# Strategic Port Planning and its associated Management A Guide for Port Authorities

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#### **ABSTRACT**

Ports will undoubtedly face some tough challenges in an ever more competitive environment. Although there will be pressures on our daily activities, there are also many opportunities for us to build on our strengths and diversify our activities into new areas. We have the capability to contribute more to our community, the region and the world's economy, .through our business engagement as well as to grow our international profile.

Planning will help ensure that the port continues to provide the highest quality service for domestic and international traffic and for import and export cargo.

That is why it is so important to have a shared and common vision of our future priorities, and why it is ineludible to debate the changing shape of the port over the next 20 years. In working towards this exciting future and while undergoing so much change, it is necessary not lose sight of our values, visión and mission.

Having a good strategy stablishes "how" you travel the road you have selected and effective execution makes sure you are checking in along the way.

In order to facilitate the strategic planning process, this paper proposes a methodology that helps port to organize the work, dreaming and building the future.

#### INTRODUCTION

This paper is focused on the aim of answering these two questions:

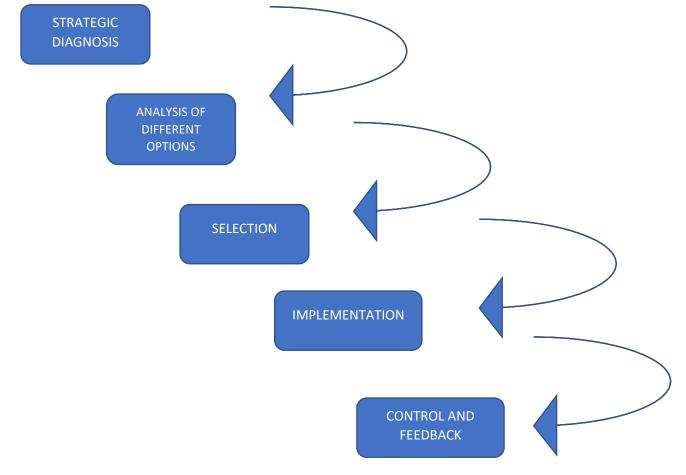
- 1- Is it a utopia to prepare our port for future uncertainties?
- 2- How can we design a specific methodology for developing port authorities' strategies?

The core of this work is to provide a practical Port Planning Guideline to support ports on how to accomplish their strategies, and more importantly, on how to manage them for achieving realization.

In the following pages, the reader will not find a magical recipe, instead of it, a cooperative method to guide ports that want to succeed in preparing for the exciting future, exceeding the port authority members involvement and trying to build an engaged port community that foresees the future. The possibility to benefit from new perspectives is the added value: work consultatively and collaboratively

## FROM GENERAL BUSSINESS MANAGEMENT TO PORT MANAGEMENT: the strategic planning process.

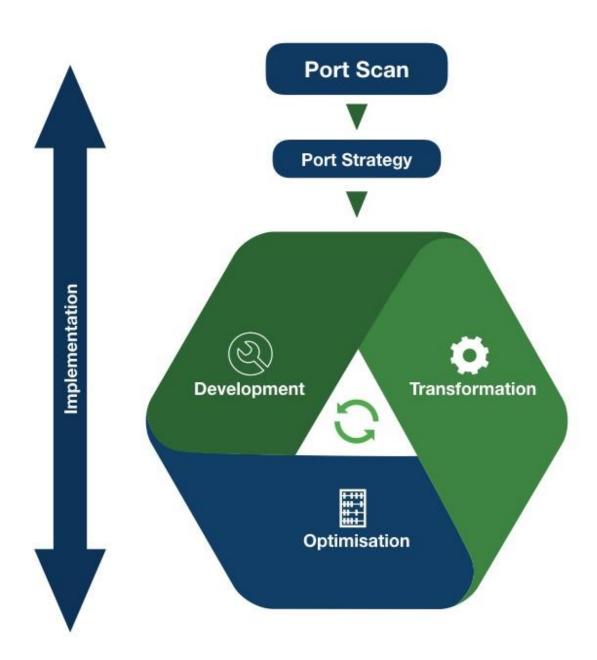
Thinking globally, for every kind of organization, strategic planning consists in an integrated process of five big blocks:



#### FIGURE 1: STRATEGIC PLANNING PROCESS.

If the reader wants to deepen about this topic, a great variety of authors dedicate their studies and investigations to this matter, a field focused on having access to greater productivity, culture, empowerment, and overall effectiveness, giving the directors of complex organizations a key to improve their performance. Among the authors, Johnson and Scholes (2006) will provide a quick and exhaustive view about strategy.

In accordance with this general organization of the planning process, if we focus on Ports, this is a scheme of our proposal: a Port Planning Guideline:



**FIGURE 2: PORT PLANNING GUIDELINE** 

This focused technique is developed in the following five steps:

- 1-perform a comprehensive analysis of the current situation of the port,
- 2-build a long-term Port Vision with the participation of every stakeholder,
- 3-prepare/draft a joint action plan with strategic stakeholders based on the Port Vision,
- 4-turn the Port Vision into a Commercial Plan and
- 5-develop a sustainable and flexible Masterplan.

The first three steps are usually known as Strategic Planning while the last two steps are usually categorized as Technical Planning.

In addition to the mentioned steps, it is important to emphasize two of the core values of this methodology. Every phase is thought in a participative basis promoting the collaboration of all the

stakeholders involved in the port community who are not restricted to the port area itself. Some of the strategic stakeholders that can be listed are: the National Government, the Provincial Government, the Municipality, all the companies and industries within the port and nearby areas, NGOs, educational and research institutions, environmental protection organizations, et cetera. Besides, within this process, sustainability is the other core value taken on board from the very beginning in order to anticipate the needs of future generations and the prosperity of the region served by the port. In summary, this approach adopts PIANC Working with Nature Philosophy and PIANC Sustainable Ports Approach to promote ports as one of the key drivers for reducing inequality and enhancing the quality of life within their areas of influence.

In these next pages, we explain in detail the phases that allow the company to traduce the strategic planning in action.

#### STEP ONE: perform a comprehensive analysis of the current situation of the port: Port Scan

The first step is the "Port Scan", a tool developed by Port Consultants Rotterdam for the elaboration of a high-level assessment for a terminal and/or a port complex. Following this holistic approach, the performance of a terminal and/or a port complex can be understood, the bottlenecks identified, the potentials recognized and the priorities set throughout a SWOT analysis. Furthermore, this diagnosis focuses on four specific topics:



Layout and insfraestructure



Organization & finances



Operations & logistics



Environmental & social aspects

**FIGURE 3: PORT SCAN FOCUS** 

By covering the afore-mentioned topics, the current internal and external situation can be systematically addressed.

This first step ensures that a Port Authority will be able to answer:

- ✓ What is our starting point? And to reply this question, this methodology proposes the sweep of the general situation by the analysis of the following issues:
- ✓ What is the general condition of port infrastructure?
- ✓ What are the most important indicators that allow the port/terminal to show its level of activities and performance?
- ✓ Are nautical and land accesses adequate for actual activity and future expansion?
- ✓ Which are the ways of transportation to join the port/terminal with its cargo? How is the general condition/maintenance of them?
- ✓ Which are the drivers that conduce to competitiveness in port areas?
- ✓ Is the environment of the port/terminal growing in accordance with the port?
- ✓ Who are the stakeholders? Can you map them using high/low interest in the organization and high/low power in order to organize the strategies toward them?
- ✓ What are the economic, cultural, and political trends, in our region/country/world?
- ✓ ... and a lot of other questions regarding the local situation, that will give the planner the best diagnosis of the port.

#### STEP TWO: build a long-term Port Vision with the participation of every stakeholder,

The second step is the elaboration of a long-term Port Vision which uses as starting point all the collected and processed data for the "Port Scan". This step tries to set the future ambitions for developing a terminal and/or a port complex. Consequently, it is interlinked with a second question: Where do we want to go?

The process for elaborating a Port Vision can become a topic on its own; however, it is important to highlight the most relevant characteristics. A Port Vision is of importance for promoting an investment climate and license-to-operate (SLO) by giving confidence to policymakers, companies and stakeholders in the future, by allowing the alignment of strategies between the port authority and stakeholders and by facilitating the cooperation among all the involved parties. Moreover, a Port Vision sets the course for future developments, as it is a public document of easy access made with the contributions of all related stakeholders. Usually, it is composed by some core visions which are based on key success factors.

The Port Vision aspires to be a base guide for the successful advancement of a port complex/terminal, in the long term, and its objective is to set out the ambitions for the future. In this documentation, the trends and perspectives, the dreams, and the port indicators identified within the four groups of the "Port Scan" will be made comprehensible to all stakeholders

The main objective of the documentation (report, brochure, presentation, etc.) that is generated is to take the first steps to achieve consensus with all the actors of the sector towards a sustainable development of the port complex/terminal. Due to this, the methodology proposed is, again, working together with the stakeholders to delimit their wishes, expectations and aspirations towards their mental image or the port/terminal 20 years ahead, through workshops, meetings and interviews, to collect the prospects and forecasts and in a subsequent opportunity to validate the conclusions or change them in order to feel represented by the high lines of the vision.

After building the vision, it will be useful to edit and print it, to encourage the organization and its stakeholders to work in order to guide the future actions towards the fulfillment of it.

It is recommended to present the vision to society with a public meeting, as a way of obtaining the support of the community. Afterwards, it is useful to publish it in order to allow everyone to reach and download the vision.

As an example, we can read the Port of Rotterdam's vision 2030 in this link: <a href="https://www.portofrotterdam.com/sites/default/files/upload/Port-Vision/Port-Vision-2030/files/assets/basic-html/index.html#1">https://www.portofrotterdam.com/sites/default/files/upload/Port-Vision/Port-Vision-2030/files/assets/basic-html/index.html#1</a>, and the Port of Bahia Blanca's vision 2040 in this link: <a href="https://puertobahiablanca.com/vision\_portuaria\_2040/">https://puertobahiablanca.com/vision\_portuaria\_2040/</a>.

The authorities of Port of Rotterdam consider something that is crucial and fundamental: The Port Vision is like a compass: ambitions are a spot on the horizon, even when circumstances change. Flexibility is the keyword. It is exactly the aim of the process of building a vision.

### STEP THREE: prepare/draft a joint action plan with strategic stakeholders based on the Port Vision

The third step is the definition of strategic objectives and an action plan for accomplishing the ambitions set in the Port Vision. Corporate performance objectives must be defined to fulfill these characteristics: Specific, Measurable, Achievable, Reasonable and Time-bound, just to let the port to measure success along time.

The agenda includes actions to be done by the port and combined actions with some of the strategic stakeholders in order to implement the set goals and objectives. This step ends up with all the information related to the defined actions that allow the ulterior high-level control of the performance of the port through KPIs to monitor the successful progress of the Strategic Plan.

With this step we can close the circle of the strategic planning: the diagnosis, our Port Scan, the expectations and ambitions, our Port Vision, and the concrete actions to implement our dreams, the Action Plan.

How can we settle an action plan to bring the Vision back to earth and don't let the strategic process only be a nice path of theoretical ideas that never can be done?

This proposal is based on the idea of setting strategic goals, with the essential characteristic of being measurable over the course of time. The possibility to quantify a goal lets us measure within 3 months or more if we can achieve it or we need to modify our behavior in order to reach the fulfillment of the goal. (Believing that not only the port/terminal is the owner of the vision, it is necessary to get the community involved in the commitment to obtain real changes by the allocation of different actions to the organization and the stakeholders. With this activity, you will get the compromise of changing the future, having in your boat a lot of internal and external members, all with the same compass: doing a change possible.

Another step concerning the Action Plan is the Revision Plan, that consists in a periodical review of the evolution of the actions in order not to lose productivity. To track the progress, the port stablishes actions for short, medium and large term, identifying the period of time while the actions is going to be held and the results will be reported annually to the board of Directors.

This step, that is critical viewing the strategic plan with a concrete and practical eye, the outcomes determine the success of the plan, and can be resumed as:

How can we bring the vision back to earth? A quick summary:



FIGURE 4: TURNING THE VISION INTO ACTION

## STEP FOUR AND FIVE: turn the Port Vision into a Commercial Plan and develop a sustainable and flexible Masterplan.

The fourth and fifth steps are closely interrelated as the formulation of the Commercial Plan directly influences the elaboration of the Masterplan and, to the same extent, the other way round. This can be easily explained by the proposed approach of developing a Masterplan which is always centered around the financial feasibility of the Masterplan itself.

The objective of preparing a Masterplan is to define the best territorial order according to the strategy and the market. It helps to clarify and communicate the port vision and it constitutes with the vision a critical part in a ports' 'licence to grow'. They also provide a strategic framework for port authorities to consider a range of internal and external factors that may impact on current and/or future operations

It is not only a matter of technical feasibility, the financial model must be used to fine-tune and improve the Masterplan: different layouts, designs or phasing will generate different financial effects. The idea is that the financial model is used to generate the optimal choice. Thus, the Masterplan is only acceptable if it is also financially feasible, under various scenarios and following the Adaptive Port Planning Framework (Taneja, 2013) meeting many other criteria such as social, environmental and legal requirements, towards a sustainable growth.

A conscious masterplan requires placing filters, which will be transferred only by the best options:

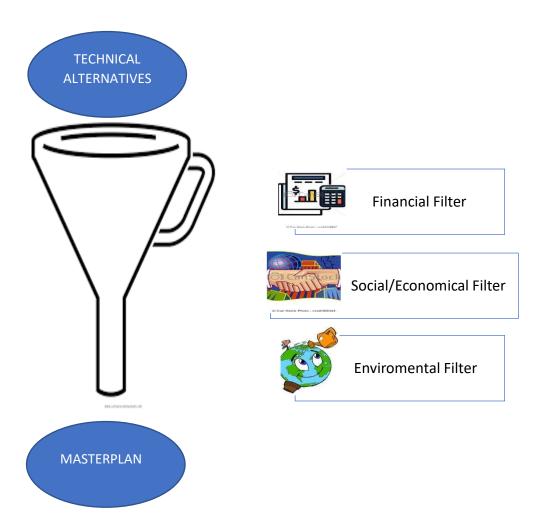


FIGURE 5: FILTERING THE TECHNICAL ALTERNATIVES TO BUILD A MASTERPLAN

Additionally, a strategic managerial process is also needed as the abovementioned steps require a regular cycle for reviews and updates based on the feedback obtained through the defined KPIs, the commercial trends and developments and the many associated uncertainties considered during the Port Planning process.

To conclude, and with no need to highlight the importance of sharing the knowledge gained during the implementation of this Port Planning Guideline for the Port of Bahía Blanca in Argentina, the spirit of this paper is to encourage Port Authorities to develop their own long-term Port Visions, Commercial Plans and Flexible Masterplans, based on a meaningful use of stakeholder engagement and the identification of win-win options towards a continuous improvement of the ports.

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