



Leveling the playing field.

How to choose the right TOS and level the playing field with your competition.

Is your port prepared to face your competitors?

Ports of all sizes are faced with a familiar challenge—how best to address the complex task of handling cargo throughout their operation, in a way that improves their competitiveness. A terminal operating system (TOS) is at the core of a port's operation. It allows cargo movements to be handled and controlled more efficiently, resulting in increased productivity across your entire organization.

Your decision to purchase a TOS may be influenced by a number of drivers:

- You may be under increasing pressure to stay competitive as shipping lines push for higher productivity.
- You may have ambitious plans for expansion in order to grow your business.
- You may handle, or be planning to handle, a variety of mixed cargo types.

Whatever the reason, there will be a time when your business systems and processes will need to scale in accordance with your organizational goals. Before making the decision to purchase or replace a TOS there are some important steps to work through to ensure you get the greatest value from your investment.

In this white paper we share some tips to help simplify the process and focus on the key elements to take into consideration prior to selection.

There are a number of key strategic factors that a port should consider prior to selecting a TOS

Do you even need a TOS?

Ships are getting larger, cargo is becoming more varied, and throughput at ports and terminals is increasing. Your customers are demanding more and more evidence that you are an efficient and effective terminal that is able to keep pace with these industry changes.

All of this suggests that non-automated systems are fast becoming a thing of the past and automated procedures will be required to handle cargo more efficiently in the future. For most modern terminals, it is a matter of when, not if, they will require a TOS.

In-house or commercial solution?

Developing an in-house solution may appear cost-effective in the short term, and able to be customized very specifically to your operation, but should not be considered in isolation of the potential long-term investment and compromises required.

An in-house developed system can expose inherent risks to your organization. Often they are developed by one or two individuals within an organization, representing a single point of failure. Should one or more of these key people leave your organization, a wealth of knowledge about your systems is lost.

Other questions also arise with in-house systems. Can your in-house system be modified to interface with other internal software systems, or systems within the wider supply chain? Can it be easily adapted to accommodate changes in technology, including the integration of mobile devices?

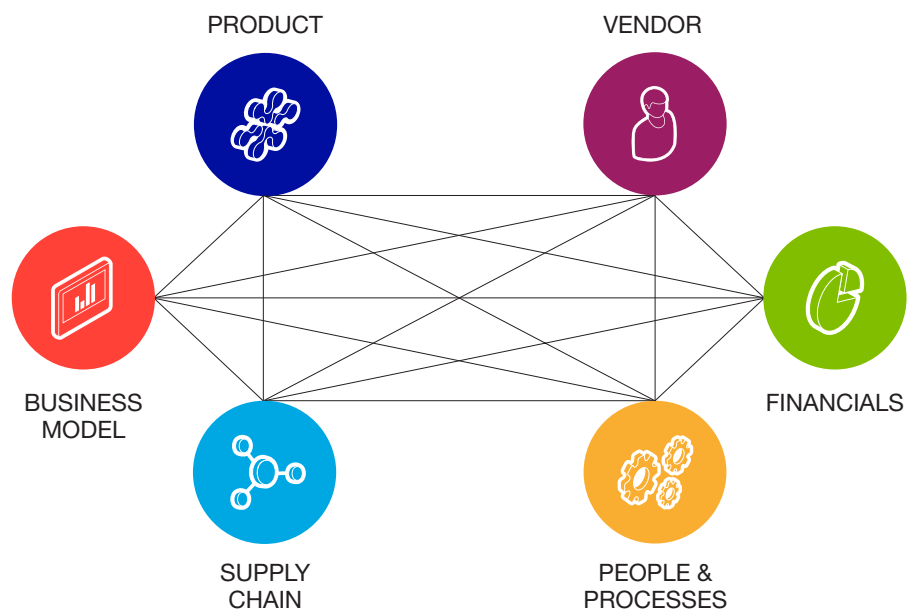
In contrast, commercial TOS vendors reinvest a considerable amount of revenue and resources back into research and development each year. They continually develop their products to ensure they keep pace with changes in technology, legislation and the industry in general.



Current industry evidence suggests the majority of terminals, including those that have traditionally employed in-house systems in the past, are now opting to invest in a commercial TOS as their solution of choice.

TOS decision factors – it's not just about the product

There are a variety of aspects to consider when choosing a TOS. Each terminal is different so the areas you give precedence to will depend on your individual situation. From experience, we believe there are six key elements to consider:



While all of these six key elements play an important part in the consideration and selection process for a new TOS, the primary focus should be on understanding your current landscape, in particular:

1. your organization's **business model**
2. your **people and processes**
3. as well as the part you play in the wider **supply chain community**.

1. Understand your business model

You need to think strategically—selecting a TOS is a long-term investment. Remember, what you are trying to achieve is terminal transformation.

You want a more efficient port and a TOS is key to achieving that, so find one that really fits your business and not only that, select one that will fit your business for longer. It is the difference between 'making do' with a generic TOS and 'excelling' with a TOS capable of really moving your business forward.

Key considerations may include, the type and volume of cargo you currently handle, the type and size of ships your port can accommodate and your vision plans for future growth.

While you may be comfortable with your current situation, market and industry changes may force you to re-evaluate your goals and objectives, causing your business model to adjust accordingly.

For example, non-containerized cargo now accounts for approximately 30% of the world cargo market, with cargo as a whole increasing at around 4% per annum. Adding to this is the speed of change in information technology.

What does this mean for your business in the future and the systems you will need to employ?

Once you have addressed your macro level business needs, it is important to dig a little deeper and consider the more functional aspects of your operation.

For example, what other areas would benefit from the functionality provided by a TOS? Do you operate a depot or warehouse area within your terminal? What gate system do you use? What are your future plans for mobile applications and other technologies such as OCR and RFID?

Understanding your business model allows you to build a clearer picture of your organization's current landscape, your vision for the future, and the tools and processes required for success.

2. Know your people and processes

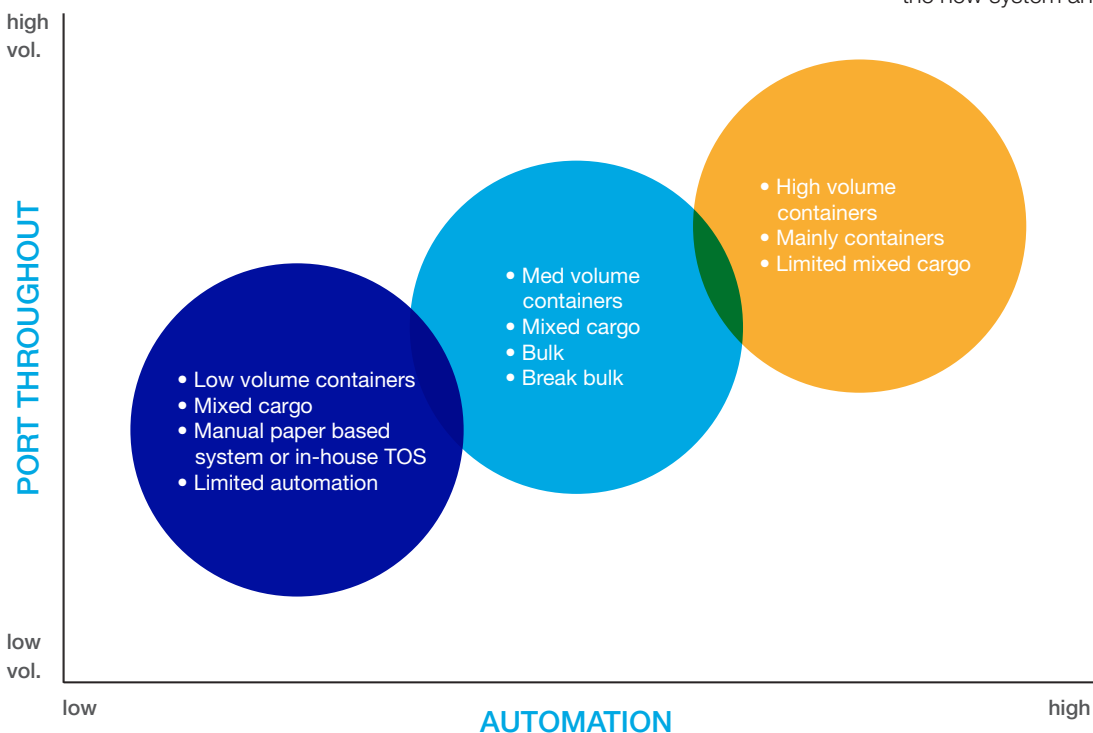
When selecting a TOS you need to be very clear about your future processes and how they may differ from your current situation. This is particularly important when moving from a manual based system to an automated solution.

The TOS vendor should be able to assist you with moving from your current state to your future state, as well as provide guidance on the flexibility of the TOS with respect to meeting your requirements. It is about striking the right balance between making changes to the process itself, or customization of the product, whichever makes the most sense to your organization.

Processes are necessary to drive the business, but the people in charge of, or involved in the process, are the keys to your success. Any form of change can be unsettling for staff. They need to adapt to new ways of working and deal with uncertainty and disruption to 'business as they know it'. Involving users as early as possible can help to mitigate any resistance.

Provide clear communication around any changes that will occur, and the expected benefits. Keeping your people in the loop will increase the likelihood of successful adoption.

Managing the change process is constant, and the earlier it starts the better the chance of success. Your leadership will be key to this, so when choosing a TOS make sure you are ready to work closely with your staff and help them to adapt to the new system and processes.



3. Understand your role in the supply chain community

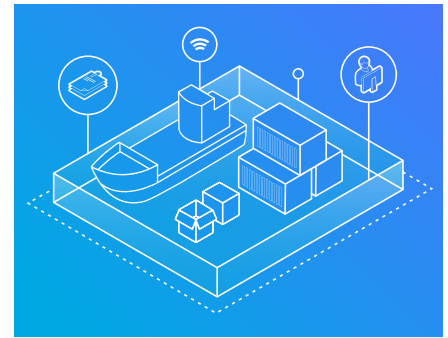
A TOS is not just about the needs of your own organization—it is your entry ticket for involvement in the wider supply chain. There are a variety of stakeholders and areas of interaction where your TOS needs to be the hub of activity and co-ordination. Shipping lines, transport hauliers and customs are just a few examples of the different agencies and organizations reliant on clear communications and interactions with your terminal.

While there are global standards for many things, there are also many variations. So whatever it is you need to connect to, you need to be sure the TOS is capable of making the appropriate data available to the relevant systems and decision-makers within the supply chain.

Choosing the right TOS will ensure it becomes a competitive advantage, not just a commodity, and will further extend your customer service and value into the wider supply chain.

Building a picture for your future

Addressing these three key elements up front allows you to build a picture of how you are positioned today, where you would like to be in the future, and the changes to prepare for in order to be successful. This knowledge makes your decision on an appropriate vendor and TOS solution much easier, and will result in a system that is scalable enough to grow with your business and the wider supply chain community.



About Master Terminal from Jade Logistics Group

Designed to handle all cargo types in one integrated system, Master Terminal is the world's leading terminal operating system (TOS) for mixed cargo ports.

Master Terminal is licensed at over 120 terminals worldwide, from vehicle terminals in Italy to steel terminals in North America.

Implementation is the key to success, and our implementation record is second to none in the industry. Our proven and robust methodology, partnership approach, thorough training and unrivaled implementation timeframes deliver tangible results fast.

Jade Logistics has been designing, building, and supporting innovative logistics software since 1993. Our experienced people understand the global logistics industry and are the foundation on which we build long-term relationships with our customers.

We have offices in New Zealand, Australia, USA, the Netherlands, the United Arab Emirates, and Indonesia.

*For more information, visit us at **jadelogistics.com***

FITTING THE EXTENDED SUPPLY CHAIN

