



LEVERAGING DIGITAL SOLUTIONS FOR CRISIS MANAGEMENT

September 2020





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LEVERAGING DIGITAL SOLUTIONS IN TIMES OF CRISIS

The New Normal has arrived. Resulting from the COVID-19 pandemic, it is obvious that the global economic system is much too vulnerable. During the period of the first six months in 2020, Port Authorities realized how important of their ability to operate become. While the passenger traffic has dropped in a short period and it would take some time for them to recover, the logistic services remains critical for global businesses. As a backbone of the logistics, ports around the world function as nodes for distributions and consolidation of supply chain. Having undergone the digital transformation in the first phase, many ports were prepared to overcome the challenges of the dynamic requirements for the logistics during this COVID-19 crisis.

This Playbook, written for senior management of port authorities, was created to share our experiences and serve as a practical guide to help others prepare for the next crisis. It provides a 4-step approach, which adapts simple and well-known management tools, that port authorities can use to prepare themselves. It also provides selected examples of digital solution best practices from participating chainPORT members that port authorities can apply to their operations.

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Don't wait until the next crisis to come. Leveraging digital solutions and make your business resilient today will save your business tomorrow.

Phanthian Zuesongdham, Hamburg Port Authority



WHY AND FOR WHOM SHOULD THIS PLAYBOOK BE USEFUL?

The COVID-19 pandemic was the significant trigger that required many port authorities around the world to demonstrate robustness. At the core of logistics hubs in the global supply chain, port authorities faced unprecedented challenges within and outside of their organizations. However, it was apparent in this pandemic, that the better prepared the organizations were in terms of digital transformation before the crisis, then the more agile and resilient they were in comparison to those with less digital maturity.

This chainPORT Playbook “Leveraging Digital Solutions for Crisis Management” serves as a practical strategic guide for senior management of port authorities, with the following objectives:

OBJECTIVES

To give a step-by-step approach of how port authorities can be best prepared for the next crisis, not limited to a pandemic like COVID-19

To provide a high-level SWOT Analysis framework to facilitate the start of the exercise

To provide best practices of digital solutions from chainPORT members, with different indications of the measures, which can suit the environment of other port authorities

To stimulate exchange of information and cooperation among port authorities towards a future-proof and sustainable global supply chain

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With the worldwide COVID situation it became clear that embracing digital transformation of many operational processes is imperative. Fast tracking some elements such as digital workspace to allow remote work and adopting digital thinking and skill sets became essentials in our daily operations.

Serge Montpetit, Port of Montreal



CRISIS, WHAT NEXT?

Crisis is defined as a sudden and unexpected event leading to major unrest for society or an individual organization¹. The aftermath of the COVID-19 is the “New Normal”. However, it is not the “Final Normal” as several economic experts have said that COVID-19 would not be the last crisis of this kind that we will face. So, the question is, what should we do next? The answer is clear – we need to be prepared for the next crisis!

During COVID-19, organizations saw how important digital solutions are in a crisis. Some organizations struggled with the “New Normal” while others transitioned seamlessly. Those with greater digital maturity were able to pivot better because many processes could be executed remotely or automatically. This enabled continuity of business services to the port customers and stakeholders as well as operational services within the organizations.

The following 4-step approach will guide you with simple and well-known methods to create a set of measures for your preparation for the next crisis, including the incorporation of digital solution best practices.



STEP
1

SWOT ANALYSIS

Capturing the chainPORT learnings from the past, a high-level **SWOT Analysis** from the COVID-19 crisis is summarized on the next two pages. This example can be used as a template to help you to make your own SWOT Analysis for the next crisis.

STEP
2

DEFINE YOUR GOALS FOR YOUR CRISIS MANAGEMENT

After creating your SWOT Analysis, it is time now to define your goals. What would you like to achieve from the measures to overcome the crisis? This could include both internal perspectives of your own organization and external perspectives including your customers and stakeholders in the supply chain. In this Playbook, we refer to the perspectives of “protecting the workforce” and “protecting the supply chain”. From these two perspectives, you can detail your objectives granularly in order to match your needs and situations.

STEP
3

SELECT SUITABLE BEST PRACTICES AND OTHER ADDITIONAL MEASURES

Having defined your goals, the next step is for you to select best practices and other measures that are suitable to your goals and situation. What must you achieve before the next crisis comes or during that situation? Examples of digital solution best practices from several ports in the chainPORT network are shared in the **Best Practices** section of this Playbook. If the best practices do not serve your objectives or fit to your conditions, then you can modify them or define other complementary measures which best meets your goals.

STEP
4

SET IMPLEMENTATION ROADMAP AND EXECUTE THEM

Once you have a list of all measures together, it is time to bring them into a roadmap with timeline, budget and interdependencies. With a roadmap and a proper multi-project management scheme for executing the selected measures, you will be able to track the impact of your measures and the return on your investments.

HIGH LEVEL SWOT ANALYSIS FOR CRISIS SITUATION IN PORTS

STRENGTHS



Protecting the workforce

Adequate hygienic and distancing measurement and solutions for different employees and external groups were implemented to limit the risk of infection.

Telemedicine / healthcare services offered for employees of the port authorities

Protecting the supply chain

Continuous operations were ensured and essential for ensuring trust in port operations.

Pre-existing operational continuity plans were activated and adapted to the crisis.

Information for the general public and stakeholders from the ports were shared through social media (LinkedIn, Facebook, Instagram, Twitter).

New digital solution for fast-laning critical (medical) cargo

WEAKNESSES



Protecting the workforce

Coordinating and controlled database would enhance effectivity, reaction and reporting towards threats in crises.

Protecting the supply chain

Impromptu container overflow capacities for trade or supply chain disruptions should be considered for future crises.

Variance in customs and regulatory procedures occurred can affect the supply chain.



While the recent global pandemic is accelerating digital transformation of companies and ports worldwide, to have the most impact, ports must approach this new paradigm through a smart and structured process. Documents like this will help guide decision-makers in the port industry to focus on the right priorities in view of future-proofing business processes as we head into the digital age.

Daniel Olivier, Port of Montreal



OPPORTUNITIES



Protecting the workforce

Accelerating digital transformation through new technological skills acquisition and adoption among staffs and partner companies

Possible acceleration in process automation and internal digital services through different kinds of funding programs to boost the use of merging novel technologies into the supply chain

Protecting the supply chain

Geographic diversification of markets through regionalisation of production to increase resilience of supply chains

Port authorities as digital leaders with a coordinating role in a post-crisis world to accelerate digital transformation across the port community regarding standardisation of data, processes and procedures

Others/ governance

Through stimulus funds by governments ports can accelerate post-crisis recovery or further development for digital infrastructure projects

Acquiring unique crisis management skills that are transferable to other types of future crisis and shared among international port community esp. on cyber attack

THREATS



Protecting the workforce

Ageing employees could hinder adaptability towards digital transformation but address the needs of ageing population/employees more efficiently

Protecting the supply chain

Port authorities to re-engineer workspaces and introduce smart technologies to prevent possible future outbreaks and protect employees by redundancy and implementing business continuity along the supply chain

Potential long-term decrease of maritime trade from acceleration of reshoring, buy-local policies and 3D printing. Significant acceleration of online commerce could divert truck-capacity away from maritime logistics

Others/ governance

Current loss of income and uncertainty about the speed of resumption of certain activities (e.g. cruises) and future investments into digital and innovation projects

Relapse due to a second round of contamination in the fall of 2020 would slow a fragile economic recovery

LEVERAGING DIGITAL SOLUTIONS FOR CRISIS MANAGEMENT BY BEST PRACTICES

chainPORT member ports were invited to share insights about how the members handled different situations they faced during the COVID-19 pandemic. In this Best Practices section, the members share some of the creative solutions which have helped them in this crisis. Following is an overview of the selected best practices classified into two clusters: protecting the workforce (internal perspective) and protecting the supply chain (external perspective). For each best practice, a brief evaluation has been made by the implementing port. This can be used to help you assess its suitability for your port.

PROTECTING THE WORKFORCE

- 1 Internal Communication: VR- and AR-based Video Conferencing, Sharing Continuity Processes
- 2 New Digital Hiring Practices
- 3 Use of Drones and Digital Twins of Port Space
- 4 Business Continuity and Redundant Critical Systems
- 5 Innovation, Start-Ups, and Accelerators
- 6 Electronic and Automated Labor Dispatching
- 7 Smart Wearables

PROTECTING THE SUPPLY CHAIN

- 1 Fast-tracking Critical Supplies: From Dock to Market
- 2 Open Data Sharing
- 3 External Communication: Social Media Communication Strategies and Port Panels
- 4 Experience in Cyber Threat Management

Disclaimer

The compendium of best practices represented in this playbook does not represent the entire chainPORT network nor the international port community. It is based on leading ports in the working group sharing best practices for the advancement and benefit of the entire maritime community. The evaluation of the best practice is only by all means an indication of the experience of those ports implementing specific measures. The information should be perceived and used voluntarily, and as appropriate for your organization, as it was not proven by an empirical or statistical analysis.

PROTECTING THE WORKFORCE

The health and safety of the workforce is of vital importance. Digital solutions were often leveraged to enable safe work practices during the pandemic. Social distancing and working from home accelerated the use of collaboration platforms and tools in every port. The adoption was supported by various digital tools such as short videos. Adoption and satisfaction of employees was monitored to ensure health and productivity. Best practices include introduction of new support and training programs. For example, specialized online ergonomic classes helped to ensure an optimal work environment at home. Some ports introduced on-demand Tele-Medicine services to help employees get professional medical advice remotely if any symptoms occurred, or if they had any questions concerning their health. The pandemic, moreover, fostered the digitalization of formerly paper-based processes. In this section, we share digital best practices that go beyond basic tools.

- 1 **Internal Communication:
VR- and AR-based Video Conferencing,
Sharing Continuity Processes**
- 2 **New Digital Hiring Practices**
- 3 **Use of Drones and Digital
Twins of Port Space**
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Critical Systems**
- 5 **Innovation, Start-Ups, and Accelerators**
- 6 **Electronic and Automated Labor Dispatching**
- 7 **Smart Wearables**



Increase in remote work

“

We are in a period of exponential growth of technology – use this to create an even more safe, healthy and happy working environment, assisted by technology.

Piet Opstaele, Port of Antwerp



INTERNAL COMMUNICATION: VR- AND AR-BASED VIDEO CONFERENCING, SHARING CONTINUITY PROCESSES

Video Conferencing has significantly gained traction during confinement imposed by the pandemic. It is seen as an optimal solution when non-essential travel is restricted, employees work from home, and direct personal contact should be prevented. While video conferencing is not new, a variety of technological enhancements were introduced to make the experience more socially immersive and realistic. In spite of comfort, normal desktop-based video conferencing can feel unnatural and not an entirely equal substitute for personal contact. Here, VR- and AR-based video conferencing can fill the gap. Further, a quick implementation and activation of continuity procedures increased the effectiveness of continuity plans.



Virtual 3D meeting with 40 colleagues represented as avatars

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Antwerp

The Port of Antwerp implemented and fostered the use of Virtual and Augmented reality- based video conferencing across the port community. First tests were performed on VR meetings, where virtual interaction is possible, given a much better experience than 2D screen interfacing (see illustration).

Further, we implemented a process to conduct area assessments to help identify risk levels in workplace settings and to determine any appropriated control measures to implement, focused on Port of Antwerp workspaces and physical processes. Special consideration is given to consider where there is minimal ability to maintain social distancing and employee protection (e.g. on a tug boat).

Montreal

Prior to the crisis, Port of Montreal (henceforth: MPA) had established a registry of mobile phone numbers of all its employees. That way, it could communicate urgent crisis-related messages by SMS, should email systems be down or in case of a cyber-attack.

NEW DIGITAL HIRING PRACTICES

Hiring and onboarding new employees during the COVID-19 pandemic presented organizations with new challenges. Most companies already had procedures for remote job interviews. However, onboarding with social distancing was novel to most employers and employees. This section shares how chainPORT members surmounted such barriers.



Online training platform for security and safety



HPA colleague from the Digital Office on the **Career Page**

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Antwerp

Besides the complete virtualisation of the selection and assesment process for new hirings, Port of Antwerp launched a new platform for online training, in the first place on security and safety. Based on an interactive and game-based learning platform staff can upgrade their skills on fire prevention, first aid, ergonomics – at the pace and time preferred. This has currently been rolled out to 700 people in operations (see left illustration).

Barcelona

Creation of a **new portal** to attract “digital talent” and activating LinkedIn not only to put news about the port but also for being an attractive place to work. As a result, the Port of Barcelona has increased significantly the curricula received and young and digital people is attracted.” During the crisis, most interviews were performed remotely and all sanitary measures were taken when the candidates need to go to the port. All the relevant information about COVID-19 was posted quickly and clear in our intranet, allowing the mobile access for everyone.

Hamburg

A new career campaign was created to enhance the digital hiring: First, a relaunch of the **career website** with videos about employees describing their job, projects and experiences at the Hamburg Port Authority (HPA) targeting the most wanted candidate groups such as engineers and IT specialists. Secondly, an HPA Company Blog was launched with entries about job profiles, new ways of working with remote work, work-life-balance or apprenticeships at HPA. The blog posts are published on social media. During the crisis, all interviews were conducted remotely. A virtual onboarding event was organized where new hires had a chance to interact, get all relevant info and get to know all company divisions.

COST

2

VALUE

4

TIME TO LAUNCH

3

TRANSFERABILITY
TO OTHER PORTS

3

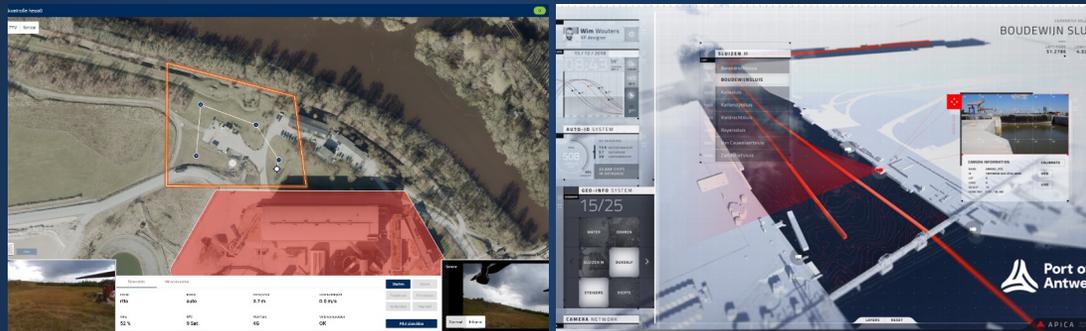
TRANSFERABILITY
TO CRISIS

4

USE OF DIGITAL TWINS OF PORT SPACE AND DRONES

Digital twins allow for an immersive 3D experience of the port environment. In times of confinement where access to port facilities may be restricted, ports with digital twin capabilities in place were able to overcome accessibility restrictions.

Internet of Things enables the digital twin to connect the analog with the digital world. Drones and sensor readings of digital twins reduce the physical interaction needed for the maintenance of structures, security, engineering, operations and other purposes.



Drone Flight Mission Control Application of the HPA

The "Boudewijn Sluis" in Antwerp's Digital Twin

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Antwerp

To detect and monitor (potential) incidents, traffic flows, dangerous goods, fleet operations, etc. an acceleration in the deployment a Port of Antwerp digital twin happened since March 2020. A modular technology architecture has been built to enable the fast roll-out of a wide range use cases, mainly driven by IoT and machine vision technology (smart cameras, air and water sensors, ...). Based on this infrastructure more advanced data analytics and AI algorithms are being deployed to support a real time situational awareness view on the port. An automated drone was prepared to monitor the social distancing on the large truck parking in the Port of Antwerp – however due to strict legal restrictions no official permit to fly could be obtained so far.

Hamburg

Drones are used for a situational analysis in catastrophic management. This allows for a faster detection and response to accidents. An automated drone is currently in a 3-month test phase for situational analysis of storm and tidal condition as well as polder control.

Los Angeles

Drones and situational awareness technologies were used more during the pandemic to reduce transmission of the virus and protect the workforce.

COST

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VALUE

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TIME TO LAUNCH

4

TRANSFERABILITY TO OTHER PORTS

3

TRANSFERABILITY TO CRISIS

4

BUSINESS CONTINUITY AND REDUNDANT CRITICAL SYSTEMS

Having business continuity plans and redundant infrastructure are crucial during disruptions. Continuity plans should be able to address situations from a small incident to a large disruption of this nature and magnitude. Having these plans at hand, which have been practiced before the crisis and are up to date, increases the ports' readiness.



The Emergency Operations Center before COVID-19 (practice exercise)



The Emergency Operations Center during COVID-19 (virtually activated)

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Antwerp

The central Antwerp traffic coordination center (ACC) is located in the north of the port, where also representatives of traffic management river Scheldt and pilots are present. To spread the risk and ensure social distancing, within a few days in March 2020 two backup locations were set up to ensure the operation of these critical functions, of which one is still in use. This was a crucial action to ensure that the port remained 100% operational.

Barcelona

Having a replica of our maritime control tower was very important during the covid crises. The maritime control tower works 7/24. Although during the covid the teams were separated and they did not mix, one person was infected, so the tower needed a deep disinfection. Thanks of having the second place to operate the vessel traffic of the port was not interrupted.

Hamburg

Redundancy of identified critical systems, data centers and ability to remotely control port applications within IT-landscapes of the HPA enables the Port of Hamburg to keep up the service level of significant services during the pandemic and other crises in the past.

Los Angeles

Business continuity plans were available prior to the crisis and regularly tested, which enabled a smooth transition to remote work. In response to COVID-19, the Port of Los Angeles also virtually activated its Emergency Operations Center.

COST

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VALUE

5

TIME TO LAUNCH

5

TRANSFERABILITY TO OTHER PORTS

4

TRANSFERABILITY TO CRISIS

5

INNOVATION, START-UPS, AND ACCELERATORS

Creating or supporting an environment for accelerators in the port community can support port authorities with fast and creative solutions for novel (parallel) problems occurring in times of crisis.

Startups are agile and can rapidly adapt their business model. The pandemic has witnessed spectacular examples of startups responding to the fight against the virus through creative solutions. Creative and innovative processes can outperform traditional channels in times of emergency response. Ports having privileged access to startup ecosystems arguably have an advantage in terms of agility and responsiveness in critical situations.



The Beacon Antwerp's innovation community.



Startups working in Montreal's innovation accelerator Centech

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Antwerp

The **Beacon** is an important IoT and IO ecosystem in Antwerp, with about 70 technology companies. From the beginning of the COVID-19 crisis, there was a strong reach out the community to leverage solutions on ensuring social distancing and preserving personal health. Solutions on secure building access, tracking, etc. were worked out. The port authority accelerated the cooperation with startups on providing POC's for new solutions, e.g. smart wearables and machine vision system on social distancing were tested.

Montreal

The MPA called on its innovation accelerator **Centech** to assist in deploying smart wearables to protect employees against COVID-19 and prepare for employees return to the office. It also challenged the local startups community to devise tech solutions to protect cruise passengers at its terminal once activity would be set to resume. The MPA launched calls for proposals to local startups.

COST

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VALUE

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TIME TO LAUNCH

4

TRANSFERABILITY
TO OTHER PORTS

3

TRANSFERABILITY
TO CRISIS

3

ELECTRONIC AND AUTOMATED LABOR DISPATCHING

During a pandemic, companies can suffer from the sudden leave of either sick or quarantined staff in significant numbers. Roll-call rooms, dispatch halls and other in-person work assignment locations may be restricted. Electronic and automated dispatching can help port authorities to swiftly and safely dispatch employees while maintaining operations in the dynamic environment.



Labor Dispatching in Montreal's Merinio App

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Los Angeles

A mobile application to dispatch Port Pilots was available as an efficiency-improvement feature prior to COVID-19, but it also became a safety feature for social distancing during the crisis. The mobile application enables the Port Dispatcher to assign jobs to Port Pilots anywhere with an internet connection, for Port Pilots to acknowledge jobs remotely, and for other bi-directional messaging as a remote extension of the on-site system. The mobile application also provides integrated information about Port Pilot job status, schedules, rotations, assignments and various statistics.

Montreal

A local startup (Merinio) developed a mobile application that automatically redispaches employees in case of short-term absence or leave. The MPA has been testing this technology internally since 2019. This technology holds high potential if applied to dockworker daily dispatch and could eventually replace old-fashioned dispatch halls still found in some ports across the world. Some of them had to be temporarily suspended during the pandemic following sanitary restrictions.

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The Los Angeles Pilot Service found the port pilot mobile application successfully allows the dispatching of pilots while maintaining physical distancing protocols and remain well connected to all needed Port of Los Angeles technologies during the present pandemic.

John Dwyer, Chief Port Pilot II, Los Angeles Pilot Service



COST

3

VALUE

4

TIME TO LAUNCH

4

TRANSFERABILITY TO OTHER PORTS

3

TRANSFERABILITY TO CRISIS

4

SMART WEARABLES

Smart digital wearables are technologies that can ensure both employees and employers are respecting sanitary measures in place to contain the spread of disease. Such technologies also offer tracing possibilities, which can go a long way in monitoring social interactions and containing contamination. They range from simple alert devices to sophisticated geolocation devices capable of tracing social interactions.

In the case of the pandemic, it can help employees minimize physical contact and can alert employees to exert physical distancing measures. Moreover, with added sensors and functionality, smart wearables can detect vitality signs indicating a possible infection, thus, recommending appropriate actions.



Social distancing solution



Smart bracelets used by workers in the Port of Antwerp

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Antwerp

Since Q4 2019 a project was running – with the technology company Rombit - to test smart wearables for worker safety on tug boats and locks (e.g. man down alert). End February 2020 a new function was developed to guarantee COVID-19 physical distancing and contact tracing through device-to-device communication. Tests were executed during 12-hour-shifts of the port authority’s technical and nautical staff. Protection of privacy is included by design and fully compliant towards the GDPR regulations, e.g. no personal data is stored.

Montreal

The MPA is deploying smart bracelets for all employees to wear as a condition for returning to the office. A Canadian supplier (PROXXI) was retained for purchase of smart bracelets that vibrate when employees are within 2m of each other. The devices can trace employee-employee interactions for over 14 days in case an employee tests positive. They sync to a mobile application via Bluetooth to a cloud-based database so that employees can track interactions and run analytics on their daily interactions.

PROTECTING THE SUPPLY CHAIN

Ports are central nodes in supply chains and are often looked upon to protect them. The interlinked nature of supply chains means that stakeholders must coordinate and harmonize emergency response for measures to have maximum effectiveness. Digital solutions can play a key role in coordinating efforts across supply chains to contain and recover from major disruptions.

- 1 **Fast-tracking Critical Supplies:
From Dock to Market**
- 2 **Open Data Sharing**
- 3 **External Communication:
Social Media Communication Strategies
and Port Panels**
- 4 **Experience in Cyber Threat Management**



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Having a digital perspective has opened possibilities for us to manage the COVID-19 crisis with flexibility and more effectively.

Catalina Grimalt, Port of Barcelona



FAST-TRACKING CRITICAL SUPPLIES: FROM DOCK TO MARKET

Logistics play a frontline role in emergency response. Timely deliveries of critical supplies can even have life-or-death consequences. Demonstrated leadership among ports during the pandemic included acting as coordinating bodies for the supply of critical cargo or implementing tech-based fast-track solutions for expediting critical cargo to market.

Targeted processing of critical and time-sensitive cargo can make a big difference for everyone involved in combating this pandemic or other crises.



Critical medical supplies delivered to a clinic through the Port of Los Angeles

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Barcelona

Easy and accessible real time information available for the port community in the web in a JSON web service with full scope of vessels, trucks and trains. Due to the sanitary and cleaning measures in the shift changes some delays were reported in the operations. Although they were fixed very quickly in order to give transparency to our operations 3 websites were accessible with on-line information about vessels, trucks and trains operating in the port. These are available for all customers and this transparency increased the confidence in the port.

Los Angeles

In response to the pandemic, the Port of Los Angeles developed the Medical Optimizer, a new data-as-a-service solution, to support the City of Los Angeles' Logistics Victory Los Angeles (LoVLA) effort to link suppliers of COVID-19 related medical equipment and supplies with organizations in need of them. The Medical Optimizer provides information from the Port Optimizer, City of Los Angeles information systems and medical inventory systems that can be used to identify, manage and facilitate shipments of these critical goods.

Montreal

Several countries around the world are facing a procurement crisis in their fight against the virus. Getting critical medical cargo in time to frontline workers can be a matter of life or death. Through a consortium of key partners, the solution aims to develop an AI-enabled solution with a dashboard to identify incoming critical cargo containers, and trace on-dock processes to ensure the containers dwell less than 12 hours (or next day) at port. The AI module is based on Natural Language Processing (NLP) techniques for cargo identification.

COST

4

VALUE

4

TIME TO LAUNCH

4

TRANSFERABILITY
TO OTHER PORTS

4

TRANSFERABILITY
TO CRISIS

4

OPEN DATA SHARING

As we can all learn from one another, sharing data, as well as knowledge, innovation, and “best practices”, can foster the development of new solutions and innovations. Joint efforts can result in better solutions when battling this crisis.



NxtPort the open data sharing platform in the Port of Antwerp

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Antwerp

NxtPort is an open datasharing platform for the overall supply chain, providing a performant and safe environment. It’s proven that during a crisis fast access to relevant information and performing adaptations are crucial to keep the cargo flow going. In Antwerp it was clear that companies who had a higher level of digitalization and connection with their partners, have been responding faster to specific demands (e.g. on the increased food or pharma flows) and have significantly been less impacted by the COVID-19 crisis. Traceability, predictability, rerouting of cargo are key. It is much faster and more efficient in a digital connected environment and system.

Barcelona

Portic provides data sharing for port agents and CTA (Container tracking app) for importers and exporters in the Port of Barcelona. During the pandemic, the information interchanged in the PCS was crucial in order to maintain the operations in the port. Sharing the same information for all the port community helped to be agile, confident and transparent.

COST

3

VALUE

4

TIME TO LAUNCH

3

TRANSFERABILITY TO OTHER PORTS

4

TRANSFERABILITY TO CRISIS

4

EXTERNAL COMMUNICATION: SOCIAL MEDIA COMMUNICATION STRATEGIES AND PORT PANELS

Social media platforms were among the various communications tools used extensively by all chainPORT members to quickly and effectively inform employees, customers, the public and other stakeholders. For sharing specific information at the right time and place, digital port panels can help in this fast-changing environment. This could be information or advice about safety precautions.



Behind the scenes of “PORTtalk”, video format describing the situation in the Port of Hamburg

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Antwerp

Placing the latest COVID-19 rules from Belgian government in six different languages on the dynamic information panels at the entrance of the truck parking area to decrease the disinformation to foreign truckers in the Port of Antwerp.

Barcelona

The digital panels in the port are used to inform about the cruise and passenger vessels, as they are very close to the city where many people passing by, they were adapted to inform about the sanitary measures that the citizens need to respect.

Hamburg

In order to inform external stakeholders about the situation in the Port of Hamburg, the video format **PORTtalk** was used and published on social media and the official website hafen-hamburg.de. The videos described for instance the situation at terminals, the hinterland and described how the operations in the port were still running 100%.

Los Angeles

During the pandemic, the Port of Los Angeles created a new series of CEO video messages to communicate with employees and external stakeholders. They were well received and effective in covering a range of topics, including business updates, safe practices, workforce appreciation, telecommuting updates, and other topics.

EXPERIENCE IN CYBER THREAT MANAGEMENT

Building up internal capabilities or acquiring external experience in cyberattack management is crucial when ports are becoming more digital. The digitalizing of processes provides hackers with more gateways to intrude. Furthermore, cyber threat actors use times of crisis to increase exploitation activities as was seen during COVID-19. Therefore, it is crucial to be prepared for any eventuality.



The Port of Los Angeles Cyber Security Operations Center

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Antwerp

When Belgium went in lockdown mid of March 2020 the number of remote workers (mostly from home) increased from an average of 100/day to more than 700/day. This significant transition went smoothly (thanks to a robust network and server park) but in the weeks following there was a significant increase of phishing attempts (sending fraudulent emails to induce people to reveal personal information, such as passwords or credit card numbers). To prevent fraudulent access to the laptops of POA staff two main actions were taken:
 1) activation of tools to detect suspicious requests to and behavior of the laptop and
 2) restricting the access to suspicious websites.

Barcelona

General knowledge about crisis management was very useful in the first steps of the pandemic, specially how to identify the critical jobs and the people who were recommended to distantiate. The alerts and the phishing attacks experimented a big increase. Constant information was posted in the intranet teaching how to deal with phishing or how to configure the wifi at home.

Los Angeles

The Port of Los Angeles Cyber Security Operations Center (CSOC) detected significant increases in cyber threats during the pandemic. While the CSOC protected the technical infrastructure, the Port of Los Angeles provided its computer users with additional cyber security awareness bulletins and guidance about the elevated phishing attempts and fake websites because many of the new threats were targeting telecommuters and the thirst for pandemic information.

COST

4

VALUE

4

TIME TO LAUNCH

4

TRANSFERABILITY TO OTHER PORTS

3

TRANSFERABILITY TO CRISIS

4

STRATEGIC RECOMMENDATION FOR THE NEXT CRISIS

Besides the roadmap to prepare for the next crisis, following are additional thoughts that should be considered in your strategic position to advance your port to the next level of digital maturity.

USING NEW NORMAL AS NEW OPPORTUNITIES FOR FAST TRACK DIGITAL TRANSFORMATION

As Kotter and Matsushita mentioned in the first of their 8-step process for leading change – Create a Sense of Urgency – the COVID-19 pandemic created this “Sense of Urgency” that led to the New Normal in the world socio-economic system. There was no driver stronger than this pandemic. So, rather than simply cope with this New Normal, it is time that we must take this opportunity to promote and leverage our capability in digital transformation within our organizations quickly. The “Fast Track Digital Transformation” will help us streamline the processes in the logistics among various actors leading to cost reduction, increased customer experiences and robust business continuity.

MANAGING CRISIS WITH DIGITAL MINDSET

One of the crucial success factors to master the crisis is the right mindset. Digital mindset is not merely the ability to use technology, but rather a set of attitudes and behaviors that enable people and organization to foresee their possibility and leverage their capabilities. Julia Sweet, CEO of Accenture, has recently concluded the “5 rules for developing a digital mindset”² as follows:

Fast-Forward to the cloud. Leaders understand the need for blurred lines in the technology stack — data, infrastructure and applications.

Build your digital “A-Team.” To deliver the first-class experience for customers and employees, all companies will need a digital competent team. Build up a good foundation and let them be the digital core of the organization.

Be a learner. Organizations must think beyond traditional ways of doing business to solve complex problems. Learn from your customers, your employee and other industries.

Move at “lean” speed. No one will go back to the pre-crisis status anymore. What the organization needs now is to create lean decision-making, governance processes, streamlined workflows and evolve the organizational culture to support “new work”.

Act with purpose. People is the crucial factor for success in every organization. Clearly articulating purpose and communication are the key drivers to change and enabling people to act with agility.

² <https://fortune.com/2020/06/26/coronavirus-accenture-ceo-digital-transformation>

LAST BUT NOT LEAST...

All participating ports of the chainPORT network contributing to this Playbook hope that the provided guideline and best practices will be useful for your future work in preparing for the next crisis.

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