

Global Trading

An Overview Of Various Models Used In
Global Trade Today

Supply chain
Global Trade
SCM
Processes
Value chain
Retail
VCM
Warehouse
Logistics
Management
DCM
Distribution



Agility At Work

Siri



Siri Technologies
Agility At Work

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#38/C-23, South End Road

Basavanagudi, Bangalore 560 004

Tel: +91.80.2634.0050

Fax: +91.80.2634.0066

www.siritech.com

Overview

Businesses today are engaged in serving customers across the world. With **global** boundaries shrinking and the influx of technology in every business process, logistics plays a key role in any transaction between a business and its customer. With key processes being automated; **supply**, **demand** and manufacturing processes are being tied together to form one huge **value chain**, involving trading partners, raw material suppliers, manufacturers, trucking companies, wholesalers, distributors, retailers and the end customer.

With our understanding of specific pain areas faced by technology companies and end customers across various processes within the value chain, coupled with domain expertise, we are in a position to provide **technical**

solutions across any component within the value chain process.

In the past, Siri has provided B2B and marketplace solutions to our clients, which could be translated into being able to address the demand as well as the supply chain. Our understanding of collaborative commerce and strong technical skill would translate to being able to provide your stakeholders with tangible benefits across your value chain.

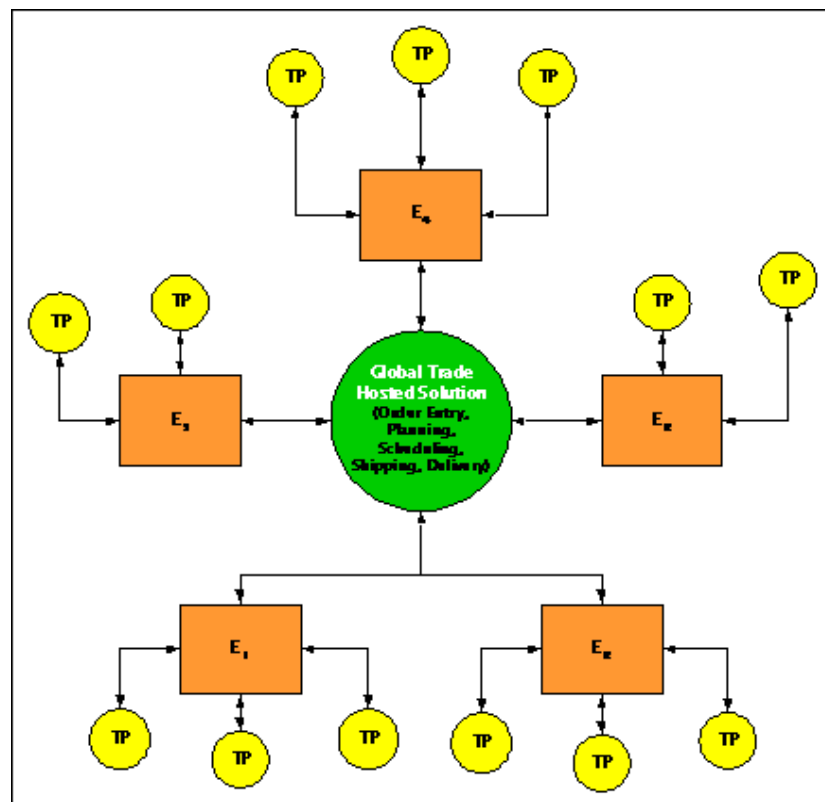
Trading Models

The Global Trade Model

The Global Trade Model transcends geographical boundaries. It involves various processes

starting from the generation of the sales order, consolidating multiple sales orders, scheduling a shipment, generation of documents, shipping the goods, customs clearance and final delivery.

the relevant players in the logistics supply chain. Some prominent logistics providers either have an existing automated process or have embarked on developing such marketplaces to enable movement of goods with minimum loss of time and money.



Legend
E Enterprises (companies directly involved in buying and selling of goods and services)
TP Trading Partners (These could be freight forwarders, carriers, customs agents, clearing house agents, etc)

Currently the industry works in an unstructured manner where the primary beneficiaries are the brokers/agents who interact with

These marketplaces allow the various parties involved in the supply chain to come together and interact on the same platform

that allows quicker and faster processing from order to delivery.

Typical participants involved:

- Shipper / exporter
- Freight forwarder
- Carrier
- Clearing house agent
- Importer

Components of the Global Trade Model:

1. Order Entry

The order entry system allows enterprise users to enter the details of the items present in the purchase order. The output of this system would generate a sales order.

2. Planning

The planning module provides options for users to decide on the container information, define box sizes, container load patterns, truckload options, etc.

3. Scheduling

Primary users of this module would be the freight forwarders, who would generate a shipping schedule for the goods to be shipped. Freight forwarders would provide the MAWB (master airway bill) and MBOL (master bill of lading) numbers to the users to the company to complete the booking of the shipment.

4. Booking

Enterprise users would complete the booking formalities by entering all relevant information of the shipment such as marks, vehicle numbers, HS numbers, bill to and ship to details, etc. They would also attach relevant documents such as COO certificates, HAZMAT certificates, etc.

5. Shipping

The carrier would raise the AWB / BOL and issue the numbers to the freight forwarder responsible for movement of the goods. Relevant details of the product such as location on board, container numbers, destination information would also be provided by the carrier. At this point of time, the exporter and importer can also track the movement of goods over high seas.

6. Entry view

Importers can make use of this module to view the details of the shipment once it has arrived and is in the possession of the import customs officials. The duties and taxes that would need to be paid would automatically be calculated at the time of booking. The importer can then inform the clearing house agents to pay

the relevant duties and taxes and release the goods from the customs warehouse.

7. Delivery

Final delivery of the product to the importer would involve the importer and importers freight forwarder signing an online delivery receipt, which would then effectively close the purchase order.

The Supply Chain Model

The supply chain model is most commonly used within an enterprise that interacts directly with existing legacy systems. It seeks to tightly integrate disparate supply chain participants into a link that extends backward to involve suppliers, manufacturers, third party vendors, etc.

Tangible benefits that are achieved by implementing a supply chain solution within the organization include aggregated buying power, consolidated procurement, collaborative material definitions, streamlined payments and billing operations, activity monitoring, etc.

By integrating multiple trading partners, the organization has the added benefit of reduced costs and could also implement procurement programs such as reverse auctions.

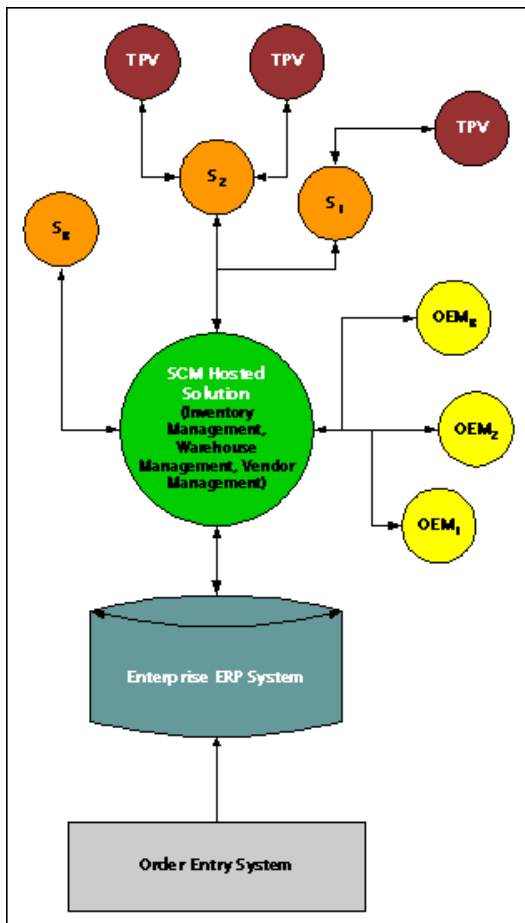
Typical participants involved:

- Enterprise
- Suppliers
- Manufacturers
- Third party vendors

Components of the Supply Chain Model:

1. Inventory Management

By interacting with the existing legacy / ERP system, the hosted solution extracts information about the re-order levels, current stock on hand, re-order quantities, production requirements etc. This information would allow the production and store managers to streamline their inventory requirements that would



Legend
S Suppliers of raw materials to an organization. Would include multiple tiers.
OEM Original Equipment Manufacturers. These would be manufacturing shops that manufacture the end product.
TPV Third Party Vendors. Typically involved directly with the suppliers to source raw materials that are not sold by the supplier.

proportionately increase ordering efficiencies across the organization.

Automatic triggers could alert suppliers and third party vendors to replenish SKU's as required depending on production schedules.

2. Warehouse Management

The warehouse management module would deal with finished goods inventory. Depending on the demand from the market and the organizations forecasting abilities, alerts would be triggered to original equipment manufacturers to increase or decrease production of the goods.

3. Vendor Management

This module would be of specific use to purchase supervisors who would have to deal with suppliers, TPV's and OEM's on a daily basis. Using

this module, users could track the quality, quantity, lead-time for supply, slippages, historical performances, etc. of the trading partners. Also, users would be able to assign specific ratings to these trading partners that would be useful at the time of ordering inventory.

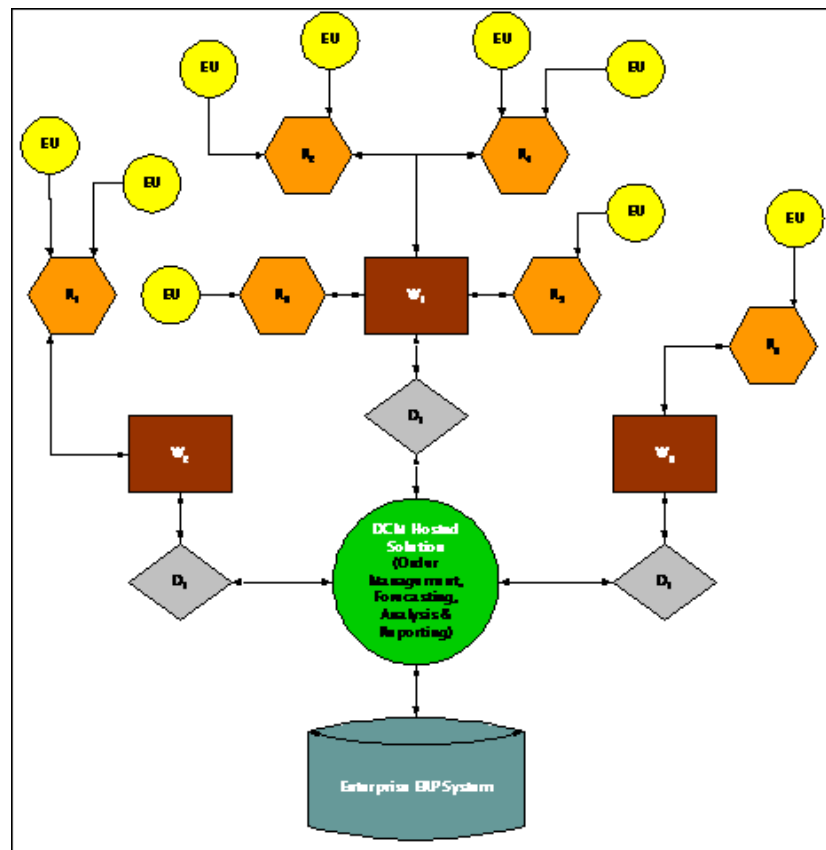
The Demand Chain Model

A successful product organization is so perhaps only because of its understanding of its customers, market demand patterns, preferences, consumer behavior and so on. The demand chain model seeks to forward integrate the organization with the drivers of its business namely its customers. Similar in architecture to the above mentioned supply chain model, this model also

interacts with the existing legacy system of the organization but extends forwards to include the wholesaler, sales force, retailer, and the end customer.

Benefits that are translated to the organization would allow for advanced warehouse management models such as just-in-time inventory that would translate to

Typically, demands are captured at the retailer and based on the severity of the market demand alerts are triggered at the wholesaler for replenishment or reduction in supply. This information is translated back from the wholesaler to the organization, which then has the foresight to estimate production volumes thereby keeping tabs on inventory held, inventory required, production schedules, etc



- Legend**
- D** Distributors of the product.
 - W** Wholesalers of the product who would directly interact with the distributors and the retailers.
 - R** Retailers of the product who would interact with the wholesalers and the end customer
 - EU** End users. Final consumers of the product.

reduced expenses and better management of warehouse space.

Typical participants involved:

- End customer
- Retailer

- Wholesaler
- Distributor
- Sales force
- Enterprise

Components of the Demand Chain Model:

1. Order Management

The order management module would involve receiving orders for servicing market requirements from the retailers. Depending on the stocks held by the distributors and wholesalers, users of the system would assign these stocks to the retailer. The wholesaler who may have depleting reserves or the distributor could also place orders. All requests that are directed to the system would automatically form an input to the analysis and reporting module.

2. Forecasting

Users of this system would primarily be from the sales and marketing teams and top executives who would like to identify possible sales of their products in the future. The forecasting module allows users to make use of historical data from the order management module to forecast sales and market demands. The system would also be able to handle seasonal demand spikes and display a forecast in multiple formats such as graphs or numbers.

3. Analysis & Reporting

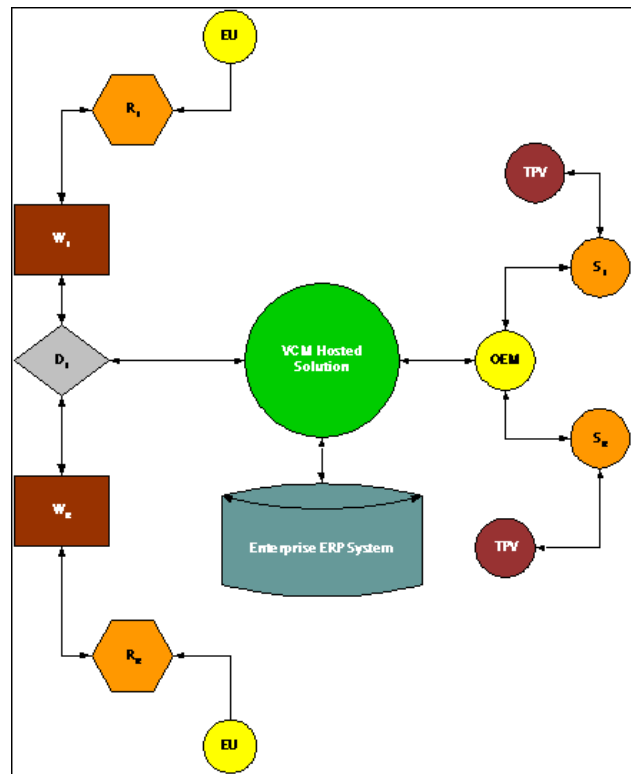
The production and marketing teams who would make use of historical data would typically use the analysis and reporting module to identify product demand, in addition to identifying product enhancements.

The Integrated Demand-Supply Chain Model

into account inputs from the market and translates the same to the organization that triggers the backend chain of supply from the suppliers and manufacturers. It therefore involves the end customer, retailer, wholesalers, distributors, enterprise, suppliers, manufacturers, etc.

More commonly known as the value chain model, this model seeks to integrate an organizations supply and demand chain thereby streamlining the process of demand for products to their manufacture.

This model is provided as a hosted application that interacts with the legacy system. It takes



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The greatest benefit of implementing such a model would be automation. By automating the supply chain process based on inputs from the demand

chain, organizations can be assured of lower costs of production, reduction in expenses for storage space, responsive to spikes in demand, etc. Also, an intelligent system would allow top executives to be in a position to intelligently forecast demand based on historical data.

Typical participants involved:

- End user
- Retailer
- Wholesaler
- Distributor
- Enterprise
- Supplier
- Manufacturer
- Third party vendor

By implementing a value chain solution, organizations can reap the benefits of various modules as those mentioned in the SCM model and the DCM model. The integration of these two models provides the organization with a solution that would be able to

address the back end and front end of its entire operations.

Technology

There are many issues that need to be addressed by any organization wanting to integrate its supply, demand or value chain. The primary benefit that organizations derive is that of automation - the processes and protocols involved in integrating their various trading partners. Solution architecture of these hosted solutions is well defined and technologies could vary from usage of the .NET platform of Microsoft or the J2EE platform of Java, depending on preferences and compatibility criteria.

Why Siri

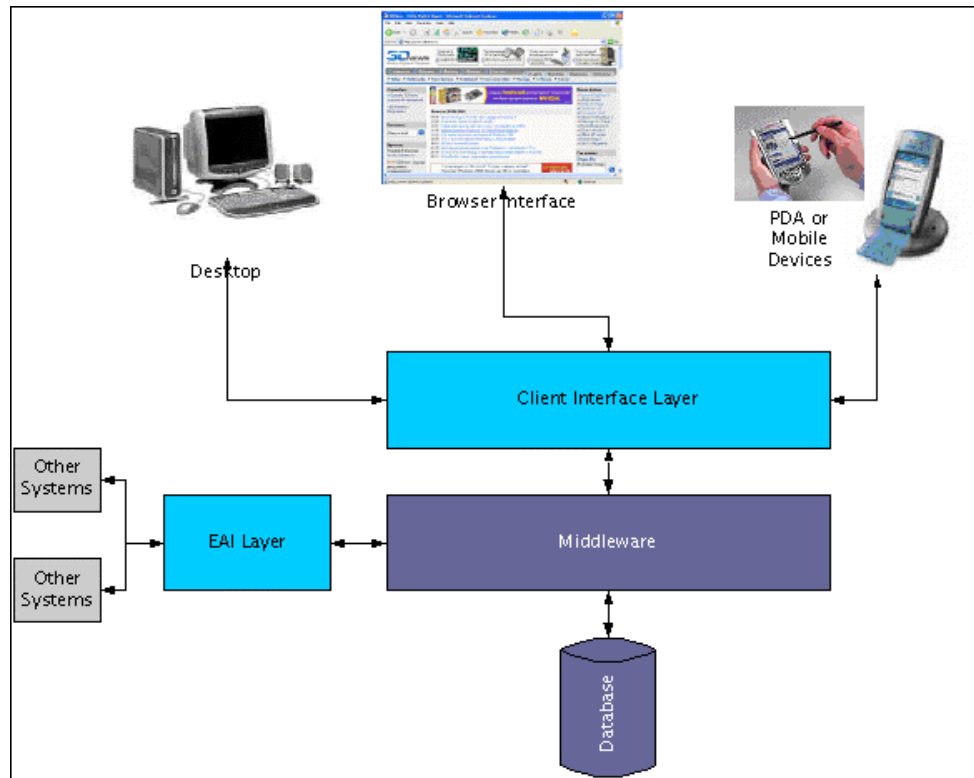
- Siri is one of the pioneers in developing and testing a global trade model.

- Extensive experience across implementing B2B and e-marketplace solutions.

- Siri possesses large resource pool of domain and technical

engineers with an optimal combination of analysis, development and testing experience

- Wide range of experience in using technologies to implement these solutions.
- Development experience across the .NET and J2EE platforms.
- Experience in developing customized solutions to facilitate flow of information between disparate modules.



About Us

Agility at Work!

Siri Technologies is a SEI CMM Level 4, ISO 9001:2000 IT services company. Founded in Bangalore, in 1994, we have successfully delivered over 500 projects involving application/product development, QA, maintenance, re-engineering and support. With over 15 products to our credit so far, we are one of the pioneers in

offshore product engineering in India.

With profitable and debt-free operations every year since inception, and Bank of America as

a major shareholder, we have established ourselves as a reliable, long-term services partner of many companies in the US and Europe.