



IMPORTANCE OF LOGISTICS IN CTRM SYSTEMS

INTRODUCTION

The movement of goods is as old as humanity. As trading in goods increased and became more global, it helped establish connectivity with markets near and far as never experienced before.

Price structures between markets have become transparent and are accessible in real time. Profitability today is derived more from the operating efficiencies of refineries, factories and the movement of goods, as price arbitrage opportunities dry up in a well-connected market and also because cyclicals have been better managed as a result of better storage infrastructure.

Manufacturing and trading organizations in this century are now building efficiencies in the logistics space in order to be able to drive up profit margins. The global demand for commodities is unceasing resulting in record daily freight movements.

With the advent of Commodity Trading & Risk Management Systems as well as Enterprise Resource Planning(ERP) systems, the recording of planned and initiated movements has brought in increased efficiencies for organizations. Higher efficiencies in the movement of goods have been achieved through the adoption of multiple systems that can record these transactions and allow operators to keep track of transit shipments. Moreover, with the availability of real-time tracking systems, more power now lies in the hands of schedulers and operators to create increased efficiencies. In recent years, advanced tools have become available to operators that enable them to connect with the logistics world by identifying available freight in real time. These algorithmic products – developed over many years of supply-demand mapping – have created increased efficiencies in trading. However, inefficiencies still exist in the post-transactional logistics cycle.

Even today, most of these systems focus more on streamlining the contract management cycle as there is now a greater focus on P&Ls that accrue from open and closed positions or identifying the correct freight carriers to move goods. Moreover, having more tools that don't interact with each other at the command of the operators has created information that provides little value. While infrastructure-related issues faced by the organizations dealing in physical goods have not been dealt with, these are further compounded by not having the required material information at the click of a button.

The key mantra today in the logistics market is real-time information that works seamlessly with an organization's Commodity Trading systems. As traders' positions are updated in real time with information from Point-of-Transaction stakeholders, P&Ls become more meaningful and high levels of efficiency are brought into the Supply and Trading activities. This reduces the layers through which information is processed before the Supply and Trading teams can make use of this information.

This white paper discusses how Manufacturing and Trading companies can use point solutions that focus on bringing real-time information from the actual sources directly to their Commodity Trading systems to enhance trading efficiencies. They can do so without having to invest in costly modifications to existing systems to make the trading and logistics systems more efficient, and also focus better on the logistical aspects of trading that have been hitherto ignored.

WHAT ARE THE BENEFITS OF A GOOD LOGISTICS SYSTEM?

OPTIMIZATION – Logistics departments have a variety of options to move goods between two points. Primarily, the logistics system must optimize the way commodities are shipped thus increasing overall efficiency and generating cost savings.

INPUT EFFICIENCY – An efficient logistics system must reduce the time spent on freight management as well as reduce data entry errors (with proper integration with relevant systems) hence increasing supply chain visibility that enables better decision making, lowers costs and reduces inefficiencies.

REAL TIME DATA – Real-time information of material loading data, etc. is the hallmark of an efficient logistics system. Ready availability of relevant data is essential for decision making and puts more power in the hands of the traders.

ANALYTICS– Analytics provide a powerful way for traders and schedulers to check for patterns and optimize logistical transactions. However, in order to provide analytics, the relevant data must be available at the fingertips of the users. Most Trading and Logistics systems cannot access real-time information and store it properly. Efficient logistics systems must provide for this capability.

INFORMATION BROADCAST – Real-time logistics information provides benefits to both the supplier and the consumer. Ideally, efficient logistical systems must be able to disseminate the information to all parties involved in the transaction in order to keep the information relevant and real time.

AUDITABLE– Continuous changes in the transactional information related to movements of goods is not new. However, every change needs to be tracked in real time for future review and for analytical purposes. Efficient logistical systems must track and maintain the changes so that they can be audited, especially those that occur at the source. This provides useful information to the organization for decision making.

To summarize, we can argue that the accuracy and speed of data (especially that in realtime) are the critical factors that define whether or not a logistics system allows the trader to be in the game, and provides increased profitability from those trading decisions.

In addition, these factors help enhance the system's ability to analyze, provide input efficiency and broadcast the correct information to both the organization and relevant market participants.

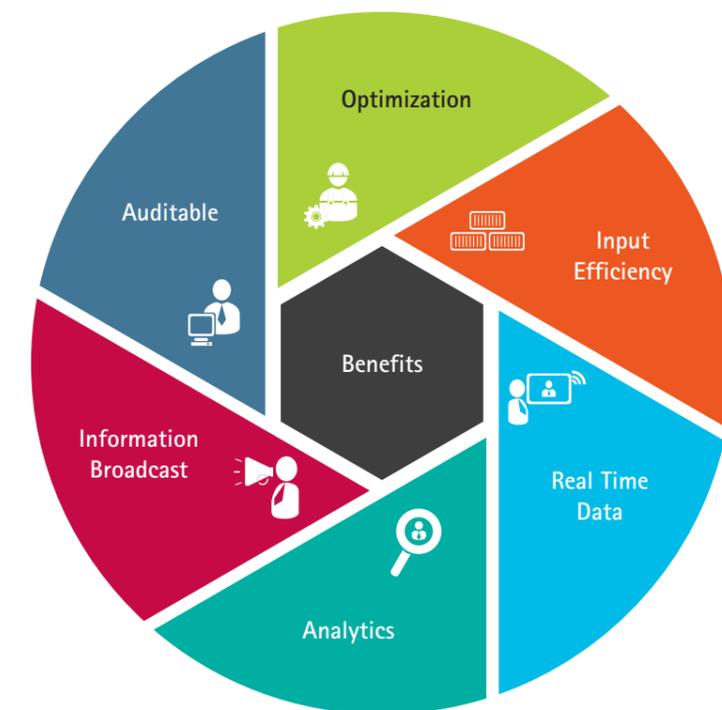
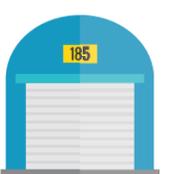
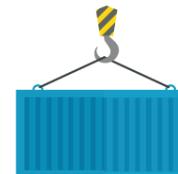


Figure 1 – Desired Benefits from Logistics Systems



CURRENT SCENARIO

Most Commodity Trading or Management systems are either specialized in the handling of Paper Trades or Physical Trades. Due to the complexity of commodity contracts, most trading systems cannot cover all the functionalities required to manage Physical and Paper Trades and eventually impact the establishment of an efficient logistics system. The in-built logistics systems are basic in nature and work as a post-fact recording system rather than in real time.

Moreover, once implemented, the existing Commodity Trading and Risk Management systems are rigid. They cannot change much without the introduction of more complexity and subsequent costs when modifying the systems to align with real world processes. Moreover, being out-of-the-box systems, it is also difficult for these systems to adapt to the changing scenarios in the world of logistics.

The trading world is dynamic. The logistics business mirrors it in the complexity of the transactions undertaken. Process changes take place depending on the regions where trading happens and while most trading and logistics systems try to be a one-size-fits-all with the aim of maintaining a single standard, the situation is very different in the real world.

Therefore, custom-built solutions that align to the real world as well as allow the existing systems to maintain their standardization are the need of the hour. Trading organizations can benefit deeply by solutions built for the logistics market by experts who are well-versed with both trading and goods scheduling to increase efficiency of products and reduce the complexity present in off-the-shelf trading systems.

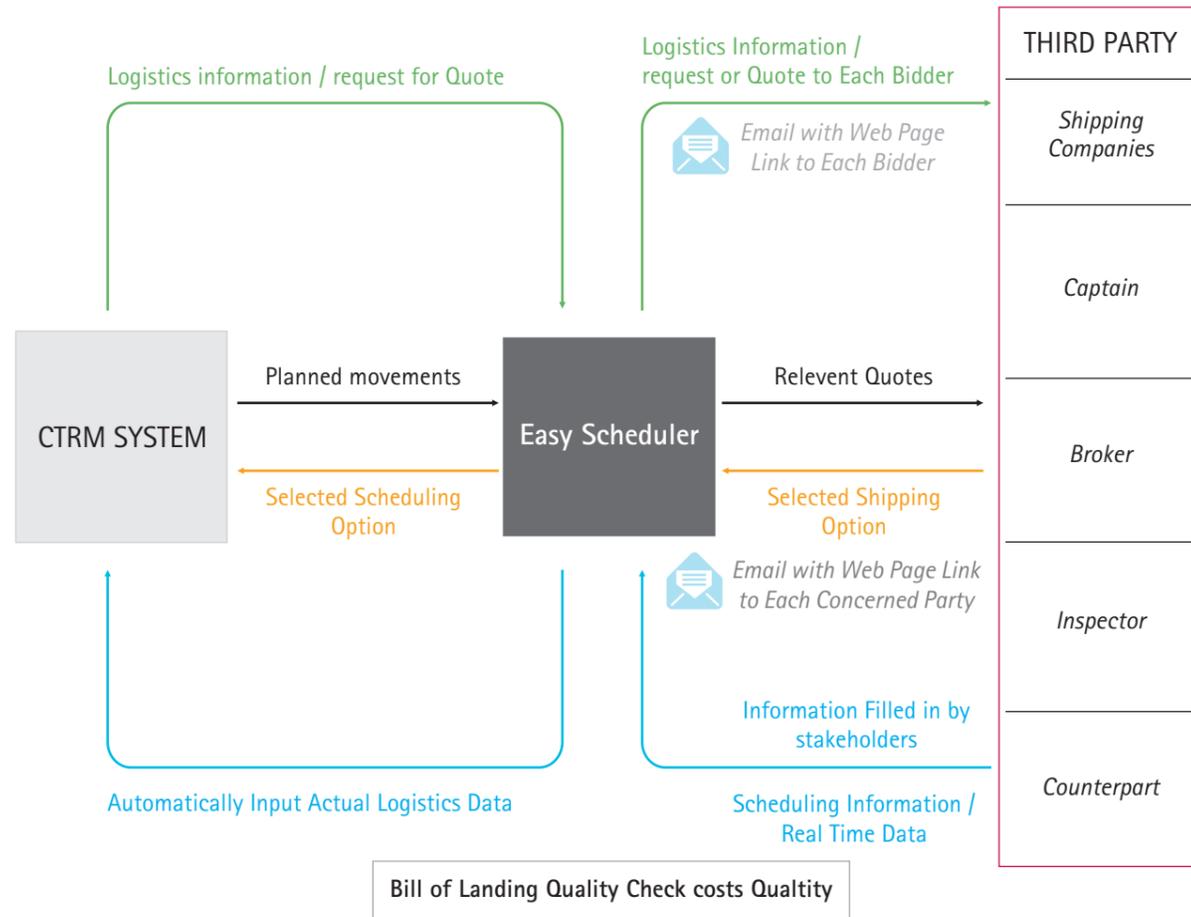


Figure 2 - Process Cycle Easy Scheduler High Level Design



EASY SCHEDULER

In order to enable an organization's off-the-shelf Commodity Trading system to become standardized and obtain logistics information in real time, Easy Scheduler, a custom-built solution from ITC Infotech leads the way. It is a simple tool that allows an organization to connect with players in the logistics cycle – schedulers, shippers and quality personnel – and enables them to update the information directly into the CTRM system, with or without human intervention.

MODUS OPERANDI

Easy Scheduler seamlessly integrates the Commodity Trading system with the real world of logistics. It allows the operators from the logistics team to directly interact with the real world and automatically update information into the systems with or without human intervention.

The solution connects to the Commodity Trading system using in-built connectors that use the standard connectors provided by it. For both planned and actual transfers, the Easy Scheduler will send mails to relevant market participants with live links. This will enable the participant to post the relevant information, which will

then be sent back by the users who update the information in a secure location provided as a web page. This information is then relayed back to the operations team and can be updated directly into the Commodity Trading system or ERP system, as the requirement may be.

The application provides a simple e-mail link that opens up a secure web page that permits updation of relevant information. The information may pertain to quality, grade or specifications of the material, shipping dates, quantity dispatched through Bill Of Lading and expected delivery and/or dispatch dates.

The application can be configured to enable the operations team to undertake further processes on the real-time information. The operations team can choose to either review the information obtained from the market participants or simply allow it to be processed in the off-the-shelf logistics system of its choice. With the immediate update of information in the required system, it is understood that the most relevant information that has not been modified will be available to all the organization's stakeholders.



DERIVED VALUE

Given the importance of managing logistics in real time, and in the domain of commodities trading, companies can derive tremendous value from this simple solution.

Minimal Human Intervention – As the information is derived directly from source systems in raw format, it eliminates the human element in data exchange thus removing errors introduced as a result of human oversight.

Reduced Information Lag – As the information is directly procured from the source, the systems are updated in realtime. Updated information is the key to smarter trading decisions.

Accurate Information – With minimal human intervention and information being updated directly from source, the data becomes more accurate. Moreover, multiple stakeholders provide information directly to the system, which aggregates the information and updates sink CTRM systems maintaining high accuracy.

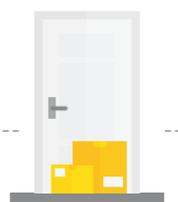
Flexibility and Scalability – As organizations trade in multiple commodities and at multiple locations, we understand that one-size-never-fits-all. The solution has been built with enough flexibility to accommodate the variations inherent in the logistics business. Moreover, the solution has been built on the latest architecture that enables it to grow alongside your business.

Cost-Effective – The solution is highly cost-effective as off-the-shelf systems do not need to be customized. Moreover, as data is now available in realtime, trading and logistics teams have the capability of making more informed decisions that benefit the entire organization.

The solution addresses the requirements of real-time information and accuracy adequately.



Figure 3 - Bird's Eye View of Easy Scheduler Benefits



SUMMARY

Inefficiencies are created as a result of the gap between information creation at source and it being made available to the organization. In addition, the human element in updating information poses a risk to the accuracy of the information and the speed at which it is made available to organizational stakeholders. As different regions have their own complexities, taking into account all this information can become a challenging task for the logistics teams within the organization. Above all, costs incurred to modify the existing Commodities Trading system to accommodate the real-time flow of information are prohibitive.

As industry champions and having worked closely with large organizations, ITC Infotech's Easy Scheduler helps address major issues around logistics and its interface with the Commodities Trading system. The tool runs in the background and updates data in the CTRM in either a manual or automatic mode. As the information is directly available from third party personnel involved with the trading and logistics cycle, it is the most relevant, accurate and reliable data.

About ITC Infotech

ITC Infotech is a specialized global scale - full service provider of Domain, Data and Digital technology solutions, backed by a strong business and technology consulting focus. The company caters to enterprises in Supply Chain based industries (CPG, Retail, Manufacturing, Hi-Tech) and Services (Banking, Financial Services and Insurance, Airline, Hospitality) through a combination of traditional and newer business models, as a long term sustainable partner.

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