Internet and E-Commerce Impact on Procedures inside Supply Chain (SCM)/

Yossi Egozin

Abstract

The advent of the Internet and electronic communication has enabled companies to be more responsive to their customers. Now companies can receive their customer's orders in a matter of seconds, enabling faster order processing and shorter order cycle times. This ultimately results in customer service improvements. However, the same technological advancements are changing the marketplace and providing an impetus for changes in organizational structures.

In the future managers and company's leaders will have to operate in new and unfamiliar market environments that shape new alliances and economic environments.

The IT (Information Technology) era of the new millennium brings technological advancement and new organization structures. The Internet enables new procedures of selling, buying merchandise – services and money shift. As a result companies shift theirs SCM (Supply Chain Management) into E-SCM (Electronic Supply Chain Management).

Electronic supply chain creates new agreements among their business partners (suppliers and customers). The Electronic Supply Chain's characterized by connectivity, velocity and transparency that provides the balance between cost effectiveness and long-term alliances.

Companies depend on their business transactions surrounded by add value and change value procedures. Research has shown that the higher electronic transactions the higher company digitization level. The Internet and EC (Electronic Commerce) is the digitization barometer of today's firms.

The new electronic transaction characterized by connectivity, velocity and transparency changes the firm environment where velocity, flexibility and customizations are all that counts. The new environments shift the firm from the industrial era into the information era. The Internet is a technology broker that encourages collaboration and provides new value for the firm, value that improves theirs efficiencies and increases their incomes.

DBT (DIGITAL Business Transformation) ties company digitization to their supply chain efficiencies. DBT is the firm voyage using IT in order to achieve collaborated SCM and excellence in operation. However, DBT sharpens the firm transformation from the industrial-age into the information age, where virtual information streams materials in the physical world.

Material flow, or material management is one of the critical SCM procedures that can achieve cost effectiveness and long-term alliances balance. That research is based on logical links that conduct the research insight. The research shows the EC dependence on the Internet; the influence of firm digital transactions on their digitization level; the firm transfer to the information era and the company's move into the electronic supply chain.

High digitization, high technology and EC strategy enable company velocity and flexibility and are essential to operate in the information-age, where mass production is out and customizations is in.

The firm transfers into the information-age raise their abilities to manage in the virtual world, in order to supply materials fast, punctually and at low price. Virtual material management reduces material stock and finish goods stock, which are essential to build to order strategy.

The research methodology based on literature review and Dell case study, Dell considered as Internet and EC pioneer and leader company. Dell uses the Internet abilities to adapt velocity, flexibility and build to order strategy, in order to achieve advantages in the hardware market. As described in the article "living in Dell Time" from the fast company journal by Bill Breen "for most businesses, warehouses full of stuff are a kind of security blanket. But Dell has replaced inventory with information, and that has helped turn it into one of the fastest, most hyper efficient organizations on the planet" (Breen. Nov, 2004. p.86).

Literature analyzes, Dells' business results short circle time and Dells' phenomenal growth rates, shown the ESCM benefit and noted the firms shifting from material management into information management.

After we present the research arguments and improve them step by step with the most objective tools, the research offer a new material management model which is suite to fast, hyper dynamic and real time changing environments.

The PPIC model (Product Planning and Inventory Control) corresponding the new environments and replaces the EOQ (Economic Order Quantity) model which is no longer relevant to fast real time business transactions.

The research goal is to shade light on Internet and EC influence on SCM, TO analyze some of the benefits that characterized the firm shifting from SCM to ESCM and suggest new material management model.

System No.

1102568