Considering the perspectives of port users

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The quest for performance measurement has always been a key issue for ports. Port managers, whether port authorities or terminal operators, need to organise complex processes in an efficient and effective way in order to find the best ways to capture value for their customers and address the concerns of stakeholders.

For many, port performance has been associated with operational efficiency alone. Physical quantities of items used, levels of effort expended, scale or scope of activities, and the efficiency in converting resources into port services have always captured centre stage. Indicators like berth occupancy, revenue per tonne of cargo, capital equipment expenditure per tonne of cargo, vessel turn-around time and number of gangs employed have been used for decades as means to benchmark current performance against prior-year performance and against competitor performance, so as to deliver efficiency objectives.

However, improved efficiency does not necessarily lead to improved competitiveness, for competitiveness is also a product of effectiveness in delivering desired services to both customers and users. If a terminal operator wishes to improve its cargo-handling efficiency so as to improve berth utilisation through faster vessel turnaround, it may also improve its effectiveness as vessel time at berth decreases and the customer may be more satisfied with the shipping line’s performance. However, if that terminal operator improves its asset utilisation by leaving more vessels at anchor so as to minimise its own downtime, its asset utilisation is improved but the customer’s service expectations may not have been met. In this case, efficiency has come at the expense of effectiveness.

The importance of measuring perceptions

Stakeholders’ perceptions of the ports they use are increasingly vital for correcting both operational and governance flaws that the port’s network might experience. Measuring users’ perspectives helps managers to understand the current situation and eventually address issues so as to improve experiences with the port. Insight into what is most important to a port’s users provides managers a two-pronged tool: firstly it assists ports in setting priorities, e.g. pointing out areas needing the greatest investment for improvement (against those where investments are less effective); and secondly, it identifies those areas where a port already delivers value, and therefore the port could benefit from marketing initiatives to raise awareness.

In the supply chain world, this is not an easy task. Effectiveness is related to the objectives of those users seeking it. Port user groups might rate a port’s effectiveness in service delivery differently, i.e. a port that is rated highly by the shipping lines may score poorly when rated by cargo owners or its own supply chain partners, or vice versa.

Effectiveness measurement in practice

Not surprisingly, port authorities and others increasingly acknowledge the importance of measuring the effectiveness component of port performance in the supply chain. In recent times, on both sides of the Atlantic, we were invited to develop tools that will lead to such measurement.

In September 2013, European ports, via the European Sea Ports Association (ESPO), associations representing port users (shipowners, shippers and their agents), and port service providers (terminal operators, pilots, tug operators) joined academics to undertake a multi-year project that will develop and pilot test the measurement of port users’ perceptions.

As part of a wider project targeting the monitoring of the European port sector called PORTOPIA, European ports and port policy makers aim to identify evaluation criteria of port services that are most important to different groups of port users and to evaluate which of these criteria different user groups use to determine whether a port’s performance is effective in meeting their needs. In the long-run, the actual measurement of how different users evaluate the port(s) they use will provide useful data on the performance of European ports as seen by user groups and the opportunity to interpret the data for performance management.

Lessons from North America

The process of finding the right user indicators for port effectiveness began in 2008. Following a pilot implementation that examined Canadian users of three Canadian and two US ports, the second pilot moved solely into US territory and examined service delivery effectiveness for American users. The final phase was implemented through the AAPA Customer Service Initiative, and collected user evaluations of the performance of seven North American container ports, each with more than 250,000 TEU in volume.

Participating ports supplied user lists for direct solicitation of users, and two surveys were developed, one for the East Coast with four East Coast ports listed and one for the West Coast with three ports listed. The team at Dalhousie University completed the work in December 2012, with the input of over 200 port users from 39 shipping companies and 48 supply chain partners and 119 cargo owners or their agents provided their insights based on their experiences with port service.

Each port participating in the study received (from the research team) a confidential report with the results for each of their user groups. Their individual results were framed in a Determinance / Importance-Performance Gap Space to explain to ports (and in particular the
There are many reasons to stay tuned, but also a ‘state of European ports report’. This will provide individual ports with a personalised effective performance report, which could be readily understood by their partners and staff, and on which they could hang improvement initiatives. The European exercise will focus on identifying which additional/different criteria will be useful for European ports and the pilot instrument will be developed in consultation with ESPO, as well as the associations representing port users, over the next several months. The PORTOPIA team will be working with European ports and will report progress on this initiative via the PORTOPIA project website: www.portopia.eu and will report progress on this initiative via the PortEconomics initiative. The team will be working with European ports associations representing port users, over consultation with ESPO, as well as the Mediterranean and its adjoining seas. Mr Pallis is a co-director of the PortEconomics initiative and will report progress on this initiative via the PortEconomics initiative.

In all cases, the initiative identified criteria for targeted improvement for each user group. Each port had a unique portfolio of factors to invest for improvement, and many ports found a usable ‘market for awareness’ opportunity. East and West Coast patterns were also noted. It is expected that the programme will be offered again in 2014.

**Next steps**

In North America, participating ports reported that the exercise provided a framework, which could be readily understood by their partners and staff, and on which they could hang improvement initiatives. The European exercise will focus on identifying which additional/different criteria will be useful for European ports and the pilot instrument will be developed in consultation with ESPO, as well as the associations representing port users, over the next several months. The PORTOPIA team will be working with European ports and will report progress on this initiative via the project website: www.portopia.eu and also via the PortEconomics initiative. The European exercise is not just for container ports however; the project will also consider whether this approach will work for bulk, ferry and cruise operations. In the long run, this will provide individual ports with a personalised effective performance report, but also a ‘state of European ports report’. There are many reasons to stay tuned.

**References**


**About the author**

Mary R. Brooks, a member of the PortEconomics team, is with Stephen Ison as the editor of Elevier’s Research in Transportation Business and Management. Until 2013, she was the William A Black Chair of Commerce at Dalhousie University, Halifax, Canada. She has been actively engaged in the work of the Transportation Research Board (Washington DC) since 1993, and she was appointed to the Marine Board of the US National Academy of Sciences in 2008. She is the founder and chair of the Port Performance Research Network, a network of more than 50 scholars interested in port governance and port performance issues. Her latest book with Thanos Pallis, Classics in Port Policy and Management, was published by Edward Elgar in May 2012.

Thanos A Pallis is associate professor at the Department of Shipping, Trade and Transport, of the University of the Aegean, Greece (Jean Monnet in European Port Policy). He was a Fulbright Scholar at the Centre for Energy, Marine Transportation and Public Policy (CEMTPP), Columbia University, New York, US, and lectures at the University of Antwerp, ITMMA. A regular contributor at OECD, UNCTAD, IAPH, AIVP and ESPO discussions on port development, he has served as member of teams advising the European Commission, the Committee of the Regions, and national governments on port performance and development. He has been recently appointed secretary general of MedCruise, the association of cruise ports in the Mediterranean and its adjoining seas. Mr Pallis is a co-director of the PortEconomics initiative.

**About the organisation**

PortEconomics is a web-based initiative aiming at generating and disseminating knowledge about seaports. It is developed and empowered by the members of the PortEconomics group, who are actively involved in academic and contract research in port economics, management, and policy. Since October 2012, Port Technology International and PortEconomics have been engaged in a partnership.