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Making Integrated Logistics Your Competitive Advantage

Today's constraints are yesterday's decisions; today's decisions will be tomorrow's constraints. Decision makers should therefore, carefully embrace useful technologies and capitalise on them to achieve greater heights in quality, productivity and profitability.
By K K Han, CEO, Gurusoft

As logistics is the last frontier for cost competitiveness, there is increasing interest in enhanced performance and growing sophistication in both material/information handling for logistics purposes. What is it all about?

Before putting such system concept as ERP, WMS and ASRS in perspective, we must recognise and understand the world is changing fast in terms of customer, technologies and competition etc.

However, understanding these changes is increasingly less of a technical challenge but more

of a shift in the mindset. Who is your customer? Do you have the right view of a customer?

Customer Oriented Thinking

In the face of shorter product life cycles, deeper price cutting and shorter windows to market, many companies see the need to create a competitive advantage through a concerted strategy of service differentiation.

As before and more so today, staying close to the customer is heard as often in boardrooms as

it is in conferences or forums. Indeed, customer influence on design, manufacturing, packaging, distribution, and marketing has never before been more pronounced.

At its core, what you see is a matter of attitude. If an attitude of 'the customer is king' prevails, then customer service is very likely to be world class. It is well known that quality, accuracy, timeliness, and dependability are essential for world-class customer service; but what more can be done to meet this challenge in the area of logistics and warehousing?

ERP (Enterprise Resource Planning)

ERP is an integrated information system designed to support decision makings within an enterprise environment. It establishes a framework in which the whole company can work more effectively together by communicating consistent priorities to all people in an enterprise through its common database, online enquires and exception-oriented reports, and business insights and intelligence.

WMS (Warehouse Management System)

Over the years, from an initial stand alone system that controlled movements and storage of goods in a warehouse, WMS has evolved into various application solutions involving order management, transport management, billing and even a complete accounting system.

ASRS (Automated Storage And Retrieval System)

AS/RS Systems are devices designed for automated storage and retrieval of goods and items in manufacturing, distribution, retail, wholesale and institutions. It is based on the key principle of bringing 'goods to the man' rather than man going around to look for goods.

Industry Choice Or Dilemma?

Does ERP begin where WMS end? What are the features/functionality that a WMS typically offers, and an enterprise resource planning (ERP) system lacks? Different ERP vendors utilise WMS integration in a variety of ways. How many have cost effectively allowed the warehousing functions to integrate seamlessly with manufacturing activities?

In theory, the WMS should track both work-in-process (WIP) and finished goods inventory, forging a link between the warehouse and production areas, achieving accurate real-time links to the ERP system. In reality, there still exist many gaps or 'bubbles of cost inefficiency' between these

two areas as many companies still struggle to find a solution to handle such integration challenges. For example, most of the inventory management at the ERP level only provides a functional view of the stock from an accounting perspective. The total quantity of a stock item available to sell is maintained, and various costing models are available.

The system tracks the total quantities into and out of the warehouse, to maintain the current stock levels of each product. Many systems allow a single pick location to be allocated to a product that is used when storage and picking instructions are issued.

On the other hand, a WMS views the stock from a physical perspective. The system deals with the physical goods and tracks the product and quantities down to bin or location level. Total stock quantities are available, but the system tracks the details of the product down to the location level, for full traceability in the physical warehouse.

Benefits Of Integrating WMS Into ERP

The reality is that there are numerous benefits when the WMS is integrated with the ERP system. Ten realisable benefits are as follows:

1. FIFO (First in First Out) made possible making sure product expiry dates are observed and consumer confidence maintained.
2. Stock out costs reduced with production, sales, and procurement all pulling real-time data from WMS for making better decisions.
3. Production schedules better optimised with accurate real-time raw material and quality data.
4. Better quality customer service with more accurate inventory data and quicker response time.
5. Warehouse activities captured and immediately updated for procurement and customer service to act on short shipments or short receipts from vendors.
6. Cost effective integration with complete data flow through, from freight manifest systems, scales, and small package carriers into sales order entry.
7. Empowering e-commerce with real-time and accurate data link and 24/7 feedback to online customers.

8. Efficient error reductions with mobile devices and bar code activities tightening integration between warehouse and production floor.
9. Keeping only a 'single version of the truth' for inventory, availability, and costing as there is a single functioning system.
10. A greener image with a true paperless environment.

Financial Justification

While we strive for a more automated, integrated, responsive and flexible logistics system, we must also recognise that our traditional methods of financial justification alone do not support automation and integration in the area of logistics/warehousing.

They are strongly biased towards capacity expansion and incremental cost reduction, and away from revenue enhancement and quality improvement; they ignore a company's competitive position.

If strategy is about creating a unique and valuable position involving a different set of activities, finding that new position and new way of doing things is an entrepreneurial edge.

However, difficulties mastered are opportunities won. The challenge is: Can we expand our system thinking, which is rational in nature, into a realm of strategic planning and competitive positioning?

Logistics Excellence Is A Journey

The use of a computer systems capabilities and evolving ERP/WMS along with the integration of more advanced ASRS will provide systems that are more flexible and responsive to the changing needs in both manufacturing and distribution applications.

Identifying the problem and prescribing the right system mix is only the first step towards logistics excellence, the top management's commitment to the system must be strong and visible to those who are designing the and placing the system.

Real progress only occurs when people understand why changes are needed and introduce such changes on the basis of a shared and consistent vision.

This journey in a way is like scaling a mountain. The truth is: you can expect frustrations, set backs or reversals but do not see them as failures. It is a detour, a temporary inconvenience. The idea is to turn this stumbling block into a stepping stone rather than stumbling over it.


Summary

As you would probably agree, no system should be designed as an island onto itself. A broader integrated system must be conceived and the design must provide room for future expansion, subsequent integration, and further growth.

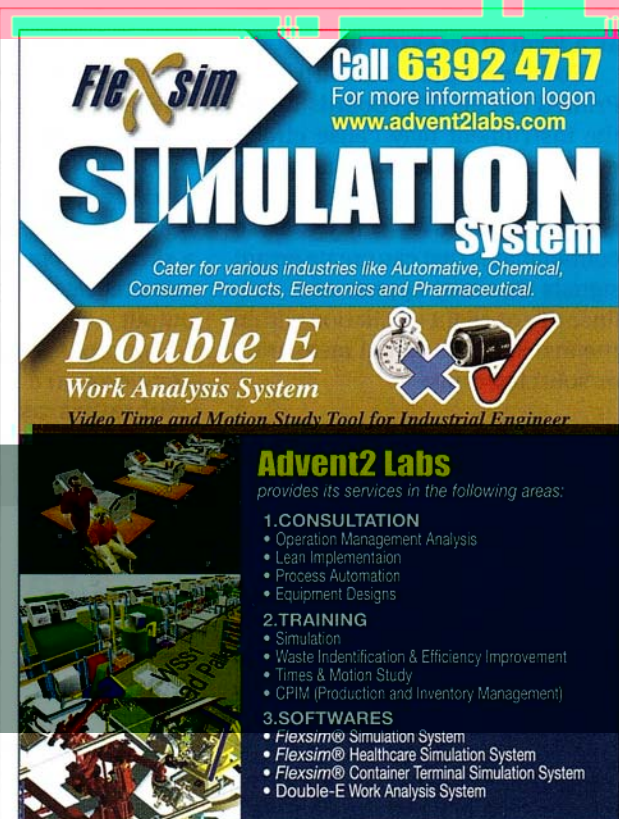
The pressures and imperatives of doing business on a global scale are inevitably leading to recognition of the central role of logistics. The prizes in today's markets go only to those companies that are capable of providing added value in ever-shortening time scales. Some call it 'faster, better, and cheaper'.

To make this possible, we need to stretch our vision beyond the realm of the predictable, the safe and the expected. We need to play with the rules, rather than by the rules by inventing new business value propositions.

It calls for a major shift in our mindset rather than an intellectual understanding.

Therefore, integrated logistics/warehousing are neither a cost contributor nor a strategic liability. When understood and executed appropriately, it has a power to be both a revenue enhancer and a competitive weapon. 

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