specialized skills and technology.</li> <li>• Leads to high quality technical problem-solving.</li> <li>• Grow new professor from graduates / Continuous development of the staff</li> <li>• Professional development opportunities</li> <li>• Quality Management System</li> <li>• Could extend to different cities and provinces</li> </ul>	<ul style="list-style-type: none"> <li>• Culture</li> <li>• Varying domain</li> <li>• Private, for-profit, and on-line universities</li> <li>• growing competition</li> <li>• Extensive impact of technology</li> <li>• Loss of qualified staff to other schools</li> <li>• National directives / new law</li> <li>• Retention of key staff critical</li> </ul>

Table 34 shows the SWOT analyses of responses on the advantages, areas to improve and best organizational practice of the respondents' organizations. Enumerated herein

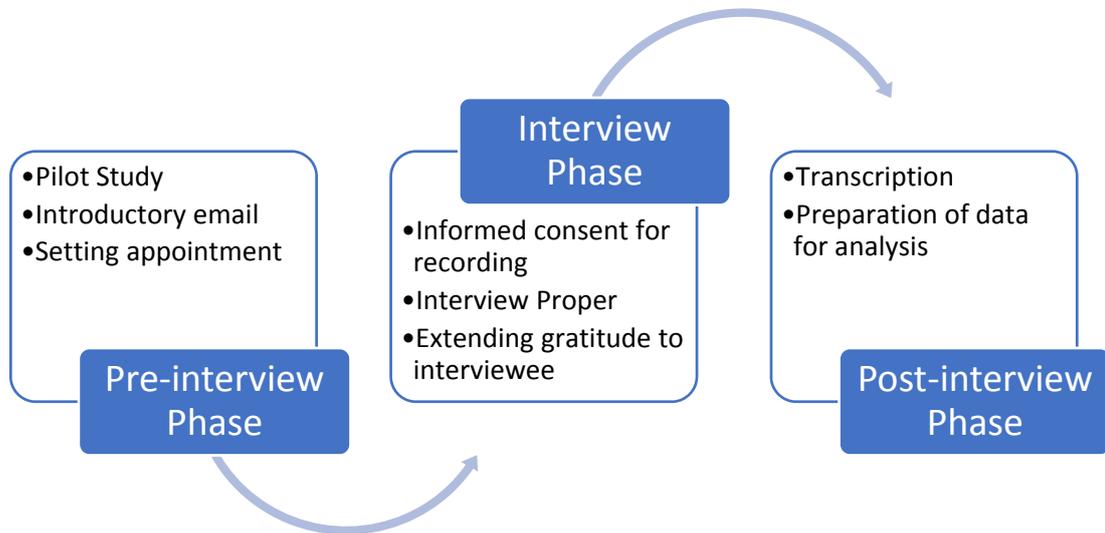
the top 14 responses indicating the start-up elements and influencing factors as categorized in the OPA model:

Influencing variables/elements/theme	Major Factors
<b>1. Structure.</b> - A structure with defined roles and clear lines of authority, responsibility and accountability.	Organizational Capacity
<b>2. Programme management.</b> A concrete curriculum design and development process with specified learning outcomes.	Organizational Capacity
<b>3. System.</b> Quality management system (QMS), knowledge management system (KMS) and information communication system (ICS).	Organizational Capacity
<b>4. Internal business process perspective.</b> Monitoring and feedback on problem and performance including proper mechanisms of recruiting applicants that match the education philosophy of the institution. It is in the best interest of the institution to satisfy the customers or the stakeholders through possessing and projecting the image of quality education.	Organizational Capacity
<b>5. Shared Beliefs.</b> The institution is at its best if values are shared across the organization for the achievement of its mission.	Organizational Motivation
<b>6. Staff.</b> It is an excellent practice to have robust recruitment, retention, motivation and professional development policies.	Organizational Capacity
<b>7. Learning and growth.</b> The strong commitment of top management to the development of organizational learning and growth systems to cope with the needs of the industry and adapt to the ever-changing maritime environment without prejudice to the best practices and values	Organizational Motivation
<b>8. Strategy.</b> The need for clear direction articulated in a well-defined mission, vision and goals.	Organizational Motivation

<b>9. Style.</b> This factor is highly important to employees as they look up to the top management's leadership style, commitment, rationality and decision making.	Organizational Capacity
<b>10. Skills.</b> The institution should have a program to develop and equip its staff with knowledge and skills.	Organizational Capacity
<b>11. Resources-Equipment.</b> The need to invest in MET equipment	Organizational Capacity
<b>12. Resources-Capital.</b> The need to augment capital for all MET requirements	Organizational Capacity
<b>13. National context.</b> Directives/laws and strong industry linkages be they domestic or international should be highly considered.	External Environment
<b>14. History.</b> Age, reputation, stability, knowledge, and organizational memory as influencing factors for the institution's growth	Organizational Motivation

#### 4.3 Data Presentation and Analyses: Interview

Six experts who have a vast knowledge of the topic were interviewed utilizing the semi-structured interviews with open-ended questions. Though face-to-face interviewing is effective, the researcher opted to have Skype and phone interviews instead because of limitations of geographical proximity. The researcher then manually transcribed and analyzed the data. The sequence followed by the researcher in the conduct of the interview, as illustrated in Figure 53.



*Figure 53. Sequence of Interview*

The following are the profiles of the respondents:

- Educator, Curriculum Developer (R1): United Kingdom
- Full Professor (R2): United States
- Educator (R3): United States
- Head, International Training Division (R4): United States
- Maritime Educator (R5): Philippines
- Chief, International Education and Training (R6): Japan

The interview raised a number of issues and questions and elicited significant responses:

#### **4.3.1 Areas of concern relevant in the start-up of a maritime-related educational institution**

Foremost, national context should be considered, not only the best practices of foreign MET institutions (R1, R3, R5). Respondents stressed the importance of the relevance of the start-up of the organization its contribution to the society and economic development of the country. The purpose of setting up the Academy, its legal basis, mandate and educational philosophy should be well-defined and construed in a national context.

Funding has always been the biggest challenge but sustainability of funding would be the most critical aspect, particularly securing and maintaining adequate funding levels and other resources (R1, R2, R4).

Unanimously the respondents hinted that in the start-up process, determining the programme is critical. Cognizance must also be taken of equipment and facilities needed to have the capacity for growth. Moreover, the attraction and development of diverse and suitably qualified faculty and staff via a faculty development plan is important. Further, there is the need to have a rigorous student admission system.

As regards to programme management, the respondents suggested starting programmes gradually and having a strategy rather than doing everything at the same time (R1, R3, R5). For instance, start with OOW Deck and Engine and gradually grow the offer (R1). Others suggest beginning with maritime-related courses (R5) and then developing programmes that came out of training need analyses focusing on outcome-based education (R3). There was also a recommendation to develop relationships with employers/stakeholders and industry for sea time and relevance of the programme as one of the respondents believed that “Coast Guard shipboard training should level up with the enterprise” (R5).

For the system of the institution, respondents affirmed that it is not bad to have QMS but the quality standard system will suffice and it needs accreditation from national standards. Moreover, infrastructure for knowledge management and a system for

information communication should be established and enhanced. As one of the respondents quipped, “start the systems right.”

Some respondents highlight the importance of shared values. There is an indication that the commitment of the government and organization for quality and excellence will form part of the success of the start-up. (R3, R4)

#### **4.3.2 Curriculum design and development process**

All of the respondents opined that in designing the curriculum, there is the need to make reference to national educational standards and – in the case of maritime-related courses - to the STCW Convention. It is also proposed by the respondents to develop a quality assurance process that will regulate curriculum development and embed monitoring tools.

Some interviewees indicated that to ensure that the proposed curriculum is responsive to the needs of the industry, one of the stages in curriculum design could be consultation with stakeholders, employers and industry partners. Alternatively, the institution can invite industry representatives and stakeholders to the academic panel that will be approving the curriculum.

There were also indications that there are always numerous issues with designing curricula from assessment strategy and design, and syllabus and resources, to a lack of understanding of the maritime context among educational bodies. Those challenges are inevitable. To overcome them it is necessary to establish a good rapport with stakeholders, particularly those who will be directly involved in the any panels set up to develop curricula. They should be consulted and engaged in discussion with sufficient time between development stages to allow time for addressing issues (R1, R5).

There was a consensus that curriculum development should address the needs of the maritime industry as well as provide suitable options based on national development, student interest and career development.

For engineering programmes, a good place to look at ABET accreditation requirements (R2, R5). All the respondents indicated that a review of the curriculum and structure of other international maritime institutions would also be useful to establish some form of baseline.

It was further posited that some of these challenges could be addressed by reaching out to or partnering with other institutions both nationally and internationally and consulting with curriculum development experts at Philippine universities.

#### **4.3.3 Decision-making process**

A respondent implied that the strategy of the institution will be headed by its top-level management while financial matters, operation and implementation will be handled by the head of departments and curriculum-related questions will be taken over by the curriculum managers for a specific department (R1).

There should be a mix of Coastguard and civilian faculty and staff. The structure should be similar to a typical college or university with a “President” and “Provost.” One of these positions should be held by a civilian. There should also be department heads of each programme. The department heads should have the autonomy to make decisions related to their specific programme, but the overall authority should be the College President (R2, R3, R4, R5, R6).

#### **4.3.4 Criteria for measuring organizational performance**

Respondents pointed out that there are numerous tools to measure performance: national student survey, module evaluation surveys, induction survey, and staff survey.

Moreover, there are external quality audits from educational and maritime governing bodies. Student attendance, retention and success data to analyze performance could also be used. Likewise, observations of staff are used to monitor dynamics among the lecturing team. Human Resources-related statistics could also be useful to look at age profile, retention of staff and sick leave. In addition, financial performance indicators can also be utilized for budget planning and monitoring.

Further, other respondents proposed the inclusion of some metrics or criteria:

- Accreditation requirements (are they being met?)
- Needs of the maritime service
- Quality of graduates (how ready are they to serve?)
- Cost-effectiveness
- Recruitment and retention

#### **4.3.5 Importance of international and national policies, rules and regulations to METIs**

Most of the respondents agree to consider and use STCW and national maritime education standards. Below are some of the significant statements of the respondents that give justification to their position.

“UK uses STCW, but not Model courses. National training standards are prepared and adopted by MNTB to guide the curriculum design process. The biggest challenge to the institution is to ensure full compliance with requirements of maritime Administration (in the UK MCA) and its numerous requirements towards STCW certification.”

“STCW for the maritime world cannot be the only thing. Keep abreast of what is going on around the world. Coastguard is a global brand. There is that so-called brotherhood of Coastguards.”

“STCW should be considered however, inclusion should be assessed based on the mission of the services the Philippine Coast Guard provides. Most of these rules and regulations could be addressed or included as part of a professional maritime/coastguard component of the educational experience. It may be best to have a separate department to handle this and the rules and regulations could be included as part of a core curriculum requirement that all students/cadets must satisfy before graduation/commission.”

#### **4.3.6 How organizations learn and grow**

The majority of the respondents shared that organizations learn and grow through encouraging openness and problem-solving mindset, continuous assessment and developing a culture of continuous improvement.

They further, reported engagement in the following initiatives: professional development programs, generous training packages, five days back in the industry policy, best practice sharing, working in teams, quality monitoring and continuous improvement, collecting feedback from students and customers and employer/stakeholders engagement events.

#### **4.3.7 Best practices that can be used to design the best model for the PCGA**

It is the consensus of the respondents that national context is the key to effective operation. There is no one-size-fits-all solution. It is recommended to think about what will work for the country and design what is needed for its society and industry. Mistakes are unavoidable and through continuous improvement, the institution will be able to rectify any issues. Cooperation programs, and external and internal quality monitoring tools should be established as tools to prompt enhancements.

Moreover, accreditation requirements could provide a baseline. For engineering programmes, ABET is the main body for accreditation. There are others for different professional bodies.

It is further indicated by the respondents that the Academy must include programmes that are competitive outside the Philippine Coast Guard. The degrees offered should provide students/cadets suitable career opportunities in the Coast Guard and in the industry outside of the Coast Guard.

## **Chapter 5 Conclusion and Recommendations**

### **5.1 Introduction**

In this chapter, the summary of the results will be presented and conclusion will be drawn from the result and analyses made in the previous chapter and recommendations made. This chapter will also briefly present the limitations of the research work. In the synthesis of the research study, concepts or models as explored in the literature review will be discussed with reference to the data presented in the preceding chapter.

## **5.2 Summary of the Results**

Themes were utilized to categorize the data/responses. The three main themes that became evident were: organizational capacity, organizational motivation and external environment. The themes that emerged were further classified into the following categories:

### **.1 Organizational Capacity**

#### *1. Resources*

##### *1.1 Human Resource/Staff*

##### *1.2 Capital/Financial Resource*

##### *1.3 Infrastructure/Equipment*

#### *2. Systems and Process*

##### *2.1 Governance*

###### *2.1.1 Style*

###### *2.1.2 Structure*

##### *2.2 Internal Process Management*

###### *2.2.1 Quality Management System*

###### *2.2.2 Knowledge Management System*

###### *2.2.3 Information Communication System*

##### *2.3 Programme Management (Curriculum Design and Development)*

### **.2 Organizational Motivation**

#### *1. Strategy (Mission and Vision)*

#### *2. Shared Values (Organization Culture)*

#### *3. History/Organizational Life Cycle (OLC)*

#### *4. Incentives (Staff Development, Learning and Growth)*

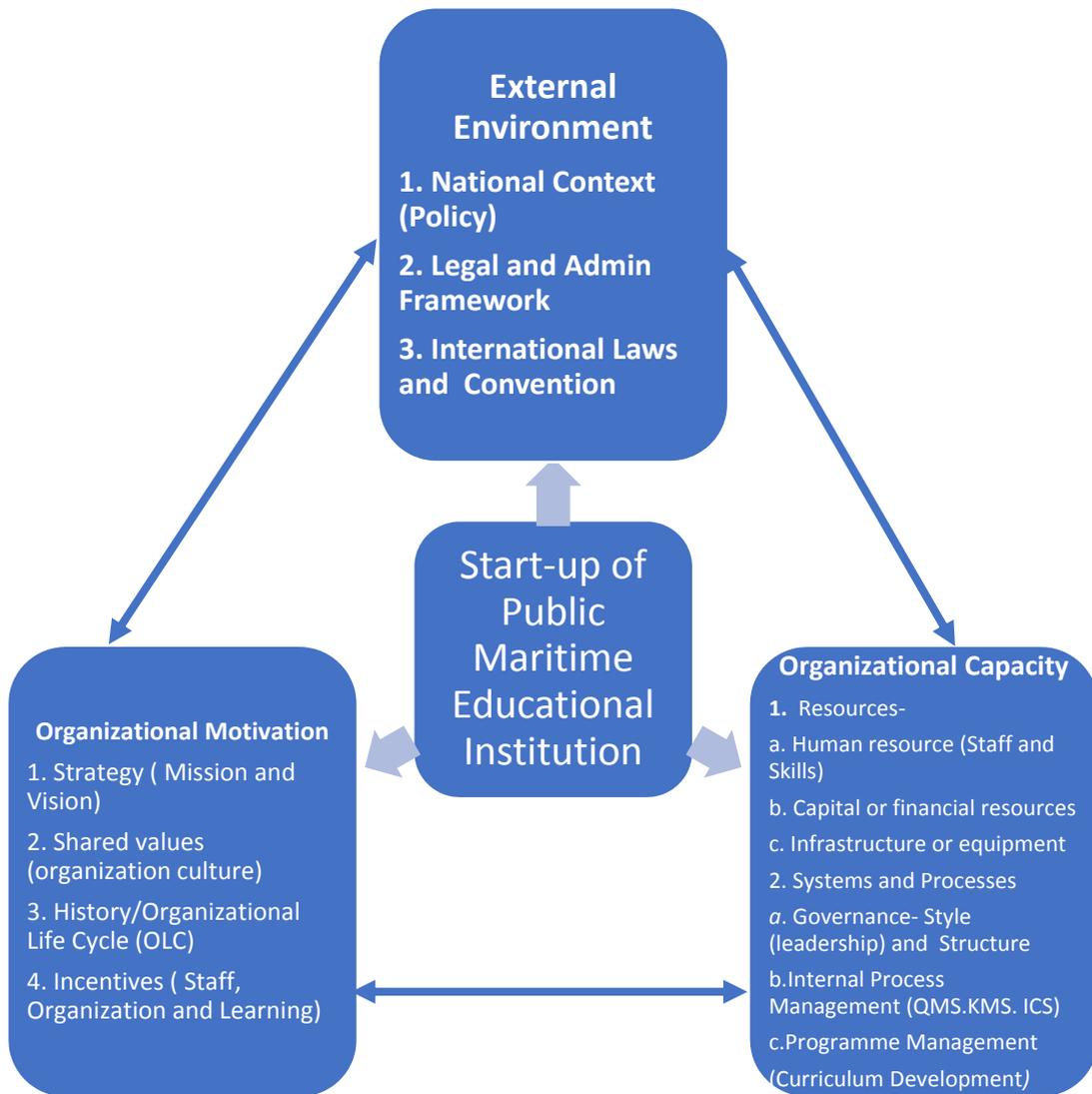
### **.3 External Environment**

#### *1. National context (Policy)*

#### *2. Legal and Administration Framework*

### *3. International Laws and Convention*

From the researcher's analysis of the data gathered from the respondents' perspectives on the growing institutions and the start-up organization coupled with the frameworks that were drawn partially from the work of Shirokova (2009), Parnell and Carraher (2003), as well as the Mckinsey's 7S, Balanced Scorecard and OPA models, it is possible to craft an enhanced framework that shows the core constructs to be considered for a start-up of a public maritime educational institution. Figure 54 presents such a framework.



*Figure 54. Organizing Framework for the Start-up of Public Maritime Educational Institution.*

Figure 54 presents the researcher’s novel framework that features the nomological network of elements to be considered in the start-up of a public maritime educational institution. Consistent with the perspective of the respondents, the concept of a start-up is seen as a broad and encompassing construct. The start-up of an organization is affected by a number of antecedent factors including three major factors namely: Organizational Capacity, Organizational Motivation and the External Environment from which nine elements – resources, systems and processes, strategy, shared values,

history, incentives, national context, legal and administrative framework, and international laws and convention – may be derived. These will have an effect on the optimal start-up of such an institution. The factors' interlinkages are extremely significant as a change in one factor almost always affects the others.

### **5.3 Recommendations**

The primary recommendation is for start-ups of the nature described in this work to adapt the organizing framework derived from the research, capitalizing on the interlinkages of the three factors with their distinct elements: **Organizational Capacity** from which are derived the two elements of Resources (Human Resource, Financial Resource, Equipment) and, Systems and Processes ( Governance, Internal Process, Programme Management); **Organizational Motivation** incorporating the four elements of Strategy (Mission and Vision), Shared Values (Organization Culture), History (OLC) and Incentives (Staff, Organization and Learning) and finally, **External Environment** which highlights the importance of National context, Legal and Administrative framework and International laws and convention.

When considering **Organizational Capacity**, one sub-element of the “Systems and Process” element is crucial for such a start-up. This sub-element is Programme Management. The educational philosophy of the Academy should be defined with reference to training need analyses, outcome-based education and job analyses. An appropriate curriculum design and development model, as elaborated on below in Figure 55, is highly recommended for adoption.

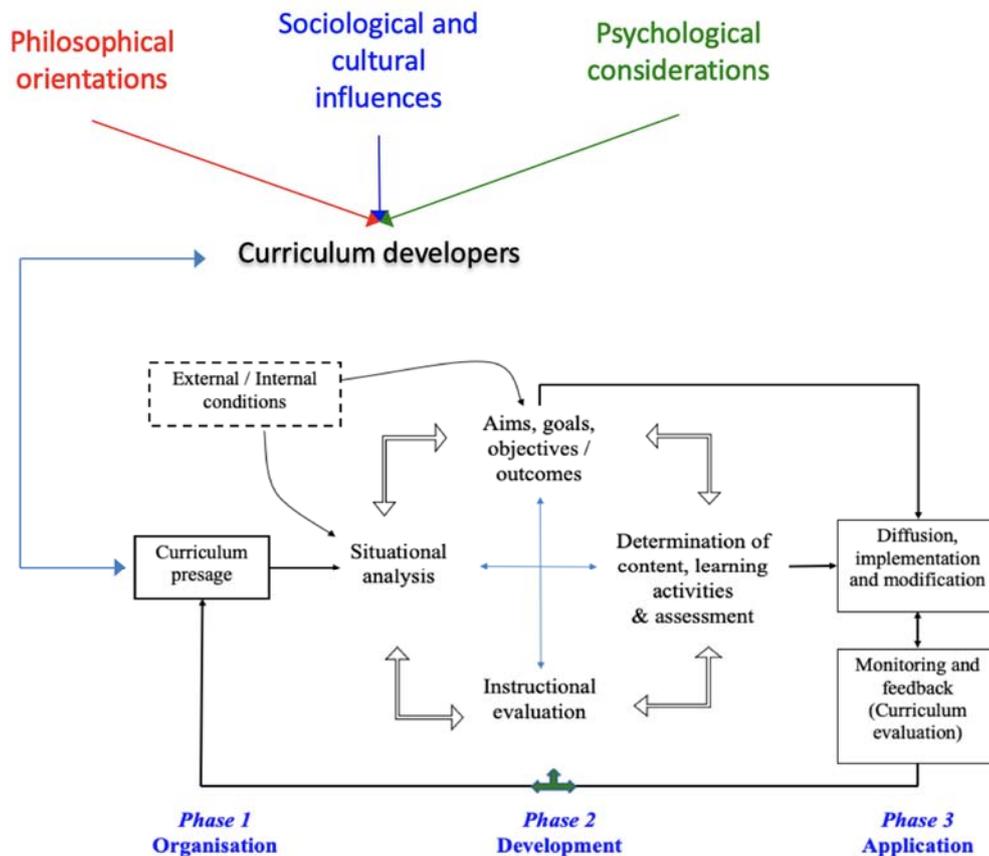


Figure 55. Curriculum Design and Development Process Model  
Source: Manuel (adapted from Print) (2019b)

This process of curriculum development and design can be viewed broadly as a process that crosses the boundaries of all levels involved in the educational system. The approach to education starts from a public policy level where national or system-level governance actors are involved (Cairney, 2012; Manuel, 2018). The process also demands the participation of the institutional level in the design and development of curriculum and further, requires the cooperation of the teaching and classroom level for the implementation.

It is the author's opinion that since the rationale for setting up a Coast Guard Academy is primarily to provide a pool of competent personnel to the Philippine Coast Guard with maritime-related mandates, it will, as a public educational institution, undertake operations of maritime higher education nature and thus design and develop the

curriculum according to the needs of the Academy after going through the process described in the previous paragraphs.

As regards Human Resource or Faculty and staff, it is recommended that a start be made with the existing pool of qualified instructors from the Coast Guard Education and Training Command but additionally hire qualified civilian professors to complement the workforce requirement needed for the start-up and then eventually groom instructors from the graduates of the PCGA. Recruitment and retention policies – in particular as they relate to the qualifications of instructors - should keep in mind the desired learning outcomes so that there is alignment between those outcomes and the learning activities.

Regarding Financial Resources, Equipment and Infrastructure funding and maintenance, it is the responsibility of the PCG to exert best efforts to lobby for suitable legislation and indicate therein the much-needed infrastructure, equipment, and other logistical requirements. It is also a welcome strategy to resort to endowments and accept grants from stakeholders.

For Systems and Processes, it really matters to start right. A Quality Management System<sup>1</sup> is optimum, but a Quality Standard System<sup>2</sup> will suffice at the inception of the institution. However, a Knowledge Management System and Information Communication System should also be in place. The structure of the organization

---

<sup>1</sup> A Quality Management System (QMS) is a collection of business processes focused on consistently meeting customer requirements and enhancing their satisfaction. It is aligned with an organization's purpose and strategic direction (ISO9001:2015).

<sup>2</sup> Quality Standard System (QSS) refers to an established system - documented policies, procedures, controls, and internal quality assurance, which covers but is not limited to, education and training and assessment of competence. The QSS is established as a mechanism to monitor and ensure the achievement of defined objectives of the approved education and training programme against specified standards (e.g. in accordance with the requirements of the STCW convention) (Nakazawa, 2019).

should be well-defined and the governance or leadership style effective if approaches that are not only top to bottom but also bottom to the top are to be taken advantage of.

Regarding **Organizational Motivation**, the Academy's vision and mission should be carefully crafted and clearly communicated and should incorporate the values of the institution that should be shared by all. With respect to incentives, remuneration is not so much of an issue since it is governed by the government salary standardization, but the staff development program and the individual and organization learning and growth should be given significant emphasis.

In the entire process of start-up, the assessment of the external environment should not be in any way discounted. Socio-cultural, economic, technological factors, international and national policies, rules and regulations and even perceptions of stakeholders, affect the operation of the institution. Thus, all these intricacies should be considered as start-up variables, giving the most importance to the national context. In the application for grant of authority to operate an institution such as the prospective PCGA, the PCG will have to review relevant national laws and policies, manuals of regulations for higher education, to ensure that the establishment and operation of the institution complies with the relevant requirements.

All these three major elements and their sub-elements should be conscientiously considered prior to and at the inception of the Academy, all the time taking cognizance of their causal interlinkages. A change in or neglect of one factor could affect the entirety.

## **5.4 Conclusion**

One brave small step will lead you to a path of something great and eventually bring you to your destination. This can be the case of the start-up of the Philippine Coast Guard Academy. Few big things started big; rather most big things had small beginnings. Armed with the research findings leading to the proposed framework, recognizing the salient and key start-up factors of Organizational capacity, Organizational Motivation and External Environment, their nine salient elements and the associated sub-elements (which are all interlinked) the new institution, despite the reality of challenges, will succeed. Continuous improvement (informed by best practices of other METIs or other jurisdictional models) will help address the gaps and reinforce the educational philosophy it upholds, all the time considering the national context and views from a bottom-up approach.

## **5.5 Limitations and Future Research**

Considering the time and budgetary constraints and geographical factors (proximity to respondents), the research largely depended on the interviews and survey questionnaire targeted at a purposively selected sample. This approach limits the external validity of the research; an acknowledged limitation that the researcher sought to reduce by consulting key expert informants.

Furthermore, the scaling approach taken was original to the researcher and only based on the Likert format. A full Likert scaling process was not undertaken and as such the items in the questionnaire could not be tested for internal consistency reliability (for example using Cronbach Alpha). Future research could address this limitation.

## References

- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 60(1), 451-474. doi:10.1146/annurev.psych.60.110707.163505
- ASIA-PACIFIC PSC TOKYO MOU. (2019). Memorandum of understanding on port state control in the asia pacific region. Retrieved from [www.tokyo-mou.org/](http://www.tokyo-mou.org/)
- Bateman, S. (2006). The growing significance of coast guards in the asia-pacific: A quiet development in regional maritime security. *Ocean Yearbook Online*, 20(1), 505-531. doi:10.1163/22116001-90000112
- Cairney, P. (2012). *Understanding public policy: Theories and issues*. Basingstoke, Hampshire: Palgrave Macmillan.
- Callegaro, M., Manfreda, K. L., & Vehovar, V. (2015). *Web survey methodology*. Sage.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Flick, U. (2018). *Doing triangulation and mixed methods* (Vol. 8). Sage.
- Food and Agriculture Organization of the United Nations. (n.d). How to analyze organizational performance. Retrieved from <http://www.fao.org/capacity-development/resources/practical-tools/analyse-organizational-performance/en/>
- Gillham, B. (2008). *Developing a questionnaire*. A&C Black.
- Gordon, L., & Narayanan, V. K. (1984). Management accounting systems, perceived environmental uncertainty, and organizational structure: An empirical investigation. *Accounting, Organizations and Society*, 9, 33-47.
- Guest, D. (2001). *Voices from the boardroom* CIPD Publishing.
- Hanks, S. H. (1990). The organization life-cycle: Integrating content and process. *Journal of Small Business Strategy*, 1, 1-13.

- Hox, J. J., & Boeije, H. R. (2005). Data collection, primary versus secondary.
- Hoy, F. (2006). The complicating factor of life-cycles in corporate venturing. *Entrepreneurship: Theory and Practice*, 30(6), 831-836.
- Hrebiniak, L. G., & Snow, C. C. (1980). Industry differences in environmental uncertainty and organizational characteristics related to uncertainty. *Academy of Management Journal*, 23, 750-759.
- Japan Coast Guard. (n.d). Mission of JCG. Retrieved from <https://www.kaiho.mlit.go.jp/e/mission.html>
- Johnston, M. P. (2017). Secondary data analysis: A method of which the time has come. *Qualitative and Quantitative Methods in Libraries*, 3(3), 619-626.
- Johnson, R. B., & Christensen, L. (2019). *Educational research: Quantitative, qualitative, and mixed approaches*. SAGE Publications, Incorporated.
- Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard: Measures that drive performance.
- Keusch, F. (2015). Why do people participate in web surveys? applying survey participation theory to internet survey data collection. *Management Review Quarterly*, 65(3), 183-216.
- Kiriri, P. N. (2002). *Business planning: A typology for small and medium enterprise (SME) life cycle stages*. DBA Southern Cross University 2002.
- Johnson, R. B., & Christensen, L. (2019). *Educational research: Quantitative, qualitative, and mixed approaches*. SAGE Publications, Incorporated.
- Lester, D. L., Parnell, J. A., & Carraher, S. (2003). Organizational life cycle: A five-stage empirical scale. *The International Journal of Organizational Analysis*, 11(4), 339-354. doi:10.1108/eb028979
- Lippitt, G. L., & Schmidt, W. A. (1967). Crisis in a developing organization. *Harvard Business Review*, 45(6), 102-112.
- Mangham, I. L. (1987). *Organization analysis and development*. Chichester [u.a.]: Wiley.
- Manuel, M. (2018). *Introduction to public policy*. Unpublished lecture handouts, World Maritime University, Malmo, Sweden.

- Manuel, M. (2019a). *Change Leadership & Management*. Unpublished lecture handouts, World Maritime University, Malmo, Sweden.
- Manuel, M. (2019b). *Curriculum Development and Design*. Unpublished lecture handouts, World Maritime University
- Matkó, A., & Takács, T. (2017). Examination of the relationship between organizational culture and performance. *International Review of Applied Sciences and Engineering*, 8(1), 99-105.
- Miller, D., & Friesen, P. H. (1984). A longitudinal study of the corporate life-cycle. *Management Science*, 30(10), 1161-1183.
- Nakazawa, T. (2019). *Quality Assurance in METC and Governance Models*. Unpublished lecture handouts, World Maritime University, Malmo, Sweden.
- Neelankavil, J. P. (2015). Primary data collection: Exploratory research. *In International Business Research*, , (pp122- 145). Routledge.
- Patton, M. Q. (2005). Qualitative research. *Encyclopedia of Statistics in Behavioral Science*,
- Phelps, R., Adams, R., & Bessant, J. (2007). Life cycles of growing organizations: A review with implications for knowledge and learning. *International Journal of Management Reviews*, 9(1), 1-30.
- Philbrick, J. H., Smith, F. R., & Bart, B. (2010). Using web surveys to determine audience characteristics and product preferences. *American Journal of Business Education (AJBE)*, 3(4), 1-6.
- Philippine Coast Guard. (2013a). Functions. Retrieved from [www.coastguard.gov.ph](http://www.coastguard.gov.ph)
- Philippine Coast Guard. (2013b). Mandates, mission and vision. Retrieved from [www.coastguard.gov.ph](http://www.coastguard.gov.ph)
- Philippine Coast Guard. (2013c). Philippine Coast Guard History. Retrieved from [www.coastguard.gov.ph](http://www.coastguard.gov.ph)
- Print, M. (1993). *Curriculum development and design* (2nd ed.). Crows Nest, Australia: Allen & Unwin.
- Ravanfar, M. M. (2015). Analyzing organizational structure based on 7s model of mckinsey. *Global Journal of Management and Business Research*,

- Resnik, D. B., & Shamoo, A. E. (2017). Fostering research integrity. *Accountability in Research*, 24(6), 367-372.
- Rowlinson, M. (1996). *Organisations and institutions: Perspectives in economics and sociology* Macmillan International Higher Education.
- Schein, E. H. (2010). *Organizational culture and leadership*. John Wiley & Sons.
- Scott, B. R., & Bruce, R. (1987). Five stages of growth in small business. *Long Range Planning*, 20(3), 45-52.
- Shirokova, G. (2009). Organisational life-cycle: The characteristics of developmental stages in russian companies created from scratch. *Journal for East European Management Studies*, 14(1), 65-85.
- Smith, K. G., Mitchell, T. R., & Summer, C. E. (1985). Top level management priorities in different stages of the organization life-cycle. *Academy of Management Journal*, 28(4), 799–820.
- United States Coast Guard. (2019). Mission. Retrieved from <https://www.uscg.mil/Our-Missions/>
- Waterman Jr, R., Peters, T., & Philipps, J. (1980). Structure is not organization.
- Wokurka, G., Banschbach, Y., Houlder, D., & Jolly, R. (2017). Digital culture: Why strategy and culture should eat breakfast together. In *Shaping the Digital Enterprise* (pp. 109-120). Springer, Cham.

# Appendices

## Appendix 1. Informed Consent Form



Dear Participant,

Thank you for agreeing to participate in this research survey, which is carried out in connection with a dissertation being completed by the researcher, in partial fulfilment of the requirements for the degree of Master of Science in Maritime Affairs at the World Maritime University in Malmo, Sweden.

The topic of the dissertation is Optimising the start-up of a Public Maritime Education Training Institute: A Case Study of the Philippine Coast Guard Academy

The information provided by you in this questionnaire/interview will be used for research purposes only and the results will form part of the indicated dissertation. Your personal information will not be published. You may withdraw from the research at any time, and your personal data will be immediately deleted. However, I do hope you will be willing to complete the whole questionnaire/interview and thank you for this.

Anonymised research data will be archived on a secure virtual drive linked to a World Maritime University email address. All the data will be deleted as soon as the degree is awarded (in November 2019).

Your participation in the questionnaire/interview is highly appreciated.

Student's name	Dorothy <del>Ugala Manglicmot</del>
Specialization	Maritime Education and Training
Email address	w1802874@wmu.se

\*\*\*

I consent to my personal data, as outlined above, being used for this study. I understand that all personal data relating to participants is held and processed in the strictest confidence, and will be deleted at the end of the researcher's enrolment and that all data presented in the final work will be anonymised and presented in aggregate.

Name: .....

Signature: .....

Date: .....

## Appendix 2. The Survey Instrument



(You are invited to participate in this survey on the research about "Optimising the start-up of a Public Maritime Education Training Institute: A Case Study of the Philippine Coast Guard Academy". We will be grateful if you will take a few minutes of your time to accomplish it. Please note that your participation in this study is voluntary and there is no payment involved. It is very important for us to solicit your inputs and opinion. Your feedback will be treated with utmost confidentiality. Thank you so much for your efforts and unwavering support.)

### QUESTIONNAIRE

#### SECTION A

This section is intended to know the respondent's profile. Please answer by ticking the boxes or writing in the spaces provided for the text.

1. Name (optional) : \_\_\_\_\_
2. Age : \_\_\_\_\_
3. Gender : \_\_\_\_\_
4. Nationality : \_\_\_\_\_
5. Rank ( if applicable ) : \_\_\_\_\_
6. Highest Education Background:  
Check applicable box  
 Bachelor's degree       Doctoral Level Degree  
 Master's Degree       Others (please specify): \_\_\_\_\_

#### SECTION B

This section is intended to help us gain insights into how the following areas or aspects of organizational behaviour influence the start-up of a Maritime Education Training Institute. In this part of the questionnaire, you are being asked to fill in the blanks, answer yes/no as required and tick the appropriate boxes. This will be followed by a few questions your answers to which will be truly valued.

1. Name of Institution you are currently connected with  
\_\_\_\_\_
2. Classification/type of Institution  
Check only one box  
 University       Academy  
 College       Others (please specify): \_\_\_\_\_  
 Maritime Training Institute
3. When was the institution created?  
\_\_\_\_\_
4. How long have you been working in the institution?  
\_\_\_\_\_
5. What position do you hold in the institution (kindly describe your duties and responsibilities)  
\_\_\_\_\_  
\_\_\_\_\_

**6. What Maritime Courses/ specialization does the institution offer?**

*Check boxes which are applicable*

- Marine Engineering  Others ( please specify): \_\_\_\_\_  
 Nautical/ Maritime Transport

**7. How is the institution funded ?**

- By the National Government/State-owned  Others ( please specify) : \_\_\_\_\_  
 By private interest (privately-owned)

**8. Are there problems encountered with getting adequate financial resources for the institution?**

*Check only one box*

- Yes, Please briefly elaborate on how these problems are addressed

\_\_\_\_\_

- No  
 Not sure

**9. How many teachers/instructors/staff are employed by the institution?**

*Check only one box*

- 3-100  101– 200  201 – or more

**10. Have you had any challenges in obtaining qualified teachers in the institution?**

*Check only one box*

- Yes, Please briefly describe these challenges and how the institution has tried to address them

\_\_\_\_\_

- No  
 Not sure

**11. Have you had any challenges in funding equipment resources?**

*Check only one box*

- Yes, Please briefly describe these challenges and how the institution has tried to address them

\_\_\_\_\_

- No  
 Not sure

**12. Do you consider STCW Convention 1978, as amended in the development of curriculum in your institution?**

*Check only one box*

- Yes  
 No

**13. If yes, what are the challenges faced by the institution in the implementation of the Convention? If not, state the reasons for non-consideration.**

\_\_\_\_\_

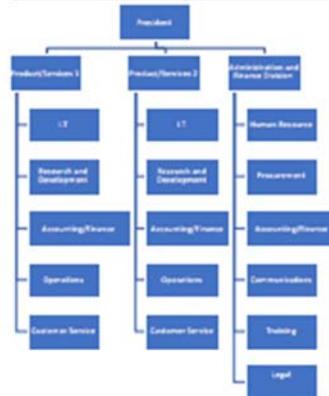
**SECTION C**

In the academic literature on organizations there are three basic kinds of organizational structures:

1. **Functional-** Organization is divided into smaller groups based on its special function as illustrated in this example:



2. **Divisional-** Organization splits employees into segments that correspond to particular products, services or markets. Each division enjoys some degree of autonomy complete with functional units as illustrated in this example:



3. **Matrix -** Organization is structures in which some employees report to more than one supervisor or leader as illustrated in this example:



1. Which structure is most closely represented in your institution?

Check only one box

- Functional
- Divisional

Matrix

Others (please describe briefly): \_\_\_\_\_

**SECTION D**

In this part of the questionnaire, kindly express your agreement or disagreement with the statements about your current institution based on a scale of 1 to 5 where (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. Choose the appropriate box as required.

The institution I work for has...	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1. an organizational structure that is optimum for our operations	<input type="checkbox"/>				
2. a structure that does not work for our operations	<input type="checkbox"/>				
3. clear reporting lines	<input type="checkbox"/>				
4. clear-cut responsibilities and authority for all personnel	<input type="checkbox"/>				
5. no silos (information is shared across all departments)	<input type="checkbox"/>				
6. documented vision and mission statement that are articulated across the organization	<input type="checkbox"/>				
7. measurable goals and objectives set	<input type="checkbox"/>				
8. mapped out strategic plans	<input type="checkbox"/>				
9. proper mechanisms to recruit and retain qualified employees	<input type="checkbox"/>				
10. personnel morale and welfare development program	<input type="checkbox"/>				
11. has a formal staff development program	<input type="checkbox"/>				
12. interpersonal and communication skills training for its employees	<input type="checkbox"/>				
13. program for enhancing team-building skills	<input type="checkbox"/>				
14. quality management system	<input type="checkbox"/>				
15. a system for storage of the knowledge and expertise gained from the employees	<input type="checkbox"/>				
16. information processing systems for performance monitoring and improvement	<input type="checkbox"/>				

17. top management/leader who facilitates heightened employee involvement	<input type="checkbox"/>				
18. corporate values focused on social responsibility and ethics	<input type="checkbox"/>				
19. interest and cooperation from all levels of management to support the overall goals of the institution	<input type="checkbox"/>				
20. customer satisfaction index/service rating analysis	<input type="checkbox"/>				
21. benchmarking procedures or techniques employed to compare performance against standards/best practices	<input type="checkbox"/>				
22. mechanisms or measures to check its financial performance	<input type="checkbox"/>				
23. a tool to check its internal process effectiveness by using performance-based targets	<input type="checkbox"/>				
24. initiatives to identify critical technologies needed	<input type="checkbox"/>				
25. a learning and development culture	<input type="checkbox"/>				
26. I think that my institution is a good model of an educational institution	<input type="checkbox"/>				
27. If a new educational institution is being set up, I believe my institution will be a good model/example for it to follow	<input type="checkbox"/>				

28. What would you say are the advantages of your current organizational structure and systems?

\_\_\_\_\_

\_\_\_\_\_

29. What would you like to see improved in your current organizational structure and systems?

\_\_\_\_\_

\_\_\_\_\_

30. What in your institution do you consider best organizational practice?

\_\_\_\_\_

\_\_\_\_\_

We appreciate and thank you for taking the time to complete this survey.

### Appendix 3. Semi-Structured Interview Guide



Name (optional): \_\_\_\_\_  
 Gender: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Position: \_\_\_\_\_

QUALITATIVE PROCESSING WORKSHEET			
No.	Questions	Respondent's Response	Researcher's Notes
1	What are the areas of concern which are relevant in the start-up of maritime-related educational institution such as the Philippine Coast Guard Academy?		
2	How does the institution design and develop curriculum? Is it responsive to the needs of the maritime industry? Were you confronted with challenges in the process? How did you deal with the challenges?		
3	Who is responsible in the decision making in the institution? Could you explain the decision-making process?		
4	What is the criteria for measuring organizational performance?		
5	How does international and national policies, rules, law and regulations affect the operation of your Institution?		
6	How does the organization learn and grow?		
7	What best practices can be used to design the best model for the Philippine Coast Guard Academy (management, structure, systems, staff (recruiting and retention) and also link to the areas of concerns in Q1)?		