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**CURRENT PRACTICES IN RETAIL
INVENTORY MANAGEMENT**

BY

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ABSTRACT

The objectives of this study were two-fold: (i) to document the current inventory management and control systems as practised by representative retail organizations in Lahore, and (ii) to identify problems faced by retailers in utilizing modern technology in inventory management and control systems. The research methodology involved in-depth interviews with a sample of leading retail organizations and software developers in Lahore.

Procedures employed by different retail establishments were found to range from informal mechanisms employing visual checks and elementary documentation, to computer-based systems for tracking purchases and sales, and for supporting re-ordering decisions and overall inventory control. Improved systems result in fewer ad-hoc decisions and fire-fighting by the owner-manager. A key benefit is more relevant, timely, and accurate information, resulting in improved customer service levels. Better reporting procedures allow more delegation and greater attention to strategic issues.

Retailers encounter many problems as they attempt to upgrade their systems. A major obstacle is the effort required, particularly for staff training and in developing new procedures, as the organization prepares to switch over to the new system. Another is the lack of awareness of the various options available to retail organizations as they seek to improve the efficiency and effectiveness of their inventory management and control procedures. There is a lack of understanding of the costs and benefits of these options, and of what needs to be done to move to the next level of sophistication.

The study strongly suggests that there is a need for training retailers on inventory management issues. Further research needs to be conducted to understand and document the practices, problems, and needs of different segments of the retail and wholesale sector. Training material needs to be developed which, through case histories of successful (and failed) implementations of inventory management and control systems, illustrates the options available to retailers for improving their operations. Given the size of the retail

sector in the economy (third largest sector contributing Rs. 196 billion to the national GDP and employing 3.7 million), and the predominantly small size of retail establishments (less than 2% of the 347,000 retail establishments in urban Pakistan employed over 4 individuals), the impact of improved inventory management systems can be wide-ranging and significant.

1. STUDY OBJECTIVES

The objectives of this study were two-fold: (i) to describe inventory management and control systems as practised currently by selected retail organizations in Lahore, and (ii) to identify problems faced by retailers in utilizing modern technology in inventory management and control systems.

Efficient and effective inventory management and control systems are critical to the successful management of a retail establishment. Proper systems allow for the efficient use of available space and working capital. The system can identify which product has a higher inventory turnover, which product should be stocked in large quantities, when to reorder and the level of stockouts to expect. It can provide useful information for volume of sales and profit analysis.

Unfortunately most retail establishments in Pakistan rely more on past personal experiences of the owner-manager, and his immediate circle of acquaintances, rather than on inputs from professionals or from the (national and international) academic and trade literature. Yet there is a growing awareness among many retailers that times are changing. Pakistan's economy is opening up; following GATT-induced trade reforms clothing apparel from Western Europe and the United States started being imported into the country in 1995. With increasing exposure to the global economy through travel and access to international media, Pakistani consumers have become more demanding in terms of the range of products and brands expected, and quality standards and service levels provided.

The vast majority of firms in the retail sector are small and medium enterprises (SMEs). Of the approximate 347,000 retail trade establishments in urban Pakistan in

1985¹ less than 2% employed over 4 individuals (54% were 1-person and another 34% were only 2-person operations). There are few large departmental stores; even a city as large as Lahore has only nineteen.

Retail stores are predominantly run by *owner-managers*. These owner-managers find it difficult to expand their operations as they are using unsophisticated inventory management and control systems. They remain forever mired in the minute details of day-to-day operations. Without strong management control systems, further expansion is limited by the number of sons or brothers of the owner-manager, i.e., by the number of individuals who can be trusted to run the operations.

Information technology opens up many new possibilities for improving upon existing inventory management and control systems. Given the large size of the wholesale and retail trade sector, the potential impact on cost savings through efficient inventory management is enormous. In 1995-96, for instance, the Wholesale and Retail Trade sector contributed Rs. 324 billion to the national GDP² and employed 3.7 million individuals³, a result this sector was the third largest sector in terms of contribution to GDP (share of agriculture, manufacturing, and trade was 25%, 18%, and 16.5% respectively), and also third largest in terms of employment (agriculture, social services⁴, trade, and manufacturing employed 48%, 13%, 13%, and 12%, respectively; in the urban areas the share of employment was 8%, 24%, 27%, and 22%, respectively). Thus the sector plays a

¹ Survey of Distributive Trades and Services, 1984-85 (Urban), Federal Bureau of Statistics; Of the 347,371 establishments reported in 1984-85, 199,021 were located in Punjab, 96,183 in Sind, 39,286 in NWFP, and 12,881 in Baluchistan. The previous survey was conducted in 1975-76 and reported a total < 276,201 establishments.

² GDP (at current factor cost) was Rs. 1952 billion in 1995-96; Pakistan Economic Survey, 1995-96.

³ Employment figures are for 1990.

⁴ Social refers to Community, Social, and Personal Services

key role in the national (and particularly urban) economy of the country, and even minor improvements in efficiency can have a significant impact.

Within the retail sector, there are several categories of stores. In 1991, according to a census carried out by Aftab Associates⁵, there were approximately 136,000 retail stores in the major urban areas of Pakistan. A break-up by type of store, and by location (for the two major cities of Karachi and Lahore) is presented in Table 1. Descriptions of each store type is presented in Table 2.

For the purpose of this study, we restricted our target population to general, medical, and department stores, and bakeries. The reason for this was that the other two store types, i.e., Kiryana Stores and Khokhas are less sophisticated. There was considerable evidence that these outlets do not employ any modern inventory management systems.

TABLE 1: TYPE OF STORE BY MAJOR URBAN CENTRES

	Lahore	Karachi	Urban Pakistan
General Stores	5,511	6,979	38,204
Kiryana Stores	5,912	4,256	56,365
Medical Stores	1,036	1,456	10,544
Bakeries Khokhas	664	1,297	6,047
Department Stores	2,187	4,842	24,868
	19	35	146
Total	15,329	18,865	136,174

Source: 1991 Census of Retail Stores, Aftab Associates (Pvt) Ltd.

⁵ Aftab Associates is one of the leading marketing research organizations in the country. It has played a pioneering role in the introduction of retail audits as a service for estimating retail off-takes and share of market studies.

TABLE 2: RETAIL STORE TYPES

<p>GENERAL STORE: At least 50 percent of floor area is used for stocking branded and packaged consumer items such as foods, personal care and cosmetics, common household items. These products are displayed on a set of floor- or wall- mounted shelves.</p> <p>DEPARTMENTAL STORE: Very large general store usually having self-service facility and check-out counters for customers. Such stores often have separate sections dealing with different product lines such as food items, garments, and cosmetics.</p> <p>KIRYANA STORE: Over 50 percent of floor area is used for stocking unbranded, loosely packed food and household items such as spices, sugar, pulses, kerosene oil. Some part of the store (less than 50 percent) is used for stocking branded items.</p> <p>MEDICAL STORE: Mainly carries branded medicines and pharmaceutical products. Some part of the store (less than 50 percent) carry general store items.</p> <p>BAKERY: Mainly carries branded or unbranded fresh bakery products such as bread, cakes, biscuits, along with other breakfast and guest items like tea, milk, squashes, jams, jellies, and custard. May additionally carry (in less than 50 percent of store) some grocery store items.</p> <p>KHOKHA: Mainly carry pan, cigarettes, and soft drinks. May additionally carry a few general store items.</p> <p>OTHERS: Other categories include electrical goods stores, auto part dealers, stationers, restaurants, and canteens.</p> <p><i>Source:</i> Courtesy of Aftab Associates (Pvt) Ltd⁶.</p>
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⁶ Aftab Associates uses these store categories in their Retail Audit; Reference: personal correspondence.

2. METHODOLOGY

The main objectives of the study, as stated in the previous section, were to understand the nature of inventory management and control systems used by selected retail organizations, and the obstacles they face in utilizing modern technologies to improve upon these systems. Given these objectives it was decided that the best way to proceed would be to study establishments which might have relatively developed inventory management and control systems. Thus the population studied was restricted primarily to leading-edge retail establishments, what are commonly referred to as *class A* retail outlets, i.e., carrying a wide and deep range of products and providing 'high class' customer service. These outlets are usually found in more expensive neighbourhoods, have large floor areas, and are typically air-conditioned. Also included in the study were software houses which have assisted retail establishments in the development of inventory management systems.

The study was conducted in two phases. In the first phase, in-depth interviews were conducted with individuals with extensive experience in the retail business in Pakistan. The objective was not so much to understand the details of their particular organization and way of doing business, but rather to understand historical trends and the broad segments within the industry. During this first phase a second objective was to spend time within a few stores, as non-participant observers, to see how the inventory control processes work. This was particularly valuable in cases where the store did not follow formal, organized, and well-defined inventory control procedures. The third objective of this phase was to develop and test a questionnaire which would serve as a research instrument during the second phase of the study.

During the second phase of the research, the objective was to conduct a survey of 15 retailers and 2-3 software houses. Appendix A lists the establishments interviewed. The survey was conducted through face-to-face interviews. The retailers were selected so as to

cover at least four main segments of retailers, i.e., departmental stores, bakeries, pharmacies, and bookstores. The software houses selected were ones which had experience in developing information systems for retail organizations. The topics covered in the study included systems for recording sales and purchases, systems for checking inventory, procedures for re-ordering inventory, and for management control. Information was also obtained regarding store ownership, facilities (store layout, product range), segmentation (location, prices, customer class), human resource management (skill levels, compensation, training, and organization structure), and accounting practices followed (cost or retail accounting). Other issues which came up were regarding problems due to inefficient and corrupt government officials, particularly those from the taxation and labour departments. A sample questionnaire is included in Appendix B.

In the following sections, inventory management and control systems in each of the four categories of retail outlets studied (department stores, bakeries, pharmacy, and book shops), are outlined by describing one store from each category in detail. In addition, one store, which was found to be utilizing the most advanced systems, is also described as a model for others to learn from.

After describing the five detailed case histories, the key subsystems within the overall inventory management and control systems are described, together with the advantages and obstacles encountered as an organization utilizes complex sophisticated systems.

3. INVENTORY MANAGEMENT IN A BOOK SHOP

3.1 BACKGROUND AND STORE PROFILE

The owner, who belonged to an agricultural family, started his book shop in 1970 when he came to Lahore. The store, covering 900 square feet, is situated in a high traffic area in Ghalib Market, with plenty of parking space. In 1987, a new branch in Defence

was opened. Today the 32 year old son of the owner, who is also doing an MBA from Allama Iqbal Open University, is managing the business. The son is so critical for the business that according to the owner, "if he goes out, the whole system will collapse." Being receptive to change the younger owner had first introduced a cash register in the shop because he did not want "a customer to wait in line to get a receipt for an item worth Rs. 5." He bought the register after thoroughly researching various options, as he wanted to establish an efficient way to manage inventory. It helped greatly but there were "too many little items and stock - taking must be done for all of them, cash registers do not have the format to do all that." This led him, in 1990, to buy a computer. The use of the computer in the inventory management process, however, has yet to materialize. However, within the coming year the store is expected to develop computerized systems to handle retail management. In fact one of the major constraints being faced by him is the lack of an effective inventory control system and finances.

The store remains open from 9 in the morning till 9:30 at night, for six days a week with Friday being off. The store mostly caters to upper and middle class customers. There are four employees at the shop, their education varying between matriculation to intermediate. There is one manager (for shop management), one purchaser, and two salesmen. Though there are no written guidelines provided to the salesmen but they are supposed to be presentable, and polite to all customers.

Inventory items include books, stationary, and greeting cards, with an average inventory level of Rs. 500,000. Ten to fifteen categories of books are carried in the store with prices going upto Rs. 2000 (for an atlas). Items are procured both from publishers and various dealers. Most purchases are repeat purchases; only in about 5% cases are new items purchased.

3.2 INVENTORY MANAGEMENT

Sales & Sales Documentation: Book sales are highly seasonal. Most of the sales occur between the months of January and April. During a month, sales peak in the first week. Sales are usually higher on Sunday, Monday and Tuesday, and peak hours are between 5 and 10 p.m. Transactions range from 100 to 150 a day. Wholesale orders, mostly received over the phone, account for about 15% of total sales. During school vacations sales are minimal.

Occasionally, sales promotion events are held, but only to attract more customers rather than to compensate for weak sales. Customers are given receipts for purchases made. One copy of the receipt is left in the cash memo. From this copy, transactions are fed daily into the computerized cash register. Two types of reports, X and Z are generated (A Zed report, indicates the total sales on any day of the year, and the type and number of items sold). ZED reports are generated daily from these entries of the cash register; at the end of the year these reports are used for accounting purposes. Information like number of items sold, department wise sales, number of customers, return entries, any advance payments, and credits given is available on these forms. In the beginning of the year the stock of the store is checked, the sales are found from the ZED reports, at the end of the year the stock is rechecked and the whole exercise gives the annual revenue generated and level of pilferage.

Inventory Reordering & Recording: As much as 70 percent of purchases are made on credit. Items have to be picked by the store purchaser from the suppliers outlet. The whole process of inventory management starts with reordering. Whenever a stockout occurs for an item, demand is registered in a demand book. Purchase orders are checked by the owner before allowing the purchaser to make purchases. A new item is added to the list of purchases if salesmen receive repeated demands (2-3 times) from customers. The purchaser calls twice a day to find if there is some new entry on the demand register, and if so, checks for the new item in the market. Items are purchased from two or three main vendors. Vendor selection depends mostly upon the price; the one who offers the lowest

price becomes the supplier as long as his price remains the lowest. When purchases arrive, the purchase invoice goes to the purchase book, while the purchased item goes to the stock room where they are repriced and are issued for shelf display. The size of the purchase order is decided in the light of past experience. Sometimes text books are stocked just before the start of the new educational year, to avoid disappointed customers.

Inventory Process: When any item is issued from the stock, three copies are made to record the issuance and delivery of these items. One remains with the stock room record, while two are sent to the shopping hall, from where one of these copies is signed (as a proof of receiving the items) and returned back to the stock room, while the other is retained at the store. The ZED report is checked daily and if there is any doubt, the audit roll at the till is used to remove it. The items which are not to be selected by the customer are picked up by the salesman while the rest are picked by the customer right off the shelf. Some of the products are repriced in the back room. Return claims are honoured if they are backed by a sales receipt. The returned product goes back to the shelf.

Inventory Checking: Inventory is checked twice a year and on each occasion two days are spent for the purpose. There is no permanent staff for inventory checking. At the time of the biannual check, all employees are involved in this work. There is an average inventory shortage of 2% per month in spite of a guard who is employed to keep a watchful eye on customers. According to the owners, kids are generally responsible for shoplifting. Once, one of the employees was caught. He was later removed from his job.

Managerial & Inventory Control: The owner had decided to develop the existing system over a period of 2 to 3 years, so that regular business procedures were not disrupted. The existing system focuses on cash and sales flow. The owner expects that a formal organized system will yield positive results not only for sales and revenues but also for store image. Development of an effective inventory control system is being seriously considered these days.

4. INVENTORY MANAGEMENT IN A DEPARTMENT STORE

4.1 BACKGROUND AND STORE PROFILE

The owner established the store in 1975. He represents the third generation in this business. Prior to this store his family had a store in Tolinton Market. He added new departments in his store based on sales experience and in response to changing customer demands. New departments included departments specializing in flowers, toys, and bed sheets. Profitability and customer satisfaction are the two major operating principles of the business. The owner firmly believes that the real profit is made through good procurement practices, i.e., "the cheaper you buy a product, the more would be the profit earned".

Having started from a modest ground floor store, the store in September 1994 had four floors, with a total store area of 9,000 square feet. The store employs 50 persons. All salesmen have at least two years prior sales experience, and a minimum of an intermediate degree (12 years of education). The ground and first floors are used as shopping halls, while second and third floors are used as stock rooms. These changes have resulted in higher profits. Plans are made for only one year, since the owner believes it is difficult to forecast beyond that. He feels the need to improve the inventory system management, and in the coming year plans to bring all inventory management systems on-line. He strongly feels the absence of a retailer association and complains, "they (individual retailers) just think of their own interest and fail to think collectively as a single retailer-community". Over the years he has learnt that political stability positively influences his business.

The store carries more than 5000 products with prices ranging from Rs.1 to Rs. 125,000 (a dinner set). In addition to the recently organized departments, the store carries groceries, candies, crockery, and hosiery. All kinds of products, staples, best sellers and in-fashion items are kept in the store. The store display and front is changed every 2 to 3 months. Business starts at 10 a.m. and shutters are pulled down at 9 p.m. Friday is the off day. The store operates on a self service basis. Customers from upper and upper-

middle class come here to shop and on the average spend 15 to 30 minutes per visit. Customer comments and employee's observations are communicated regularly to management. The store is air-conditioned (and centrally heated during winters). The stock rooms or godowns have lighting facility, but are not spacious and the air is stale.

4.2 INVENTORY MANAGEMENT

Sales & Sales Documentation: Sales are seasonal in nature. They are typically higher during winter months (October to December); on Thursdays and on Saturdays during a typical week and between 5 and 8 p.m. on a typical day. On average there are over a thousand business transactions a day. Only a few of these are on credit. All sales are documented in cash registers. There are four automated cash registers which maintain daily sales records.

Inventory Reordering & Recording: The process of reordering a product initiates at the salesman level. On finding a shelf partially depleted, the salesman checks the inventory for that product in the stock room. If there is nothing stored, he writes a purchase order which is handed over to the department head. The department head accumulates all such orders from his department and gives them to the store purchaser. The store purchaser groups all purchase orders received from various departments into 'Store' and 'Market' purchases. Store purchases are conducted via telephone and are delivered at the store by the manufacturer, while market purchases are made by a market purchaser who is always accompanied by one of the directors. These two spend most of their time in the market. Intelligent purchases of this team result in high profit items being purchased. According to the owner, most of the store's profits are earned through intelligent purchases made by market purchase teams.

Inventory Process: Purchase documentation is handled by the accounts staff. When a purchase consignment arrives at the store, it is checked against the invoice. Supplies received from local suppliers are returned if found damaged, but imported items or those

received from Karachi have to be destroyed and the loss has to be borne. All products are labelled with prices in a back-room. Most of the inventory is stocked in godowns, with only a part placed on the display shelves. Customers pick items and bring it to the department's cash counter, where payment is made and a receipt in triplicate is made. A red coloured copy of the receipt is left in the department's cash memo which is a record of the sale of the product at that department's counter, while a white coloured original copy is issued to the customer. At the same time the purchased item is sent along with a blue coloured carbon copy to the main counter on the ground floor. The customer is handed over the item after matching his receipt with its copy at the ground floor counter before the exit. When a customer brings a claim of a damaged product it is first inspected and then the refund is made. For this purpose, suitable adjustment is made in the cash register and the product is replaced on the shelf or sent back to the manufacturer.

Inventory Checking: Store wide inventory checking takes place once a year but inventory of high cost products is checked regularly. Three weeks are required for the annual inventory checking, and another three days to rearrange the products back on shelves. In addition to inventory checking, store pilferage is checked by three employees who keep a vigilant eye to catch shoplifters. Despite these measures a monthly inventory shortage of one percent on the average remains unaccounted for.

Inventory Control: Items for promotion and mark-downs are selected on the basis of the approaching expiry dates, especially if there is a large quantity already in stock. Sometimes the store is stuck with a product as a result of changes in fashions and trends (especially in the dresses and cloth department). The placement and display of such slow moving items are improved in order to attract customers. There is, however, no regular procedure to monitor the volume of sales of a particular product. The owner believes that formal' organized inventory control management system would streamline the process and "cleanup the mess in inventory management". He expects that an improved system will speed up the sales transaction, improve store image and even increase revenue. Computers have been bought for streamlining the store operations, but have not yet been installed. As

a matter of fact the owner is looking for some specialist who could develop a system to manage inventory and improve the control system. The owner considers checking purchases and performance of salesmen to be the key strategic control issues.

5. INVENTORY MANAGEMENT IN A PHARMACY

5.1 BACKGROUND AND STORE PROFILE

The present owner's father and grandfather had started the business in 1948. They used to work 12-14 hours a day and 7 days a week; the store used to be closed only on Eid days. According to them, those were the days when finding medical stores, and the right medicine, was a difficult proposition. They started the business with the dream, "to provide quality and good service and make drugs available at all times". The accomplishments were many. A manufacturing plant was established in the sixties; a second plant in 1975, and a third in the eighties. In the 90's, however, the pharmacy business, according to the owners, offers only meagre margins and even those are diminishing day by day. Due to this disincentive the family's future plans concentrate on the provision of healthcare equipment rather than on drugs. Opening a new drug store in Lahore is, however, on the cards but with very low priority.

The store is located on the Mall. This location being a busy traffic area, together with the unavailability of sufficient parking space, discourages many customers from shopping at the store. There are 40 workers at present at the store. The store is spacious (spread over two floors) but is not well lit. There are two manual cash registers. The store display is hardly ever changed.

5.2 INVENTORY MANAGEMENT

Sales & Sales Documentation: Sales typically amount to Rs.1 million a week, and remain fairly constant throughout the year. Average inventory levels are about 1 million. All sales

are documented through the cash memo. The cash memos and invoices are used to calculate profit. Almost all the items are purchased on credit.

Inventory Reordering & Recording: Inventory management is decentralized. One person is responsible for one shelf each. He is responsible for deciding what to reorder, when to reorder, and how much to reorder. Decisions are taken based on experience. Inventory is reordered daily through telephone calls. Drugs are mostly delivered by manufacturers or their authorized dealers at the store. Items are generally delivered within 2-3 hours or at most within a day. Deliveries are checked against invoices.

Inventory Process: Salesmen take customer orders through prescriptions. The item is retrieved by the salesmen. The first floor is used as a stock area. Only 20 percent of inventory is kept on the ground floor which is also the shopping floor, while the remaining is kept on the first floor. There is no need to mark prices as merchandise comes pre-priced.

Inventory Checking: Inventory checking takes 40 to 50 minutes and is checked daily by 3 or 4 employees. The process is fairly casual, and the individuals are not permanently designated for this job. There is no formal annual store-wide stock taking.

Inventory Control: The store has never been stuck with a large inventory. The primary reason for that is the strict policy followed by pharmaceutical companies to withdraw expired items (or items nearing the expiry date). Profit is considered more important than inventory turnover, and is measured with the help of cash memos and invoices.

6. INVENTORY MANAGEMENT IN A BAKERY

6.1 BACKGROUND AND STORE PROFILE

The owner couple owned a shop in Gulberg Centre which was acquired to start a garment business. The idea of a bakery was initiated by the wife, a graduate from Home Economics College, and after considerable deliberation they ended up opening a bakery in 1987. Business boomed and new branches were opened. Franchises were initiated to business associates for opening bakeries in Model Town and G.O.R. However, this practice was discontinued due to the difficulty of controlling quality of franchisee products. Poor products of some franchisees had hurt the overall brand image of the store. Business remains strong. Customer satisfaction and store image are given high priority in running the business. The owners strongly believe in quality assurance and staying receptive to change.

The Gulberg branch of the bakery remains open from 7:00 a.m. to 10:30 p.m. and is open seven days a week. It is situated on a high traffic location and parking space is easily available. It is air conditioned and centrally heated, thus providing a comfortable environment to customers around the year. The store caters mostly to the upper class of society. Product line comprises roughly twenty items with prices ranging from Rs. 3 to Rs. 175 per item. These include pastries, patties, cakes, pizzas, sandwiches and biscuits.

6.2 INVENTORY MANAGEMENT

Sales & Sales Documentation: The store carries about Rs. 35,000 worth of inventory. Daily sales amount to Rs. 10,000 and transactions average about 250 a day. Sales are high during winters, and peak around the Eid and Xmas holidays. Sales are higher on weekends, and between 4 to 6 p.m. Daily sales are not recorded. They are calculated indirectly from ledger entries (to be explained later). One person is employed only for making ledger entries and keeping various accounts (daybook).

Inventory Reordering & Recording: Inventory is reordered on the basis of salesman's experience. Ability to respond to sudden unusual increases in demand depends on raw material availability in the factory. If the raw material is available, then urgent orders can be delivered within two to three hours. Raw materials are procured from only 1 or 2 vendors. A delivery slip with two copies is made whenever supplies leave the factory for a bakery: one remains in the factory, one remains at the bakery (and is used to make the ledger entry), and one is returned to the factory after being signed by the bakery incharge. Ledger entries are made on receipt of fresh supplies, as well as on removal of stale products.

Inventory Process: Products are allowed to remain at the bakery for a maximum of 24 hours. For fresh cream products the time limit is 18 hours. Products are kept in see-through counters but are not accessible to customers. A customer has to ask the salesman for a product. The salesman packs it and sends it to the payment counter. The customer pays at the counter and takes his purchased item. Cash receipts are issued to customers only on request. About five percent of sales are for customers who request home delivery via telephone orders.

Inventory Checking: Inventory is checked daily, and it takes about an hour. No individual is specially hired for this job. Inventory shortage (pilferage) does not occur as the number of items, and customer access to them, is limited. Given the short shelf life, there is no need for end of the month inventory checks.

Inventory Control: Cash receipts are not used for inventory control. Daily demand reports and purchase reports are developed manually and sent to the head office. It is felt that a formal management control system would help in obtaining information faster. A computer and a software packages was bought. However, the computer is not being used. The owners are looking for a person who can operate it.

7. AN ADVANCED INVENTORY MANAGEMENT SYSTEM

The store profile has not been provided to safeguard anonymity.

7.1 INVENTORY MANAGEMENT

Sales: Average inventory on hand is worth Rs. 1 million. Average monthly sales are Rs. 175,000. Inventory turnover time is about six months. Business is run on cash payments. Some of the institutional buyers are given 3 months credit. All sales are recorded through cash memo receipts which are issued for every item sold. These are also recorded in a cash register.

Inventory Reordering & Recording: The inventory level of each product is tracked. When the inventory falls below a certain level, the item and quantity-on-hand is added to a demand purchase list. After being checked by the owner, the list is routed to the computer room, where the "expected" (as per records) inventory levels together with a recommended order quantity, is added on to the list. The list is then again sent to the owner for final approval. Purchase orders are handled by the purchaser, who reorders inventory twice a month. Local items take a day or two for delivery, while imported items take about three months.

Inventory Process: When delivery is received, it is checked against the purchase invoice, and then is sent to the computer room. Each item is allotted a unique computer generated tag number which is then attached to the item. Quantity received along with other data such as discounts and date of purchase are entered into the computer. Imported products are placed on the shelves immediately, while local items are stored in stock and displayed as shelf space becomes available.

Inventory Checking: Inventory checking takes 2 to 3 hours, and is done once a week. There is almost no inventory shrinkage at the store. Products once sold are not returnable. Beginning of month inventory is recorded. There is no annual store-wide check

since the weekly checking is considered sufficient for keeping the owner informed regarding inventory and sales.

Inventory Control: Cash receipts are used for inventory control. When the cash memo book finishes, the cash memo receipts are used for updating the inventory database. Sales are also recorded. The computer programme is also capable of generating "0 quantity" message, but is not being used at the moment. A customer mailing list is kept within the computer database which is kept current by constantly adding new customers and change of address information. The owner believes that it is usual for a store to get stuck with a particular item, "but good management is to put it on sale when there is still time, because once the season elapses, then one is really in deep trouble". Computer inventory-level reports and salesmen observations are used to detect slow moving products. The owner feels that the computer generated reports (regarding sales, inventory, and profit calculations) assist him in making correct decisions. He intends to make the system even more integrated with the inventory management process in future.

Based on the four case studies described in the previous sections and the case study of the advanced system described above, it is clear that considerable variation exists between inventory management systems currently in use. In the next section these variations are high-lighted, and then summarized in the concluding section.

8. SUMMARY OF INVENTORY MANAGEMENT PRACTICES

This section summarizes findings from the fifteen retail stores interviewed. A few broad generalizations are also made based on these findings.

8.1 BACKGROUND AND STORE PROFILE

Retailing in Lahore is very much a family run affair. Businesses are passed from generation to generation. Many of these business families, such as those running Aligarh Book Centre, Fazal Din & Sons, H. Karim Buksh, Al-Fateh Departmental Store, and Maqbool Academy (book store), have been in the business for more than four decades.

There are also examples of new entrants who, despite having no prior experience in retailing, have managed successfully. Here too, the business is run in close collaboration with immediate family members, like father and son, between two brothers, or husband and wife together. Examples include Cavalry Super Store, Khalil Sons Departmental Stores, Multi-Line Books and Sugar-N-Spice.

All retailers, regardless of the product being sold, strongly feel the absence of a larger retailer association which can fight for their rights. The common complaint was that "our suppliers raise the prices suddenly, and we have to adjust the rates accordingly. In the end, we earn the bad name, and have to listen the customer complaints".

Store timings among retail outlets differ somewhat, with pharmacies keeping the longest working hours. Bakeries open earlier than book shops, which in turn open earlier than departmental stores. Closing times vary from 7 p.m. to 10.30 p.m. Stores are open days a week with Friday being off. The larger variety of products in a departmental store probably results in more employees, as is also the case with book shops as opposed to a bakery. Education level of employees varies between matriculation to intermediate. Education is important in a departmental store or bakery perhaps due to the type of customers that visit these stores which usually belong to higher income classes. In bookstores and pharmacies the nature of the product necessitates that salesmen be at least

matric or an intermediate. Salesmen are expected to be polite and presentable to all customers. Average inventory at hand is least for bakeries. It is higher in bookstores, even more so in pharmacies and highest in departmental stores. Some bookstores and bakeries do provide home delivery in response to telephone orders. Return claims are honoured in almost all the major stores if they are backed by the sales receipt.

8.2 SALES & PURCHASE RECORDING

Sales peak during winter months in bookshops and bakeries. Sales are also higher (for all stores) during the first week of the month, around the weekend, and after 5 p.m. Pharmacies have fairly constant sales through out the year. Transactions average 800 to 1500 per day in department stores and pharmacies, about 250 at bakeries, and roughly 100 at bookstores.

Department stores routinely put seasonal products on promotional sales at the end of the season. When school textbooks are suddenly changed, bookstores are forced to sell off the older textbooks to libraries, or to bear the losses themselves. The nature of the product in case of pharmacies, and the short shelf-life of bakery products, reduces the possibility of using sale promotions to get rid of overstocked items.

Sales documentation is generally done through cash memos and tilling machines. A copy of the sales receipt is left in the cash memo. These are then used for daily data entry into a computer or a sales register. The tilling machine's audit roll and sales receipts are sometimes used to check the day's sales in case of ambiguity.

Annual stock-taking allows the calculation of total annual revenues generated. Extent of pilferage can be estimated by comparing total revenues against daily sales figures and inventory purchase invoices.

Purchase recording involves matching purchased products against invoices. After attaching price stickers, products are sent to the shelf or stock rooms. Invoices are filed and used to calculate periodic profits. Table 3 summarizes the sales and purchase recording systems used by the various firms studied. Sales and purchase systems prevalent in the retail industry in Lahore can be categorised into three types according to the level of sophistication. The simplest system involves keeping a ledger book. A cash register involves more complexity. Computer systems are the most complex.

TABLE 3: SALES & PURCHASE RECORDING

<i>Store</i>	<i>Computer Use</i>	<i>Sales Recording</i>	<i>Purchase Recording</i>	<i>Permanent Records</i>	<i>Return/Refunds</i>
Book-1	Coming Soon	Cash Register X, ZED reports	Purchase Book	Yes	Refund Slip (Cash Register)
Book - 2	Coming Soon	Ledger (Sales Book)	Ledger	Yes	Cash Return) Supporting Voucher
Book-3	No	Duplicate Book	Stock Book	Yes	Cash Refund
Book-4	Yes	Cash Memo + Computer (1)	Computer	Yes	No returns/refunds
Dept -1	Thinking about	Cash Register	Purchase Book Entered in Cash Register	Yes	Refund Slip (Cash Register)
Dept - 2	Thinking about	Cash Register	Register with invoices	Yes	Credit Slip (3) Refund Slip (4)
Dept - 3	Coming Soon	Cash Register (2)	Purchase Register	Yes	Refund Slip
Dept - 4	Thinking about	Cash Register	Purchase Register	Yes	Refund Slip
Pharmacy	No	Cash Memos + Ledgers	Purchase Register with invoices	Yes	Refund Slip (5)
Bakery	Have, not using	Ledger	Purchase Reports (daily)	No	Refund Slip

1. As one cash memo book finishes, sales from that book are recorded in computer.
2. Cash Receipts are compiled at the end of the day.
3. Towards future purchases.
4. For on the counter cash refund.
5. For items with acceptable expiration period.

The use of ledger books for recording sales and purchase transactions were described in the following terms:

"...every sale is recorded in the Duplicate book, this is done manually by the owner who is at the cash counter, sales are recorded as they take place. Purchases are recorded in the Purchase book.."

More formal procedures for using ledger books, involved recording sales and purchases department-wise or even item-wise, and to keep running balances.

The main disadvantages to using ledger books were the additional training required as well as the extra time and cost of recording the transactions and maintaining the system. The advantages identified were availability of information, inventory checking, and the possibilities of using accounting principles.

It was found that certain firms also used a mix of informal and formal systems. Thus for instance on a high-value item (such as expensive pens) a formal system would be used whereas on low-value items (such as pencils) an informal system would be used. Using the 80-20 rule, one might thus only apply the formal system on the 20 percent of items which contribute to 80 percent of inventory costs.

The use of cash registers indicates the next level of complexity for recording sales and purchases. Additional investments and training are required. Among the benefits are various reports (commonly referred to as X and ZED reports), as well as cash receipts. The machines are programmable (and the output can be transferred to computer systems) although few firms utilize this capability. Limitations include only partial automation, the lack of customized reports, limited number of codes available, the difficulty of recording purchases.

The final stage of complexity is indicated by the use of computers. Several firms were encountered who owned computers, but were unable to utilize them. The reasons for

these non-operational computers included problems both with the software (due to poor specifications, poor interactions with the developer, reliability problems, lack of user friendliness, and lack of documentation), and with the hardware (due to poor after sales service and incorrect specifications). Other reasons for these non-operational computers include lack of training, too lengthy a set-up time, and lack of organizational procedures.

Among firms with operational computers, key benefits described were ability to generate customized reports, ability to develop customized coding and pricing procedures, and the ability to upgrade the system. Other benefits mentioned include improved information, better accuracy, item-wise details, easy availability and accessibility, and the possibility of analyzing sales trend. The systems also provide a one-stop solution to handling purchases, sales, re-orders, expenses, employee and customer information. Procedures for recording and updating information included both on-line as well as batch methods.

8.3 INVENTORY RECORDING AND CHECKING

Inventory recording mostly takes place with the receipt of new inventory. Inventory checking was described by one owner as "*... the procedure to check inventory (number of items) on-hand (on the shelves and/or in the stock room) against the number of items purchased and the number of items sold*".

In bakeries, the short shelf-life of the product results in rapid inventory turnover, frequent stock-checks, and frequent reordering. Annual stock-taking is rare. In pharmacies inventory turnover is also relatively fast. However, inventory checking is especially important for pharmacies in order to locate items approaching expiry dates (in order to return them to manufacturers). Periodic inventory stock-taking is important for department stores due to the large variety and seasonality of products. However, very few stores are using systematic methods in order to identify fast or slow moving items.

Stockouts are common in department stores, indicating a need for improved systems. Owners however feel that stockouts are "part of the game, and difficult to check".

Tables 4 and 5 summarize the various systems used for inventory recording and checking by the responding organizations. Key variations include how often the inventory is checked (whether through visual checking, end-of-month checking, or daily checking), and the method used to check inventory (through checking the book inventory or by taking physical inventory).

Visual inventory checks are used in organizations which maintain no records of inventory. Usually these are one-man establishments, and the effort involved in checking inventory is minimal. The disadvantages include difficulty of checking levels, lack of control over shortages, and problems in re-ordering.

Both end-of-month (periodic) and daily (perpetual) inventory checking procedures require developing procedures for recording, compilation, verification, and record updating. Benefits include better information (more readily available, useful, accurate, and less costly), improved control over pilferage and improved end-of-period control.

Book inventory systems require tracking opening inventory, purchases, and sales. Benefits include improved information (stock availability, unit cost, and shortages). Physical inventory requires taking actual counts. Benefits include more accurate and complete information. The process however is costly and time consuming, thus allowing for only infrequent measurements. In practice, several establishments used a mix of book and physical counting systems. High-value items were physically counted at the end-of-the-day by certain departments. This also allowed for a check on shortage and overage of these items. On the other hand, inventory status of low-value items were only measured via books.

TABLE 4: INVENTORY RECORDING

Store	Mode	Record beginning of the month inventory
Book-1	Manual (Cash Register)	No
Book-2	Manual	No
Book -3	Manual	Yes
Book - 4	Computer	Yes
Dept-1	Manual (Cash Register)	No
Dept -2	Manual (Cash Register)	No
Dept - 3	Manual (Cash Register)	No
Dept - 4	Manual (Cash Register)	No
Pharmacy	Manual	No
Bakery	Manual	Yes

TABLE 5: INVENTORY CHECKING SYSTEMS AND SHRINKAGE

Store	Frequency	Random/Store wide	Time Spent (per year)	Shrinkage (Monthly)	Spending to reduce shrinkage (per month)	Measures	Industry Average of Shrinkage
Book-1	Every 6 months	Store-wide	4 Days	2%	Rs. 2500	1 person to watch customers	Don't know
Book - 2	Once a year	Store-wide	2 days	No idea	Nothing	1 peon to watch customers	Don't know
Book - 3	Never	-	-	10%	-	Nothing	5%
Book-4	Weekly	Store-wide	2-3 hours/week	None	Nothing	None	Don't know
Dept-1	Every 6 months	Random + store-wide (1)	4 days	No idea	Nothing	Keeping an eye on customers and employees	Don't know
Dept -2	Every month (mid)	Random	3-4 hours/month	2-3%	Nothing	Nothing	2-3%
Dept -3	Once a year	Store-wide	1-2 weeks	No idea	Nothing	None	Don't know
Dept -4	Once a year(2)	Store-wide	3-4 weeks	1%	Rs. 7500	3 full time employees	Don't know
Pharm	Daily	Random	40-50 minutes/ day	3%	Rs. 7500 - 10,000	3-4 dedicated employees	Don't know
Bakery	Random	Random	1-2/week	None	Nothing	Nothing	Don't know

1. Varies depending on various departments.
2. Inventory of costly items is checked on regular basis.

8.4 INVENTORY REORDERING AND CONTROL

The process of inventory management starts with reordering. In bakeries, pharmacies, and departmental stores reordering takes place daily. A demand note is prepared by the salesman, in charge of the shelf, when an item is running short. This demand note is handed over to the supervisor, who compiles them into a purchase order for approval by the owner. The purchase order is used by the purchaser who makes daily purchases from the market. In bookshops reordering takes place less frequently, usually weekly or fortnightly.

Most major retail outlets have warehouses or large stock rooms to store the items. When any item is issued for shelf display it is usual to enter the item code, quantity and the name of the salesman (who requested the item) in a register. Sometimes a receipt in triplicate is made out; one for the stock room, one for the salesman, and a third as a receipt (kept in the stock room) after being signed by the salesman on receipt of the product.

Tables 6 and 7 summarize the inventory re-ordering and inventory control practices in the various stores studied. Firms were found to be using both manual and computer-based systems. Manual systems were based primarily on the experience (and learning by observation) of the owner-manager. Purchase books were maintained, and the availability of items checked through human involvement. Computer systems maintained information on stock levels, sales trends, vendors, and returns and refunds.

The key advantages of computer systems were found to include control of stockouts, improved information (accurate and more complete), possibility of setting reorder points (season-wise, as well as department- and item-wise), control employee dishonesty (kickbacks through supplier commissions and theft), vendor information, vendor selection, and trend information on returns and refunds.

Many large retailers do use computers to monitor sales. Use of computers for inventory management, however, is almost non-existent. Only one of the retailers out of the surveyed sample used computers for identifying slow moving products and reviewing inventory stocks. A few retailers indicated that they were in the process of developing computer based inventory management system. Most were looking for the right person to develop such a system; an indication that there is a dearth of properly skilled persons in this field. All agreed that a formal inventory management and control system would help increase sales, improve the image of the outlet, and enhance profits. They also felt that it would help control inventory stockouts and pilferage. They indicated that employees might resist such systems. Employees inclined towards dishonesty would be more likely to get caught. It might also decrease the owner's dependency on salesmen. The role and importance of salesmen, who currently play a key role in the reordering process, would also decrease.

TABLE 6: INVENTORY RE-ORDERING

<i>Store</i>	<i>How often?</i>	<i>Re-ordering procedure</i>	<i>How to check the availability of an item?</i>	<i>Re-order point, how calculated?</i>	<i>Re-order quantity, how determined?</i>
Book-1	Daily	Recorded in "Demand book"	"Demand book"	Manual (Previous sales + experience)	Manual (Previous sales + experience)
Book-2	On demand	"Demand Note" (1)	By checking item on shelf	Manual (Previous sales + experience)	Manual (Previous sales + experience)
Book-3	Every other day	"Purchase List"	By checking item on shelf	Manual (Previous sales + experience)	Manual (Previous sales + experience)
Book-4	Bi-monthly	"Purchase List" (1)	By checking item on shelf/ in computer	Computer (4)	Sales trend from Computer printout + demand + item type
Dept-1	Weekly	Re-ordered immediately	By checking item on shelf & in stock room	Manual (Previous sales + experience)	Manual (Previous sales + experience)
Dept -2	Weekly	Recorded in "Demand Book" (2)	By checking item on shelf & in stock room	Manual (Previous sales + experience)	Manual (Previous sales + experience)
Dept -3	Weekly	"Re-ordered List" (1)	By checking item on shelf	Manual (Previous sales + experience)	Manual (Previous sales + experience)
Dept -4	Daily	"Purchase Order" (1)	By checking item on shelf & in stock room	Manual (Previous sales + experience)	Manual (Previous sales + experience)
Farm	Daily	"Re-order List" (3)	By checking item on shelf	Manual (Previous sales + experience)	Manual (Previous sales + experience)
Bakery	Daily	Re-ordered immediately	By checking item on shelf	Manual (Previous sales + experience)	Manual (Previous sales + experience)

1. Prepared by sales person and approved by owner.
2. Purchaser informed.
3. One almairah is assigned to each person and he prepares the "Re-order list" of items, which are re-ordered right away.
4. Computer gives "0 quantity" message.

TABLE 7: INVENTORY CONTROL

<i>Store</i>	<i>Stock age determined?</i>	<i>How?</i>	<i>Stock turnover measured?</i>	<i>How?</i>	<i>Profit measured, how?</i>
Book-1	Yes	Through observation	Yes	Through observation	End of year
Book-2	Yes	Through observation	Yes	Through experience	No (4)
Book-3	Yes	Through observation	Yes	Through observation	No (5)
Book - 4	Yes	Through observation	Yes	Through observation	No - (6)
Dept-1	Yes	Manually (1)	Yes	Manually (1)	No
Dept -2	Yes	Through observation	Yes	Through observation	No
Dept -3	Yes	Through observation	Yes	Through observation	No. (4)
Dept -4	Yes	Through observation	Yes	Through observation	Manually (7)
Pharm	Yes	Through observation (2)	No	N/A	Manually (7)
Bakery	N/A	N/A	Yes	Through observation (3)	Manually (7)

1. When the new stock comes in, current stock of the item is checked and these are calculated.
2. One almaidah is assigned to each person and he is responsible for checking the stock age (expiration dates).
3. By checking the daily demand note and sale reports.
4. Will be calculated once the computer is operational.
5. No numbers are calculated, but looking at the store growth, we get a feeling that the store is running in profit.
6. Computer programme is being enhanced to generate these numbers as well.
7. Calculated by accountant, using sale and purchase receipts.

9. CONCLUSIONS AND RECOMMENDATIONS

There are considerable differences in the procedures employed by different retail establishments for managing inventory. These range from informal mechanisms employing visual checks and elementary documentation, to sophisticated computer-based systems for tracking purchases and sales, and for supporting re-orders and overall management control.

Organizations with good systems in place operated more efficiently; there was less chaos and also less need for ad-hoc decisions and fire-fighting by the owner-manager. The system provided a one-stop solution to handling purchases, sales, re-orders, expenses, employee and customer information.

A key benefit is improved information — more relevant, more timely, and more accurate. This improved access to information allows retailers to decrease stockouts, decrease obsolescence, decrease the overall level of inventory while maintaining an acceptable level of customer service. The improved information allows the owner-manager to monitor the performance of various personnel, departments and product lines through a formalized reporting system, rather than by physical presence. As procedures become more structured, the owner-manager is able to delegate responsibilities to his staff, and to spend more time on strategic concerns.

However it was found that retail establishments encounter many problems as they attempt to upgrade their systems. The existence of organizations with unused or under-utilized computer systems, points to the existence of these difficulties. The continued detailed involvement of owners in the detailed day-to-day operations of their stores together with the lack of professional management or existence of large chain stores, is further evidence of the difficulty the retail sector in Pakistan (even the most sophisticated firms within the industry) has in implementing improved inventory management and control systems.

A major obstacle faced by the retailer is the effort required to prepare for switching over to the new system. Coding systems have to be developed for organizing the various product items being handled; prices and other data needs to entered. Store personnel need to be trained to understand the new procedures and to maintain the new system. Other problems encountered are due to the general lack of experience in developing software (both within the retail organization and also, to some extent, among software developers).

A more general obstacle is the lack of awareness of the various options available to retail organizations as they seek to improve the efficiency and effectiveness of their inventory management and control procedures. The costs and benefits of these options are unclear, and there is a lack of understanding of what needs to be done to move to the next level of sophistication. There is even less awareness of how information technology is revolutionizing retailing in the economically-developed countries, and the possibilities which are opened up by the use of these technologies⁷. The study strongly point towards the need for more training. Given the size of the retail sector in the economy, the impact of improved systems can be wide-ranging.

Further research needs to be conducted to understand and document the practices, obstacles, and aspirations of different segments of the retail and wholesale sector. Based on this research teaching material needs to be developed which, in simple language and illustrated with easy-to-understand case histories, explains the options available to retailers for improving their operations. In Pakistan, as elsewhere, nothing is as convincing to a

⁷ In 1988, Wal-Mart Stores of USA had 35 thousand on-line terminals in 1300 plus stores linked to corporate headquarters (where over 2 million on-line transactions were handled daily) using a satellite network with 1400 earth stations. This system allows for instant communication with headquarters, and allows for detailed monitoring of inventory and movement, tracking trends by item, and ensuring product flow from supplier to distribution centre to stores to guarantee that stocks are available and yet items not over-stocked.

practical businessman as a good success story. And nothing teaches more than an expensive failure. Stories of successful implementations of inventory management and control systems need to be documented and disseminated. Stories of failures would prove equally valuable.

Appendix A: List of Organizations Surveyed

<ul style="list-style-type: none"> • W. Iqbal Majid Aligarh Book Centre Ghalib Market, Gulberg III Lahore Ph: 873332 -877191 • Shahid A. Khokhar Sugar-N-Spice 12-C, Gulberg, Lahore Ph: 8765536,873812 • Ghaiz-ud-Din Tariq Book Fair 145-G, Masjid Chowk Defence Society (LCCHS) Lahore Cantt: - Lahore Ph:894392 • Zubair Khalid Mirza Multi-line Books Regal Chowk Hall Road, Lahore Ph:353564 • Dr. Zafar Maqbool Maqbool Academy 10 Dayal Singh Mansion Shahrah-e-Quaid-e-Azam Lahore Ph:357058 • Nadeem Akhtar Butt Cavalary Super Store Cavalry Gound Lahore Cantt: Lahore Ph:6665668,371668 • Irfan Iqbal Sheikh Al-Fatah Departmental Stores (Pvt.) Ltd. 55-E-III, Gulberg-III, Lahore Ph:875817,875877 • Asim Buksh, Saeed Buksh Haji Karim Buksh & Sons Empire Center, Lahore Ph:877386 	<ul style="list-style-type: none"> • Muhammad Yousaf Dar Khalil Sons Departmental Store Khalil Plaza 29/E Main Market Gulberg-II, Lahore Ph:873472, 874588 • Sohail A. Kabir Fazal Din & Sons (Pvt.) Ltd. 53 Shahrah-e-Quaid-e-Azam P.O. Box No. 344, Lahore Ph:7231762-4 • Dare Computer Systems 14-Kamran Appartments 79-Ferozepure Road, Lahore Ph:415778, 7589376 • Kewan Khawaja The Technology Group Hafeez Center, Main Boulevard Gulberg III, Lahore-54600 Ph:5712264 • Bashir Buksh Haji Karim Buksh (Liberty Market) 41-Commercial Zone Liberty Market Gulberg-III, Lahore Ph:873972, 874602 (Store) 305538-40 (LCCI) • ArifNazirButt Variety Book Centre Liberty Market Lahore Ph: 879872 • Bashir Ahmed PACE (Pakistan) Pvt. Ltd. 73-Mamoon Lance Cavalary Ground Extension Lahore Ph:6661178
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Appendix B: Interview Questionair

Visisted: Liberty Market 12/4/94 10:00-11:00 AM

STORE NAME

ADDRESS

CONTACT POSITION _____ PHONE

BUSINESS CARDS?

BROCHURES?

CASHMEMOS?

ORDER SLIPS?

OTHERS

NOTES

- THE LEADING GENERAL MERCHANT OF THE TOWN

(A)- OWNER'S PROFILE /HISTORY

1. Owners Education Age
2. Business started in By whom
3. Prior business experience?

4. When did you get involved in retail business?

How did you get involved in retail business?

5. What is used to make decisions?

Customer research

Past sales

Vendor reports

Ads.

Others, please specify

Customers attitude, react to their needs.

6. Are you receptive to changes? Yes No
What changes have you made in last one year ?

2.
3.

How it worked out?

7. How do you see yourself, one year front now?

Five years front now?

8. Is there a retailer organization (like Pakistan Booksellers & publishers Assoc.) for your business?
 Yes No

Name Of Yes)

(B) STORE PROFILE

1. Store type .
2. Merchandise type Mix (Grocery, Candies. Crocker. Toys. Hosiery, Linens, Flower Shop etc.)
3. How did the store grow over course of time?
4. What are top 3 operating principles of store?
 profitability
 customer satisfaction
 store image

I-SALES

1. Stores' average inventory on hand?
2. Average sales/Week _____
sales /month _____
sales /year _____
3. U of transactions/day _____!
/week _____
4. U of credit transactions _____,
5. # of wholesale vs. retail transactions/volume?
6. % of orders received on phone/store visits!
7. Busiest business time (seasonally) ?
During day _____
Of week . . .
Of month _____
Of year .
8. What different factors directly affect sales?
 weather
 political stability

9. How are items identified which are candidates for promotions or mark-downs?

10. What kind of damaged products can be returned to the supplier?

How it affects the store revenue/image (return/refund policy)?

II- PRODUCTS

1. # of items

2. Price range, for merchandise

3. How is variety and quantify of each assortment/brand decided?

4. Brands?

___ manufacturer

___ dealer (retailer name)

___ generic (no name).

5. Item type?

___ staple (year round-housewares)

___ fashion

___ best sellers (for a short period of time).

6. Item categories?

___ scrambled merchandise (florist & greeting cards)

___ complementary goods (cats & tires, stereo & tapes)

___ substitute goods (man\ brands of same item).

7. No. of vendors for each category? _____

8. What guidelines are used to remove a product from shelf?

III-FACILITIES

owned

rented

leased

1. Store space?

Why? _____

2. Do they have on location supply room/warehouse?

Yes

No

If 'No' how far? _____

Store hours?

High traffic

Low traffic.

Daily Weekly

3. Store location?

5. How is parking;? Plentiful

Reasonable

Insufficient

6. A ir-conditioning?

Yes

No

Heating?

Yes

No

7. Store size?
of floors!
8. Cash registers? Manual _____ Automated _____
9. # of cash registers! _____ 5 _____ In operation? _____ 4 _____
10. Order taking process?
 a list is made
 items are picked as customer asks for them.
 self service
11. Surveillance systems? Yes _____ No _____ Cost? _____
12. How often store front & displays are changed?':
13. Store atmosphere? (observation)
 spacious smells _____ sounds _____ sights
 lighting cash registers _____ availability of sales persons

14. Draw store layout

IV- CUSTOMERS PROFILE

1. What market segment visits? upper upper middle
 middle lower
 2. Customers'? Age _____ Gender _____
 3. Average time spent by shopper?
 4. Planned visits (%)? _____
 5. Unplanned or impulse purchases (%)? _____
 6. _____ % of customers want home delivery.
For what products _____
 7. _____ % of customers request customized products.
How often they do that? _____
How is it recorded and handled? _____
- & Criterion used to determine the x-tics and needs of a customer? 1.
2. _____
 3. _____
 4. _____
9. Do you use customer addresses for mailing list? Yes No
(Get sample flyers, letters, leaflets.)

V-HRM

1. # of employees
 2. Employees education level?
 3. Employee experience?
 4. Is employee experience required? Yes No
If 'Yes', what kind of? _____
Any training offered? _____
 5. Written guidelines are provided to employees? Yes No
 6. Are employees encouraged to pass observations/comments to the mgmt?
 Yes No
- How often do they do tha? _____
7. Store hierarchy - job description of each employee, block diagram.

BLOCK DIAGRAM?

(Q-INVENTOR Y MA NA CEMENT I-
INVENTORY RECORDING & CALCULATION

1- How are sales documented?

How often cash receipts are issued!

How often cash receipt are used for inventory control?

2- How are purchases documented?

3- Are permanent records on all transactions maintained? ____ Yes _____ No
If Yes', for how long? _____

4- How are returns & damages processed /handled?

5- Returned item would go to? stock room shelf

6- Prices are masked on merchandise? Yes No Not at all i

7- Pricing/coding takes place in? buck room sales floor.

8- Inventory system used ? physical inventory (dollar control /unit control)
How often"

9- Do you use perpetual (book) inventory system? Yes No
If "Yes', how do you do it?
total # of units sales returns by using receipts
other

10 Do you record beginning of month inventories? Yes No
End of month inventories? Yes No

11 Is book inventory maintained through out the year? Yes No

12 Inventory takes place in? back room sales floor.

13 Overview of record keeping system.

II INVENTOR Y CHECKING

1. How frequently the inventory is checked"!

2. Time spent on inventory checking?

Daily

Weekly _____

3. How many employees are dedicated to inventory control?
_____None_____
4. How often physical inventory is conducted to check the accuracy of book figures to adjust against shrinkage/returns?! _____
5. Does inventory checking change with season? _____ Yes _____ No
6. Are sales and inventory records reviewed regularly? _____ Yes _____ No
7. Are all type of records monitored for accuracy? _____ Yes _____ No
8. Inventory shortage? _____ Per month
9. How much inventory shrinkage (monthly) is due to
Shoplifting _____
Employee theft (pilferage) _____
Inventory recording errors _____
10. What measures are taken to deter:
Shopper theft while store is open

Shopper theft while store is closed

Employee theft

Damage
11. How much is being spent currently to reduce inventory shrinkage due to:
Shoplifting _____
Pilferage _____
Inventory recording errors _____
12. Is there any industry average for inventory shortage? _____ Yes _____ No
If Yes', what is it?
13. Are inventory shortages compared with industry averages? Yes _____ No _____
14. What mechanism is employed by the store to detect shortage of a certain item in market & to inform customers of its availability @, their store.
15. A brief inventory process (for a single item)
16. A detailed inventory process (non-participant observation).

13. How are re-order points calculated & observed? (stock level @ which new orders must be placed)

14. What guidelines are used to add/drop products?

___ declining sales ___ profits ___ prices
___ appearance of substitute ___ loss of usefulness.

15. A customer comes in and asks for a certain product, you are out of it, this happens many times.
what is done to prevent this from happening in the future?

The first time?

16. How soon is such situation detected?

How is it cured?

IV- INVENTORY CONTROL

1. Have you ever been stuck with large inventories? ___ Yes ___ No
If 'Yes' why did it happen?

How did you use that experience to avoid such future incidence?

How could it be avoided in the first place?

What damage was caused by it, financially & otherwise?

2. How do you decide, how much stock be placed on shelf/in store room?

3. How are slow moving items identified?

4. You want to get certain information (current stock level, cost, retail price, order information - last order, when to place next order, with whom, order delivery time/period, product turn over etc.) about an item X, how and what would you do to get this information?

5. Do you think a formal, organized control mgmt. system will help-

Sales ___ Yes ___ No
Image ___ Yes ___ No
Revenue. ___ Yes ___ No

6. If control mgmt. system is formalized/tightened, how are your employees going to react?

___ like ___ dislike
Why?

7. What suggestions, you have to improve your own inventory management?

1.

2. _____
3. _____
4. _____

8. What new technologies have you used in last 1 year for inventory control system?

V- MANAGERIAL CONTROL

1- How much time/month is devoted by management to strategic issues?

What are those issues?

2- How is current inventory system used to formulate retail assortment strategy?

3- How is a balance kept between inventory level & out-of-stock condition?

4- How is stock turnover measured/determined?

5- How is stock age measured/determined?

6- How is inventory information used to consider non deletion strategies such as cutting costs, revising marketing efforts, adjusting prices & cooperating with other retailers?

7- Which is considered most important & how much it is?

___ sales/employee _____

___ average customer transaction size _____

___ inventor}' turnover _____

How is it calculated?

(D)- A CCOUNTING PRA CTICES