Gaps between inventory management theory and practice: a critical examination of emerging trends from the FMCG industry

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Abstract: This paper attempts to identify the gap between inventory management theory and practice based on the critical examination of the trends in academic research and the practicing world. It also attempts to provide suggestions to potentially bridge this gap. Keeping these objectives in mind, key research publications and articles in the area of finished goods inventory management written in last 30 years by research scholars and practitioners were reviewed. FMCG industry was selected as a benchmark for finished goods inventory management best practices and the divergence of academic research with real life inventory management practices was analysed. Some innovative and thought provoking ideas for increasing the synergy have been suggested. This paper also highlights the recent developments in inventory management practices in FMCG industry and examines the research work in this direction.

Keywords: inventory management; FMCG industry; theory and practice; gap analysis.


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1 Introduction

With growing need for consistent performance and creating shareholders value amid stiff competition, managing the supply chain has become a focus area for organisations and management of inventory plays a vital role in the same. Today companies are constantly trying to increase productivity and reduce inventory with the help of process improvement initiatives and advancements in technology. Inventory management is one area which has got maximum attention in academic and corporate world as an effective tool for cost reduction.

Academicians and practitioners have worked on the problem of controlling inventory for years. However, these two communities are to a great extent drifting apart with respect to their treatment of the inventory control problem. While practitioners make decisions in a complex and uncoordinated environment, researchers/academicians often adopt a simplistic environment for analysis. The stakeholders’ mismatched objectives and motivation is causing this lack of synergy. The gap between inventory theory and practice, which Zanakis et al. (1980) recognised in the late 1970s, continues to grow and has been highlighted by many researchers since then. Tiwari and Gavirneni (2007) have concluded that this gap is diverging over the period. The basic nature of the issue, the disconnect between theory and practice, has attracted diverse kinds of dissection from researchers. Some researchers feel that the emphasis should be more on understanding the issue and not solving the problem while some assert that incremental mathematical research is not likely to enhance the practice. There is an urgent need to analyse this issue from a new perspective.

The intent of this paper is to not only provide insights on the gap between academic theory and practice but also to carry out a critical examination of the trends in academic research and the practicing world. With the help of the review of the literature, it has been attempted to highlight the fundamental issue behind the divergence. This fundamental issue needs to be addressed, reiterated and analysed from new perspectives to benefit the new generation of researchers and practitioners.

Basically, this paper attempts to do the following:

• highlight the need for bridging the gap between theory and practice
• compare the business and research environments and highlight the differences
• suggest guidelines for increasing the synergy.

To compare the theoretical models of inventory control with the practical models used in business world, Fast Moving Consumer Goods (FMCG) industry was identified as a benchmark looking at their vast supply chain network and Proctor and Gamble (P&G)
spreadsheet model as a reference within the FMCG industry. P&G has successfully optimised their finished goods inventory and have got real benefits through adoption of various inventory tools. With the help of the spreadsheet model adopted by P&G, the complexities of inventory management in the real world and how P&G takes into account these complexities in their inventory management system have been explained.

While the gap between inventory management theory and practice has been discussed, it becomes imperative to analyse the influence of contemporary inventory management research on businesses. Many practical solutions adopted by the companies to get competitive advantage over others have been summarised. It highlights the way companies have achieved economies of scale while managing multiple items and dealing with practical aspects of setup costs most of which occurs jointly and are difficult to measure. Supply base reduction, milk-run strategy, joint-replenishment and cross docking are some of the techniques which were first adopted by corporate and then emerged in theory.

This paper is organised as follows. In the next section, a gap analysis between the theory and practice of inventory management has been carried out. It consists of a review of various research articles to understand the context of general inventory management theory. This has been followed by a description of the P&G Spreadsheet model. The next section dwells on the recommendations by researchers to bridge the gap. Recent contributions by academicians and researchers to address the gap are covered in the subsequent section followed by recommendations and concluding remarks.

2 Theory and practice of inventory management and gap analysis

Silver et al. (1998) outlined the basic concepts of inventory control that researchers use in modelling inventory problems. In their models, researchers usually trade off the costs of setup, holding, penalties, and use various combinations of the following building blocks:

1. **items**: single or multiple
2. **periods**: single or multiple
3. **demand**: stationary or time varying, deterministic or stochastic
4. **stages**: single stage or multiple stages (for example, production, storage or distribution)
5. **capacity**: capacitated or incapacitated (that is, unlimited capacity).

Various inventory models used in academia include:

1. the EOQ model: single item, single period, stationary and deterministic demand, incapacitated and zero lead times
2. single-item, stochastic demand and or lead time models with known distributions, for example
   - \((s, Q)\): continuous review (order \(Q\) units when stock reaches level \(s\))
   - \(\{R, S\}\): periodic review (every \(R\) periods order up to \(S\) units)
   - \(\{R, s, S\}\): every \(R\) periods check, if below \(s\) units, order up to \(S\) units.
The first question faced by a practitioner is to define the problem in a way meaningful to the organisation and then to select an appropriate model. Aggarwal and Dhavale (1975) estimated a total of approximately 30 million possible theoretical inventory models. It is important to understand which model assumptions are really crucial for the performance of the entire inventory system. The assumptions researchers make about stochastic quantities, single-product systems, single-stage systems, and single-period models are most often not relevant for practitioners. Tiwari and Gavirneni (2007) concluded that assumptions such as stationary demand following a specified distribution, are over simplistic, and the resulting insights and generalisations are hard to be used in businesses. It would be hard to find a company that has only a single product or that does not correlate inventory decisions among different products. However most of the past research concerns single-product and single-stage systems. Further, because researchers build on previous research work, the compounding effect of starting with unreal situations could make future research increasingly tangential to real-world organisational problems. They seldom consider whether their models would still be valid if they relax the assumptions. The results from such models would not represent real settings that have multiple items, multiple simultaneous stages (for example, distribution, production and storage), unknown demand, random yield and capacitated suppliers.

Many researchers have concluded that inventory models developed in academia have not benefitted the corporate to the extent of its expectations. Rajagopalan and Arvind (2001) used data from the US Census Bureau to determine trends in materials, work-in-process and finished-goods inventory ratios between 1961 and 1994 in 20 manufacturing industry sectors in the USA. They found that some reduction in inventories was caused by technological and operational advances in manufacturing processes and not because of inventory-control models developed in academia. Boute et al. (2003) studied the Belgian industrial sector and obtained similar findings. Chen et al. (2005) obtained similar results and argued that some inventory reductions right after 1980 can be attributed to JIT implementations first used in the business world and then appeared in academic literatures.

Tiwari and Gavirneni (2007) further explained the divergence in inventory management theory and practice and indicated that in the absence of any strong direct contact between academics and practitioners there is a need to form a strong layer of organisations in between which can be of immense benefit to both. These organisations include

1. firms that develop and implement enterprise-level supply chain management software; for example, SAP, i2, and ORACLE
2. boutique consulting firms, such as OPTIANT, INSIGHT, and SmartOps
3. smaller firms that specialise in developing optimisation software, usually available as a plug-in for other enterprise applications; for example, ILOG, Lindo, and Maximal.

These layers have the intellectual capital and the financial motivation to bridge the disconnect.

Zanakis et al. (1980) highlighted that most of these problems are the product of an unfortunate synergism: There is an academic pressure on faculty members to publish and an unfortunate emphasis on mathematical sophistication rather than applicability. The result of this often is an impressive collection of elegant and exotic models striving for
mathematical optimality at the cost of unrealistic assumptions. Also several important issues such as appropriate model selection and calibration, aggregate inventory analysis, interaction with other business functions, and behavioural and organisational aspects affecting modelling and implementation are overlooked or taken for granted.

In the real world, the processes and policies that govern inventory management are complex, often poorly thought out, fragmented, compartmentalised, uncoordinated and undocumented. Inventory is affected by decisions made by various people in different departments. Thus, inventory at any time reflects the appropriateness of decisions made in various departments. It is difficult to hold any single department or decision responsible for higher than desired inventory or poor fill rates. This lack of accountability makes the control of inventory in large corporations challenging. In addition, people may make decisions that affect inventory with the best of intentions, and they may optimise their own objectives or those of the department while causing poor performance for the company as a whole.

Practitioners need to compromise between data accuracy and the cost of data collection. Students never get the chance to feel these difficulties as they get clean sample data for their analysis. The difficulty of estimating inventory costs in practice usually comes as a shock to students. Very few books and courses tell them how to obtain good estimates of the unit holding, ordering costs and shortage costs (Tiwari and Gavirneni, 2007). In the business world, even when historical data are available, fitting an appropriate distribution can be tricky. Analysis based on data collected from one period can be used to forecast future behaviour only if all macro and micro environmental factors remain the same. Also, as observed by Wagner (2002) the data may be dirty and need to be cleaned before usage. Further, there is a need to take into account the microeconomic and macroeconomic situations, causes of product unavailability and excess inventory needs.

3 P&G spreadsheet model

Farasyn et al. (2008) have explained a practical inventory management modelling with the help of P&G spreadsheet model. P&G extended inventory module (XIM) takes into account various complexities in supply chain and inventory management. P&G spreadsheet model quantifies inventory into cycle stock, safety stock, frozen stock (pipeline or transit inventory) and anticipation stocks (Farasyn et al., 2008). Cycle stocks result from items produced or procured in batches. Safety stocks provide protection against uncertainty in demand and supply over the replenishment lead time. Frozen stocks are straightforward translation of supply chain lead times and process constraints. Anticipation stocks cover the period where demand peaks exceed available production capacity. The supply chain structure supported by P&G inventory model is explained in Figure 1.

The model considers the practical situation of multiple production location, storage location and stock keeping units (SKU). It allows easy comparison across SKUs and provides output in the form of SKU wise and location wise inventory components. The model will calculate the inventory components of all P&G stock, which includes inventory at the source distribution centre (DC) and at the shipment points that are replenished using a push or pull form of co-ordination.
P&G inventory model follow some form of continuous review (s, Q) policy. The model supports a two tier distribution network – customer receives replenishment directly from the plant (e.g., big retailers) or through a local distribution centre. It takes into account various parameters mentioned below which, in business world, are important for calculating inventory for multiple SKUs across the complex supply chain network.

1. **parameters influencing the cycle stock** – cycle time, batch size, production rate, average replenishment interval, minimum order quantity etc.

2. **parameters describing delays in supply chain** – plant reaction time, time for quality check, order pick for DC replenishment (time between product available for shipment in plant and product loaded for actual dispatch to DC), replenishment interval, transit time etc.

3. **replenishment mode** – push or pull

4. **parameters describing uncertainty in supply chain** – standard deviation of forecast error, standard deviation of shipment volatility, bias % for shipment points as well as Source distribution centres

5. **availability targets in the supply chain**: target availability at shipment points, target availability at source DC.
In practical situations, usually shipment points are located in different markets and these markets are generally independent to each other with their own demand pattern, seasonality and fluctuations. In this situation, it is difficult to calculate the overall forecast error. Spreadsheet models take into account this fact and model estimates the overall forecast error for shipment points located in different markets. This model assumes that a service level of 85%-90% at source DC is sufficient for achieving a service level of 99% at shipment points. This helps in significant inventory reduction with high service level at shipment points.

The inventory model gives output based on statistical input data. However, this alone is not sufficient as planners need to determine the correct amount of inventory by considering the business strategy, business volume, planned initiatives (e.g., promotions, new product launches) and structural supply chain changes.

4 Bridging the gap between theory and practice

As mentioned by Zanakis et al. (1980), following could help to increase implementation success, as well as the amount of theory that is converted to practice in the field of inventory management:

1 Direct more research to practical problems whose implementable solutions would generate major benefits for practitioners.

2 Place more emphasis on aggregate consequences of decision systems. Middle and upper management, who are usually responsible for go/no-go decisions regarding new systems, are interested in aggregate effects – not individual item details.

3 Change academic course orientation from inventory theory to inventory management, and supplement it with case studies and/or real world projects. This will give students what many practitioners now lack: sensitivity to management needs and constraints in addition to sensitivity to facts and figures.

4 Upgrade the training of practicing analysts to understand and appreciate the organisational, behavioural, and political factors.

5 Place less emphasis on mathematical optimality and increase the use of heuristic decision rules. After all, a reasonable and timely solution to the right problem is far better than an ‘optimal’, usually time consuming, solution to the wrong problem.

Tiwari and Gavirneni (2007) mentions that practitioners and researchers, who currently have little direct contact, could benefit from increased cooperation with consultants and software developers who constitute the layers in the supply chain of inventory-control methodology. They have suggested following to increase the synergy between researchers and managers:

1 Researchers should provide guidelines on how to implement their research for practical problems. These recommendations can be taken up by software developers and consultants for implementation in business.

2 Research focus should shift to practical assumptions (multiproduct, multi period models) even if they yield non-optimal solution.
Inventory decisions change depending on industry and hence uniform solution for all industries is not feasible. Inventory decision in FMCG industry is vastly different from automobile industry. Researchers could focus on the inventory problems facing particular industries.

Managers can not measure the setup cost, holding cost and penalty costs precisely. It is virtually impossible to measure the marginal cost parameters assumed in theory and hence these assumptions are not well accepted in business world.

5 Contributions of academicians to bridge the gap

Academicians have accessed the gap between practical world and theory in the research papers and have done significant work on identifying the needs of companies and proposing workable models for the same. Some significant contributions published in recent past are summarised below.

5.1 Contributions in area of replenishment

One major practical issue in this area is that the setup costs (major or minor) may depend on the size of the order. It may be reasonable to assume that they are independent when the setup costs reflect the administrative costs that are related to a purchase order or the production setups that are incurred for a production batch. However, when the setup costs are due to transportation costs (perhaps the main motivation for joint replenishment), such an assumption is rather restrictive. In practice, vehicles with limited capacity are used for transportation. Thus, the setup cost structure is step-wise, each step corresponding to an additional vehicle.

Tanrikulu et al. (2010) proposed a new continuous review policy for the stochastic joint replenishment problem (SJRP) under a step-wise truck cost structure. In particular, a policy is developed in which a replenishment order of fixed size (perhaps the capacity of the vehicle) is created whenever the inventory position for one of the N items (locations) drops to its reorder point. This policy the (s, Q) policy, where s is the vector of reorder points for the N items, and Q is the constant reorder quantity. When items are identical, the content of the replenishment order is decided in a way that equalises the item inventory positions (to the extent that this is possible). For the case of non-identical items, it suggests a heuristic policy that allocates the incoming order such that inventory positions in excess of the reorder points are equalised.

There are some advantages of quantity (Q) being constant that can be stated as:

- companies maintain a stable and acceptable utilisation level of vehicles that they dispatch
- allocation policy can be carefully selected so it is possible to avoid ordering items which have higher inventory positions altogether [a challenge for policies with order-up-to levels (OUL)].
5.2 Contributions in the area of inventory optimisation through coordination

Problem associated with Global optimisation of supply chain arises when the companies are managed independently, decisions made by individual firms downstream in the chain can impose constraints on those upstream, resulting in additional costs. Coordinated decision making fosters potential benefits for the individual organisations. Two forms of coordination identified in the literature are vertical and virtual integration. In the former, one supply chain member acquires the others or various members merge. However, that ends the independence of the firms, and can fail because of behavioural difficulties in integrating distinct organisational cultures (Aviv and Federgruen, 1998).

The second form of coordination, virtual integration, maintains the independence of those firms but harmonises their decisions by means of a business arrangement between them. Vendor managed inventory (VMI) can be considered as an asset to share information which is always more beneficial than information sharing alone. In addition, VMI has been conceived as a means of enabling operational benefits. Through the flexibility that VMI offers, the supplier may combine routes from multiple origins, delay stock assignments, consolidate shipments to two or more customers, or postpone a decision on the quantity destined for each of them.

To reach a practical solution for a company to take a decision about implementing VMI there are three cases discussed in detail by Bookbinder et al. (2010) in calculating benefits.

1. independent decision making (no agreement between the parties)
2. the vendor initiates orders on behalf of customer
3. central decision making (both vendor and customer are controlled by the same corporate entity).

Values of some cost parameters may vary between the three cases and each case may cause a different actor to be responsible for particular expenses. Assuming vendor could make replenishment decisions on behalf of customer but would incur the cost to issue an order, the results can be summarised as three possible outcomes of VMI:

1. an efficient system in which both the vendor and the customer are better off when ratio of holding costs of vendor to customer is greater than vendor’s efficiency factor
2. a potentially-efficient system if there are system-wide cost savings, and either the customer or the vendor is better off of which can be made an efficient system by sharing transportation cost or price discount
3. an inefficient system if total cost of customer and vendor in Case 1 and Case 3 is less than the total cost of customer and vendor in Case 2.

5.3 Contributions to develop model for consignment stock inventory policy

The consignment stock (CS) is an innovative approach to manage inventories in which the vendor removes his inventory and maintains a stock of materials at the buyer’s plant. Battini et al. (2010) evaluated the real economical and logistic benefits from the point of view of both the partners and the whole supply chain, following the adoption of a CS policy. The technique in fact allows partners, the vendor and the buyer, to reduce
management costs and increase their flexibility. In particular, the buyer virtually removes the procurement lead time, since the responsibility of the replenishment lies completely with the vendor, who keeps a stock of its property at the buyer’s plant: the buyer uses the stock of materials according to his daily production requirements. Outsourcing of materials can easily incorporate the CS policy to enhance supply chain operations.

The vendor maintains a stock of his property in the buyer’s warehouse, always assuring the presence of a variable quantity of materials from a minimum level and a maximum level. The buyer gives a portion of his plant ‘in consignment’ to the vendor and draws materials daily according to his needs with a pull request, at the times and quantities most convenient for him, only paying for the quantity picked up.

The benefits of supplier owned inventory (SOI) to the supply chain are higher when the buyer that adopts SOI accounts for a larger percentage of the supplier’s total demand, while the benefit to the supplier from SOI is dependent on the problem parameters. Multi buyer models with five or more buyers, the total cost savings increases, with emphasis on crashing lead time.

CS policy is always beneficial for the supply chain as a whole, also under less than ideal working conditions (space constraints, obsolescence risk, and demand variability etc). The CS management policy always proved preferable in comparison to the traditional one according to the number of buyers (managed by the vendor with a CS policy), generating an annual cost saving for the whole supply chain ranging from about 35% (with a single buyer) to 70% (with six or more buyers) of the total annual costs. In a multi-buyer model the supplier’s cost saving increases if the number of buyers managed with a CS policy increases and demand standard deviation decreases.

5.4 Contribution to exploit order crossover

A major challenge for managers is to assure time-phased delivery of components and raw materials to a manufacturing facility or finished goods in a retail setting. Factors like use of more variable transportation modes in a supply chain, reduced ordering batch sizes, increase in the frequency of orders and increasing use of global suppliers are to be accounted for. When the lead times are assumed to be independent and identically distributed and in case of transshipments the order crossover is likely.

<table>
<thead>
<tr>
<th>Policy name</th>
<th>Description</th>
<th>Information used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naive base-stock</td>
<td>Traditional BSP arrived at by ignoring order crossover (This policy overestimates shortages and underestimates on-hand inventory)</td>
<td>Only inventory position (inventory on hand plus on order) is used to arrive at the order-up-to level (OUL)</td>
</tr>
<tr>
<td>policy (BSP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimal policy</td>
<td>The global optimal policy (need not be of the base-stock order-up-to form) computed using dynamic programming state-dependent policy. Difficult to compute for problems with large state spaces due to memory and computational power limitations</td>
<td>In addition to the inventory position, also considers the age of pending orders and the probability distribution of their arrivals in future to arrive at the optimal ordering decision</td>
</tr>
<tr>
<td>Best BSP</td>
<td>BSP with order crossover computed using simulation methodology</td>
<td>Only inventory position is used to arrive at the OUL</td>
</tr>
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Supply chain managers could exploit order crossover to reduce safety stocks and realise that order crossover is not necessarily baneful, but actually helpful in reducing risk in inventory operations. The classical inventory theory approach (ignoring order crossover) results in overestimating shortages and underestimating the on-hand inventory. Srinivasan et al. (2011) derived an optimal policy for crossover, the results are summarised as in Table 1.

When the probability of order crossover is negligible, the cost implications of ignoring order crossover are insignificant. In such a case, the operations or inventory manager can continue to use the naive BSP with minimal cost implications. However, when there is even a very small probability (even as low as 5%–10%) of order crossover, the cost implications of ignoring the crossover can be significant. When the probability of order crossover is high, the operations or inventory manager can realise significant cost savings by investigating the best BSP and lowering the OUL under such a policy.

5.5 Contributions to build a mathematical model

The biggest challenge in front of operations manager in distribution of FMCG of any of the products is to learn new approaches to find solution and use concepts to generate final numbers. To generate accurate required numbers and facilitate them, mathematical models are required. As discussed in the Spreadsheet model of P&G, there have been many other mathematical models developed by academicians which were accepted by many distribution companies with many corrections. Some successful attempts has been from Bertazzi and Speranza (1999) who presented a heuristic algorithm for finding an order up-to level strategy to minimise inventory and transportation costs in a distribution network with one supplier and several retailers. Qu et al. (1999) developed an algorithm for making a trade-off between transportation costs and inventory costs by iteratively solving a separate inventory problem and a vehicle routing problem.

One of the greatest challenges which distribution managers face in FMCG industry is delivering supplies with heterogeneous vehicles from one warehouse to spatially distributed multiple retailers. Kim and Lee (2011) in their paper developed a model to aid the operations managers. In order to satisfy demands of retailers, the warehouse has to place orders for some amount of the product from a higher echelon, say a manufacturing plant or a supplier (market). The warehouse employs a fleet of heterogeneous vehicles (different loading capacities) to distribute the product to retailers. Each vehicle is allowed to make round trips between the warehouse and retailers. As a solution approach, it gives a Mixed Integer Programming formulation for the problem, and developed a Lagrangean heuristic procedure for computing lower and upper bounds on the optimal solution value.

6 Recommendations

Academic researchers have learnt from the past that theories need to be implementable in the real world and started contributing towards practical aspects of theory. This has resulted in challenging the existing age old theories and developing a new policy to utilise the capacity of vehicle which earlier was not recognised of much significance. Developing a mathematical algorithm to aid the Operations or logistics manager of various distribution companies such as FMCG, FMCD has been an attempt to automate the theoretical application. As practical or implementable concepts are the only common
factors which can relate a research scholar of university to board room of corporate or to an office of operations manager. Academicians have realised it and are working to provide solutions which do not ignore the practical seemingly insignificant parameters so that practitioners can rely on academic theories and reap the benefits from literature published to bridge the gap of theory and real world.

In this paper some highly regarded articles in the area of inventory management were reviewed and articulated the thoughts in a structured manner to catch the attention of academicians and practitioners. During the review of scholarly articles, published in last 30 years highlighting the need of bridging the gap between inventory management theory and practice, it has been observed that the gap between theory and practice has diverged over the period of time with maximum divergence in the finished goods inventory management. Following suggestions can help bridge this gap and increase the amount of theory that is converted to practice in the area of inventory management:

1. **Identification of correct target audience**: researchers need to focus on the correct target audience. Target audience for researchers is those organisations that form a layer between academia and industry which are consulting firms and companies developing software for the business needs.

2. **Focus on implementable solution even at the cost of perfect optimality**: managers want to improve their inventory management practices as cheaply and quickly as possible and care little about an optimal but non-implementable solution. Researchers need to divert attention from perfect optimal solution based on complicated mathematical analysis to an easily implementable solution.

3. **Industry specific solution**: supply chain dynamics change vastly from one industry to other. The focus should be to develop an industry specific inventory management model taking into consideration the specific parameters of that industry. This will help get the attention of practitioners.

4. **Emphasis on aggregate consequences**: top management decisions on new systems are based on aggregate effect on their performance. Academicians need to increase their boundary to look beyond the subject area and need to present influence of their suggestions on aggregate system.

5. **Change in academic courses**: students need to work on real world projects with real challenges. This will provide insight to the students on the sensitivity of management needs and constraints in business world.

### 7 Concluding remarks

Inventory management has been undoubtedly one of the most challenging areas of effective management of supply chains. This study has attempted to identify the widening gap between the theory and practice of inventory management and the recent contributions to bridge the gap. As discussed earlier, rather than focusing on more rigorous theoretical models, collaborative, practice-based approaches are found to provide longer term benefits to firms that would in turn help them to add more value to the customer. Initiatives such as adoption of a central information system that allows the different members of the supply chain to share information on a real time basis would
help tremendously in minimising the inventory in the pipeline. Along with the academic models that have been developed in the area of independent demand items, the paper has also attempted to review the recent initiatives by FMCG companies to manage their distribution inventory. However, the theme of this paper has been confined to management of independent demand inventory. To gain further benefits, there is a need to integrate the independent demand inventory with the MRP-based dependent demand inventory. Also similar studies could be conducted in other sectors of Industry such as Consumer Durables and Automobiles among others. The insights form this study would potentially enable both academicians and practitioners to synergistically work towards addressing the gap between the theory and practice of inventory management and to put in both necessary managerial and academic initiatives to address this issue and thereby help to achieve a closer integration between the academic and practicing worlds.

References


