

## INNOVATIVE FRAMEWORK OF SUPPLY CHAIN MANAGEMENT

**Ms. Lovepreet Chaudhrey**

Asst. Prof., Deptt. Of Commerce  
Gujranwala Guru Nanak Khalsa College  
Ludhiana, Punjab, India

**Abstract:** Supply chain management is an active business tool to develop and run supply chain in the most effective and efficient manner. Supply chain activities cover entirely from product development, sourcing, production and logistics as well as the information systems needed to coordinate these activities. Innovation in supply chain management has become a benchmark for the business concerns to grow, prosper, and provide competitive edge to the marketeers. It is fundamental key source for the companies of all sizes. It means looking at the way how a company utilizes its assets, its pecuniary means and operating resources to cope up with the customers' requirements. However, this concept has increased dramatically over the past few years. It is an integration of business processes from the ultimate consumers through the original makers that supplies product, services and information for achieving customers' satisfaction.

This research paper present an innovative strategy adopted by The Vinimaya Inc., a privately held procurement solutions company it provides an innovative e-procurement catalog management and B2B technologies for both the buyers and suppliers based on its patented vmarketplace cloud based solutions. Vmarket place provides the highly flexible, intuitive shopping experience that makes it easy for the customers to quickly find, evaluate and select the items they need. This data has presented that how Vinimaya manages its supplier catalog and punchout as well as how it realizes 10% to 20% saving with the consumer like virtual market place. Thus the purpose of this paper is to examine the exiting research with an effort to understand the concept of innovations in supply chain management.

**Keywords:** *Supply Chain Management, innovation, logistics, e-procurement, B2B, assets.*

## INTRODUCTION

In this world in which the resources are quite confined, so businesses need to focus on getting best out of the limited ones. The ever expanding markets for goods and their unchallenged assault through promotional tools are overflowing the society with information, new ideas and attitudes which is difficult to control and assimilate which makes innovation: a need of hour in every field. A conceptual model is developed to explain the role of institutions in the successful deployment of supply chain innovations in global marketing channels as customer service requirements are constantly increasing, effective and efficient management on this part of the supply chain is crucial.

Business practitioners are trying to align and coordinate the business processes and activities of the channel members to enhance the overall performance and effectiveness of supply chain through new ideas and innovations. A supply chain consists of a various distinct entities (e.g. raw material, supplier, manufacturer, transporter, middlemen, retailers, etc.) who are responsible for converting the raw material into ultimate product to satisfy their demand in time at minimum costs. It basically connects raw materials, suppliers, manufacturers, distributors and finally end users. Thus, a supply chain can be viewed as a group of entities interacting to transform raw material into finished product and then finally making them available to ultimate customers. The concept of SCM first appeared in the literature in the mid-1980's [7], the definition of supply chain management developed by members of The International Centre for Competitive Excellence in 1994 [6]: Supply chain management is the integration of business processes from end user through original suppliers that provides products, services and information that add value for customers. From some of the statements on SCM, it appears that SCM is logistics. The term "logistics" has also had various interpretations. In 1986, the Council of Logistics Management (CLM), defined logistics management as: The process of planning, implementing, and controlling the efficient, cost-effective flow and storage of raw materials, in-

process inventory, finished goods, and related information flow from point-of-origin to point-of-consumption for the purpose of conforming to customer requirements.

Developing new products quickly and getting them to the marketplace in an efficient manner is a major component of corporate success. Supply chain management includes integrating customers [7] and suppliers [8] into the product development process in order to reduce time to market. As product life cycle shortens, the right products must be developed and successfully launched in ever shorter timeframes in order to grow. Developing innovative supply chain processes and solutions requires even greater lead time that goes beyond demand anticipation. Supply chain activities cover entirely from product development, sourcing, production and logistics as well as the information systems needed to coordinate these activities. Innovation in supply chain management has become a benchmark for the business concerns to grow, prosper, and provide competitive edge to the marketeers. It is fundamental key source for the companies of all sizes. It means looking at the way how a company utilizes its assets, its pecuniary means and operating resources to cope up with the customers' requirements. However, this concept has increased dramatically over the past few years. It is an integration of business processes from the ultimate consumers through the original makers that supplies product, services and information for achieving customers' satisfaction.

#### PURPOSE OF PAPER

The aim of this paper is to provide the framework used in structuring and implementing innovation in supply chain management along with the set of opportunities for further research and development in the related fields. Organizations using innovative ideas in supply chains are compelled to restructure and re-engineer relentlessly to increase their effectiveness and satisfy customers.

#### DESIGN/METHODOLOGY/APPROACH

The research model has been worked out to show how VINIMAYA INC. adopted smart innovative framework in the field of supply chain through e-procurement catalogues and cloud based solutions and other trailblazing capabilities to create exceptional value.

#### Innovation and Competitive Advantage

Innovation in the supply chain management aims to create the most value for the entire supply chain network, including the end customer. Successful supply chain management involves coordination of activities within the firm and between members of the supply chain and innovation in SCM initiates by boosting the total process efficiency and effectiveness across the network. To cope with the challenging regulatory political landscape, supply chain and logistics managers are continuously revisiting and altering strategies and tactics for keeping up with and meeting customers' expectations. One way of addressing this dynamic environment is through innovation. It can apply to cost & process improvements, product or service line extensions, new uses, new markets, new categories, or new to the world technologies. The truly strategic nature of supply chain innovation thus becomes apparent for participating companies, with successful implementation becoming a source of competitive advantage. Supply chain innovation is essential if manufacturing organisations are to remain competitive. Companies are too aware of changes such as increasing globalisation, price competition, increased customer demand for enhanced quality and reliability, etc. At the same time, there have been changes in technology which are enabling new forms of working and trading e-commerce being the open example. Such changes mean that manufacturing organisations need to re-appraise the totality of everything they do if they are to survive.

Supply chain management and logistics professionals have voiced their interest in innovation through the Council of Supply Chain Management Professionals (CSCMP) recent calls for examples of supply chain innovations, its support for presentation tracks on innovation at its annual conference, and publication of articles in this journal about innovation (Fawcett, Smith, and Cooper 1997; Flint et al. 2005; Scannell, Vickery, and Dröge 2000). Every organization has its own different network that comprises a unique set of actors, resources, and activities, which together constitute its identity (Gadde and Hakansson, 1993).

While research on various supply chain relationships has been growing, there has not been a comprehensive approach to construct development and measurement. This could be largely attributed to the fact that astronomical efforts are required to undertake the development and validation of constructs and measures of SCM. The integration of supply chain management

systems has been the subject of significant debate and discussion. As organizations seek to develop partnerships and more effective information links with trading partners, internal processes become interlinked and span the traditional boundaries of firms. Supply chain management therefore represents one of the most significant paradigm shifts of modern business management by recognizing that individual businesses no longer compete as solely autonomous entities, but rather as supply chains (Lambert and Cooper, 2000). SCM, along with a number of other emerging areas in operations management, is, however, still in its embryonic stage (Handfield and Melnyk, 1998). Further as global markets continue to open, many multinational companies are upcoming with an idea of innovations in supply chain management as Vinimaya did.

However, through innovation in the SCM business concerns can stand globally and can provide cut throat competition in the marketplace.

#### FINDINGS OF THE CASE STUDY VINIMAYA INC.

##### Company Brief Overview

Vinimaya was founded in the year 2000. Its headquarters are in Cincinnati, Ohio (USA) with an additional office in Bangalore, India. Vinimaya gained profitability in 2005. It is one of the successful part of the technological group i.e. Fortune 500 customers to achieve their virtual marketplace solutions. Vinimaya has spread its wings over more than 160 countries in 37 currencies and more than 13 languages.

Vinimaya wanted to increase employee adoption of e-Procurement and needed to reduce the time, effort, and cost interlinked with supplier enablement and content management. Vinimaya basically provides software as a service (SaaS) to its clients which enables them to resolve their e-procurement needs year in a row, Vinimaya Inc., the pioneer of next generation supplier enablement solutions for e-procurement, has been named one of Supply & Demand Chain Executive Magazine's "Executive 100" innovators for its successful deployment of a global e-catalog purchasing portal for a Fortune 50 client.

The Vinimaya Inc., a privately held procurement solutions company it provides an innovative e-procurement catalog management and B2B technologies for both the buyers and suppliers based on

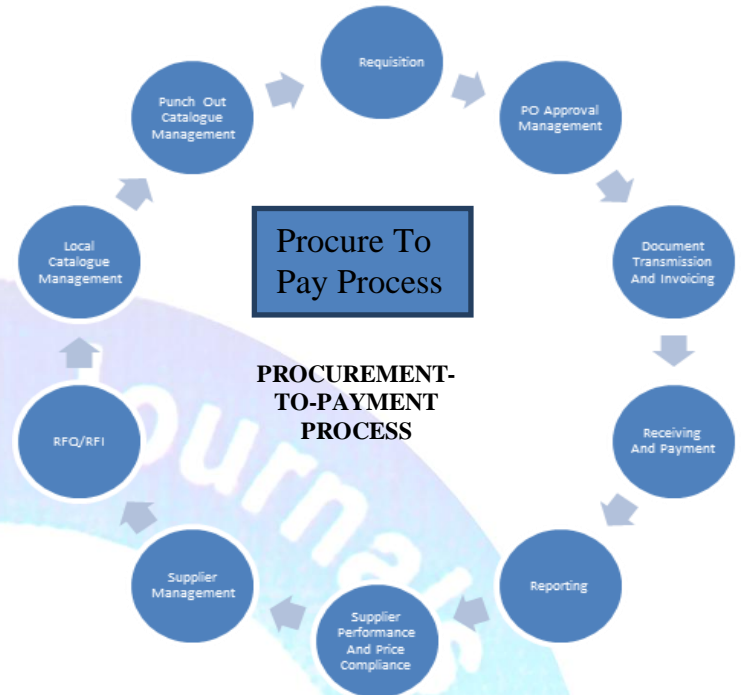
its patented vmarketplace cloud based solutions. Vmarket place provides the highly flexible, intuitive shopping experience that makes it easy for the customers to quickly find, evaluate and select the items they need. This data has presented that how Vinimaya manages its supplier catalog and punchout as well as how it realizes 10% to 20% saving with the consumer like virtual market place. Thus the purpose of this paper is to examine the exiting research with an effort to understand the concept of innovations in supply chain management.

Supplier catalog management, search relevance and flexible procurement shopping have always been the cornerstones of Vinimaya's solutions, and with this they have offered this innovative functionality to the latest release of e-Procurement platform. It has significantly advanced the simplicity and relevance of corporate buying and changed the way vMarketPlace shoppers to find supplier goods and services.

#### Vinimaya's smart, heatmap; an innovation in the supply chain

Vinimaya is actually more than an e-procurement solution. It is a cloud based solution that interlinks to the existing e-procurement solution giving it a user friendly interface that uses what Vinimaya call Smart Market Place Technology™ to deliver a consumer like shopping experience to its clients. Its search engine is similar to Google which gives the most relevant information to the user and in present scenario Siemens, McDonalds, Corning etc. are in its present clientele.

Vinimaya has added a dynamic Visual Search technology in their cloud-based vMarketPlace solution. The proprietary Visual Search technology dynamically organizes cross-catalog supplier search results into a real-time, interactive visual heat map and helps corporate buyers quickly and promptly grabs items they are looking for. The heat map evaluates and displays many areas of user preference to enhance search relevance. With just a mouse click or two on the color-coded category segments within the heat map, shoppers can drill down to quickly zero in on the exact product they are seeking. With the supply chain innovation in Vinimaya, e-procurement is set to grow bigger than ever before.



**Vinimaya’s a Software-as-a Service (SaaS)**

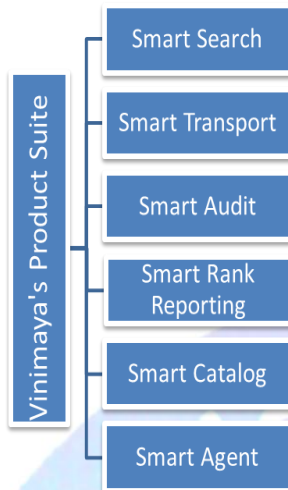
Vinimaya’s SaaS delivered, Patent-Pending SmartSearch Catalog™ which solves the most important problems facing by e-procurement market in today’s world. User and Supplier adoption is the only solution in the market that gives the user ability to search and shop multiple supply sources: websites, industry marketplaces, supplier networks and catalog databases, from a single user interface. Supplier enablement is made easier and less expensive by the Vinimaya’s technology. When complemented by Vinimaya’s B2B Transactions and Internet Electronic Data Interchange (EDI) solution, Vinimaya’s clients make their own virtual internet supplier networks and their customized catalog, which is very simple and easy to understand wherein all their details about the product like the buffer stock are presented. The catalog which is presented on the Vinimaya vMarketPlace is pervasive and with the help of its user friendly interface, it becomes easy for a buyer to compare and evaluate different products over the cloud.

**Power of an Integrated Marketplace**

Nowadays business environment is very uncertain, by not using integrated procurement marketplace any organizations will sink into errors, fraud and waste. Explore ways to improve procurement processes and makes a procurement infrastructure and a system that will put boundaries in place to reduce costs and mitigate risk.

Following are the key features of the Vinimaya’s e-market place procurement:-

- Real-time alerts - for clients when off the contract articles appear in search result box or pricing exceeds the bargained agreements.
- Block non-compliant items - at checkout or allow checkout to proceed based on pre-defined levels.
- Track price history – keeps database of the price chart for every Stock Keeping Unit and presents price changes in vMarketPlace users' search result box.
- Maintains contract data – contract data is put in the audit and price check. On- and off- contract identification is clearly visible to highlight instances where suppliers are presenting non-contract items.
- Run comprehensive reports – enhanced reporting capabilities to look over contract pricing and off-contract items – not only for items purchased, but also for every item retrieved in live search results.



Product Suite Offered by Vinimaya

- Vinimaya, Inc. is an IT solutions company, which provides eProcurement catalog i.e. its flagship product and business to business shopping solutions for buyers and suppliers. It offers Vinimaya Smart Marketplace Technology that makes a virtual marketplace, enables its clients to browse in real time through many sources of supplier data, such as punch-out sites, supplier Websites, online marketplaces, warehouse inventory, and internal catalog databases.
- The company also provides SmartSearch, a cross-catalog federated search capability that functions with any back-end ERP or stand-alone e-Procurement system.
- SmartTransport, between the suppliers and the buyer's ERP or e-Procurement system that transports PO's and invoices.
- SmartRank Analytics, a reporting tool that allows buyers to analyze content within the SmartSearch database.
- The buyers are provided with the power to cross-check the rates that suppliers post on their punch-out site with the help of the new method of smartaudit.
- It offers SmartCatalog that provides the technology and services to manage the organization's local catalogs.
- SmartAgent are the web crawlers like Google uses to search and crawl into various web sites and bring back useful information into Vinimaya SMT.
- SmartSupplier that makes supplier punch-out ready within two-three business days. It

provides its products using the Software-as-a-Service approach.

- The company serves markets, such as manufacturing, oil and gas, high tech, services, pharmaceutical, life sciences, healthcare, and higher education.

**Powered by Oracle**

Vinimaya's vMarketPlace maximizes an organization's investment in E-Business Suite and iProcurement with deep integration with ORACLE.

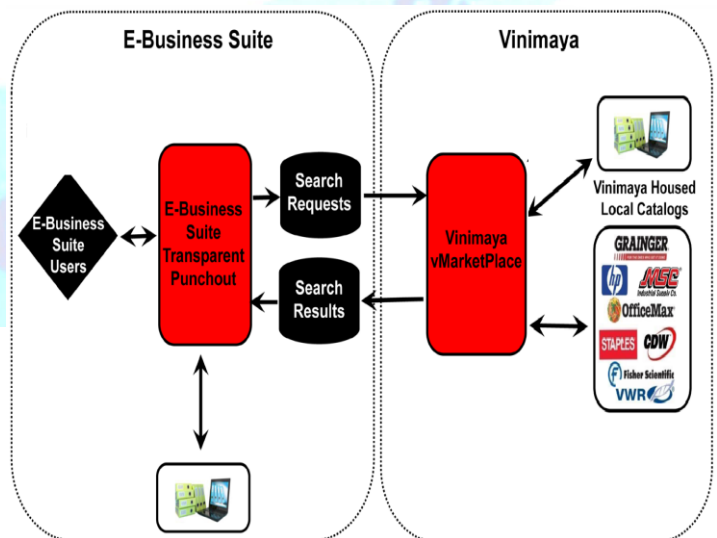
There are two different by which Vinimaya manages its client catalogs (standard and transparent) in the Vinimaya cloud.

**E-Business Suite Standard Punchout Integration**

When a user clicks on the link their Oracle credentials are automatically passed to vMarketPlace to provide for security, authentication and personalization. Upon entering vMarketPlace, E-Business Suite users can search for items across any number of punchout and local catalogs. Users reviewing the aggregated search results can compare items, compare prices, identify an item that is associated with a particular supplier category (i.e. Preferred, MBE, WBE, etc.)

**E-Business Suite Transparent Punchout Integration**

When integrating using Oracle's Transparent Punchout, E-Business Suite users can access the power of vMarketPlace. Users simply enter their search terms in the iProcurement requisition where it is transparently passed to vMarketPlace in the Vinimaya cloud. vMarketPlace then conducts the search, relevance ranks the aggregated search results and displays them directly in the iProcurement requisition screen.



## CONCLUSIONS

From this we conclude that innovation in supply chain management as a conceptual artifact in new era is very essential. Indeed, it is necessary to these innovations in SC are focused on the marketplace, i.e., improving value propositions for downstream customers, business concerns needs to estimate what customers will value in addition to focusing on demand for what they currently value. The procurement function of Vinimaya in vmarketplace came across with major changes in productivity, efficiency and impact during the preceding years, mostly due to the new arrangements and technological advances that procurement systems provides. The business transformation journey is just a beginning and these value additions over a time as Vinimaya did, considerably contributes to organizational performance.

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