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ii

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
	BUSINESS CORRESPONDENT MODEL AND ITS CONTRIBUTION IN PROMOTING FINANCIAL	1
1.	INCLUSION IN INDIA	1
	H. N. SHYLAJA, DR. H. N. SHIVAPRASAD & GAVISIDDANAGOUDA	
2.	A STUDY ON PERFORMANCE OF INDIAN MUTUAL FUND SCHEMES INVESTING IN OVERSEAS	7
۷.	SECURITIES AND INVESTOR AWARENESS OF SUCH SCHEMES	/
	DR. SMITA SHUKLA	
3.	FINANCIAL INCLUSION - OPPORTUNITIES AND CHALLENGES	15
Э.	T R BISHNOI & SOFIA DEVI	15
4.	MAKE IN INDIA – OPPORTUNITIES AND CHALLENGES ON CONSUMPTION OF POWER SAVING	21
	DEVICES	
	DR. ASHOK SHRIPADRAO KURTKOTI	
5.	STUDY TO UNDERSTAND LINKAGE BETWEEN STORE IMAGE AND STORE LOYALTY FOR APPAREL	27
J.	RETAILERS IN INDIA	27
	DR. ARADHANA GANDHI	
6.	"MAKE IN INDIA" IN THE DEFENCE SECTOR: ROLE OF FDI	33
υ.	SHAILESH BHOITE & DR. ASHA NAGENDRA	55
7.	CUSTOMERS' PERCEPTION TOWARDS SELECT NON-GEAR VEHICLES IN NORTH GOA: A	40
7.	COMPARATIVE STUDY	-10
	DR. GAJANAN MADIWAL	
8.	MAKE IN INDIA – OPPORTUNITY FOR MANUFACTURING INDUSTRY IN NAVAL SHIPBUILDING	43
0.	CDR. ALOK BHAGWAT & DR. PRADNYA CHITRAO	45
9.	APPROACHES AND VIEWS TOWARDS CORPORATE SOCIAL RESPONSIBILITY: A CONCEPTUAL	47
5.	STUDY	
	DR. DHANANJAY AWASARIKAR	
10.	MAKE IN INDIA – OPPORTUNITIES AND CHALLENGES	51
10.	DEEPA NATHWANI	51
11.	BUILDING AN AYURVEDA THERAPY DATA WAREHOUSE FOR CANCER TREATMENT	55
11.	DEEPA NYAYADHISH, DR. PRAMOD DEO & DR. GAJANAN PURANIK	55
12.	INVESTMENT AVENUES AND FACTORS AFFECTING INVESTORS DECISION IN INDIA	59
	ARUNA R. SHET	00
13.	LUCKNOW CYCLE TRACKS: A PROJECT THAT WENT LIKE A BOMB OR SIMPLY BOMBED?	62
13.	ABHA R DIXIT	02
14.	DETERMINANTS OF TAX COMPLIANCE BEHAVIOR: AMONG CATEGORY "A" AND "B" TAXPAYERS	67
14.	IN HOSANNA TOWN	07
	DEREJE LEMMA LALISHO	
15.	THE EFFECT OF FACEBOOK ADVERTISING ON NIGERIAN STUDENTS' PURCHASING BEHAVIOUR	73
_ J.	QARIBU YAHAYA NASIDI	, 5
16 .	INFRASTRUCTURE AND TALENT MANAGEMENT IN TECHNOPARK, TRIVANDRUM	77
	R. JOLLY ROSALIND SILVA	
17.	INVENTORY MANAGEMENT AT POINTS OF SALE: EXPLORING AND ANALYZING THE TRENDS IN	79
-7.	INDIAN PAINT INDUSTRY	
	RAHUL GANDHI BURRA & DR. BHARAT MEGHE	
18.	POTENTIAL OF JAMMU AND KASHMIR TOURISM: SPECIAL REFERENCE TO MUGHAL ROAD AREA	82
20.	JAHANGIR AHMAD MALIK	02
19.	GENERAL ASSESSMENT OF MGNREGA IN HIMACHAL PRADESH: A STUDY OF MANDI DISTRICT	86
1 <i>J</i> .	KHEM RAJ	00
20.	A COMPREHENSIVE SURVEY ON THE EXPORT OF BOVINE MEAT IN INDIA	90
20.	C. SAI SRUJAN & A.L.P MRIDULA	50
	REQUEST FOR FEEDBACK & DISCLAIMER	94
-		54

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INVENTORY MANAGEMENT AT POINTS OF SALE: EXPLORING AND ANALYZING THE TRENDS IN INDIAN PAINT INDUSTRY

RAHUL GANDHI BURRA RESEARCH SCHOLAR FACULTY OF COMMERCE RTM NAGPUR UNIVERSITY NAGPUR

DR. BHARAT MEGHE DEAN & ASSOCIATE PROFESSOR FACULTY OF COMMERCE RTM NAGPUR UNIVERSITY NAGPUR

ABSTRACT

Managing inventory is an important task of a supply chain manager. Though there are considerable academically discussed models in use, they come with their own set of assumptions. Then how is inventory managed in real-time environment is the question, as these models cannot accommodate all realistic conditions. This study aims to understand and analyze this gap by taking Indian paint industry as an example. The other objective of this paper is to highlight the inventory management trends at points of sale/retailer in Indian paint industry. Because, most of the research studies focused on inventory management practices at manufacturer or distributor level, the author feels the necessity of in-depth study of inventory management trends at retail level, as the impact at retail level is direct on manufacturer/distributor. The study is going to be exploratory in nature and limits its analysis in qualitative perspective only.

KEYWORDS

point-of-sale, inventory management, retailer, fns analysis, indian paint industry.

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INTRODUCTION

J nventory management plays a key role in an organization's performance. The overhead COGS (cost of goods sold) represents a major chunk of a company's P&L statement. Many academic researchers have established the importance of effective inventory management in a company. To mention a few, A common business principle is that material inventory should be kept as low as possible so as to not to tie up cash. (Anthon P. Botha, 2007).

Excessive inventories have been the death of many a business and very high inventory levels has tipped the scale in our economy (K Anbuvelan, 2005).

But most of the research studies focused on the inventory management practices at manufacturer or distributor level. At retail level, the literature available is limited and even if the literature is available, the depth of the research has not been good enough in eliciting the inventory management concerns. This study aims to bridge this gap by taking Indian paint industry as an example for its subject matter of research.

The recently concluded 53rd annual general meeting (AGM) of Indian paint association (IPA) in September 2016 at Kolkata revealed that the market size of Indian paint industry is at INR 43,500 crores. In terms of quantity, the production was estimated to be at 4.25 million metric tons. In India during 2015-16 period, as per IPA estimates, the per capita consumption of paints stands at 3.23 kgs, which is way below than the consumption levels in developed countries. Hence the growth prospects of the Indian paint industry look bright and huge. True to this expectation, the Indian paint industry witnessed a growth rate which is 1.5 times the GDP growth rate of the Indian economy for the past decade. The industry is dominated by organized players like Asian paints, Berger paints, Shalimar paints, Kansai Nerolac, Akzo Nobel, Jenson-Nicholson and Nippon paints, who remained as major brands of the industry.

The above mentioned facts about the magnitude and growth prospects of the Indian paint industry not only justifies the selection of industry and but also the strength and scope of the research findings for practical implementation.

LITERATURE REVIEW

"How much inventory to stock? When to order and how much to order?" This has been a perennial question that is being consistently faced by the businesses since their inception. Also it has been widely discussed in academic research as well as by business practitioners. To address these concerns, there are many inventory management models evolved over a period of time. Few of them which are popular in discussion and practice are,

Deterministic models: The Economic Order Quantity (EOQ) model, Sensitivity analysis and price-break Model

Probabilistic Inventory models: Single-period inventory models, fixed order quantity model and fixed time period model

Also, inventory control and analysis techniques like ABC analysis, XYZ analysis, VED analysis and FNS analysis play a vital role in understanding, tracking and managing the inventory levels thereby giving a clear picture on "How much inventory to stock? When to order and how much to order?"

The objective of this study is to understand and assess the practical application of these models techniques in reality vis-à-vis the academic discussions. Hence an attempt has been made to directly interact with retailers i.e. players at point of sale and understand their inventory management techniques, while managing their working capital as well as level of product availability and cycle service level.

The available literature on these models and techniques has been thoroughly reviewed and the attempts to fit the understanding of the same with respect to the reality, has been carried throughout the research.

RESEARCH METHODOLOGY

SAMPLING

Two different sampling techniques have been employed to select the group of subjects for this study.

- Places of research have been chosen based on selective random sampling technique
- Retail outlets have been chosen based on simple random sampling technique.

DATA COLLECTION

Close to 200 retailers representing 7 states in India have been contacted and a survey has been undertaken in Bengaluru, Ranchi, Raipur, Nagpur, Vijayawada, Guntur, Bhubaneswar, Hyderabad, areas closer to Rural markets like Angul, Sangareddy, Medak, and rural stretches around Guntur and Hyderabad, to understand their inventory management practices.

INSTRUMENT

An open ended questionnaire has been prepared to collection data from retailers with the help of a survey technique. Following questions constituted the questionnaire which aimed at eliciting the practical reasons influencing the inventory management practices at these retail outlets aka points of sale.

- What is the brand and product portfolio managed by a retailer and what are the motivating factors to maintain so?
- What is the role of advertising and branding of manufacturers on inventory management at your outlet?
- What is the basis of weightage given to hold each brand in terms of stock and capital?
- What is the inventory control system that is adopted?
- What is the role of trade credit on inventory management?
- What is the role of incentives?
- What is the role of display formats and how much inventory gets into display?
- Is product portfolio of each brand a serious concern on inventory management?

RESEARCH FINDINGS: ANALYSIS AND INTERPRETATION

The findings of the research have been quite interesting. Few of them have not even been mentioned in the assumptions of the existing models. For example, if one looks at the list of assumptions of economic order quantity (EOQ) model, which are, Relatively uniform & known demand rate, Fixed item cost, Fixed ordering and holding cost and Constant lead time, hardly there's any mention of crucial realistic issues like comparative margins and incentives offered by the industry players, minimum order size, ancestral aspect of the business, duration of trade credit and advertising and branding initiatives of manufacturers, which are playing a key role in deciding the inventory management practices at retail outlet level. These issues may not just limit themselves to Indian paint industry but can very much surface in other industries as well.

The listing and detailed analysis of the findings are as follows.

1). BRANDING AND ADVERTISING

- Branding and advertising initiatives by established firms have been playing a key role in not only capturing the market share, but also the mind share of the customer.
- These initiatives drive the customer to the retail outlets and also motivate them to insist the retailer on the availability of the concerned brand liked by him.
- Hence, the major brand that is stocked by the retailer is essentially displayed in the form of a display board to by and large communicate its availability to the potential customers.
- Also, the proportion of retailers stocking multiple major brands is relatively low when compared to the retailers stocking single major brand.

2). ANCESTRAL BUSINESS

- Majority of the retail outlets in this industry, who were considered in this study happens to be family run businesses and are in this business for more than two decades atleast.
- The retailers also accepted to the fact that the presence of the retail outlets two decades ago, was limited to selected pockets of the city/town, but this trend has been changing in the past 5 years as there has a been a considerable proliferation of retail outlets in this time period.
- The older ancestral outlets have been continuing the legacy of stocking the brands, which were originally stocked by their founders.

3). MOVEMENT OF GOODS

- Inventory is held based on movement or sale of goods at Point of sale level.
- FNS analysis technique is very much in practice, knowingly or unknowingly.
- Entry-level (in-terms of quality and price) product category and low-cost unorganized brands have been classified as fast moving with an average shelf life of 2-7 days, medium-level product category has been classified as Normal moving with an average shelf life of 7-14 days and premium-level product category has been classified as slow moving with an average shelf life of 14-30 days

4). PRODUCT PORTFOLIO

- This finding has direct dependence on "movement of goods" as discussed above.
- Traditionally, the product variety offered by the paint companies was limited.
- With the entry-level product category becoming a commodity (low-margin, high-volume) market, the major brands came out with medium-level and premium-level product categories with an eye for targeting growing urban population and higher margins.
- Though the movement of goods is the key motivating factor for a retailer to stock the goods, medium-level and premium-level product categories are stocked at a relatively lesser proportion vis-à-vis entry-level product category not only ensure their availability but also for display purpose.
- Clearly, display formats can be used as a tool to influence customers' perceptions about the risk of stock-outs if they decided to wait. Therefore by optimally selecting the display format, a retailer could discourage high-valuation customers from waiting to the clearance sales. (Serguei Netessine, *Christopher S. Tang*, 2009)

5). MARGINS AND INCENTIVES

- Any retailer wants to stock and sell goods which give him more margins.
- Asian paints, which has been enjoying a higher brand equity, virtual monopoly and extensive distribution network for quite a long-time, relatively offers less margins and incentives.
- But retailers are forced to stock or choose the Asian paints brand because it is widely demanded by the customers and also widely supplied through an extensive distribution network.
- Margins and incentives have been key drivers for the retailers who are stocking other brands but not Asian paints.

6). RESPONSIVENESS (LEAD-TIME)

- The delivery time of goods at Retail outlets is 4-5 hrs. w.r.t. Asian paints and for other players it is within 24 hrs. Because Asian paints rapidly identified lucrative catchment areas and set-up depots to achieve the shortest delivery time (Sagarika Mukherjee, July, 2014).
- On interaction with retailers, they were happy with this swiftness in delivery and low lead times which enabled them to carry low inventory and majority of it is managed at vendor (dealer) level i.e. Vendor Managed Inventory.
- Also, direct delivery at Retail outlet not only enhances supply chain responsiveness but also reduces the sale of counterfeit products under the same brand name.

7). REPLENISHMENT OF INVENTORY (MINIMUM ORDER SIZE)

- The outlets which are closely located to these depots order goods as and when required but not on periodic basis.
- Retailers which are far off from these depots order goods on a periodic basis for two reasons though the delivery time is within 24 hours.
- One, immediate replenishment is ruled out on account of distance and two, a minimum order should be placed with the dealer, who is concerned to justify his transportation costs. But it increases the inventory carrying cost to the retailer.
- In order to ensure Level of product availability and cycle service level these retailers come forward to bear this cost.

8). CUSTOMER SERVICE

- Customer service here refers to the service offered by the manufacturer/distributor to retailer
- This has been a subjective issue and there are no visible uniform trends observed with respect to any particular brand.
- It has been observed that the customer service is purely dependent on the distributor in the concerned geography.

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81

• Though customer service has been a key factor in choosing/stocking a brand, it has not been unique to any major brands available in the market.

9). SHORT DURATION OF TRADE CREDIT

- Low fixed capital is employed for manufacture of paints. The working capital requirements are huge (V.C.Malshe and Meenal Sikchi, 2008).
- The operational nature of the paint industry is highly working capital intensive with 40-45% of the funds being employed by working capital (Ramanuj Mazumdar, 2004).
- So, neither the manufacturer nor distributor can offer higher duration of trade credit to the retailer.
- The standard duration of trade credit in practice in this industry is 21-25 days depending on the brand and geography.
- So, the retailers stock the goods depending on their movement but not in bulk, with quick replenishment times coming to their rescue.

CONCLUSION

The findings of the study reveal that apart from the existing assumptions of the popular inventory models, there are other realistic issues as well, which should be taken into consideration while planning and managing inventories. Though this study focuses on retail outlets alone, distributors and manufacturers of the same supply chain should also consider these issues as they directly percolate at their ends and impact their businesses. This study also highlights that a retailer has a significant impact on sales apart from the planned branding and advertising initiatives of the manufacturers.

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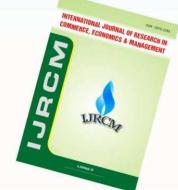
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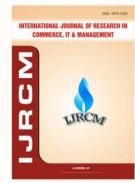
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