New Forms of Collaboration and Information Sharing in Grocery Retailing: The PCSO Pilot at Veropoulos

Katerina Pramatari, Athens University of Economics & Business, Greece
Georgios I. Doukidis, Athens University of Economics & Business, Greece

EXECUTIVE SUMMARY

In spring 2001, Veropoulos, the third biggest retailer in Greece and three of its top suppliers together with a service provider, started a pilot implementation to experiment with collaborative store ordering. The pilot involved the ordering from the retailer’s stores to their central warehouse as well as to the direct-store-delivery suppliers. The four companies together with the service provider were starting an ambitious plan to use the Internet technology in order to enable the sharing of daily POS data between retail stores and suppliers with the objective to streamline the store replenishment process. This effort resulted in significant business results but at the same time several pitfalls and challenges as far as the use of technology was concerned.

Keywords: accuracy of information; applications software; case study; data validation; electronic business; electronic markets; file maintenance; IS impacts; IS structure; online IS; software design; top management; user types; utility of information

ORGANIZATIONAL BACKGROUND

The pilot involving the retailer and the three suppliers, facilitated by the service provider, was initiated based on the concept of sharing the daily sales data (POS data) and other information between retailer and suppliers over an Internet-based collaboration platform. This concept, referred to as Process of Collaborative Store Ordering (PCSO), can be considered as a new form of supply-chain collaboration in the grocery retail sector (Pramatari et al., 2002). The top management of the four companies committed to this project after being presented with the PCSO concept by the service provider, and with the objective to decrease the level of out-of-shelf in the retailer’s stores.

On-shelf availability is a critical issue for both manufacturers and retailers today because it improves consumer value, builds consumer loyalty to the brand and shopper loyalty to the
store, increases sales and—most importantly—boosts category profitability (Roland Berger, 2002). However, the advances in supply chain management, the initiatives of Efficient Consumer Response (ECR) and category management (Dhar et al., 2001), and the investments in inventory-tracking technology have not—by and large—reduced the overall level of out-of-stocks on store shelves (Gruen et al., 2002), referred to as “out-of-shelf” (OOS).

A number of prior studies (Schary and Christopher, 1979; Straughn, 1991) have examined how product unavailability (via a temporary out-of-shelf) influences sales for a given product (SKU). Bell and Fitzsimons (2000) have studied the impact of OOS on category sales, while other studies have analyzed the possible consumer reactions to OOS from a marketing and retail management perspective (Campo et al., 2002, 2000; Fitzsimons, 2000; Verbeke et al., 1998).

But what are the causes behind the OOS problem? These are classified into the following areas (Gruen et al., 2002; Vuyk, 2003):

a. Retail store shelving and replenishment practices, in which the product is at the store but not on the shelf. This category comprises all reasons relating to shelf-space allocation, shelf-replenishment frequencies, store personnel capacity, etc.

b. Retail store ordering and forecasting causes, i.e., the product was not ordered or the ordered quantity was not enough to meet the actual consumer demand.

c. Combined upstream causes, referring to the fact that the product was not delivered due to out-of-stock situations or other problems with the retailer’s distribution center (for centralized deliveries) or the supplier (for direct-store-deliveries).

The first area includes pure out-of-shelf situations, i.e., situations where the product exists in the store but not on the shelf, whereas the last two are out-of-stock situations. The analysis by Gruen et al. (2002), which is a compilation of several global studies, shows that 70-75% of out-of-shelf situations are a direct result of retail store practices, with 47% of the cases attributed to wrong store ordering and forecasting, and 25% to cases where the product was in the store but not on the shelf (Figure 1).

Figure 1. OOS Causes (Source: Gruen et al., 2002)