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1 Introduction

Ports are the strongholds of sea exchange around the world, working with the development of around 75% to 80% of the world's essential commodities. Ports are entryways to the EU's whole vehicle organization. They are motors of financial advancement and wellsprings of thriving. They are engines of economic development and sources of prosperity. More cargo, cruise ships and ferries in ports mean more jobs and thus more economic growth in the continent as a whole.

The need for maximizing the efficiency of port functions comes with the global demand to do better with each passing day, serving the needs of the maritime industry globally. This very motivating factor has pushed EU ports to contribute €149 billion to EU's GDP - €54 billion directly via port communities & the rest indirectly through various supply chain systems

Quality port management has been one of the main factors of exchange around the world. It is a centuries-old piece of overall advancement that has accelerated worldwide exchange to increase in an exceptional way in the past century.

Marketing and customer relationship management are among the "beyond the landlord" functions of port authorities that are gaining momentum. The various forms of communication, trade and business development, local community liaison, and customer relationship management are major components of the overall marketing effort.

Marketing is the way toward characterizing, creating, and conveying worth to partners contingent upon unmistakable capabilities. By receiving a market-driven methodology, a port authority gives different showcasing answers for every partner in the port local area and past. Advertising systems created by port specialists manage organizations of partners, the individuals from which are classified into three gatherings: Business-related stakeholders (e.g., shipping lines, shippers, terminal operators, logistics and forwarding companies, transport services providers). Societal groups and local communities seeking sustainable port growth in harmony with the territory and its citizens and Institutional stakeholders are involved in meaningful interactions with port authorities on matters linked to several policy issues, legislative interventions, and public interests.

The report aims to provide insights into four elements of marketing practices of 7 Grands Ports Maritimes (GPM), 3 French inland ports and European Ports which are market studies, port communities, their promotion and lobbying efforts, thereby providing strategic recommendations for French ports. It examines the current strategic practices of the respective ports and seeks to inform how better practices can be put into effect with effective suggestions and recommendations. These recommendations are short and concise so as to give an understanding of the proposed ideas.



2 Mission and Methodology

2.1 The actors involved

2.1.1 Kedge Business School

KEDGE is a leading French business school with 11 campuses worldwide: 4 campuses in France (Paris, Bordeaux, Marseille and Toulon), three campuses abroad (Shanghai, Suzhou, Abidjan and Dakar) and three partner campuses (Avignon, Bastia and Bayonne).

KEDGE Business School is AACSB, EQUIS and AMBA-accredited, and is a member of the Conférence des Grandes Ecoles. It is also recognised by the French government, with labelised programmes, and has obtained the EESPIG label. KEDGE was ranked 8th best French Business School and 31st best European Business School (Financial Times.)

Kedge has a strong expertise in Supply Chain Management with its ISLI Program ranked best SCM program in France and its ITL Program ranked 8th in the world for Maritime Management.

2.1.2 Cerema

Cerema (which stands for Centre for Studies and Expertise on Risks, the Environment, Mobility and Urban Planning) is the major French public agency for developing public expertise in the fields of urban planning, regional cohesion and ecological and energy transition for resilient and climate-neutral cities and regions. It has a staff of 2,600 people out of which 500 are dedicated to research and innovation activities.

Cerema was created in 2014 by merging eleven public expertise organizations, each with decades of experience in the fields of bridges, roads and ports infrastructure, water, geotechnics, risk, land use and urban development.

As a multidisciplinary scientific and technical resource and expertise centre, Cerema helps in developing, implementing and assessing public policies at national and local levels, where the challenges of the climatic and ecological transition & regional cohesion are paramount.

2.1.3 DGITM

The General Directorate for Infrastructure, Transport and the Sea (DGITM) is a directorate of the French Ministry of Ecological Transition. It prepares and implements the national land and maritime transport policy. The DGITM is part of the dynamics of sustainable development and energy transition promoting the most environmentally friendly modes and uses, in their areas of relevance.

Missions of DGITM are: intermodal planning of transport infrastructures, taking full account of all their direct and indirect effects on the environment, the economy, the territories and the search for greater complementarity, for sustainable, innovative mobility at the service of all transport users; the implementation of an adapted and modernized supervision of the State over public establishments and businesses; the implementation of a sea policy that promotes development (blue growth) and respects biodiversity; respect for a high level of reliability, safety and, in particular, security; the development and economic competitiveness of land and maritime transport, in particular through



the establishment of regulatory tools guaranteeing transparency and non-discrimination; adapting and implementing some of the most advanced social legislation and regulations in Europe.

The DGITM manages all matters relating to land and sea transport, with the exception of regulations for motor land vehicles, handled by the Directorate General for Energy and Climate. Road safety is the responsibility of the road safety and traffic delegation at the Ministry of the Interior.

2.1.4 Logisthinker

Logisthinker is an apolitical, non-partisan, non-profit think tank. The think tank is dedicated to the facilitation of intermodal and international flows. The project was born in 2013, with the idea of providing decision-makers with an advisory structure based on strong expertise, both academic and professional.

Logisthinker offers a platform for exchange between the "thinkers" of logistics, its operators and its regulators to , in particular, optimizing logistics networks, facilitating flows on an international scale, reducing friction in international trade and responding effectively to the constraints of sustainable development.

Made up of academic, institutional and professional experts, Logisthinker's vocation is to constitute a platform for reflection, exchange and production of new ideas and concrete solutions for international multimodal flows.

Logisthinker thus works with both public and private organizations. Its maritime experts are members of AFDM, IAME, TransManche Development Group and they bring their expertise to public and private actors in the sector through forums, conferences and briefing notes.

2.2 Evolution of the project

2.2.1 An Open Innovation Mission

From March I to 26, 2021, 400 KEDGE students from all Masters programs and 60 companies participated in the 7th edition 2021 of the Open Innovation Challenge. The objective of this Challenge is multiple and aims at cooperation between students and companies, taking into account the 3 major skills that are currently in demand among managers: I. The ability to solve a complex problem; 2. Creativity and innovation, 3. Teamwork and collective intelligence

For the Company, it is about finding a solution to a problem and drawing on the skills of the expertise of KEDGE and its students to launch a project or bring an idea to fruition. For the students, the challenge is to make concrete proposals to the Company to meet the expressed need, thus putting into practice their knowledge and supplementing their know-how.

Cerema participated in the challenge proposing to three groups of four international students to develop a Benchmark of port marketing. Each group had to compare French continental ports with sets of six European ports. Cerema and Kedge were assisted by DGITM to manage the Mission.



2.2.2 A tool for improvement of French Port's Marketing

The objective of the mission was to develop a Benchmark of marketing practices of ports and when possible to provide strategic recommendations for French ports.

International trade relies on end-to-end supply chains. These chains see the concentration of private actors from transport, handling and logistics. The shippers delegate the choice of means of transport and storage to private actors as well as the choice of the infrastructures (sea ports, river ports, airports, logistics areas, etc.) they will go through.

In response to the increasing competition, port authorities focus on corridors solutions and they adapt their marketing. Thus, we see Haropa and the Seine Axis appear; Med Link on the Rhône Axis, Nord-Link with the Hinterland of the port of Dunkirk, the Atlantic coast for France, plus the same phenomenon at the European level.

The elements of the benchmark were composed of:

- The way port authorities do market studies and business intelligence to segment, understand and anticipate their market
- 2. The way port authorities manage their port communities, i.e. the actors of the port. This could be through branding (Med-Link, Haropa, etc.) and other marketing techniques
- 3. The way port authorities promote their services. This means how do they reach their target markets, what are the tools they use to do so, what are their sales and marketing actions

4. The way port authorities perform lobbying both on the hinterland side and on the foreland side.

The mission therefore consisted in carrying out a benchmark of the practices of the continental Grands Ports Maritimes (GPM) and three French inland ports (Lille, Paris, Lyon), and for the first group of students, Mediterranean ports (Algeciras, Valence, Barcelona, Genoa, Venice, Piraeus), for a second group North Range Ports (Antwerp, Zeebrugge, Rotterdam, Amsterdam, Bremen and Hamburg), and for the third group various secondary European ports (Dublin, Portsmouth, Felixstowe, Tilbury, Copenhagen, and Oslo) in terms of marketing. This involved mapping the methodologies used by ports in terms of promotion / communication / lobbying to develop their attractiveness. The study also aimed to highlight the differences within the ports in Europe. Marketing and/or Development Directors of the French ports have been interviewed by the students.

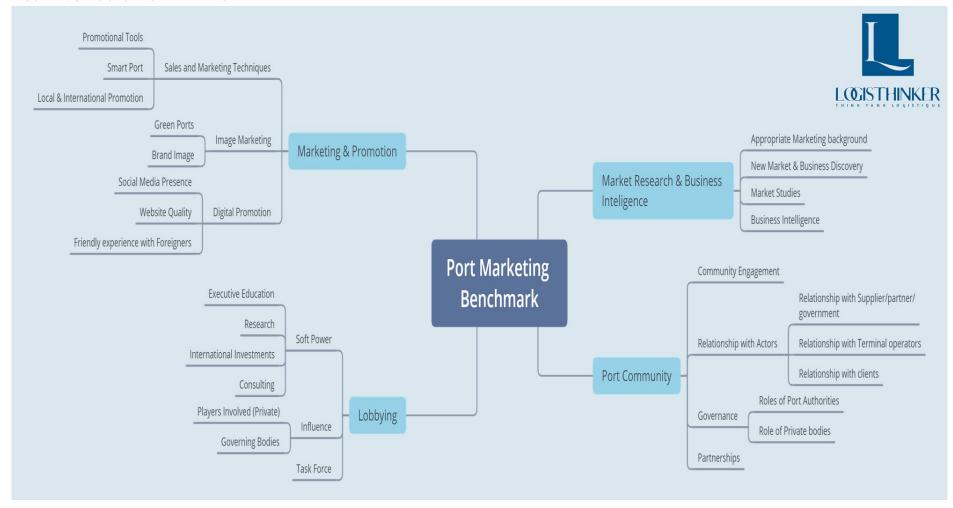
The study highlighted the success factors of port marketing and the factors of challenges. It led to recommendations which, were presented to the DGITM of the Ministry of Ecological Transition.

2.3 The Benchmark

The present report is a synthesis of the three missions done by the three groups of students during 5 weeks. The synthesis is written by one of the students with the help of a professor of Kedge Business School, with the support of Logithinker staff and financing. Thanks to these new resources, some aspects of the benchmark have been deepened. Also, the elements of the benchmark have been rationalized between the three groups.



FIGURE 1: STRUCTURE OF THE BENCHMARK









3 Benchmark

3.1 Marketing & Promotion

Marketing is "the science and art of exploring, creating, and delivering value to satisfy the needs of a target market at a profit." - Philip Kotler.

Promotion is just a technique used in marketing. Analysing the Marketing and promotional aspect of the ports will help us determine their position in the European and Foreign Market. The sub criteria that will help us determine the same is as follows:

3.1.1 Sales and Marketing Techniques

3.1.1.1 Definition of Sales and Marketing Techniques

To determine the or to analyse the market of any business it is very important to know their sales and marketing techniques. In the simplest of terms, marketing is building awareness of your organization and brand to potential customers. Sales is turning that viewership into a profit, by converting those potential customers into actual ones.

Ports are operating is more competitive environment and the importance of marketing in port management is being recognised by port authorities all over the world. Marketing in Ports as in many economic sectors is composed of activities related to marketing research and marketing implementation. The research activities will allow the

port to have its market analysed, target fixed, strategy build and objectives identified. Then in implementation stage marketing tools should be deployed to achieve those objectives.

Marketing tools are those elements that will have an influence on the "sales" of the product, or services in the seaports. The influence of those tools will differ from one country to another. Therefore, it is necessary to find the appropriate mix of all those elements for a given market, so that the results match the targets aimed at. It is clear that in many cases, various tools can be complementary and inter-changeable. The appropriate mix for a given market will have some degree of individuality.

The appropriate mix for our research is Promotional tools, Smart ports, Local and International Promotion.

Promotional Tools

Of the company's marketing functions, promotion is the most visible as well as the most culture related one. Through the promotional tools the company is standing up and speaking out, willing to be seen and heard.

With an excellent product, namely a well-equipped port with a safe and deep nautical access, modern handling gear and a highly productive labour force, clients need to be aware of the port's existence. Action is needed to raise this awareness.







Therefore, promotion can be defined as communication between the port and various target groups in order to inform them as influence their attitudes and behaviour towards the port.

Smart Port

A Smart Port is a port that uses automation and innovative technologies including Artificial Intelligence (AI), Big Data, Internet of Things (IoT) and Blockchain to improve its performance.

Although the industry of ports and container shipping is often regarded as conservative and resistant to change, there are new technologies, systems and solutions emerging that will alter this perception in the coming years, leading the entire sector to a brighter, more connected future.

The need to evolve and become "smart" is even more paramount today with the changing demands of global trade: ships are getting bigger; goods are moving faster; and geopolitical issues are creating new challenges for ports all around the world.

The industry has already embraced many emerging technologies such as Digital Twins, cargo flow optimisation and visualisation - giving customers end-to-end transparency of their cargo's journey through the supply – and the emergence of 5G's low latency and faster connectivity to improve port operations.

Local and International Promotion

Local and international promotion for ports is essential in order for them to make sure that they expose themselves to the entire market available to them. By doing so, they will increase the demand for their services and also be able to make more informed assessments of what exactly the market is looking for from them in terms of the services and facilities they need to offer once they start getting feedback from the entire market. Local and international promotion for ports is essential in order for them to make sure that they expose themselves to the entire market available to them. By doing so, they will increase the demand for their services and also be able to make more informed assessments of what exactly the market is looking for from them in terms of the services and facilities they need to offer once they start getting feedback from the entire market.

Local and international promotion can be defined as being the efforts that ports make in order to inform mainly the professional community as well as the public in general about the services and facilities that they offer.

3.1.1.2 Evaluation of Sales and Marketing Techniques

The elements selected to evaluate en compare ports on these criteria are the following:

- Do the ports host informational seminars and webinars for their professional community?
- Do they take part in the Smart Digital Ports of the Future Conference?
- The presence of a proper digital infrastructure.
- Do the ports have international consulting services that they offer to strategic partners in order to promote their brand?
- Presence of Business Incubators







3.1.1.3 Sales and Marketing Techniques Benchmark

What we found was that the benchmark ports generally had a lot of information about their attendance and participation at international trade and logistics fairs and events, they also mostly offered informational as well as educational seminars to the local as well as greater international professional community. In general, the benchmark ports had active initiatives that tried to give them a strong foothold in the industry just by getting their brand or services out into the world as much as possible and thereby promoted themselves.

Some of the ports also offer very interesting consulting services to strategic partners globally that aid in promoting them as an international brand. The best examples among them are the Port oF Rotterdam and the Port of Algeciras.

On the other hand, the 7 GPM ports had mixed results on this criterion. The port of Nantes Saint-Nazaire has a good initiative with Be My Port which is a collective that works on promotional campaigns. Under the banner of Be My Port they took part in a number of international week workshops, and they also have representatives who are very actively promoting their port throughout Europe. Their promotional campaigns are very good in Europe, however on a further international scale they are a bit behind the benchmark ports.

The port of Marseille handles its international promotion more through partnerships with various international organisations. Le Havre and Rouen both use the organisation of HAROPA to carry out its promotion worldwide. They have representatives at various locations globally, but we didn't find any information on their presence and participation at trade and logistics fairs or of any strategic international consulting services that some of the benchmark ports have.

The ports of La Rochelle and Bordeaux have some good promotional activities that they carry out to promote their leisure and tourism activities or just to promote their port locally respectively. However, in terms of international promotion they don't have information about any initiatives similar to those of the benchmark ports. And the port of Dunkirk stated that they lack the budget to carry out full promotional campaigns internationally.

Regarding the inland ports, we were less stringent on the international promotion part since we felt that that is probably not as important for them as for sea ports. The port of Lille made good use of webinars and they also had representation at trade and logistics fairs close to them in the European region. Paris through the help of HAROPA gets a lot of their promotion done for them. And they also have a great initiative with their business incubator which promotes them in the local business community.

Smart Digital Ports of the Future Conference is the only annual international event on the market that brings together the largest number of global ports, terminals, and the entire supply chain to debate, share best practices, latest developments and to successfully propel the industry forward with digitalization. Only 75 attendees took part in this conference including Port of Algeciras, Hamburg, Rotterdam, Antwerp, Felixstowe, Tilbury. This shows that the French ports need to





be aware of such events and must take part to improve their global presence.

In the context of Being a Smart Port and having a great Digital Infrastructure again the winner will be Port of Rotterdam, Port of Antwerp and Port of Algeciras. These ports are a leader in the Al supply chain revolution.

The French ports on the other hand also had a good result especially the port of Marseille, Nantes-St-Nazaire, Bordeaux. The ort of Marseille has a dedicated research program for the Smart Port Initiative, which helps them to achieve this goal. The Port of Marseille Fos is accelerating its digital transition and proving its capacity for innovation by using new technologies to ensure environmental excellence, competitiveness and attractiveness.

Serving economic development and the digital economy, Bordeaux Port is recognized as a catalyst region for innovation. A true experimentation platform, the port enhances and makes available to its partners its spaces, infrastructure and resources, which already use many advanced technologies like satellites, sensors, radars, information systems, etc.

Overall, the French Ports have done a great job in creating a good digital infrastructure which helps them in being a smart port of the future.

There are very few ports that has a proper business incubator however the port of Paris and Lille has a dedicated business incubator which helps them in the promotion of their ports. However, the ports have something called the DATA Lab and Innovation Portals.

There is very information regarding the business incubator part of ports.

3.1.2 Image Marketing

3.1.2.1 Definition of Image Marketing

Using images in marketing to connect and engage with an audience is nothing new. Via the medium of storytelling, propaganda or advertising, humans have used images to illustrate a point for thousands of years. A strong image can speak a thousand words. Images communicate thought and emotion whilst communicating a narrative in a way which words on their own can sometimes lack. These images occupy a position in the consumer's mind, which consecutively helps to distinguish the brand from others.

Analysing this criterion would help us determine the distinct position of each ports and help us identify the most successful one. The two sub criteria which would help us determine the same would be the following:

Brand Image

In marketing Brand Image is how a company is perceived in the eyes of the customer. It is the Image of the company in the market. The ports have a distinct characteristic that makes it different from others, the only difference is some have a strong hold in the minds of the





customers than others. The brand image of each ports will help us determine the different characteristic of each port.

Green Port

A "Green Port", also known as an ecological port, represents the model of a sustainable port development, which not only meet demands of the environment but also increases the port's economic interests. Sustainability is the new trend now. Ports if not sustainable in its approach may not survive in this era. This criterion will help us determine the Port's contribution towards the green environment initiative.

3.1.2.2 Evaluation of Image Marketing

In order to evaluate and compare port's Image Marketing through these two criteria, we built the following scale (from 0 to 5) in which each criterion, if met, provides one point:

- The presence of a proper branding team and branding strategy.
- The emphasis on the presence of a distinct image in the market.
- Their activities/initiatives towards the environment.
- The ESI score indicator and the presence of an Eco-calculator
- Their reward/penalty system that encourages (or discourages) their suppliers towards greener alternatives (such as less CO2 emissions).

3.1.2.3 Image Marketing Benchmark

3.1.2.3.1 Brand image

Concerning this criterion each and every port including the foreign port has developed a distinct brand image. For example, the port of Marseille is also known as the green port serving the blue economy, the port of Nantes is known as the peoples port. Port of Piraeus, Greece is the largest cruise port of the east Mediterranean region, larger than all cruise ports in the Balkans, Turkey and Greece. The only ports which need to work towards improving their brand image are the ports of Lyon and Lille.

When it comes to having a proper Branding team, very few French ports feel it's necessary to have it, the port of Paris, Le Havre, Rouen does its promotion through HAROPA, All the benchmark ports have a good branding technique, Port of Valencia - dedicated platform specially designed for innovation and new ideas – an example for French ports.

3.1.2.3.2 Green Port

Most ports are advanced and even excel in the initiatives towards a greener process and investment. On an overall basis the French ports have performed brilliantly under this criterion and shown advance and sincere motivation to improve their daily mission and transform the port into a greener entity.

For example, La Rochelle Port which obtained full marks, has shown remarkable efforts in order to take into consideration the impact of





their activities over the environment as they have conducted a detailed meticulous study of the influence of their 2025 project on nature. It goes into the maintenance and preservation of different marine species, flora life as well as other factors forming a 1378-page report prepared by the port with the consultation of their community as well.

Another leading French port is Marseille Fos, which is the first to develop a CO2 emission eco-calculator. Dunkirk on the other hand has set a green hydrogen factory as their next project with the current "Getting to Zero" initiative working towards the objective of reducing greenhouse gas emissions by shipping by at least 50% by the year 2050. Bordeaux scored on the lower end of the scale since their only initiative that was found was the second stage of PEEPOS project of 2017 which aims towards having a low-carbon port by 2020. They probably have other initiatives, but they are not visible and promoted enough.

On the other hand, Le Havre acquired a similar score due to initiatives such as ESI score discount that almost all ports offer to their suppliers and partners as well as the usage of LNG which is directed towards less CO2 emissions by the ships. The inlands port showed just as much motivation as the 7GPM. Port of Lille has installed 6 vegetated rafts for water purification. It is in collaboration with bird protection league and has launched the production of beehives to be placed in the port. Port of Lyon is more focused on claiming the title of being a 100% renewable energy producer in France. While Paris port has set

253 actions in their environmental strategic plan towards the integration of the ports in their natural habitat and the control of their environmental impacts. Moving on to the Non-French ports, almost all showed impressive actions in this criterion. Amsterdam, on top on winning many awards for its sustainable actions, is also committed to increasing biodiversity in the port area through specific projects such as the construction of swallow walls, fish spawning grounds and toad pools. Antwerp has collaborated with several companies to further develop the shore power network for their wind turbines as the port of Antwerp houses the largest wind farm on the Belgian mainland where they monitor the air quality as well. Bremen has been awarded the Nord West Award 2020 for its project "The carbon-neutral port". It is also the largest seaport with environmental certificate in accordance with the PERS (Port Environmental Review System).

3.1.3 Digital Promotion

3.1.3.1 Definition of Digital Promotion

In the era of digitalization, IT solutions help reaching one's target market via internet, and digital promotion is a marketing tool. Digital promotion targets a specific segment of the customer base and is interactive. Digital promotion is on the rise and includes search result ads, email ads, and promoted tweets – anything that incorporates marketing with customer feedback or a two-way interaction between the company and customer.

Analysing this criterion would help us determine the online presence of each ports, and hence help us find out the reach of the ports on a





global platform. It will also help us determine how successful the ports are in using digital promotion. The sub criteria that will help us analyse the same are a) social presence b) website quality c) friendly experience to foreigners.

Social Media Presence

The aim of the criteria is to establish a study on impacts of ports in social media as an assessment of Interactions with Public or Customers in order to evaluate their Social Presence. After all the Struggles and change of life influenced by recent Covid-19 Pandemic Crisis, The Digital era has evolved in all the aspects as it acts as a vital role in every Professional and Business Conditions. Social Media is a very vital tool to reach a larger audience with less efforts and traditional marketing approach. It is also more cost effective than the traditional marketing approach.

The methods to analyse the Social Presence of the port is to segregate the data on the classification based on their Account availability, No. of followers, No. of likes, Average Engagement rate in the Social media Platforms like Facebook, LinkedIn and Instagram. Facebook is the preferred social media network among port.

Website Quality

A good website reflects your business brand, offers high-quality content and is easy-to-navigate. Your website is the key to a successful digital marketing strategy because all other digital marketing elements direct guests to your website, which should effectively convert guests.

Having a good website is as important as being present on social media platforms, this criterion will help us analyse the digital well-being of the ports.

Friendly experience with the foreigners

User Experience is the ultimate aim of digital promotion, and to achieve this goal one should always focus on UI/UX designs and experience. The ports well-being will be directly proportionate to the fact on how they treat foreign consumers and their experience while using their digital platform. In the case of foreigners who may be very unfamiliar with a foreign nation's markets, especially from logistics and maritime aspect, it is necessary to give them an initial impression to consider to keep in touch and create long-term interactions with the company.

Therefore, for the purpose of this study, we define friendly experience as the supportive tool towards the professional community for the ports. A friendly website or a responsive website simply means that the structural appearance, language used perfectly viewed across different devices, screens, platforms, and most importantly the quality of information given through their websites should meet the requirements of viewers as well as the loading page speed.

3.1.3.2 Evaluation of Digital Promotion

The above-mentioned criteria will be analysed on the basis of 5 different points from a scale of 0-1, if the ports fulfil each criteria point awarded will be 5 and so on.





- Social media accounts and the quality content on each of the platform. (no of likes, followers).
- Total engagement rate.
- Website quality in terms of user friendliness/presentation and format.
- Page load time on different devices.
- A common language for the information shared.

3.1.3.3 Digital Promotion Benchmark

3.1.3.3.1 Social Media Presence

We analysed the active social media Accounts which exists for some and where some don't even have one.

As Shown in the figure, Antwerp, Rotterdam, Dublin, Amsterdam and Piraeus have the Maximum social outreach out of all 28 Ports. It was very surprising when we were unable to find any social accounts of Port of Lyon, Port of Paris, Algeciras and Felixstowe on Linkedln, Instagram and Facebook. The Engagement rate has been calculated on the measurement of Number of followers, Number of posts and average likes count.

Among the study made in the Social Network Engagement rate of Ports has been helpful to understand the potential of Presence of ports through its Social Outreach.

Another interesting aspect was the use of social medias. French ports using social medias do it using the same strategy (and content) for all medias, while there is a different utility for each media. LinkedIn should be used for deeper analysis and contribution of experts, Twitter should be used for announcements, Instagram to provide contents to be reused and facebook to engage the public. Therefore content should be different from one media to another.

	no of followers		Engagement Rate/10		
ports	linkedin	Instagrar	Facebook	Facebook	linkedin
Dunkirk	7172	142	8796	5	4.7
le Havre	698		2393	6.2	3.7
Rouen			23	1.7	
Nantes Saint Nazai	5404		1525	4.9	4.5
La Rochelle	5492		2404	4.3	4.3
Bordeaux	837	0	587	1.5	1.5
Marseille	14156	1224	2979	5.2	
Lille	1540	22			7
Lyon	4		38		
Paris					
Antwerp	41656	10500	19804	8.3	5.9
Zeeburg	8804	1359			3
Rotterdam	59847	10400	1218	7	5.4
Amsterdam	12609	1761	5423	6.8	6.7
Bremen		2235			
Hamburg	3095	3030	406	5	4.5
Algeciras					
Barcelona	17215	823			4.5
Valencia	6558	1772	1032	3	3.5
Genoa	4842	853	5104	4	2.5
Venice	862	734			3.4
Piraeus	2191	4623	522	6	7
Copenhague	2340	481	428	4	3.7
Dublin	7176	3025	32810		7.5
Felixstowe					
Oslo	1123	1943	3936	4.5	4.5
Ports Mouth	3000	1503	3936	3.5	5
Tilbury	2900				





3.1.3.3.2 Website Quality

Regarding the Website, We, evaluated the criteria on the basis of: User-friendly, Presentation & Format, Language availability, Annual report access, Ships in and near port, Infrastructure & Equipment, KPI (Key Performance Indicators), Terminals and Organigram.

The very impressive and satisfying evaluation prevailed under the model of best of all sites which are Rotterdam, Antwerp, Barcelona, Valencia, La Rochelle, Marseille and Dublin.

All Of these ports have a dedicated website and excel in the field of user friendliness, format and presentation.

The port of Rotterdam (Non-French Ports) has been a pioneer in the Management and Analysis of Data and it has covered all the Key factors required for a quality Website. Especially when setting up the Criteria, the port of Rotterdam reflected as a website with extra more information which were enthralling.

The average page load time is perfect which is 2 seconds on every device.

The Main trouble while researching about the Website is, we couldn't find the proper websites for example while searching the website of Lyon. The weblink we found managed by the port authority was lyon-terminal.fr. which doesn't have adequate information about the ports on the basis of our Criteria. But the previous linked domain is now managed by CNR which is cnr.tm.fr which was really confusing to reach the page. Whereas, all Non- French Ports Especially Antwerp,

Rotterdam, Hamburg was really friendly and it provided all the information in appropriate places in all Foreign languages for easier Understanding.

Bordeaux port being as an International Port it hasn't given KPI Information on their website which is surprising. Lille Port is the one which it has to publish it on the website or newsletter.

The website for a Port is very much necessary as it evolves in the Digital Era for various reasons and purposes. Therefore, it is important for French Ports to improve their websites according to their users.

Friendly Experience with the Foreigners.

For the GPM, there is the most striking point from Nantes Saint-Nazaire and Marseille ports. Port of La Rochelle Has done a great job in maintaining a user-friendly website for foreigners. We, could find no fault with their treatment of foreigners. The efficiency and user-friendliness of the port's website in multiple languages are an indication that this port has foreigners in mind.

They have their entire reports and missions available in English which is useful for people around the world who can easily understand the information in all aspects about the Port and that they would like to provide a pleasant experience to them.

On the other hand, it is clear from our assessment of Dunkirk and Bordeaux that they are not very focused on international relations. They don't have nearly as many initiatives to engage with international





partners and communities as some of the German and Dutch ports have. The English versions of their websites are rather limited compared to their French website versions. Particularly, the amount of information displayed on Dunkirk website drops down drastically when you change language from French to English or Chinese. However, they do show the necessary information regarding the traffic and sector of the port and there is a lot of room for improvement especially in considering how much trade takes place with shipping lines from the UK.

Regarding to HAROPA community ports of LeHavre, Rouen and Paris. In general, the structure of information is not well displayed, the amount of information seems a lot and the font and size are not attractive to make it more outstanding. And they provide the English version of the website which seems sufficient in giving the easier look for readers, researchers. From our point of view, we saw that LeHavre's separated website brings the experience and information to foreigners most adequately and it is updated in comparison with the two other ports of HAROPA. However, there aren't nearly as many initiatives to engage with international partners and communities as some of the German and Dutch ports have.

In inland ports, portoflyon.fr is now cnr.tm.fr whose Lyon website is available in English version for the user-friendly experience towards foreign visitors. On the contrast, Lille port seems to have a lack of another language option which is accounted as the lowest rate for this

evaluation and causes an obstruction to absorb information for customers; however, they have identification of clients who have container activities. With the current context: telephone, email and then transform it into video and then face-to-face.

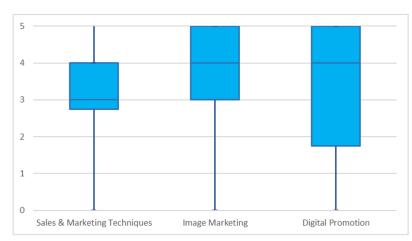
On the side of ports that is the other foreign ports, it cannot be deniable for the maximum achieved score that they reached. For the first thing, they all have a real international mindset. All of them provide their website in multiple languages and translations and offer consulting services to international partners and clients, they are committed to a vision of an international community. By that way, they are willing to share expertise internationally and sufficient information including the frequency of the ships and their services as well as their contact information can be transformed to customers clearly. All the information in the websites is easily accessible and user friendly for the foreigners. And they participate in fairs and events internationally to connect with foreigners on a professional level. As International students, we were able to collect all the information from the social platforms.

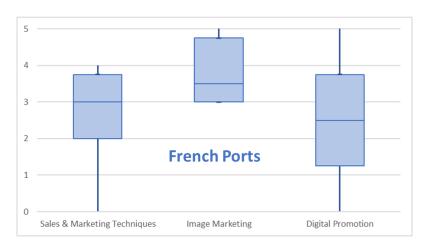
The top Performers amongst them Is Port of Valencia which has a dedicated platform for foreigners to comment and suggest changes.

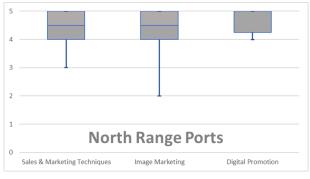
Port of Amsterdam which has a proper website with all the required information, Port of Venice and the port of Barcelona raising the bar for all the other ports.

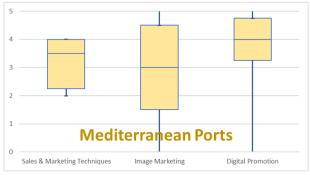


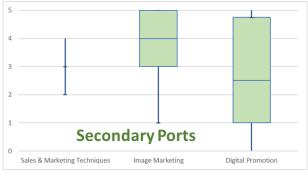
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3.2 Lobbying

3.2.1 Soft Power

3.2.1.1 Definition of soft power

In business to business markets, the concept of soft power is an important factor of competition because it builds links beyond transactional links. Soft power is often defined as the ability to attract and co-opt, rather than coerce.

Port ecosystems are no exception and they use soft power to develop their attractiveness. Our research shows different elements of soft powers for ports that we compiled in four sub-criteria:

Executive Education

Executive education has a great influence on trainees who often refer to the place they studied and show a preference for that place in their later carrier. For a port, having a place to host future top managers, create a network of alumni and sharing the brand image of the port community means creating ambassadors of the port.

Training at undergraduate and graduate level bring the feeling of being part of a community to the students, but training at MBA, Msc of Executive education creates an even stronger soft power for the host port community.

Research

At the international level, major ports are supported by strong teams of researcher. These teams, of course, publish their results in academic journals, but they also bring light to their port communities and show the expertise of the port communities around the world. This participates to the brand image of the port through a very soft and precise manner.

International Investment

Some ports are investing in infrastructures or organizations abroad in order to create strong links with a community that could favour the choice of the port when needed. Also, some ports invest in international institutions that are hosted in the port in order to raise visibility for the port and show its attractiveness.

Consulting

A port can also develop soft power by hosting a consultancy department that spreads the know-how of its managers and creates links with other partner ports. This consultancy aspect can also take the form of a strong partnership with a consulting firm based in the port and being the armed wing of the port in international bids.





3.2.1.2 Evaluation of soft power

In order to evaluate and compare port's soft power through these four criteria, we built the following scale (from 0 to 5) in which each criterion, if met, provides one point:

- At least a Maritime Program at University level (Economics, Law, Business, Geography, etc.)
- At least an Executive Education Program (MBA, Msc, a Dedicated School)
- At least one team of internationally recognized researchers dedicated to port and maritime sector
- At least one infrastructure or transportation company abroad own by the port, or at least one headquarters of an international institution
- At least one consultancy department or one headquarter of an internationally recognized consulting firm dedicated to ports and maritime sector.

3.2.1.3 Soft power Benchmark

3.2.1.3.1 Executive Education

Concerning executive education, most ports, French and foreign ones have bachelor programs. Only few port cities, mainly inland port cities don't. No major port, except Algeciras do not have such a program.

Concerning the second point, a little less than half of the benchmarked ports have a dedicated center for executive education. Among these, we find three of the world major centers for executive education in

Maritime sector with IPER, Institut Portuaire d'Enseignement et Recherche, (Le Havre); Antwerp & Flanders Port Training Center, APEC, (Antwerp) & Valencia Port Fundacion (Valencia). In addition to these there are also the Short Sea Shipping School in Barcelona, and World top 10 Msc in Maritime Management and Maritime MBAs in Copenhagen Business School (Copenhagen), Kuhn Logistics University (Hamburg), Kedge Business School (Marseille), Erasmus University (Rotterdam), etc. These ports train a large range of alumni who are and/or become top executives in the sector. These alumni, thanks to international attractiveness of the programs become ambassadors of the port city.

3.2.1.3.2 Research

Most ports are located in cities that have a University. As seen in previous point, they have in general programs dedicated to ports and maritime management, even if not all of them are experts. Research financed and managed in cooperation with ports is another interesting aspect of soft-power, since it spreads internationally the know-how of the port.

In this part, we took only into consideration ports that are embedded in research programs with internationally recognized teams. As a result, around half of benchmarked ports are in such a situation of cooperation with research, both foreign and French ports. Northern Range ports are all in this situation, as well as the major Mediterranean ports studied. One remarkable example is the port of Antwerp, with which scholars have work contract and therefore are temporary employees. They therefore act as counsellors and do their research





in close partnership with port expectations. They have access to port data and make the port one of the most studied, and therefore visible internationally as a stallion. In France, a lot of renown scholars also work on African, Baltic, Arctic, Caribbean or Asian port issues and lesser on French ports. There is probably room for improvement in terms of collaboration with local/national ports.

3.2.1.3.3 International Investment

International investment is the lowest of all criteria in the benchmark with less than a fourth of the ports satisfying this criterion. Moreover, this is a discriminating criterion since all ports that satisfy it have the higher grade of 5 out of 5 on soft power.

The four main ports of the North Range satisfy it, with mostly investements in infrastructures abroad for Rotterdam and Antwerp, investment in foreign transport companies for Hamburg and softer power for Le Havre who is host of the Headquarters of the International Association of Port Cities (AIVP). On the Mediterranean Range, Barcelona and Piraeus are investing in infrastructures abroad, especially Barcelona in France.

3.2.1.3.4 Consulting

Last soft power criteria is consulting with half of the ports doing or working closely with a major actor of port consulting. Ports of Le Havre and Antwerp have their own department of consulting and cooperation. These port authority experts are applying to international call for tenders and provide their expertise all around the world. A good example is the cooperation between the port of Le Havre and

the Port of Kribi, with a special link to the Cameroonian Minister in charge of the project who was a former student of IPER in Le Havre.

Other ports are working closely with a consulting firm, major international actor of its sector. This is the case of Bremen, where ISL is based and created by scholars from Bremen University. This is also the case of ALG in Barcelona, in which former port managers work in the consulting firm and where former consultants work at the port, sharing expertise despite the very centralized port system of Puertos de l'Estados.

3.2.2 Influence

3.2.2.1 Definition of Influence

Influence in political science is an ability to convince others. as a consequence, in economic field, influence is an indirect power helping one's ability to reach his objectives. In international trade and industrial marketing, influence is considered as an important factor.

Players involved (Private)

In every industrial sector, there are spheres of influence, from old boys club and alumni's associations to formal unions. Maritime sector is no exception.

Governing Bodies

The second way to gain influence is through public power at local, national, regional and international levels. The governance of ports becomes therefore very important to influence political decisions toward more favourable conditions of operation.







3.2.2.2 Evaluation of influence

Influence is very difficult to evaluate objectively since it is by essence an indirect power. However we set the following criteria to approach the concept:

- Does the port host professional clubs
- Does the port have unions of private actors
- Does the port have dedicated public corps
- Is there a mix between private and public corps

3.2.2.3 Influence Benchmark

In most ports studied there are general professional clubs and sector dedicated clubs such as Propeller's club, Wista, or in France the Cluster Maritime.

In the same way, all ports have unions regrouping industries, port handlers, logistic companies, etc. There are different types of governance according to countries, but all have a local, national and international affiliation. This generates influence and helps sub-sectors to negotiate along their interests at all geographical levels mentioned. In France, we can cite Union Maritimes, Union des Ports, Union nationale des industries de la manutention portuaire, etc. This type of organisation had for instance influence when VGM regulation was to be implemented in 2016.

On the public side, France, but also Spain have public corps managing most ports. Corps des Ponts in France and Puertos y canales in Spain provide most boards of directors of ports. This is both a strength and

a weakness for ports, because there is a strong potential of national influence, but there is also a weakness in the uniformity ports can be managed. In Northern countries as well as Italy and Greece, it seems there is more mixity of profiles with managers being able to move from port authority jobs to private logistics or maritime jobs in the port area, and vice versa. This is a strength in the sense people know better the objectives and constraints of each other's. At a cluster level, it can be crucial to look for cluster outcomes than collection of individual outcomes. Supply chain management teach us that often the sum of individual decisions is not as optimal as collective decision.

3.2.3 Task Force

3.2.3.1 Definition of Task Force

Task Force is about joining forces and expertise in order to make operational a common strategy for commercial purpose. We have identified in the lobbying part of the benchmark several different types of soft power and influence networks, but these networks should be aligned for the development of the port and be actionable. This is what we mean with the present item of task force.

This action is quite visible in international trade fairs. In the case of port sector, the service is becoming a door-to-door service for industrials; therefore, trade fairs can be maritime and port fairs, but they are mostly logistics and industrial fairs.

Moreover, what is crucial is the decision-making ability of the task force. Going to fairs to gather contacts and network is good, but often these fairs are the occasion to sign contracts.







3.2.3.2 Evaluation of Task Force

The task force can be evaluated upon three levels of participation in fairs:

- Participation to Posidonia
- Participation to logistic fairs
- Participation to industrial fairs
- Hosting a sectorial international fair

3.2.3.3 Task Force Benchmark

French ports have their commercial services that we interviewed. These services often travel to join international fairs in logistics, maritime and supply chain fairs. In the traveling teams, there are commercial but also technical managers. As a whole, French ports also benefit from the support of Business France, the agency of promotion of French companies. Business France has international network of offices and performs business intelligence.

France also hosts the SITL fair in which most French ports, but also foreign ports and logistic operators are coming. Often the stands of French ports are shared with port community companies and represent a common platform for the port community.

There is however no stand for French ports or French maritime sector in Posidonia, the main fair in maritime sector. In Miami, however,

the sectorial fair for cruise, French representatives from Marseille and Le Havre are present.

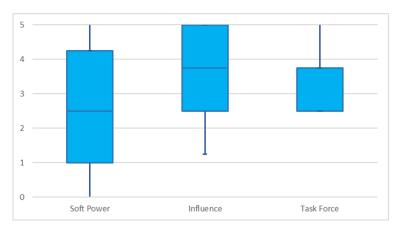
Foreign ports from our benchmark panel have same kind of activity in fairs and benefit from the support of their national or local government like Flanders's region for Antwerp.

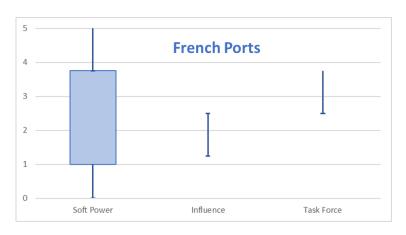
Lot of foreign ports have a stand at the French SITL fair, often with representatives of their region and logistic service providers. In Posidonia 2018, Norway, Denmark, The Netherlands, United Kingdom, Austria and of course Greece had a national presence.

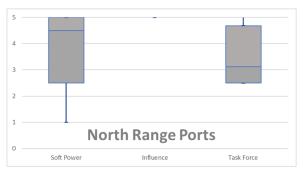
In terms of hosting international fairs, Hamburg hosts Hafengeburstag, an International Port Equipment Exhibition; Rotterdam host Europort the Port Equipment Manufacturer's Association annual fair, Piraeus hosts Posidonia and the Greenport congress, Valencia hosts every year the Mediterranean port and shipping fair, Amsterdam hosts Intermodal Europe, Europe's leading event for container transport and logistics across road, rail and sea, Marseille hosts every three years the Euromaritime & Eurowaterways Trade Shows & conferences dedicated to the Marine Industry Sector and Inland Waterways technologies in Europe; Paris the Passenger Terminal Conference & Expo, an international conference and exhibition for passenger terminal design, management, security and technology.

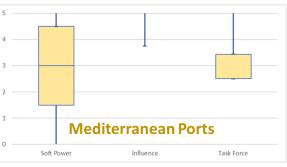


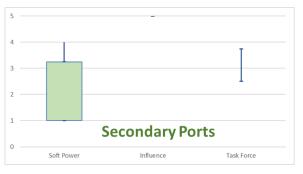
Box & Whiskers 28 Ports













3.3 Market Research and Business Intelligence (BI)

3.3.1.1 Definition of Market Research and BI

Market research is the process of determining the viability of a new service or product through research conducted directly with potential customers. Market research allows a company to discover the target market and get opinions and other feedback from consumers about their interest in the product or service.

This type of research can be conducted in-house, by the company itself, or by a third-party company that specializes in market research. It can be done through surveys, product testing, and focus groups. Market research is a critical component in the research and development (R&D) of a new product or service. In B2B market, however, it is more difficult to conduct, since it is a lot about the relationship marketing and value creation for stakeholders. Sometimes, the actor who pays is not the target market.

Business intelligence (BI) combines business analytics, data mining, data visualization, data tools and infrastructure, and best practices to help organizations to make more data-driven decisions. In practice, modern business intelligence provides a comprehensive view of one's organization's data and use that data to drive change, eliminate inefficiencies, and quickly adapt to market or supply changes.

There are four sub criteria that will help us determine the importance of Market Research and Business Intelligence: a) Appropriate Marketing Background b) New Market and Business Discovery c) Market Studies d) Business Intelligence Methods

Appropriate Marketing Background

The background analysis is also referred to as a situation analysis, and is the nuts and bolts of the marketing. This analysis sets the scene for pretty much everything that follows it and, if done well, will provide the business with a solid foundation.

Having an appropriate marketing background is an asset for the Marketing Department of any organization. It is important to know whether or not the staff employed in the marketing department of the ports have good marketing backgrounds and education to see if that could be a factor that aids ports in having successful marketing results. Thus, our focus was to find useful information online about the heads of marketing and marketing managers and assistants to see what their educational and professional backgrounds are?

New Market and Business Discoveries

From a strategic point of view, new markets and business discoveries are atypical in essence because conventional rules do not apply. In new markets the questions that typically define a company's strategy have no easy answers and therefore what is at stake is the capacity of







the organization to think out of the box and be creative in value creation.

When a market has just been born, the forces of competition there are constantly in flux, it's unclear who customers really are, and conventional strategies just don't make sense.

The criterion of new market and business discovery is one that we thought could be interesting to look at. It is something where we tried to look at it and how ports go about actively seeking out new business partners or if and how they seek to support and develop new businesses that could use their services in the future. To an extent this criterion is very related to the one of local & international promotion because promotion is a form of seeking out new clients and partners.

Market Studies

The first task is to discover a new potential markets. This task is however only the first of a marketing process. The most difficult part is often to understand and anticipate the new market identified. Market studies help to understand new markets and to analyse the different strategies fitting for the specific market.

Therefore, Market study is a study that analyses market demand for a particular product or service. It analyses the activities in a market in regard to such influences as location, demand, and competition which may or may not affect the value of property.

This criterion will help us dig deep into the market analysing capacity of the ports, whether or not they feel it is important for them to analyse their new markets.

Business Intelligence Technique

Business intelligence is a way to use use intelligence for watch groups in order to take better decisions. It is a prospective approach as well as a strategic attitude. Business intelligence is a strickt application of Sun Tzu's principal of knowing your competitors: "If you know the enemy and know yourself, you need not fear the result of a hundred battles." The approach to BI is defined by the tools one's uses. Examples of BI tools include data warehouses, dashboards, reports, data discovery tools, and cloud data services. These tools make it possible to extract the insights from organisation's data. One know well only what he can measure and can measure what he knows well, therefore, artificial intelligence and machine learning start to play important roles in this field.

The ports sector is only at the beginning of business intelligence, but has much to gain from exploiting it. Using business intelligence supports effective decision-making, including co-ordinating workers, allocating labour, minimising costs and obtaining accurate profit/loss statements swiftly after a job is finished.

Automated text mining and textometry also help analyse trends in a sector and evaluate either the response to provide or the new areas where to invest.



3.3.1.2 Evaluation of Market Research and BI

The elements that will be taken into consideration for the benchmark of market research and business intelligence capacities of the ports are the following:

- Does marketing department have a business intelligence infrastructure?
- Does marketing department harness the data via business intelligence or not?
- Does marketing department have a prospective research group
- Does the port have a partnership with a Business Analytics, Artificial Intelligence or Machine learning research lab?

3.3.1.3 Market Research and BI Benchmark

It seems French ports run traditional 'veille' on the sectors they are used to follow. When there are shipping, logistics or industrial companies using machine learning, we did not meet any information dealing with such in French ports.

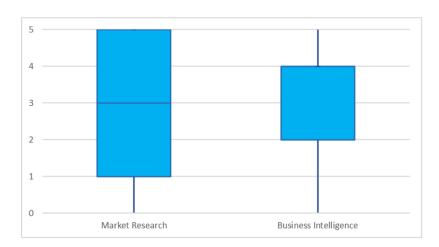
Smart ports are the only initiatives in which this kind of projects can be mentioned, but they still are projects and not effective. Similarly, no partnership was found with research labs, public or private.

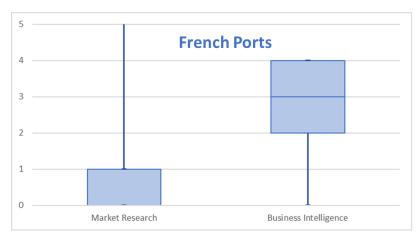
This is surprising, knowing French produces some of the most renown actors of AI.

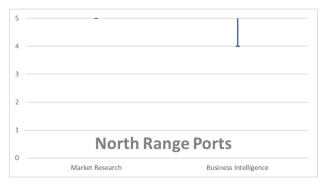
In foreign ports, only Rotterdam in its smart port projects develops this kind of technologies with Erasmus University et Technological University of Delft. Barcelona port announced a project of Al with Politechnical University of Catalonia. This area is therefore one to develop fr French ports.

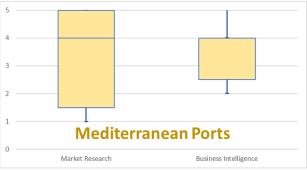


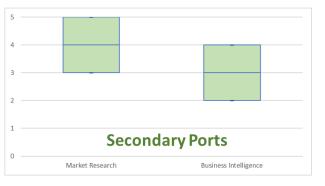
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3.4 Port Community

3.4.1 Community engagement

3.4.1.1 Definition of community engagement

Community engagement is a strategic process with the specific purpose of working with identified groups of actors, whether they are connected by geographic location, special interest, or affiliation to identify and address issues affecting their well-being.

Community engagement, that is, you reach out to the community in question in order to engage them better in the community initiative by respecting the right of all community members to be informed, consulted, involved and empowered. Community engagement employs a range of tools and strategies to ensure success. Thus, it places a premium on fostering and enhancing trust as a critical element in long-term, sustainable engagement and effective governance.

3.4.1.2 Community engagement benchmark

3.4.1.2.1 French ports

Regarding to community engagement, due to various friendly, open policies and educational initiatives towards community which facilitates close access and brings career opportunity for the citizens interested in maritime and port operations, there shows no French ports are able to reach the optimal score.

For example, even though conducting a prior public consultation for I month in 2018, Atlantique La Rochelle Port wishes to carry out a series of future developments by 2025 to improve the added value of the port platform for the territory. And similar to La Rochelle, Lille port also organized the European Heritage Days 1st JEP organization in 2019 to attract nearly 1,000 visitors who come to discover the Port of Lille site.

However, there have several cases that implement well the purpose of community engagement. Particularly, the "Grand Port Maritime du Havre" is a public institution taking care of administrative public service tasks and missions of industrial and commercial public service. Each year, under the aegis of the International Maritime Organization (IMO) and in partnership with HAROPA - Port of Le Havre, the Port Institute of Teaching and Research (IPER) organize the Advanced course on port operations and management for maritime executives, port authorities. Dunkirk and Marseille also have gained numerous partnerships through exhibitions and meetings dedicated to port and logistics synergies and allows professionals and students in transport and logistics courses to visit the port on guided tours. Bordeaux is identified as a "catalyst territory for innovation" within the framework





of the CPER (State-Region Plan Contract), the port of Bordeaux is continuing to develop new sectors in connection with public partners.

On their way towards maintaining natural habitats, Port of Rouen is also developing eco-grazing practices in various natural areas under its management, in particular in conjunction with breeders or associations. Extensive grazing is indeed a tool for the biological management of wetlands while promoting biodiversity. Besides, Nantes Saint-Nazaire with a commitment to provide equal opportunities, port has great initiatives to make sure that their community of employees remains satisfied with their working conditions.

As considering inland ports, with a huge public investment, HAROPA - Ports de Paris is continuing studies for major multimodal platform development projects in Greater Paris. There have two training centres, including AFT-IFTIM (forklift truck operators, crane operators, truck permits and public transport). Port of Lyon is educated to rowing, the nautical centre of Virign in (Ain) is one of the projects that CNR has supported to dynamize the banks of the Rhone to give them life, and make them appealing places of discovery.

3.4.1.2.2 Foreign ports

In contrast, the Non-French Ports such as Antwerp, Rotterdam, Bremen and Amsterdam overweigh those French ones. It is undeniable for Port of Antwerp, together with the affiliate APECAntwerp/Flanders Port Training Centre, set up high-level training sessions offering short-term seminars to professionals from all over the world. The seminars do not only facilitate an exchange of knowledge and best

practices; they also provide a platform of discussion between participants. Fun and educational activities for the Kids (Education program) organized by Rotterdam have a significant indication: 'Invest in today's youth!'. For Bremen port, working closely with AFZ Bremen, they offer career opportunities at the port in eight different occupations to young pupils and students. And in order to engage with the entire community, the port also strives to offer opportunities to people of all genders as well as to people with disabilities. The port of Amsterdam decisively explores ways of promoting internships for students in the senior secondary vocational education (MBO) system. And they work with JINC, a non-profit organization that fights against inequality of opportunity among young people.

Dublin Port Company transformed this important artefact and transformed the Diving Bell into a new interpretive exhibition that explains its origin and history. Dublin Port Company has opened a new state-of-the-art Seafarers' Centre at Dublin Port following a €500,000 investment in the facility. The Seafarers' Centre breathes new life into the site of the old Odlums flour mill. Housed in the former Odlums workers' canteen, which had been in use up to the mill's closure in 2012, the Centre now provides a base for vital services to sailors docking in the port, an essential workforce of the city's economy.

The 2020 Strategic Plan of the Port of Algeciras Bay Authority focuses on the main aim to "Interrelate with the surroundings and with social policies" as a plan of action: to maintain and promote an improved relationship between APBA and the Port Community as a whole, and with the surrounding area, including the boroughs, institutions and the



society in general. This will improve the public image as it is perceived by locals and generate maximum wealth and a maximum number of jobs that are compatible with the sustainable development of the Port, thus contributing to the general socio-economic welfare.

The Port of Venice has been participating in ESPO Award (European Sea Ports Organisation) since 2010, promoting initiatives for the integration of the Port and the City.

Last but not least, although it does not show a better than their coregional ports, the Port of Zeebrugge has joined the International Port Community Systems Association (IPCSA). In February 2021, SPEED and Port of Zeebrugge launched an open call for experts on smart camera detection and video analytics. And Hamburg Port conducts SMOOTH PORTS meeting for the Global partners to engage as a community every year.

3.4.2 Relationship with the Actors

3.4.2.1 Definition of Relationship with the Actors

With the majority of global trade carried by sea, developing strong, well-functioning private port network of actors is a key element of economic growth. Relationship management is a relationship involving the sharing of power, work, support and/or information with others for the achievement of joint goals and/or mutual benefits. In fact, it's difficult to establish a base for mutual understanding in port community to address challenges of all actors and to know whether they share culture, beliefs, expectations, and realizations. Thus, the port authority has to raise up both in terms of conceptual understanding

of the needs of stakeholders in and around the port, and also in its business proposition towards existing and new clients.

Our evaluation is based on the number of successful collaborations, mergers or acquisition agreements, networks with their supplier, government, clients and the terminal operators that meet their win-win solutions, how their presence at the important meetings, etc.

Relationship with partners (suppliers/government)

Once the port has selected a suppliers or partner it is important to develop a productive and professional relationship. This relationship is one of the keys for business to business markets.

The relationship with government is of a different nature but follows similar rules.

Relationship with terminal operators

Another criterion is the relationship between the terminal operators and the port authority. According to the Global Institute of Logistics, "container terminal operators have an enormous influence on the safe, secure, efficient and timely execution of the dispatch and receipt of the containers. Reports show that direct relationships with container terminal operators have led directly to greater visibility, increased velocity and added value in their container logistics processes".

Specific duties of a Terminal Operator include supervising incoming and outgoing shipments, performing quality control inspections, making sure terminal equipment is in good working condition, and hiring







staff. However, the trend in Europe shows an increasing importance of terminal operators for the strategy of ports. Terminal operators are the actors investing in the hinterland, both platforms and transport, in order to attract flows in the port.

Therefore, it is very crucial for the Port Authority to maintain a healthy relationship with the terminal operators, select them carefully, depending on their strategic orientations, and to consider them in the overall strategy of the port.

Relationship with existing clients

A regular follow up always gives customers a chance to be heard and engage effectively, such engagement helps the Port Authority to strengthen their market standards.

The more transparency the port shows in its processes and planning, the easier it is for their current customers and markets to trust and believe in the services that the port offers now and in the future. And finally, with high-level real-time information on the shipments in and around the port, ports offer their customers a service that allows them to more accurately plan their shipping schedules.

Continuity in the policy is also an important matter for shippers and freight forwarders who establish flows in a port and sometimes invest on long term.

In the current scenario it is very important for the Port Authorities to establish a good relationship with their clients. Evaluating this criterion will also help us determine whether or not the clients were informed about the operations during the COVID-19 pandemic.

3.4.2.2 Evaluation of Relationship with the Actors

These elements have been evaluated thanks to the following criterions:

- Is there a transparency in the relationship with actors.
- Is there a proper real time information on shipments through the port
- Is there continuous training and availability of workshops.
- Is there consultation on projects and inclusion in decision making.
- Do the terminal operators have autonomy of the tasks performed?

3.4.2.3 1.1 Relationship with the Actors Benchmark

3.4.2.3.1 Relationship with partners

La Rochelle port and Bordeaux port show only few information about agreement signed in commercial operations with other ports and also lobbying policy applied in the ports.

As a member of Norlink, Dunkirk has gained a great partnership between the ports that allows for smooth transfer of knowledge and expertise, thereby not only building solid network relations between





ports and their customers but also more open discussions with government. In contrast, the Port of Le Havre community has gained trust from over 120 forwarding agents as well as the agents for all major shipping lines. A member of the International Port Community Systems Association (IPCSA), Port of Le Havre in partnership with SOGET and by merging into HAROPA community, those have given the Port various benefits to increase the productivity of supply chain stakeholders and satisfies the new regulations and identify trends for maritime traffic.

In the mutual system with Le Havre, HAROPA - Port of Rouen works in collaboration with Natural Reserve for the implementation of the Natural Reserve Management Plan which develops ecological management plans and management actions on the sites it has restored or on those identified as outstanding. The Port also in well relationship with French Government's in order to protect the health of employees, sanitary measures have been reinforced.

Nantes Saint-Nazaire Port management tries to keep an open and ongoing dialogue with all of its stakeholders, partners and customers with daily communication between the parties in order to make sure that the strategic and operational decisions made are beneficial to the parties concerned. Finally, the Ports of Marseille Fos and Montreal have signed a five-year cooperation agreement for the first time in order to partner on trade and innovation. And this port is also as a member Medlink.

Regarding to inland ports, Lille port established strong partnerships with large-scale international companies (Unilever, Roquette, Heineken, Evian, Volvic, Tereos) and acts as an active member of NorLink, France. They have collaboration with the French waterways (contract with the port of Lille), contact with the Regional Council for subsidies, contact with cities and towns (more or less good relations). Next, on the scale of the 'Greater Paris' (Grand Paris) area, HAROPA - Ports de Paris is a port network that provides functions of logistics hubs with urban ports in the heart of cities as points of final delivery which are organized within the scope of an ambitious RSE approach. Lyon port is partnered with CNR to work alongside the territories to generate local economic impacts, accelerate the ecological transition and strengthen the link between the neighbouring population and the river. The company has also endowed itself with an environmental management plan to ensure its activities are carried out in harmony with the principles of biodiversity.

On the other hand, the large ports of the Northern range gain the highest score in terms of creating a strong marketing strategy and convenient corridors to maintain relationships with their partners and government. Antwerp: APCS is the network of systems and solutions for electronic communication in the Port of Antwerp, which offers several nautical services to ensure an efficient follow-up of shipping movements and optimum arrival and departure planning of vessels. The ports of Antwerp and Zeebrugge merged under the name 'Port of Antwerp-Bruges' is all about creating added value for customers and stakeholders, as well as for the rest of Flanders.



Zeebrugge has a strong collaboration with Toyota as a 44% increase in traffic was due to their car transportation. Besides, they also received support investment from the Flemish government as well as the federal government in maritime access, opening up of the port through the road and rail connection with Infrabel.

Rotterdam is Europe's leading city in terms of connectivity. It ranks the cities that offer the best prospects for foreign investment, economic development and corporate expansion. Port Authority and its partners work together to put Rotterdam on the map using the slogan 'Make it Happen'.

The port of Amsterdam has progressive techniques of sharing expertise and knowledge with their international partners. They believe it is important to foster these relationships especially in order to secure future sustainable business opportunities for the port.

Bremen port has an excellent treatment of shipping crew; they won the award of Port of the Year as decided by the seafarers themselves in 2016 and also the treatment of partners. In terms of lobbying, the port of Bremen signs contracts with representatives to promote their interests in the hinterland areas of the port.

Hamburg partnered with 12 other ports. They have separate advertising partners for building their relationship with existing and forthcoming customers. Some of their major customers are Hyundai, Unilok Logistik, UMCO.

The Mediterranean Ports and other northern ports have developed a well-maintained communication channel with their partner, clients, supplier and government.

The Port of Venice has been participating in ESPO Award (European Sea Ports Organisation) since 2010, promoting initiatives for the integration of the Port and the City. The Venetian waterfront is seen as an example of symbiotic cohabitation between the port and the city.

The ports of Genoa and Savona ports are tightly linked to the logistics and transportation networks. According to the National Plan for Ports and Logistics' guidelines, procedures should be simplified and the movement of goods between the port and the hinterland should be more effective and stable.

Piraeus Port Authority (PPA) maintains close relations with the local community, municipality, and the regional government. Official visits of foreign delegations to the port — Example: Team from Embassy of Italy visited PPA and the PPA representatives introduced the history, development and future plans of the port. Of course, there are also strong links with Chinese companies, both industries and logistics, that have helped the port to perform impressive growth in the last few years.

The Port Authority of the Algeciras has as main objective of the action plan "Relationship with the environment and social policies" (2020): Maintain and promote APBA's and the port community's good relationships with the environment - municipalities, institutions and society in general - enhancing citizens' perceptions.





Port of Valencia offers develops strong relationships with south American ports through the visiting of its facilities and specialized training centre in foreign trade, logistics, transport and storage. This initiative benefit from all businesses that are willing to be involved in Valencia Port, Sagunto and Gandía Community.

Port of Barcelona, Spain: PORTIC is the Port Community System operator in Barcelona and a private partnership between the Port Community of Barcelona, Port Authority of Barcelona, Financial Institutions (La Caixa, Banc Sabadell) and the Chamber of Commerce of Barcelona. This shows close relationship between business community and the port.

The Port of Dublin has created a master plan for present and future, which communicates all their strategy and mission to their supplier and partners. To strengthen, continue and encourage this connection Dublin Port has commissioned a series of cultural and heritage initiatives, designed to present Dublin's rich maritime heritage in new and thought-provoking ways. These recognise the importance of Dublin Port and its integration with the city, and celebrate this unique connection.

Port of Copenhagen claims to be a hub for activities and knowledge that generates collaborations, exchanges of expertise, synergies, and adds value to the society which it is part of.

In conclusion, there are some French ports with very impressive and good initiatives in building up their solid commercial networks which benefits them to discover and figure out new businesses and markets

from the collaborators in the future. This type of initiatives are also developed by other ports of the benchmark. North Range ports are however a little ahead in the sense they have coordinated actions toward commercial goals and they share responsibilities of business development between actors.

3.4.2.3.2 Relationship with terminal operators

Today, terminal operators are seen as the real strategic actors of European ports. They partner with both shipping lines on the sea side and logistic companies on the land side. On the North Range, studies show that they are the actors boosting flows and value added. Actors are integrating logistic plateforms, railroad companies and barges services. Their objective is to capture the flows far in the hinterland in order to keep them in a pipe until they reach their own terminal. In Germany, especially, there is a fierce competition between these actors and port authorities are manoeuvring to attract the most dynamic ones. Post Brexit UK is also expressing its interest by developing new freeports that will be operated by these actors in joint venture with industrial companies.

In the Mediterranean shore, ports are still trying to develop services by themselves, even though ports of Genoa and Barcelona are being dynamics in their partnership wit terminal operators. Port of Piraeus has a different strategy based on its relationship with Cosco shipping.

Finally, it is difficult to see terminal operator's strategies in France. There are some local companies such as Perigault and strategies of DP World or Eurogate are less clear in French Hinterland.







3.4.2.3.3 Relationship with clients

The more transparency the port shows in its processes and planning, the easier it is for their current customers and markets to trust and believe in the services that the port offers now and in the future. And finally, with high-level real-time information on the shipments in and around the port, ports offer their customers a service that allows them to more accurately plan their shipping schedules.

The ports all achieved relatively similar scores, which indicates that they all have a good focus on current market management and try to keep their current customers satisfied which in itself is an extremely important marketing aspect if the ports have ways of showing that their customers are satisfied either through reviews and rating websites or through customer testimonials on their website. A few highlights from the ports benchmark: Most of them had excellent displays of real time information on ships in and around the port that can be accessed from anywhere in the world. They also had excellent 'contact us' sections in their websites where they make it easy for customers to immediately narrow down their request or concern to a specific department that they would like to contact which speeds up the response time from the port (which is also something they promise on their websites). The most impressive of these ports was Rotterdam. Through their Navigate & Business Development program, they offer many digital solutions to current clients which includes an online view of all shipping and trucking routes through their port, and their excellent 24/7 insight into port connections and services also gives them an edge in the market. This brings us to the things we would recommend for this criterion for the French ports. While all

of the French ports have a strong current market management game, there are some things that they could improve in order to offer the same level of transparency and customer friendliness as their competitors. Often the contact pages on the French ports' websites are very basic with only one general form. The way to improve that is by updating their contact pages to allow customers and users to narrow down their requests straight away and contact the department they are looking for immediately. This will save time and effort for both the port and their customers. And finally, providing a user friendly and up to date information and map of shipments in and around their port, French ports will allow their customers to plan their schedules much easier which will automatically increase customer satisfaction. And the higher current customer satisfaction is, the more it can boost the marketing campaigns of the ports.

On the specific topic of COVID-19 Response; during the difficult times it was extremely important for the ports to communicate with their clients, government and the suppliers. It was difficult for the ports to work completely on a digital platform but the ports did a good job in doing so.

The Covid-19 response index clearly indicates how active the ports have been on gauging the pandemic scenario and in this matter, there seems to be a mixed average response between the French and foreign ports. Although major French ports such as Nantes Saint-Nazaire, Bordeaux, Marseille etc fared well, the Port of Dunkirk & the river Port of Lyon fared rather in an average manner in response to the pandemic. Foreign ports performed in a similar manner, with only Port of Venice falling behind in the ratings.



3.4.3 Governance

3.4.3.1 Definition of governance

Governance is a term used in capitalism context since the dilution of ownership into shareholding. When companies are owned by their managers, often founders, management, strategy and governance are similar, but when managers are not the owners, there is the need for a control of management by owners: this is governance. Ports are owned by States in France, but part of their operations since port reforms are delegated to private companies, which requires governance. Moreover, when one consider that port are facilitators for a port community, a cluster, then, port belongs to that port community and governance becomes a more complex concept.

Role of Port authority

Port authorities are institutions of a hybrid nature that incorporate elements of both public and private law, regardless of the ownership and management traditions to which they belong. This hybrid nature makes port authorities ideally prepared to face the various challenges placed on the seaport by both market forces and society. In general, the port authority, also known as port management or port administration, is the administrative body of the port.

Port authorities have traditionally been responsible for the development and improvement of the port area related to port operations, ranging from infrastructure development and maintenance to the marketing and management of port facilities. Acting as a port managing body, port authority takes over public, commercial and economic

roles. Several objectives of the general interest of society are followed by the port authorities, such as: promoting trade and industry, ensuring long-term sustainable port operation, improving maritime and hinterland connectivity, etc. Port authorities, as port governance bodies, have been proactive in developing port information systems through the availability and distribution of information technologies, improvement of interaction and exchange information between stakeholders, such as customs, freight forwarders and carriers. In the last decade, new developments in port strategies have emerged around the world: port authorities are changing their nature and function, increasingly taking an active role in the management of logistics systems and sometimes adopting management and entrepreneurial behaviours.

Numerous ports are developing and implementing the Port Community Systems (PCS). The introduction of a PCS is identified as one of the key elements facilitating seaport development. Acting as a digital platform, a PCS facilitates the intelligent and protected exchange of information between public and private port users in seaport communities, affecting the sustainable business. It is an effective, real-time, flexible, and complex information system which enables improved efficiency at all stages of the cargo process in the unloading and loading of ships, customs clearance, etc. inside and outside the seaport terminal. The higher the level of collaboration and integration between the port and supply chain stakeholders, the greater the sustainability of both the overall supply chain and the port. Port stakeholders often have individual goals, which can decrease the willingness of certain members of the port community to embrace the PCS. Nonetheless, many seaports like the North Sea ports of Rotterdam, Amsterdam,



Antwerp, Zeebrugge, Wilhelmshaven, Bremerhaven, Hamburg, and others have adopted the PCS. These independent PCSs also share and exchange common global shipping data among each other as well as with governmental authorities, i.e., local port authorities. The port authority plays a crucial role in implementing the PCS, considering that in most of the countries it is responsible for coordinating private companies operating in the port area.

Role of Private Bodies

Port reforms in the late Twentieth century put emphasis on separating the regulator (public) from the operator (private) roles. The objective was both to reduce prevarication and to increase competitiveness.

Ports, governments, and stakeholders have moved away from a belief in a single port governance model. Some commonalities in terms of both issues that decision-makers have attempted to address and the observed reforms in anticipated response exist. The precise level of desired state intervention in the port sector remains a theme of utmost controversy and discussion in several countries.

The full transfer of asset ownership (including land) to a privately-owned for-profit entity. The retained role of the government is to regulate the transferred entity. Very few countries, such as the UK and New Zealand, have applied a fully privatized port governance system, including the privatization of the port land. In other cases, privatization is commonly used as a term for the long-lived transfer of

management rights of ports to private entities by selling the (corporatized) public governing port authority to a private company.

This criterion will determine the role of private entities in the port governance.

3.4.3.2 Evaluation of Governance

Since most European ports function on the same model, the evaluation will take place on two major criteria:

- Are all port terminal privately owned.
- Did the port implement a Port community system.

3.4.4 Partnerships

3.4.4.1 Definition of partnerships

What we mean in partnership is the ability for the port to develop official relations with other ports. In terms of business to business marketing, the links one actor develops with the other actors of the sector are valuable resources. In the port sector, two main types of relationships have been identified.

Hinterland partnerships and mergers

In the last decade, happened a concentration of port activities. The industry is a mature one, with both vertical and horizontal concentration of actors. The result is a competitive advantage moving toward efficiency. The consequence is a concentration in port offers as well with gatherings of ports





Foreland partnerships

On the other side, the seaside, there are also partnerships developed between port authorities. The objective is to harmonize procedures and benefit from the common commercial efforts. This is a new trend and could become a competitive advantage in the coming years.

3.4.4.2 Evaluation of partnerships

The best way to evaluate partnership is to measure the two following criteria:

- Is the port a member of a gathering of ports?
- Does the port have explicit commercial agreement with foreign ports?
- Presence of a logistic free trade zone

3.4.4.3 Partnership Benchmark

3.4.4.3.1 Hinterland partnerships and mergers

In France, the trend to gather or merge ports is very strong. In our benchmark population, Le Havre, Rouen and Paris form Haropa, Marseille and Lyon are members of Medlink, Dunkirk and Lille gathered in Nordlink. Atlantic coast ports are still autonomous, but it could be an advantage for them to gather in the near future.

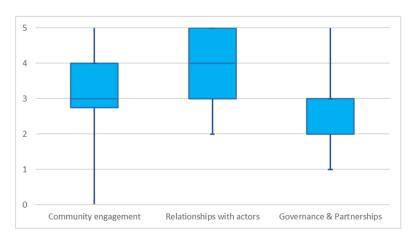
Abroad, Antwerp and Zeebrugge are merging, and Oslo in the past integrated local terminals in its governance. Other ports are quite independents, probably due to high level of centralization, like in Spain or high level of autonomy like in Hanseatic and Italian ports.

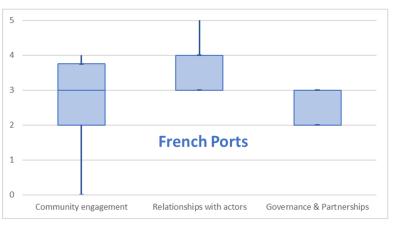
3.4.4.3.2 Foreland partnerships

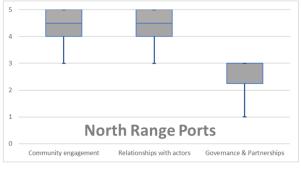
Commercial links between port authorities are difficult to identify. Only an agreement between Port of Barcelona and Tanger-Med was clearly identified. Most relationships seem to be made by terminal operators and shipping lines who have specific interests in different ports where they call in priority. Moreover, port authorities, for instance harbour masters, work with their foreign counterparts on a daily bases. This is not a commercial agreement, but this is clearly a strong link between ports. This criteria is therefore not discriminating.

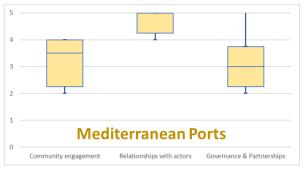


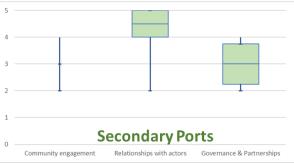
Box & Whiskers 28 Ports















4 Conclusion

This benchmark is the synthesis of the work of three groups of international students with different backgrounds and visions of marketing. They have benefitted from the experience of active coaching from Kedge, the Cerema, the DGITM as well as from Logisthinker for the synthesis. Students have collected a large amount of data in order to built this knowledge. Primary data from French and foreign port managers interviewed, primary data collected and analysed from public communication of ports and also secondary data available on both the web and Kedge Library resources.

Size matters

The first conclusion from this work is the existing correlation between the flows going through the port and its marketing actions. The bigger the port, the better its marketing. We cannot conclude, however on the causality. Maybe marketing drives more flows, maybe it is the other way around and bigger ports have more money to invest in marketing operations. At European level, we see that the bigger ports, foreign and French have the best practices, and this is also true at national level.

Anticipation is crucial

Second point is the importance of anticipation. A lot of ports are only performing flows analysis and look at existing market tendencies. However, marketing is also about investigating new opportunities, out of the box and out of the range of competitors. This is blue ocean strategy compared to red ocean strategy. Some very successful ports, at the European level act in that sense. A supporting point is the nature of marketing teams that could be more knowledgeable on marketing techniques.

Analytics is future of B2B marketing too

Business and Marketing analytics became key success factors of B2C marketing; but ports are now investing a lot on these new technologies in order to have valuable data and smart analysis of this data. In Rotterdam for instance, they developed synchromodality thanks to big data analysis. This provides best level of service for customers.

Animation of a business network

Port systems are network of actors. One of the roles of port authority is to create the animation of this network by favoring interations between the actors. Marketing objectives of the port should be related to the fluidity of information circulation and decision process within the network. That is what creates value in a business network.

Co-construction of service

Successful ports are ports in which projects are build together. There are several levels of involvement of actors in co-construction of value. The first level is an informative level in which main actor informs partners of what is going to happen, second level is when main actor requires partners to work with him on a project, thirds level is to build together a solution, and ultimate level is to define together a long term goal and built the path to reach it while walking the path. Few European ports seem to be at this stage, this seems therefore a key success factor of the future of port sector.

International perspective

Successful ports have an international perspective rather than a national one. This is especially the case for ports of smaller countries and former city-states. That means they do not present themselves as





gateways for their country or capital city, but as places of logistics and trade. That means also their marketing is thought for foreigners and potential clients and partners.

Port sector requires a Business to Business Marketing

Port do not have clients, they have partners. They are in the middle of a supply chain and they offer industrial service. Therefore, the market of ports is really difficult to define. It is a business to business market. As such, what is important is to connect the three layers of B2B: actors' network, network of activities and network of resources. Among resources, products and infrastructures are only one aspect, and relationships and business units are the aspect that is often forgotten by port management. That means the 4Ps and other B2C marketing techniques do not really apply, or only in specific areas such as cruise. And even in these types of specific markets, B2C is only one element of the business.



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