

RETAIL SALES DATA: THE HIDDEN TREASURE

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> W.P.No. 2001-02-04 February 2001 / 1639

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Abstract

Retail Sales Data: The Hidden Treasure¹

Increasingly, retail outlets; be it in the large organized sector or unorganized sector, have started computerizing their point of sale (POS) transactions. This opens up opportunities for using the information towards better decision making by retailers and other actors (including manufacturers) in the value chain. The potential is even more significant, if such information can be analyzed across retail outlets at an industry level. This is fairly common practice in the developed countries.

In this context, we had an opportunity to explore the possibilities from analyzing POS data. In 1998, we had been involved with FoodWorld, a retail chain of over 25 outlets in the three southern cities of Chennai, Bangalore and Hyderabad, in writing case studies on their management strategies. During the case writing exercise, it was proposed that the large amount of POS transaction data, which was used only for accounting purposes, could be explored for "hidden treasures" to improve the quality of decision making. This paper reports the exploratory work done by us on a sample of the POS data.

The primary decision maker we addressed ourselves to was the retailer. The key decision areas examined in the paper are market definition and segmentation, merchandising (category management, pack sizes, inventory planning), marketing and store management.

¹ By G Raghuram. B Banerjee. AK Jain. A Koshy and G Bhatt. This paper was presented at *Retailscope* '99. Chennai. We acknowledge the data support provided by FoodWorld Division, Spencer & Co Ltd. Chennai.

Retail Sales Data: The Hidden Treasure1

1.0 Introduction

The retail sector in India is undergoing significant transitions with the entry of large scale retailing, as well as marked improvement in offering a 'shopping' experience to customers. Marketers are beginning to look at the role of retailing as a brand with a potential to influence a value chain, rather than being an outcome of a value chain. The retail sales in India for 1996 stood at Rs 5.8 billion, forming 53% of GDP. The number of retail outlets in 1996 was 9.7 million, up from about 8 million in 1993, providing significant employment to the population [FoodWorld C, 1999]. Interestingly, the growth rate of the number of retail outlets in India happens to be higher than the population growth rate (contrary to global trends), primarily due to the unorganized sector.

Increasingly, retail outlets, be it in the large organized sector or unorganized sector, have started computerizing their point of sale (POS) transactions. This opens up opportunities for using the information towards better decision making by retailers and other actors (including manufacturers) in the value chain. The potential is even more significant, if such information can be analyzed across retail outlets at an industry level. This is fairly common practice in the developed countries.

In this context, we had an opportunity to explore the possibilities from analyzing POS data. In 1998, we had been involved with FoodWorld, a retail chain of over 25 outlets in the three southern cities of Chennai, Bangalore and Hyderabad, in writing case studies on their management strategies. During the case writing exercise, it was proposed that the large amount of POS transaction data, which was used only for accounting purposes, could be explored for "hidden treasures" to improve the quality of decision making. This paper reports the exploratory work done by us on a sample of the POS data.

2.0 Key Decision Areas

The primary decision maker we addressed ourselves to was the retailer. The key decision areas for a retailer are

- Market Definition and Segmentation
- Merchandising
 - Category Management
 - Pack Sizes
 - Inventory Planning
- Marketing
 - Pricing
 - Promotion Planning
- Store Management
 - Display Planning
 - Store Layout
 - Manning

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These decisions address both senior staff level managers and store level operational managers of the retailer. Many of these decision areas could also benefit other actors across the supply chain like dealers and intermediaries, and manufacturers. The other potential users of analyzed POS data are consultants and even customers.

3.0 POS Data Description

We obtained POS data for two FoodWorld stores (whose characteristics are described below) in

Chennai for a period of four months (August 1998 to November 1998).

	Mount Road	Annanagar
Location	Shopping plaza in a commercial area	High street in a residential area
Date of Opening	December 996*	September 1996
Trading Area (sq ft)	7,257	3,177
Average SKUs dealt with	6,000	4,000
4 month (122 days) sales		
Value (Rs)	30,974,800 (254,000 per day)	21,184,770 (174,000 per day)
Bill Count	141,076 (1,156 per day)	89,356 (732 per day)
Product/SKU Count	784,531	702,024
ltems (# quantity)	1,049,231	875,800

^{*} The Mount Road store in Chennai was earlier the famous Spencer's Store, which was taken over by the RPG group, prior to launching the FoodWorld chain [FoodWorld A, 1999]

As seen in the table above, the Mount Road store had total revenues of Rs. 30.97 million and served 141,076 customers (as measured by bill count) who bought 1,049,231 items (hash (#) quantity) across 784,531 products (stock keeping units (SKU)) over the four month period. Similarly, the Annanagar store had total revenues of Rs. 21.18 million and served 89,356 customers who bought 875,800 items across 702,024 products. The Mount Road store had average daily revenue of Rs 254,000 from 1,156 customers. The Annanagar store had average daily revenue of Rs 174,000 from 732 customers.

The data was sourced from four files, having the following data elements.

- Product Master
 - Product Code, Product Name, MRP, Group Code
- ♦ Group Master
 - Group Code, Group Name, Department Code
- ♦ Item Files
 - Bill Date, Bill Number, Bill Time, Product Code, Cost, MRP, Sold Value, Quantity
- ◆ Campaign Files
 - Product Code, Campaign Start Date, Campaign End Date, Cost, MRP, Selling Price, Campaign Number

The product master gave the product (SKU) code, the product name, the maximum retail price (MRP) and the group code. The products were classified into groups (subcategories like detergents, toothpaste, etc). The group master gave the group code and the group name. The item files were the ransaction level data giving the bill date, bill number, bill time, product code (of products bought in a bill), cost, MRP, sold value, quantity. Each bill had as many records as the number of products bought. The item files had information, in addition to the customer bill, like cost and MRP. The campaign files

used for the analysis gave information on price discount promotion campaigns. The data elements contained in these files were product code, campaign start and end dates, cost, MRP, selling price, campaign number.

4.0 POS Data Analysis

We describe below the data analysis steps.

Data Range

There were 49 departments (categories), 243 groups (subcategories) and 6306 products/SKUs. These were hierarchically defined, that is each product/SKU belonged to a unique group, which belonged to a unique department. All the other data elements in the dataset took their values as per the transactions.

Data Preparation

We encountered three problems in the dataset which needed to be dealt with before querying and analysis. There were negative bill value entries (representing returns, corrections and payments of any kind), some of which would have distorted the analysis. The entries, being insignificant in number, were eliminated from the dataset. There were also large transactions value entries recorded some time during the end of the day, representing transactions from counters like bakery, café, etc. which were outside the main retail area. Since these entries distorted the picture of hourly activity, per bill value, etc., they were also eliminated from the dataset. There were also problems of identifying unique transactions, since the same bill number was used in the dataset, even within the same day. Hence a combination key involving bill number, bill date, product code and quantity was derived to uniquely identify transactions.

Software Aspects

The POS data was made available for each month in dbf format using zipped files. The data was then imported to Microsoft Access 97. This software was used to prepare separate master transaction tables of over five lakh records each for the two stores. Data querying was done using Microsoft Access 97. Analysis on the queried datasets was done using either Microsoft Access 97 or Microsoft Excel 97.

5.0 Market Definition and Segmentation

The dimensions on which customers can be segmented and markets are defined below.

- ◆ Day of Purchase
- ♦ Value of Purchase
- Quantity of Purchase
- ♦ Time of Purchase
- Basket of Purchase
- Visitation cycle

- ♦ Duration of Purchase
- ♦ Demographics

Typically, with POS data, aggregated customer behaviour can be analyzed. To understand behavior at a disaggregated level (for example visitation cycle, duration of purchase, demographics and correlating other dimensions with demographics), purchase patterns of individual customers have to be tracked over time. This requires identifying customers through the use of a loyalty card (which FoodWorld had not yet introduced). Use of credit card information was a possibility. (FoodWorld allowed credit card purchase in certain stores for purchase value of Rs 500 and above). However, credit card use was not yet popular and any analysis based on this was not expected to be representative. For duration of purchase, even without a loyalty card, it is possible to offer the customer a token number (which records the entry time) which would then have to be presented by the customer at the time of billing.

We present the analysis of the aggregate behaviour on some of the dimensions identified above.

Day, Value and Quantity of Purchase

The distribution of daily customers into the stores is given in exhibit 5.1. It is clear that the bill count of the Mount Road store is significantly higher than the Annanagar store. While the Annanagar store never had more than 1000 customers per day, the Mount Road store had more than 1000 customers on 84% of the days and more than 1500 customers on 7% of the days. It is possible that the actual footfalls (number of people walking into the store) is higher than the bill count and would be a useful measure to monitor, both in terms of traffic management within the store and to reflect on the bill count to footfall ratio.

In terms of daily revenues (exhibit 5.2), while the Mount Road store had crossed Rs 160,000 on all the days, the Annanagar store had done it on 54% of the days. Similarly, while the Mount Road store had exceeded daily revenues of Rs. 300,000 on 18% of the days, the Annanagar store had never exceeded this figure. To get a better understanding of the customer, a distribution of the bill value and quantity across bill count for the Mount Road store are presented in exhibits 5.3 and 5.4 respectively. A significant observation is that 24% bought only one item at a total purchase value of less than Rs 30. More than 50% of the customers bought three or less items at a total purchase value of less than Rs 90. Also, 13% of the customers bought 16 or more items at a total purchase value above Rs 400. This indicates that even in a large organized retail outlet like FoodWorld, bulk of the customer visits resulted in small value purchases.

Exhibits 5.5 to 5.8 are monthly charts of day wise total bill count (number of customers) and total bill value (revenue) for the Mount Road store, for August to November 1998 respectively. Exhibits 5.9 to 5.12 are similar charts for the Annanagar store. One of the most striking observations from these charts is the sharp Saturday peaks, followed by a Sunday slack in the Mount Road (commercial area) store. On the other hand, the Annanagar (residential area) store had a weekend peak, with the Sunday reflecting a higher traffic in volume and value than the Saturday. Also, the first and last weekends of the month showed relatively higher traffic at Annanagar store. In fact, even the weekdays at the end and beginning of the month showed relatively higher traffic at Annanagar. The Mount Road store also showed a significant peak on the Saturday prior to Diwali (Monday, October 19). Similarly, the Friday

before Saturday, August 15 showed higher traffic than other Fridays. Saturday, August 15, being a holiday showed lower traffic than other Saturdays.

Exhibits 5.13 and 5.14 give the monthly aggregates for the two stores for various parameters like bill count, number of products (SKUs) sold, the total quantity sold, total value, mean and standard deviation (SD) of value per bill, value per SKU, value per # quantity, SKU per bill, mean and SD of # quantity per bill and # quantity per SKU. The average value per bill was Rs 219.56 in the Mount Road and Rs 237.08 in the Annanagar store. The average value per # quantity was Rs 29.52 at Mount Road and Rs 24.19 at Annanagar. It is also interesting to note that the # quantity per SKU was 1.34 at Mount Road and 1.25 at Annanagar. While the Annanagar store attracted lesser traffic than the Mount Road store, the value (and SKU and # quantity) per bill was higher.

Exhibits 5.15 and 5.16 examine similar parameters aggregated over the four months and classified across weekdays, Saturdays and Sundays. Exhibit 5.17 extends the Saturday and Sunday data of 5.16 to the first and last Saturdays and Sundays of the month versus the rest. Apart from the traffic characteristics already observed, we see that the value per bill was significantly higher on the weekends than the weekdays. In the case of Annanagar, it was higher during the first and last weekends.

Time of Purchase

We can also profile customers by looking at the traffic and purchase behaviour across time of a day. Exhibits 5. 18 and 5.19 give the hourly aggregates of bill count, value and value per bill for September 1998 for the Mount Road store. It can be seen that in terms of traffic, there were two peaks, one between 1300 hrs and 1500 hrs and the other between 1700 hrs to 2100 hrs. The evening peak also had a higher hourly traffic than the afternoon peak. Value per bill showed an increasing trend in the morning hours till 1200 hrs. It then flattened out till 1900 hrs into the evening peak and then showed a further increasing trend until closing hours. Exhibit 5.20 analyzes the time of day data in three hour slots across weekdays, Saturdays and Sundays for September 1998 for the Mount Road store. While the traffic distribution across day did not show significant variations between weekdays, Saturdays and Sundays, the value per bill and (consequently the value) on Sunday morning till 1200 hrs was significantly higher than for other days. Thus, high value shoppers preferred not only the later hours of the day but also Sunday mornings.

Basket of Purchase

Defining segments by understanding customer behaviour based on the basket of purchase is increasingly becoming an area of research [Russell and Petersen, 2000]. A simple examination of this is presented in exhibits 5.21 and 5.22. These exhibits address the question of what else is bought along with Sundrop Oil 1 Lt Pouch and Nestle Charge 40 gms, respectively, at the Mount Road store over the four month period. These two products were selected on the principle of one being from a "destination" category (cooking oil) and the other being from a "convenience" category (chocolate). This specific brand of cooking oil constituted over 10% of the total value of all the baskets in which it was present, while the specific brand of chocolate constituted under 4% of a similar total value. Fruits and vegetables were present in almost all the baskets containing either of these two products. Out of the top 20 items by value in the cooking oil basket, there were seventeen household "essential"

consumables, two liquor items and one durable. In the chocolate basket, there were seven household "essential" consumables, four liquor items, eight "nonessential" consumables and one durable.

A different approach to the basket analysis is presented in exhibit 5.23. The question addressed was how often some of the top items, in terms of product count, in the "snacks, candy, chocolates, etc" department, were bought solo or with one other item. Examination of the top five items showed that nearly 50% of the times, they were bought solo. This adds to the insight regarding the small volume customer of the Mount Road store (exhibits 5.3 and 5.4), into the type of basket of such a customer. The top five candy and chocolate items, amounting to a total of nearly 6,800 solo purchases, constituted over 18% of the solo purchase baskets. This behaviour was reinforced by the fact that the Mount Road store is part of a shopping mall having trendy stores and an office complex. It is also interesting to note that the sixth top item (exhibit 5.23), a value pack of three chocolates (MRP Rs 35), had no solo buyers, while the same item as a one pack (MRP Rs 12) was bought solo 43% of the times. This suggests that value packs are outside the price range of the solo item shopper and/or value packs are picked up by the more serious shoppers.

In conclusion, the type of analysis done in this section would help the retailer to

- Define and target markets more proactively
- Identify peak days, hours and slack days, hours and the causes
- Promote off peak days to attract more traffic and,
- Provide information to customers to help them self select their visits from peak times to off peak times.

6.0 Merchandising

Merchandising is one of the most important functions of modern retail management. It deals with the question of how many SKUs (range of items, brands, pack sizes, etc.) to stock, how much quantity within each SKU, when to order and vendor development. Analogous to product management in a manufacturing enterprise, the merchandising function in a retail enterprise builds on category management. A category is a group of SKUs which could be substitutes and/or complements from the customer's perspective and hence require coordination in procurement. To put it in a different way, sales of items within a category are dependent on each other, while sales of items across categories are independent of each other.

Category Management

Some analysis possibilities that would lead to better category management are

- Category definition based on purchase basket
- Category wise contribution per unit space (space being a function of range of products offered)
- SKU wise contribution per unit space aggregated over time
- SKU wise contribution per unit space for specific time periods
- Quantity purchased per SKU (for pack size analysis)

The 6306 SKUs merchandised in FoodWorld were divided into 49 categories. We did not explore category wise analysis except for exhibit 5.23, which tries to identify the items which are purchased

solo, given the large number of solo purchase baskets. This has implications for procurement and display planning.

Exhibit 6.1 examines the top 100 SKUs by value at the Mount Road store over the four month period. These 100 SKUs (out of 5853 SKUs) effectively constituted the A category items, accounting for nearly 35% of the sales. These SKUs require more merchandising focus.

Pack Sizes

Exhibit 6.2 analyzes the distribution of purchase quantity per bill, for six SKUs, for the month of September 1998 in the Mount Road store. The per bill quantity of one was the highest for all the SKUs except Sundrop Oil 1 Lt Pouch and Golden Eagle Beer Deluxe 650 ML. In the case of the cooking oil, the highest amount was bought in the per bill quantity of two while in the case of beer, the highest amount was bought in the per bill quantity of twelve. This has implications for pack size while merchandising.

Inventory Planning

Possible areas of analysis to improve inventory planning using POS data are

- Forecasting of SKU wise sales, as a function of time, own promotion and promotion of competitor brand.
- Impact of stock out which could help determine appropriate service levels for stocking.

Exhibits 6.3 and 6.4 give the daily sales for 20 Kgs Ponni Raw Rice Premium and for Peppy Cheese Balls from August 1998 to November 1998 for the Mount Road Store respectively. The X axis marks every fifth day, while the histogram bars are marked for every day. A chart of this kind allows us to see sales trends as a function of time. In the case of rice, there were weekend peaks and festival peaks. However, the relative variance was lower in rice than in the case of cheese balls, which also had significant number of zero sales days. (The surge in sales for cheese balls towards the end of September could be attributed to a promotion campaign on this product which ran between September 20 and October 19, 1998.) The relative sales movement of these two products is presented in exhibit 6.5.

The impact of stock out was analyzed for an assorted chewing gum product. Exhibit 6.6 gives the stock out period (September 2 to 8, 1998) when the Centrefresh brand was not available while the competing brand was available at the Mount Road store. Exhibit 6.7 analyzed the pre, during and post stock out sales of the Centrefresh brand, it's main competitor, Wrigley's, and the chewing gum group (sub-category) for the four month period. The competitor sales went up during the stock out period. However, the overall group sales also went up, implying that the demand for chewing gum during the week went up due to other causes, and Centrefresh lost out on a possible opportunity. When the stocks were available, the average sales followed similar trends as the group sales, possibly implying that stock out did not have longer term effects. While obviously a more rigorous analysis over a longer period is called for, the likely hypothesis is that the stock out cost is restricted to the contribution lost during the stock out period.

7.0 Marketing

The important marketing decisions are pricing, service offers and promotion planning. POS data would enable analysis for these decisions. For example, in pricing, an SKU wise analysis of sales as a function of price, across competing products in a category and across price variations over time of the same SKU, etc. is possible. Similarly, the impact of service offers on various market segments can be examined. We explore some aspects related to promotion planning.

Promotion Planning

Exhibits 7.1 to 7.7 present the effect of promotion campaign on sales of seven selected SKUs across different categories. The analysis looks at various parameters like quantity per bill, quantity per day, bills per day, value per bill and value per day for the defined pre, during and post campaign periods during the four months. In the case of cheese balls and atta, there is also an analysis of these parameters for the group (sub-category). For the other SKUs, there is a category quantity per day analysis. However, it would be difficult to derive any implications unless the definition and constituents of the category are more rigourously understood. In all the SKUs, the quantity per day (and value per day) showed a perceptible increase during the campaign period. The increase in sales quantity per day was a result of more bills (customers) per day rather than the sales quantity per bill. The quantity sold per day during the post campaign period, in comparison with that during the pre campaign period, showed a discernible increase in the case of atta, puri balls and Perk Super Value pack, and a decrease in the case of floor cleaner and Dairy Milk chocolate. The other causal factors influencing this need to be better understood.

An analysis done internally for biscuits in FoodWorld showed that promotion of a brand not only increased the sales of the brand, but the entire product group, presumably because the promotion increased traffic to the shelf where biscuits were stocked. POS data should also allow analysis of the impact of campaign depending on the type of campaign (price discount, increased quantity offer, co-promotions, etc.) and the type of product (destination, convenience, etc.).

8.0 Store Management

Three key areas of store management are display planning (which needs close coordination with merchandising and marketing), store layout and manning.

Display and Layout Planning

In display and layout planning, the POS data would help in evaluating the effect of various choices on contribution per unit shelf space. Choices in display could be the quantity (and by implication shelf space) per SKU, combinations of SKUs (in accordance with typical purchase baskets), promotion information, etc. Choices in layout in a store could be location of products (at entry versus in the middle versus at the deep end, at special locations like near the billing counters or shelf ends, choice of shelf, etc), design of shelves (number, length, proximity, etc). An interesting implication for display and layout planning is obtained from Exhibit 5.23, which suggests that the top five candy and chocolate items accounted for 18% of solo purchases, which itself accounted for 26% of the bill count.

On the premise that customers need to be served faster, a separate display and billing counter for the top selling items in candy and chocolate could be considered. The location of such a display area could be either at the deep end or at the entry of the store, depending on whether we wish to attract the traffic into the store or not.

Manning

Decision areas related to manning are staffing of billing counters, service, security and back office over time of day and week. Organization of the billing counters (based on number of purchase items, mode of payment, etc) is also significant. Inputs for these decisions could be obtained from POS data analysis on day and time of purchase (exhibit 5.4 to 5.12 and 5.18 to 5.20), check out service times and duration of purchase in the store. Check out service times would help in queuing analysis. In the current context, check out service times can be obtained by examining successive check out times during periods of continuous operation of a billing counter. Duration of purchase in a store can be obtained by flagging in customers when they come in, as already described in section 4.

9.0 Limitations

This research is exploratory in nature and only serves the purpose of identifying various kinds of applications and analyses that the POS data can facilitate. It is in no way exhaustive or rigorous on either the application or analytical dimension.

We have not explored secondary material (literature) or how other retailers in India or abroad use POS data.

10.0 Suggestions

Our experience in working with the POS data brought forth the following suggestions which could be taken up for better use of the POS information for improved decision making.

- Automatic indenting/order processing should be implemented
- Matching with inbound scanning at warehouse and store receipts will enable assessment of inventory movements in the supply chain
- Transactions for internal administration should be separately flagged
- Bill numbers should be unique for a store over and analysis cycle (one day)
- Multiple records for the same product in the same bill should be consolidated as quantity increments
- Coding schemes need more thought for
 - fruits, vegetables, bakery, bread and buns, which could do with finer coding to enable appropriate analysis
 - relationship hashing between product code and group code to lend itself to ease of analysis
- Electronically readable loyalty cards would help in tracking customer's
 - purchase patterns over time
 - purchase behavior as a function of basic demographics
 - time spent per visit

Glossary

- # qty Hash Quantity
- Bcount Bill count
- Date The format used is M/D/YY
- Frq Frequency
- GDP Gross Domestic Product
- Items used synonymously with SKUs
- MRP Maximum Retail Price
- POS Point of Sale
- Product used synonymously with SKUs
- Qtysum Quantity Sum
- SD Standard Deviation
- SKUs Stock Keeping Units
- Value Sales value in Rs

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- Gary Russell and Ann Petersen, Analysis of Cross Category Dependence in Market Basket Selection, Journal of Retailing, Vol. 76(3), pp. 367-392, 2000

List of Exhibits

- 5.0 Market Definition and Segmentation
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- 6.3 Mount Road: Daily quantity 20 Kgs Ponni Raw Rice Premium product from August 1998 to November 1998
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7.0 Marketing

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- 7.6 Mount Road: Campaign Effect on product/group behavior Chocolate Coated
- 7.7 Mount Road: Campaign Effect on product/group behavior Mints/Candy/Sweets

Exhibit 5.1

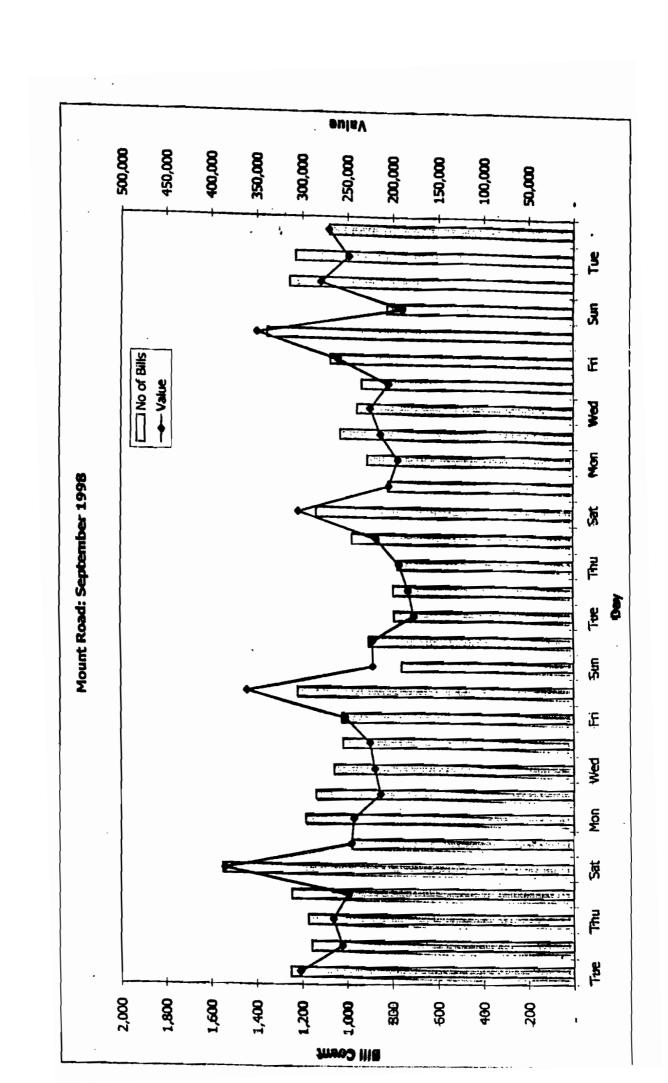
			%	23	17	20	14	6	11	5	2	0	0	0	0	0	0	0	0	0	0	0		
Days	ays	Annanagar	Frq	28	21	24	17	11	13	9	2	0	0	10	10	0	0	0	0	0	0	0		122
ion across	No. of Days	-	%	10	0	0	3	2	2	4	5	5	13	16	19	12	5	0	2	1	7	7:		
Bill Count Distribution across Days		Mt. Road	Frq	0	lo	0	4	\{\mathbf{E}\}.	2	5	19	9	16	20	23	15	[9	0	3;	1	ĵ.	6	-	122
Bill Co		- - -	Range	650	700	750	800	820	8	920	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500			
			Bill Count Range	:009	651	701	751	801	851	106	951	1,001	1,051	1,101	1,151	1,201	1,251	1,301	1,351	1,401	1,451	1,591+		Total

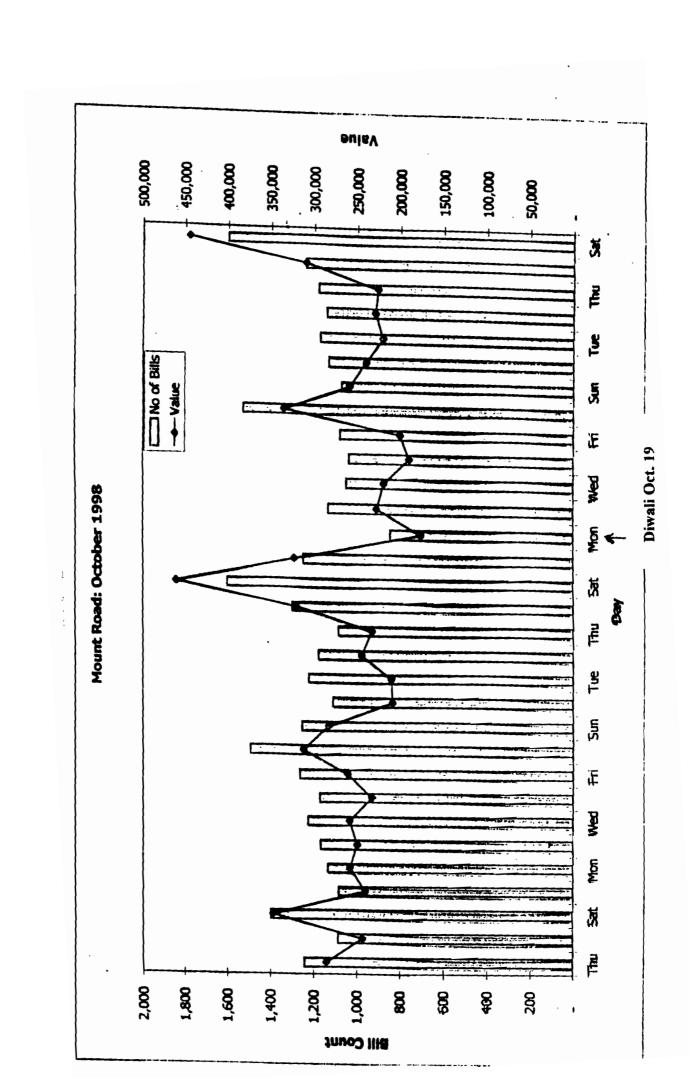
Exhibit 5.2

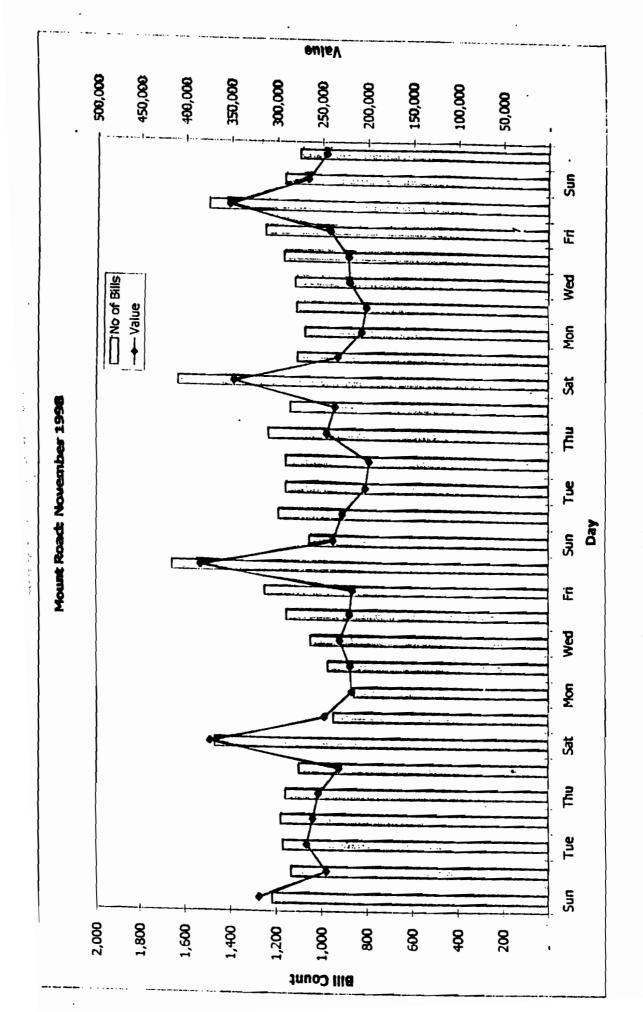
	Value	Distributio	Value Distribution across Days	ys	
			No. of Days	Jays	
•		Mt. Road	peo	Annanagar	igar
Value Range	ange	Frq	%	Frq	%
80,000	100,000	0	0	1	1
100,001	120,000	0	0	16	13
120,001	140,000	0	0	12	10
140,001	160,000	0	0	271	77
160,001	180,000	7	2	19	16
180,001	200,000	7	 9	17.	14
200,001	220,000	22	20	6	7
220,001	240,000	27	77	9	2
240,001	260,000	27	22	6	7
260,001	280,000	7	9	2	7
280,001	300,000	2	4	4	3
300,001	320,000	2	4	0	0
320,001	340,000	3	2	0	0
340,001	360,000	7	9	0	0
360,001	380,000	7	2	0	0
380,001	400,000	m	7	0	0
400,000÷	- -	2	2	0	0
	· - -			·	
Total		122	4	122	

Exhibit 5.3

	Distributio	n of Bill Va	lue across	Bill Count	
Value Ra	inge (Rs)		Total (Bi	Il Count)	
		Frq	%	Cum.	% Cum
0.01		2,652	7.54	2,652	7.54
10.01		3,447	9.80	6,099	17.35
. 20.01	30	2,405	6.84		24.19
30.01	40	2,422	6.89	10,926	31.08
40.01	50	2,124	6.04	13,050	37.12
50.01	60	1,453	4.13	14,503	41.25
60.01	70	1,245	3.54	15,748	44.79
70.01	80	1,246	3.54	16,994	48.34
80.01	90	1,127	3.21	18,121	51.54
90.01	100	1,191	3.39	19,312	54.93
100.01	110	776	2.21	20,088	
110.01	120	723	2.06		57.14
1 120.01		695		20,811	59.20
. 130.01	140	643	1.98	21,506	61.17
140.01	150		1.83	22,149	63.00
150.01	160	627	1.78	22,776	64.79
160.01	170	589	1.68	23,365	66.46
170.01		484	1,38	23,849	67.84
180.01	180	494	1.41	24,343	69.24
	190	550	1.56	24,893	70.81
190.01 200.01	200	390	1.11	25,283	71,92
			4.76	26,955	76.67
250.01	300	1,484	4.22	28,439	80.89
300.01	350	1,042	2.96	29,481	83.86
350.01	400	924	2.63	30,405	86.49
400.01	450	646	1.84	31,051	88.32
450.01	500	516.	1.47	31,567	89.79
500.01	550	471	1.34	32,038	91.13
550.01	600	371	1.06	32,409	92.19
10.003	650	. 278	0.79	32,687	92.98
650.01	700	288	0.82	32,975	
700.01	750	222	0.63		93.80
750.01	800	183		33,197	94.43
800.01	850	149	0.52	33,380	94.95
850.01	900	151	0.42	33,529	95.37
900.01	950	163	0.43	33,680	95.80
950.01	1,000		0.46	33,843	96.27
1,000.01	1,500	129			96.63
1,500.01	2,000	618	1.76		
2,000.01	2,500	275	0.78	34,865	99.17
2,500.01	3,000	111	0.32	34,976	99.49
3,000.01	3,500	65	0.18	35,041	99.67
3,500.01		30	0.09	35,071	99.76
4,000.01	4,000	19	0.05	35,090	99.81
4,500.01	4,500	7	0.02	35,097	99.83
5,000.01	5,000	4	0.01	35,101	99.84
5,500.01	5,500	9	0.03	35,110	99.87
	6,000	2 3	0.01	35,112	99.87
6,000.01	6,500		0.01	35,115	99.88
6,500.01	7,000	0	00.0	35,115	99.88
7,000.01	7,500	1	0.00	35,116	99.89
7,500.01	8,000		0.01	35,119	99.89
8,000.01	8,500	3. 2	10.0	35,121	
8,500.01	9,000	i	0.00	36 (53)	99.90
9,000.01	9,500	Ö	0.00	35,122 35,122	99.90
9,500.01	10,000	Ó	0.00	35,122	99.90
	-		4.44	73,1641	33.30
10000+		341	0 10		
		34	0,10	35,156	100.00







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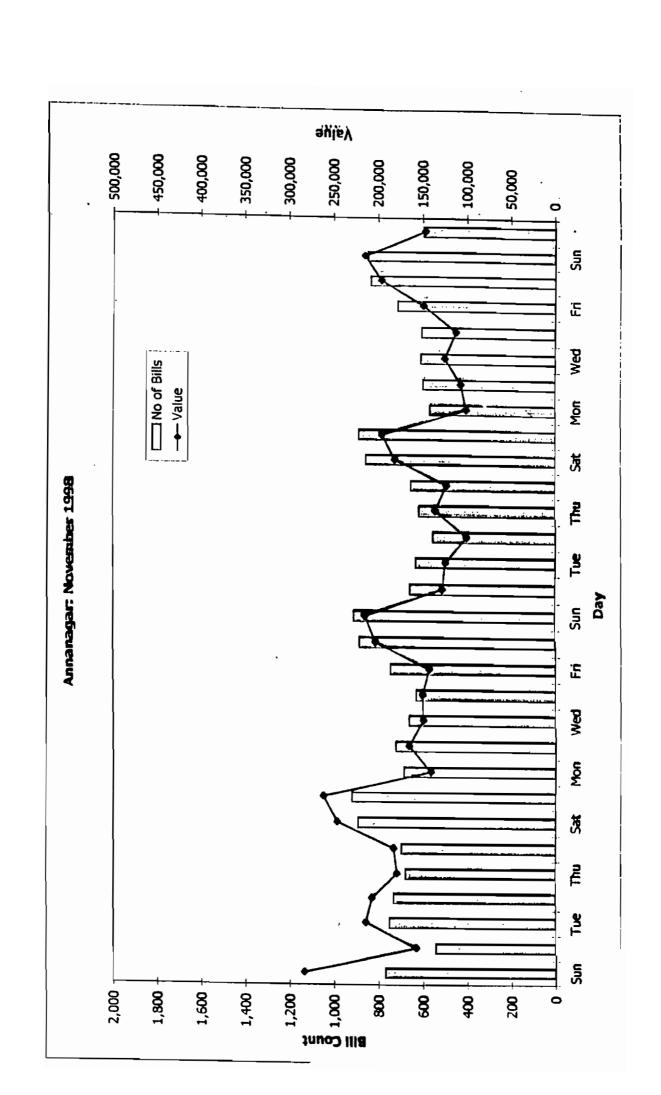


Exhibit 5.13

	Mou	nt Road: M	Mount Road: Monthly Aggregates	sgates		
Months	Aug-98	Sep-98	Oct-98	Nov-98	Totals	Average
Bill Count	36,576	31,563	37,458	35,479		35,269
Product/SKU	199,797	190,437	199,741	194,556	784,531	196,133
Qrysum	264,626	253,610	270,976	260,019	-	262,308
Value	7,815,106 7,361,	7,361,888	7,361,888 8,242,859 7,5	7,554,947	30,974,800	7,743,700
Value per bill	213.67	233.24	220.06	212.94		
CS	22.98	, 24.94	26.77	24.88	26.29	_
Value per SKU	39.12	38.66	41.27	38.83		
Value per # qty	29.53	29.03	30.42	29.06	29.52	
SKU per bill	5.46		5.33	5.48	5.56	
# aty per bill	7.23			7.33	7.44	
	SD 0.88	0.92		0.98	96.0	
# qty per SKU	1.32	1.33	1.36	1.34	1.34	

Exhibit 5.14

	Ann	ianagar: Mc	Annanagar: Monthly Aggregates	gates		
Months	Aug-98	Sep-98	Oct-98	Nov-98	Total	Average
Bill Count	23,994	21,388	22,522	21,452	89,356	22,339
Product/SKU	194,898	168,272	171,959	166,895	702,024	175,506
Qtysum	243,316	210,621	214,003	207,860	875,800	218,950
Value		4,927,345	5,530,334	5,050,176	21,184,770	5,296,193
Value per bill	236.60	230.38	245.55	235.42	237.08	
QS.	D 38.08	32.37	59.77	42.42	44.82	
Value per SKU	29.13	29.28	32.16	30.26	30.18	
Value per # qty	23.33	23.39	25.84	24.30	24.19	
SKU per bill	8.12	7.87	7.64	7.78	7.86	; ;
# qty per bill	10.14	9.85	9.50	69.6	9.80	
-	SD 1.42	1.16	1.55	1.22	1.37	
# qty per SKU	1.25	1.25	1.24	1.25	1.25	

		Mount Road: Aggregates	Aggregates		
		Across 4 months Weekdays	Weekdays	Saturdays	Sundays
No. of days		122	98	18	18
	Total	141,076	26,077	26,663	18,336
Boount	SD	184.93	112.35	137.49	143.97
	Mean) (1,156	1,117	1,481	1,019
	Total	784,531	505,745	158,682	120,104
Product/SKU count	SD	1,263.71	720.54	720.69	795.26
	Mean	6,431	5,881	8,816	6,672
	Total	1,049,231	679,342	212,426	157,463
Chysum	റ്റ	1,677.97	937.55	994.99	1,130.08
	Mean	8,600	7,899	11,801	8,748
	Total	30,974,800	20,036,653	6,487,700	4,450,447
Value	SD	54,811.21	28,352.32	42,132.85	35,551.57
	Mean	253,892	232,984	360,428	247,247
SKU per day		6,430.58	5,880.76	8,815.67	6,672.44
SKU per bil		5.56	5.26	5.95	6.55
#qty per day		8,600.25	7,899.33	11,801.42	8,747.94
#qty per bill		4.7	6.88	7.73	8.31
#qty per SKU		1.34	1.34	1.34	1.31
Value.per day		253,891.80	232,984.34	360,427.77	247,247.06
Value per bill		219.56	208.55	243.32	242.72
Value per SKU	-	39.48	39.62	40.88	37.05
Value per #qty		29.52	29.49	30.54	28.26

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		Annanagar: Aggregates	gregates		
	_	4 months	Weekdays	Saturdays	Sundays
No. of days		122	86	8	18
	Total	89,356	59,029	14,808	15,519
Boount	S	105.80	80.49	60.22	78.61
	Mean	732	989	823	862
	Total	702,024	441,276	124,880	135,868
Product/SKU count	SD	1,447.56	1,061.48	1,118.34	1,045.96
	Mean	5,754	5,131	6,938	7,548
	Total	875,800	552,984	156,218	166,598
Otysum	S	1,755.79	1,310.77	1,344.34	1,279.68
	Mean	7,179	6,430	8,679	9,255
	Total	21,184,770	13,352,972	3,787,581	4,044,217
Value	S	47,147.58	36,789.98	41,548.37	36,092.64
	Mean	173,646	155,267	210,421	224,679
SKU per day		5,754.30	5,131.12	6,937.78	7,548.22
SKU per bill	: ;	7.86	7.48	8.43	8.75
#qty per day	:	7,178.69	6,430.05	8,678.78	9,255.44
#dty per bill		08.6	9.37	10.55	10.74
#qty per SKU		1.25	1.25	1.25	1.23
Value per day	ı	173,645.66	155,267.12	210,421.15	224,678.73
Value per bill		237.08	226.21	255.78	260.60
Value per SKU		30.18	30.26	30.33	29.77
Value per #qty		24.19	24.15	24.25	24.28

		Æ	Annanagar: Aggregates	egates			
		4 months	Weekdays	Saturdays	days	Sunc	Sundays
				First+Last	Rest	First+Last	Rest
No. of days		122	98	8	10	8	10
	Total	89,356	59,029	6,742	8,066	6,664	8,855
Bcount	SD	105.80	80.49	56.32	58.39	75.61	72.96
	Mean	732	989	843	807	833	988
	Total	702,024	441,276	62,021	62,859	63,184	72,684
Product/SKU count SD	S	1,447.56	1,061.48	1,145.06	496.17	1,027.20	974.15
	Mean	5,754	5,131	7,753	6,286	7,898	7,268
	Total	875,800	552,984	77,391	78,827	77,809	88,789
Otysum	S	1,755.79	1,310.77	1,292.29	700.79	1,261.99	1,163.85
	Mean	7,179	6,430	9,674	7,883	9,726	8,879
z . <u> </u>	Total	21,184,770	13,352,972	1,914,053	1,873,528	1,919,556	2,124,661
Value	S	47,147.58	36,789.98	40,792.27	24,056.90	36,535.76	30,681.41
	Mean	173,646	155,267	239,257	187,353	239,944	212,466
SKU per day		5,754.30	5,131.12	7,752.63	6,285.90	7,898.00	7,268.40
SKU per bill		7.86	7.48	9.20	7.79	9.48	8.21
#opy per day		7,178.69	6,430.05	9,673.88	7,882.70	9,726.13	8,878.90
#aty per bill		08 .6	9.37	11.48	9.77	11.68	10.03
#4ty per SKU		1.25	1.25	1.25	1.25	1.23	1.22
Walue per day		173,645.66	155,267.12	239,256.63	187,352.76	239,944.48	212,466.12
Varius per bill		237.08	226.21	283.90	232.27	288.05	239.94
Value per taku		30.18	30.26	30.86	29.81	30.38	29.23
Value per #aty		24.19	24.15	24.73	23.77	24.67	23.93

Mount Road: Hourly Aggregates for Sep'98

India: Institute of Management. Ahmedabad

204.3

7,169.650

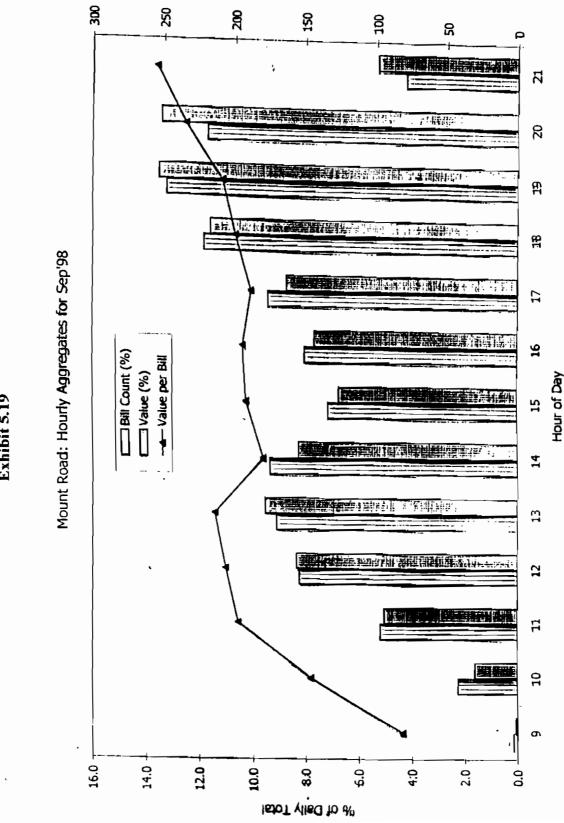
1,170

per day

35,101

Total

Exhibit 5.19



Value per BIII

Mount Road: Hourly Aggregates

Segment			-	912	12-15	15-18	18-21	21-23	Total
	Days		22				-		_
				1,933	6,827	6,166	9,345	1,085	25,356
	Bill Count %	% 1		7.62	26.92	7	Š	4.28	
Woolds.		Mean		88	310.	280	425	49.	1,153
weekuay.				318,703	1,302,862	1,109,674	1,109,674 1,960,549	263,248	4,955,036
	Value	%		6.43	26.29	22.39	39.57	5.31	
		Mean		14,487	59,221	50,440	89,116:	11,966	225,229
	Value/Bill		} <u>-</u> .	164.87	190.84	179.97	209.80	242.62	195.42
	Days		4		-			-	
				437	1,551	1,524	2,128:	287	5,927
	Bill Count %	%		7.37	. 26.17	25.71	35.90	4.84	
100		Mean		<u>ē</u>	388	381	532	7	1,482
Saturoays	ļ 			87,043	333,872	352,429	499,664	92,164 1	1,365,172
	Value	%		6.38	24.46	25.82	36.60	6.75	
		Mean		21,761	83,468	88,107	124,916	23,041	341,293
	Value/Bill			199.18	215.26	231.25	234.80	321.13	230.33
	Days		4	-			-		
				302	1,005	523	1,424	₹ E	3,818
	Bill Count %	%		7.91	26.32	24.93	37.30:	3.34	
0.00	_	Mean		19/	757	238:	356	፟፠	186 186
Surradys			-	76,680	240,086	195,891	303,404	33,381	849,442
	Value	%		9.03	28.26	23.06	35.72	3.93	
		Mean		19,170	60,022	48,973	75,851	8,345	212,361
	Value/Bill			253.91	238.89	205.77	213.06	247.27	222.48
	.Days		Š						
				2,672	6,383	8.542	12,897	1,507	35,101
	Bill Count %	%		7.51	26.73	24.62	36.74	4.29	
Ę		Mean		68	313	28E	430	.0≤	1,170
3			7	482,426	1,876,520: 1	1,657,994	2,763,617	388,753:7,169,650	,169,650
	Value	%		6.73.	26.18	23.13	38.55	5.45	
		Mean		16,081	62,561	55,266	92,121	12,960	238,988
	Value/Bill			180.55	200.02	191.85	214.28	257.99	204.26

Indian Institute of Management, Ahmedabad

Exhibit 5.21

Mount Road Store (Aug '98 to Nov '98)

_	_								_																
	%		4.41	12.87	2.67	0.18	1.42	1.17	0.41	0.25	0.16	0.41	0.15	0.03	0.35	0.19	0.03	0.16	0.41	0.03	0.07	0.12	_	25.49	
	Gtysum		1,873	5,467	1,135	77	6 05	864	175	105	29	174	29	13	150	83	14	99	172	12	28	49		10,824 25.49	42,464
	%		10.20	3.88	2.39	2.13	1.50	D.74	0.72	0.62	0.53	0.49	0.42	D.41	D.40	0.39	0.36	0.34	0.33	0.32	0.30) as ·a	-		
9	Value		117,118	44,539	27,423	24,440	17,262	8,451	8,249	7,162	6,122	5,655	4,779	4,758	4.554	4,515	4,136	3,897	3,784	3.636	3,436	3,430		307,326 26.77	1,148,087
ter by Valu	% of Total	Bill Count	103.57	336.04	93.76	6.42	43.98	25.96	13.47	7.67	5.71	12.93	4.10	1.07	11.06	6.16	1.16	4.37	10.70	0.18	2.14	3.12		_	1,
20 Product Clus	Product Count % of Total	*	1,161	3,767	1,051	72	493	291	151	98	3 5	145	46	121	124	69	13	49	120	2	24	32	-	-	
Sundrop Oil 1 Lt Pouch - Top 20 Product Cluster by Value	Code Product Name P		1 145091 SUNDROP OIL 1 LTS POUCH	2 110001 VEGETABLES	3 110002 FRUITS	4 100152 PONNI RAW RICE PREMIUM 20 KGS	5 994301 BREAD & BUNS	6 100112 SUGAR 1 KG	7) 101117/TOOR DHAL PREMIUM 1KG.	8 145116 IDHAYAM GINGELLY OIL 1 LTR	9 101116 TOOR DHAL PREMIUM 2 KGS	10 160100 PEPPER 100 GMS	11 194076 CADBURYS BOURNVITA REFILL 500 GMS	12 501001 ROYAL CHALLANGE WHISKY 1000ML	13 100125 URED DHAL WHITE WHOLE 1 KG	14 171151 AAVIN COOKING BUT TER 500 GMS	15 601015 VINTAGE PREMIUM WHISKY 750ML	16 222005 ALL OUT LIQUID REFILL	17 171142 FOODWORLD PANNEER 200GMS	18 320094 MILTON PANGER 3	19 190084 INESCAFE SUNRISE PREMIUM INST 200GM	20 220197 SURFEXCEL MATTC 500GMS		Top 20 products by value	Total for 3347 products
	Sr No.		1 14	2 11	3 11	4 10	5 9	6 10	7 10	8 14	9 10	10 16	11 19	12 50	13 10	14 17	15 60	16 22	17 171	18 320	19 190	20 22		_	-
	ঠ		L_			L																			

0.10 8,460 12.22 0.07 0.05 0.80 8 0.07 0.29 95,0 212-0.31 0.58 0.17 0.15 9.0 0.56 0.22 355, 206 19, 94 20, 229 29, 22 2,249 Otysum 4,978 1,594 67 8 9 51 8 557 2 TE N 401 901 88 69,221 3.78 3.28 1.23 25.0 0.47 0.46 4.0 4 0.43 0.42 940 0.39 0.33 0.33 8 67,285 49,780 8,352 58,423 38,108 21,3940 18,556 9,702 7,4586 **[011/** 7,457 7,021 6,306 5,890 106'5 5,835 6,057 1,781,314 Value 191.63 68.99 Product Count | % of Total 101.83 41.05 1.10 1.93 0.83 5.30 0.30 Bill Count 11.70 1.20 0.87 2.30 2.00 6.07 1.7 5.50 2.57 20.6 0.87 Nestle Charge 40 gms - Top 20 Product Cluster 5,747 2,069 3054 1,231 88 23 159 26 36 69 60 165 351 R 289 145085|FLORA SUNFLOWER OIL 1 LTR POUCH 601001/ROYAL CHALLANGE WHISKY 1000ML 100152 PONNI RAW RICE PREMIUM 20 KGS **501015|VINTAGE PREMIUM WHISKY 750ML** 173108 SUMERU PERED PRAWNS 3UMBO 192004 COCOCOLA CONTAINER 1.SLTRS 171142/FOODWORLD PANNEER 200GMS 145091 SUNDROP OIL 1 LTS POUCH 502009|OLD-CASK RUM 750ML 500358|CADBURY'S GOLD 44 GMS 500357 NESTLE CHARGE 40 GMS 121255 CADBURYS PICNIC 38GM Hop 20 products by value NAME 192005 COLA TIN 330ML |Total for 3952 products **506010 KING FISHER BEER** 184024|SUZANNES B.F.F. 994301 BREAD & BUNS 261000 PET PRODUCTS 110001 VEGETABLES 193022 ONJUS 1LTR 110002|FRUTTS Sr No PRODUCT 4 क व्य E 4 7 Ø, 6 젎 豆 # 田 16 18 5 20

8

Mount Road Store (Aug '98 to Nov '98)

indian instructe of Management, Ahmedabad

Exhibit 5.23

Snacks, Candy, Chocolates etc

RODUCT	NAME	Solo	%	With 1 other %	Tota
500357	NESTLE CHARGE 40 GMS	1491	47	725. 23	316
121304	NESTLE POLO'MINT	1569	53	656 22	
500358	CADBURY'S GOLD 44 GMS	1383	47:	674 23	
121255	CADBURYS PICHIC 38GM	1142		744 26	
121560	FADRIDYS DEWY STOME	1188	43	728 26	
121261	PARHIBUE ANAM ALMAN ALLA SERVICE		0	1224 40	
121003	ALPENLIEBE MILKY CARAMEL CANDY 35 COOK	016	E0		
121314	NESTLE POLO FRESHMINT 25GM	. 012	50 0.	384 24	
121594	NESTLE LION BAR 45GM	. 0	U,	744 50	
121238	ALPENLIEBE MILKY CARAMEL CANDY 35 GMS ALPENLIEBE MILKY CARAMEL CANDY 35 GMS NESTLE POLO FRESHMINT 25GM NESTLE LION BAR 45GM CADBURYS PERK 17.5GMS MALTAA JUJUIPS 100GMS FÖX GLACIER MINTS 100GM POUCH LABBURYS CORRES	636	0 55 42 0	518 37	
186101	MALTAR INTUINE LOOMS	036	55	273 23	
121669	FRY GLACIED MINTE LOCKY POLICE	468	42	265 , 24	
121584	EABBURY'S COOGLY 100GMS	j 0 .	0,	268. 33	
544444	CADBURYS COOGLY 100GMS ALLENS SPLASH 65GMS NESTLE NUTS 50 GMS CADBURYS CREATRY BAR 105GMS	0,	0,	200 30	7
#RVPc	NEETI E KITTE EA AND	0		. 264 36	7
121278	MESILE NUIS SU GMS	227	38	131 22	5
1212/4	CAUBURTS CREAMY BAR 105GMS	0	0	286 49	5
151001	FUX TROP. FRUIT/GLACIER FRUITS 100GM PCH	. 176	35	113 22	
180105	MALIATORANGE CANDY 100GMS	155	34		_
186103	MALTAN JEERA CANDY 100GMS	140	32	114 26	
186111	MALTAA GINGER CANDY 50GMS	150	35		
121433	TOBLERONE 35G X 3	0	0	196 47	
121005	FÜX TROP. FRUIT/GLACIER FRUITS 100GM PCH MALT/MORANGE CANDY 100GMS MALTAA JEERA CANDY 100GMS MALTAA GINGER CANDY 50GMS TOBLERONE 35G X 3 ALPENLIEBE POUCH 10'S	186	40.		
185060	M B PRODUCTS BUTTER BISCUITS 200 GMS PARRYS SOFT SPOT 250 GMS M B SWEET CRISP 2003MS	0	7U,		
500081	PARRYS SOFT SPOT 250 GMS	0	0	164 51	
186084	M B SWEET CRISP 2003MS	0,			
121596	FOX BLACK CURRANT/ORG/STRBRY 250GM TIN	0	0		
121434	ALPENLIBE STICK 4'S	77.		GO 24	
121512	PARRY LACTOR FOR HONEME	. 87	37		
121591	PARRY LACTORING BOOGMS AFTER EIGHT 200GM	_ 0,	0		2
121467	PARRY COFFEE BITES 200 GMS	89	43	37 18	. 2
121130	CAMMINISTES ESTATE CHOSEN AND AND AND AND AND AND AND AND AND AN	0.	Ò		
121483	CADBOURIES ECLAIR CHOCOLATE 100 GRAMS QUALITY STREET 240GM	64,	38	16 27	_
\$000kb	POLO FRUIT RING 5S	O,	Ó		_
INKURK	M B BUTTER RELIES	69	45		
131383	M B BUTTER BEANS 200GMS	3	0	86. 58	
121203	M B PRODUCT MOGHUL JUJUBEE 100 GRAMS TOX GLACIER FRUITS 250GM TIN	; 0	Ŏ	72: 50	_
121399	TOX GLACIER FRUITS 250GM TIN	. 15	32.		14
121616	FARRY TRY ME 200GMS	0	0,	34 24	
121515	TOFFO SOOGMS	47,		60, 46	
121597	FOX GLACIER TROPICAL FRUITS 250G	1		34, 29	
171214	PARKITS COFFEE BITE FORCES	30,	26;	34, 29	
1210(12	ALPENLIEBE MILK CARAMEL CANDY 646 AVA	0	0.	40 36	
121330	TON GUILLER MINTS DEROM TIM	36	34	20, 19	
121103	PARRY LACTORING SWEET SOLVERN	j 27 ₁	28.	23, 24	ġ
121194	PAKKY ANY TIME KONGME	0	0	34 39	8
121577	PARRY ORANGÉ ČANDY 200 CMC	20	23	22, 26	8
141300	PARRY LACTO BON AMN JON CARC	30	42.	16 22	
141209	PARRY CARAMII K KOOGME	į O'	O:	28, 40,	-
121592 (QUALITY STREET 210CM	25	37 ;	17 25	
186104	MALTAA STRONG PEPPERMINT 100GMS	26	41	11, 17,	
4.12149F	PARRY PAN MAZA 200 GMS	20	33	16, 26	6
1215A2	PARRY MR. P.NUT 500GMS	0	0	20 33	6
	THE PROPERTY OF THE PROPERTY O	1	32	20, 33,	u

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	1 % Value %		147,816 14.09 1.176,468 3.80	3.91 1.100.013	0.14 532,896	2.52	458,520		1	215,552	0.09 176,130	0.02 156.523	0.23 145,665	0.02 143,835	0.33 135,420	0.40 133,376	0.15 132,972	D.D.7 127,492	<u> </u>	13 0.18 118,984 0.38	0.62 110,856	0.56 102,891	0.05 101,230	138 0.01 99,588 0.32) TOTO	Bi 0.03/ 93.755/ 0.30
	1% of Total Otysum	Bill Count	76.14	26.70	0.69	14.90	0.36	0.42	0.25	0.72	0.47	0.11	0.80 2,	0.10	1.79	0.37 4,145	727.1 18.0	93	D-40		2.63	2.08 5,910		0.08	第一班(10.08i	0.15
Top 100 - Value	Product Count %		107,416 13.70	37,668 4.80	21.0 868 0.12	21,026 2.68	1,213 0.15	80.0 593 0.08	358 0.05	1,012 0.13	80.0 599	152 0.02	1,134 0.14	137 0.02	2,521 0.32	522 0.07	1,143 0.15	489 0.06	571 0.07	1,187 0.15	3,714 0.47	2,928 0.37	367 798	11.4 0.01	552 0.07	וממ ובנו	1222 D.TIBI
Top	Product Name		110001 VEGETABLES	FRUITS	3 601001/ROYAL CHALLANGE WHISKY 1000ML	4 994301 BREAD & BUNS	5 100152 PONNI RAW RICE PREMIUM 20 KGS	6 601015 VINTAGE PREMIUM WHISKY 750ML	7 261000 PET PRODUCTS	BI 5060101KING FISHER BEER	9/ 5020089JOLD CASK RUM 750ML	10 601037 SEAGRAMIS 100 PEPER SCOTCH WHY 750ML	11 14508SHEORA SUMPLOWER OIL 1 LTR POUCH	12 601036 TEACHERS HIGHLAND 750ML	13 192004 COCOCOLA CONTAINER 1.5LTRS	14 606006 GOLDEN EAGLE BEER DELUXE 650ML	15 194076 CADBURYS BOURNVITA REFILL 500 GNS	16 EDITZS/MCDOWEIL NO 1 WHISKY 750ML	17 BOZOOSIOLD MUNK RUM 750ML	18 145091 SUNDROP OIL 1 LTS POUCH	19 100112 SUGAR 1 KG	20 192005 COCO COLA TIN 330ML	21 500008 MCDOWELL NO-1 BRANDY 750ML	22/ 500096/OLD SMUGGLER 750ML	-	24 603.034 FINDLATERS FINEST SCOTCH WHISKY 750ML	25 600097 FINDLATERS FINEST SCOTCH WHERY 375 ML
	S. Pcode		1 110001	2 110002 FRUITS	3 601001	4 994301	5 100152	6 601015	7 261000	8 506010	6 502039	0 601037	1 145085	2 601036	3 192004	4 606006	5 194076	5 कागळ्ड	7 502005	3 145091	100112	192005	800009	1800096	3 SQ1008	F-CHE 2	5000975
	Sr No.											Ä	1	H	H	7	귀	퓌	H	#	붜	7	7	ห	KI	~	- 2

Exhibit 6.1

Exhibit 6.1 (contd..)

26 200045 DOVE SOAP 100 GRAMS 27 171142 FOODWORLD PANNEER 200GMS 28 193022 ONJUS 1LTR 29 600009 MCDOWELL NO-1 BRANDY 375ML 30 600010 B NEPOLJON BRANDY 750ML	1,254 1,287 1,287 1,287 1,287 1,287 1,280	% % % % % % % % % %	% of Total! Bill Count 0.89 1.85 0.91 0.58 0.20	Qtysum 2,068 2,068 2,199 2,199 924 358	0.20 0.37 0.21 0.09 0.09	Value 93,060 85,976 84,040 81,622 81,622	% 0.30 0.28 0.27 0.26 0.26
31 171151 AAVIN COOKING BUTTER 200 GMS 32 601012 MCDOWELL NO-1 WHISKY 375ML 33 601012 MCDOWELL NO-1 WHISKY 375ML 34 171159 AAVIN TETRAPACK MILK 1000 ML 35 192003 FANTA PET BOTTLE 1.5 LTRS	1,202 73 670 1,367 1,447	0.03	0.05	3,067 1,771	0.03	75,188 75,188 73,322 70,216 70,004	0.23 (24 (25 (25 (25 (25 (25 (25 (25 (25 (25 (25
37 601017 BAGPRPER WHISKY 750ML 38 121255 CADBURYS PICNIC 38GM 39 173108 SUMERU P=== ED PRAWNS JUMBO 40 20139 PONNI BOILED RICE 10KG 41 500358 CADBURYS GOLD 44 GMS	272] 2,845i 204 325i 2,924	0.03 0.36 0.03 0.09 0.09	0.19 2.02 0.14 0.23 2.07	371 4,785 404 405 4,256	0.04	64,7851 64,7851 64,7501 63,8401	0.22
42 101117/TOOR DHAL PREMIUM 1KG. 43 601016/VINTAGL PREMIUM WHISKY 375ML 44 606009/KALYANI BEER 45 601019/BAGPIPER GOLD WHISKY 750ML	1,180 367 507 507	0.05i 0.05i 0.03i	0.84 0.26 0.36 0.15	1,345 421 1,750 278	0.03 0.03	63,461 63,150 63,015 62,831	0.20
46 601013 MCDOWELL PREMIUM WHISKY 750ML 47 605011 MARCÓBOLO BEER 650ML 48 601005 WHYTE & MACKAY 15 YRS 750 ML 49 600015 V S O P EXSHAW BRANDY 750ML 501038 WHYTE & MACKAY SPI. RESERVE 750 ML	3051	0.021	0.03	227 2,006 41 213	0.02i	62,218i 62,210l 59,409l 58,964l	0 0 0 0 0

Exhibit 6.1 (contd..)

	%		0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	7.16	7.16	0.16	7.15	3.15	0.15	0.15	0.15	0.15
	Value	_	57,8:4	57,55.5	57,338	56,05R		55,415	L_		52,644	1	51,740		51,267		1 1		49,962[(69,900		47,607 0	47,436 (47,230 0	47,22 6 i C	46,883 0	46.400
	%	_	0.42		0.02	0.08	0.04	0.28	0.09	0.17	0.15	0.03	0.01	0.11	0.12	0.49	0.03	0.12	0.40	0.15	0.04	0.26	0.08	0.05	0.07	0.08	0.00[
	Otysum		4,381	3,306	177	988	441	2,920	923	1,738	1,595	288	Ø	1,140	1,219	5,100	355	1,274	4,194	1,606	426	2,776	856i	502	755	839	31
	1% of Total	Bill Count I	2.69	2.12	0.12	0.45	0.29	1.69	0.49	0.89	0.41	0.17	0.05	0.70	0.65	2.24	0.21	0.62	1.97	0.20	0.26	1.27	0.29	0.26	0.42	0.43	0.02
	% %	9	0.48	0.38	0.02	0.08	0.05	0.30	0.09	0.16	0.07	0.03	0.01	0.13	0.12	0.40	0.04	0.11	0.35	0.04	0.05	0.23	0.05	0.05	0.08	0.08	0.001
/afue	Product Count		3,792	2,987	167	633	415	2,383	689	1,255	583	235	76	1886	912	3,166	292	878	2,774	281	371	1,789	416	363	1265	50 6 i	31
Top 100 - Value	Sr No. Pcode Product Name Prod	ار	51 186028 K S SNACKS POTATO CHIPS 100 GMS	52 186037 K S SNACKS SAVOURIES 200 GMS	53 145094 SUNDROP SUPER REFINED SUNFLOWER OILSLTRI	54 103155 ANNAPOORNA ATTA 5KG.	55 50041 ARIEL COMPACT 1KG CANISTER DETR POWDER	56 1864011STS SPECIAL THATTAI 200GMS	571 222005IALL OUT LIQUID REFILE	58 1212611CADBURYS PERK SUPER VALUE PACK 105GMS		601-6040051R M VODIKA 750ML	61 320382DO ALL VEG CUTTER	S	63 154084 F.W. CASHEWNUTS ROASTED 100 GMS	641 SD0357INESTLE CHARGE 40 GMS	65 601022 V.S.O.P.EXSHAW BRANDY 375 ML	661 121287 NFSTI = KIT KAT 100GMS	671 121260ICADBURYS PERK 35GMS	68 606005 GOLDEN EAGLE BEER 650ML	69 600011 NAPOLEAN BRANDY 375ML	701 192006 FANTA TIN 330ML	71 Z0188ISUNGOLD SUNFLOWER OIL 1KG POUCH	72! 601018 BAGPIPER WHISKY 375ML	731 203104 LAKME ULTRA CREAME LIPSTICK	74 160160 BADAM 100 GMS	75 393086 OLYMPUS IRONING BOARD

	%	\vdash	45.614 0.15	1	Г	.L	1	1	1		ı				1	1	1	80 0.13	40 0.13	ı	ı	50 0.13	ı	36 0.13	77 0.13	0 0.12	6 0.12	_	7 34.48	Ī
	Value		ľ		ĺ		ĺ		43,875			42,934			ĺ							41,360	40,8	39,896	38,857	38,10	37,226		34.43 10,674,457 34.48	20.00
	% - 0	_	051 0.30	0.57	1	ı	241 0.02	L	ı	ı	ı	2 0.03	L.	1		ı	1 0.13	0.00)	0.43	3 0.05	ı	,	0.28	ı	J	0.09	0.05			-
	Il Otysum		3,105				ĺ		1,350			362	461	1,8	*	4,887	1,391	S S	4,501	573	234	188	2,924	1,209	401	gg.	358		361,035	222 011 1 040 752
	% of Total	Bill Count	1.32	2.56	0.37	0.34	0.13	0.31	0.80	60:0	0.01	0.21	0.29	0.93	0.37	3.05	0.57	0.04	2.67	0.32	0.16	0.11	1.40	0.24	. 112.0	0.26	0.34	_	183.54	110 1111
	%	_	3 0.24	0.46	0.07	0.06	0.02	90.0	0.14	0.02	0.00	9.04	0.05	0.17	0.07	0.55	0.12	0.01	0.48	0.06	0.03	0.021	0.25	0.049	0.04	0.05	0.05		33.02	
Top 100 - Value	Product Count		1,868	3,616	220	486	185	434	1,123	129	16	295	416	1,314	523	4,298	940	DS.	3,754	445	230	152	1,969	343	292	371	473		258.926	C3C 207
Top 1	Product Name		121283INESTLE KIT KAT 35GMS	77 121282 NESTLE KIT KAT 17 GMS	78 145116 IDHAYAM GINGELLY OIL 1 LTR	79) 602006/OLD MUNK RUM 375ML	80 600006jjohnex Brandy 750ML	101116 TOOR DHAL PREMIUM 2 KGS	82 160100 PEPPER 100 GMS	83 202088 SENSOR EXCEL 10'S BLADE	84 416170BRAUN SILK EPIL COMFORT BODY SYSTEMER220	INESCAPE SUNRISE PREMIUM INST 200GM	86 500271 WHISPER MAXI 20 PADS	87 182113 MAGGI TOMATO SOUP 70 GMS	88 170006 NESTLE MILO CHOCO DRINK REFIL 500 GMS	IK S SNACKS SAVORIES ASST 100 GMS		91 S00332/SUNDROP SUNFLOWER OIL 15 LTR CAN	92 186340 SEEMATI ASSORTED SAVOURES 100GMS	93 121090 CADBURYS ECLAIRS 604 GM	94 202087 SENSOR EXCEL 5'S BLADE	NESCAFE SELECT INSTANT COFFEE 200 GMS	96 121089 CADBURYS DAIRY MILK 48 GRAMS	97 606012 MARGOBOLO BEER STRONG 650ML	98I 603006 BLUE RIBBON GIN 375ML		ARIEL COMPACT DET. POWDER 500 G		Total for 100/3833 products	Total for 5853 projects
	Pcode		12128	12128	14511	60200	900009		160100	202086	416170	190084	500271	182113	170006	186036	184024	500332	186340	121090	202087	190072	121089	606012	603006	606008	220022			_
	Sr No.		76	2	78	73	8	81	82	83	\$	8	8	87	88	83	8	91	22	93	8	95	96	97	88	8	ğ			_

o 100 gms	Total Qty	447	. 226	69	40	40	30	14	24	6	90	11	12	15	16	18	20	42	1,123
- Dove Soap	Bill Count	447	113	23	10	8	5	2	3	1	6	1	1	#-T	1	1	1	1	628
200045	Unit aty	7	2	m	4	2	9	7	8	6	10	11	12	15	16	18	20	45	1.79

6 2 12 7	14		23	23	223	9
	9 1	5 9 4	4000	W 4 N 0 K	0 W 4 W 0 V	1 2 8 4 2 6

Mount Road Store - Distribution of Purchase Qty. for Sep. '98

ıg₃r 1 KG	Total Qty	298	350	189	104	240	9	. 14	10	18	1,529
- S	Bill Count	865	175	63	76	48	1	2	1	1	915
100112	Unit qty	1	7	3	4	2	9	7	10	18	1.67

	ζţ	175	270	27	88	15	74	8	9	<u></u>
I Lt Pouc	Total (•	617
Sundrop Oil 1 Lt Pouch	Bill Count	175	135	6	22	3	4	1	1	320
145091 - 51	Unit qty	1	2	3	4	2	9	8	10	1.76

	10 617	350	<u>9</u>
	8	1	
	24	4	
	15	3	
	88	22	4
	27	6	
Maximum	270	135	

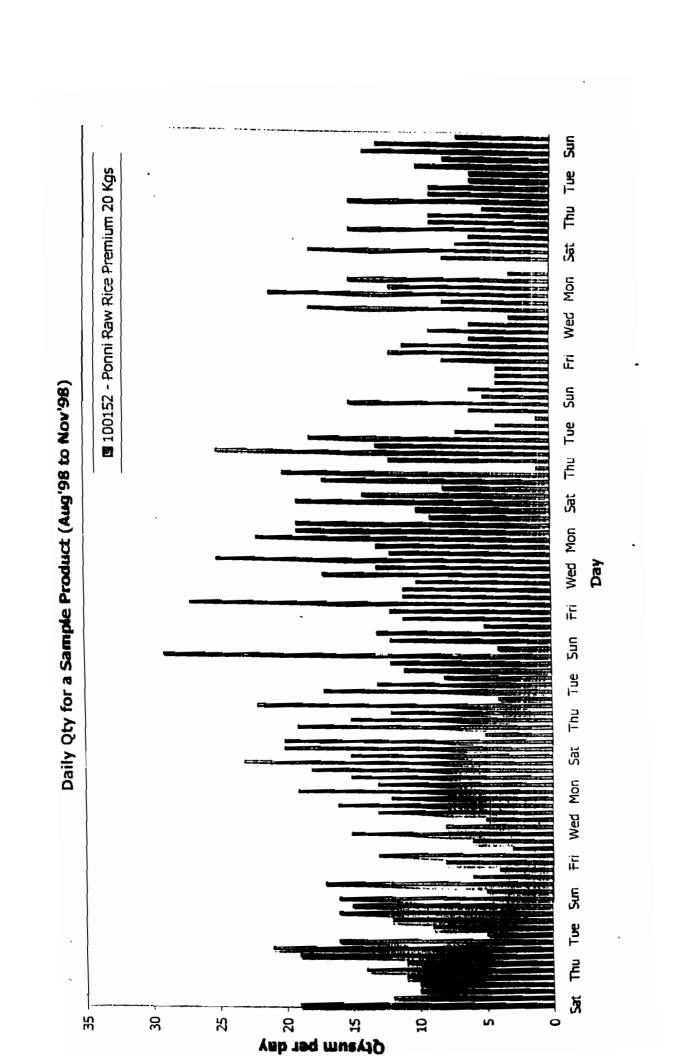
4

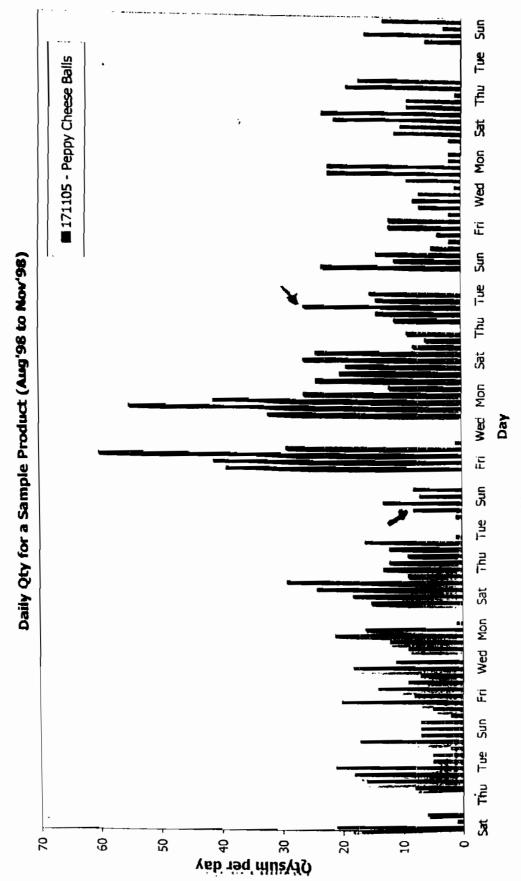
831	388	2.14
32	1	32
24	1	24
15	1	15
108	16	12
20	2	10
7	1	7
30	5	9
30	9	5
9/	19	4
06	30	3
172	86	7
227	227	T
Total Qty	Bill Count	Unit qty
* Milk 1 Lt	171159 - Aavin Tetrapack Milk 1 Lt	171159 - 1

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Exhibit 6.2 (contd..)

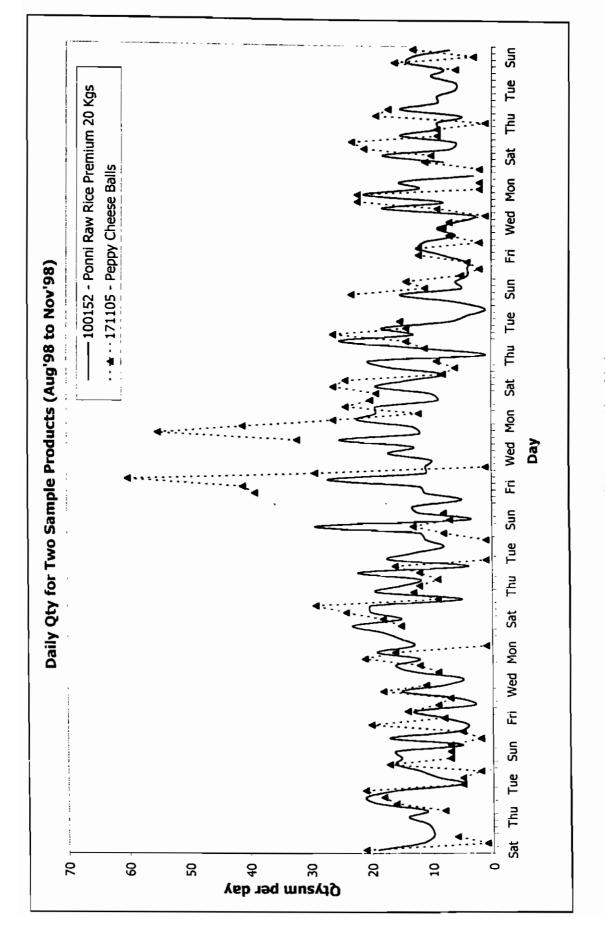
· - -			تحديد			****					Maximum							
LERING DOU MI	Total Ory	35	72	23	Æ	15	120	7	24	20	240	20	120	32	216	144	8	1,227
bubuub - Golden tagie Beer Weruve buu Mi	Bill Count	SE	386	砂 耳	ਲ	3	. 20		3	. 2	20	1	5	1	9	3	1	160
05) - 070000	Unit aty	1	7	E	4	2	9	1.	8	10	12	02	54	32	96	48	84	7.67





9/20 - Campaign Period - 10/19

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- i	121202 Bill Count	Centrefres	- Centrefresh Chewing Gilm Otysum Oty/Bill Value	₹	t. 5 pcs Value/Bill 5.0	620	Otysum 291	121640 - Wrigley's Chewing Gum Assorted II Count Otysum Oty/Bill Value Value/B 18 29 1.6 1.74 9	Value 174	Value Value/Bill
	5 2	5 æ	0.1	4	5.0		29	1.6	1 1	7.6
K.	S Q	121	1.2	9	6.0		33	9	- 1	4.6
S	121	22	1.8	110	9.2	51	45	2.4	- 1	14.2
Mon	ē	<u>6</u>	1.5	45	7.5	7	7	1.0	ō	9.0
Tue	47	171	1.2	821	6.1		1		1	7
× ed	18	ন	1.2	110	6.1			1	-	(
교	111	13	1.2	62	5.9		7	1.5		2) 6
Œ	80	<u></u>	1.0	4	0.0	ET	18	₹ i		2) C
Sat	æ	6	1.1	₹ 7	5.6	78	4	<u>ה</u>	<u>\$</u>	20,00
Still	7	<u>a</u>	1.3	45	6.4	32	R	1.7	318	7.7
Σ	-	1	1.0	·	5.0	52	33	7	210	₩.
9	2	77	1.0	10	5.0	23	2	1.6	777	9.7
3	-	-	-	_		30	23	1.8	318	10.6
āt:	+	+		-		43	20	1.6	420	9.8
3	+	+	-	-		37	[99	1.8	396	10.7
= }	-	-	-			42	32	1.38	4,00	10.9
	-	-	-		 	30	44	1.5	<u>4</u>	8.8
513	-	-	-	-	-	เฉ	42	1.8	252	11.0
	-		-	-	-	E	14	1.1	84	6.5
	-	۲	7	1951	6 1	151	77	1.5	132	8.8
		2 2	1 -	100	6.8	æ	76	2.5	456	15.2
	07	ž K	-	175	6.3	76	43	1.7	2581	9.9
Ē 3	194	8	Ç.	940	7.4	44	112	2.5	672	15.3
		3 2	7	275	63	31	52	7.1	312	10.1
uns !		7 7		98:	5.9		33	1.5	198	4.9
		7	Į -	707	14		1	1.8	84	10.5
		-		İ	in in	151	32	7.1	1921	12.8
	101	į	1	145	in S		133	1.4	1381	8.6
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E		ā lē	1 2	, Jac	8		25	<u>יי</u>	150	8.8
Sar	7.	à	1	101	;					

) .l			Sock	Stockout Scenario					
				- 206	907 - ChewingGum					
				Products	St				Group	
		121202 - Centrefres	efresh Chewing	th Chewing Gum Asst. 5 pcs	121640 - Wr	121640 - Wrigley's Chewing Gum Assorted	Gum Assorted	- 206	907 - Chewing Gum	ium
		F F	During*	Post	Pre	During*	Post	Pre	During	Post
Days		32	7	E8	32	7	83	32	7	8
Strack out days		FF .	7	8	14	ਰ	13	0	0	ਰ
Available days		£)	10	22	181	71	(3)	3.21	71	88
Bill Count		928	0	1,086	263	218	831	1,903	4391	5,116
 }		424	0	1,449	442	365	1,449	2,938	731	8;758
Value		2,120	Ö	7,246	7597	2,190	9,876	20,276	5,023	56,840
100	Mean	1.30	0.00	1.33	1.68	1.67	1.74	l		EZE
	S.D.	0.22	ō	2E 30	1940	0.25	0.43	Ø18	1520	0:27
	LES.	14.62	0.00	ZE 51	24.56	52.14	22.29	5.	10443	105.52
	202	10.94	0	15.18	10.91	19.66	18.85	34.23	30.3T	48:87
1	Mesarr	11.24	0.00	14.48	14.61	31.14	12.7年	班和	62.71	GT. 64
App and suits	SD.	831	Ö	11.63	9.11	9.93	8.51	18.82	13.73	27.06
4150	T T T	6.50	0.00	6.67	10.08	10.05	11.88	10.65	/11 年	11.11
varue per pur	:a:s	111	10	1.58	2.64	1.51	3.29	1.31	1.33	1.92
	Mean	£ 73.101	0.001	119:96	► (147.33	312.36	151.94	(633.61)	11/2/	35.43.60
value per day	S.D.	54.70	jo 	75.89	70.96	117.94	121.95	230.29	203.56	301.93
			_							
				 Stock out period was 9/2/98 to 9/8/98 	d was 9/2/98	86/8/6 01				•

Indian Institute of Management, Ahmedabad

171015 - Peppy Cheese Bails* Group 171015 - Peppy Cheese Bails* Group 171015 - Peppy Cheese Bails* Group Stock out days S1 29 42 51 29 42 Stock out days 8 6 9 51 29 42 Stock out days 8 6 9 51 29 42 Stock out days 8 6 9 51 29 42 Stock out days 8 52 33 14,428 9,288 13,232 Available days 4,740 4,360 3,400 169,976 109,048 13,232 Value per Bill Mean 11.02 24.00 10.30 282.90 320.28 315.05 Oty per day Mean 1.02 24.00 10.30 282.90 320.28 315.05 Sills per day S.D. 6.84 15.23 6.97 90.08 90.84 87.45 Value per Bill Mean 16.87 13.09 17.00 1.030 3.764.09 Value per day Mean 10.23 189.57 103.03 3.332.85 3.760.28 3.764.09 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,071.43 Value per day S.D. S.D.	out days ble days unt per Bill per day		9	4 - Brandad	Charke			
out days Free body Cheese Bails* Group out days Free blied days During Post Post Pree During Post Post Pree During Post Post Pree During Post Post Pree During Pree During<	out days ble days unt per Bill per day			30255				
per days Pre day Pre day Post and a	out days ble days unt per Bill per day		171015 -	Peppy Chee	se Bails*		Group	
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ble days 8 6 9 P	out days ble days unt per Bill per day		51	59	42	51	59	42
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per Bill Mean 474 552 340 14,428 9,288 15 per day Mean 1.69 1.69 1.69 1.69 1.69 1.69 1.69 1.50 1.69 1.69 1.69 1.69 1.69 1.50 1.50 1.70 <	per Bill		281	333	200			
per Bill Mean 4,740 4,360 is 3,400 is 169,976 is 109,048 is 15 is 1.70 1.69	per Bill		474	252	340	14,428	9,288	13,232
per Bill S.D. Mean S.D. 1.69 on 1.66 1.70 on 1.70 1.70 on 1.70 <td>per Bill per day</td> <td></td> <td>4,740</td> <td>4,360</td> <td>3,400</td> <td>169,976</td> <td>109,048</td> <td>158,092</td>	per Bill per day		4,740	4,360	3,400	169,976	109,048	158,092
S.D. 0.50 0.30 0.58 90.28 320.28 3 Mean 11.02 24.00 10.30 282.90 320.28 3 S.D. 6.84 15.23 6.97 90.08 90.84 S.D. 3.76 9.01 3.61 80.84 Mean 16.87 13.09 17.00 8.76 S.D. 5.01 2.36 5.76 8.76 S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,0 * 20% price off between 9/20/98 and 10/19/98 3.760.28 3.760.28 3.760.28 3.760.28 3.760.28		Mean	1.69	1.66	1.70			
Mean 11.02 24.00 10.30 282.90 320.28 3 S.D. 6.84 15.23 6.97 90.08 90.84 Mean 6.53 14.48 6.06 90.84 S.D. 3.76 9.01 3.61 8.02 Mean 16.87 13.09 17.00 8.76 S.D. 5.01 2.36 5.76 8.76 S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,0 * 20% price off between 9/20/98 and 10/19/98 10/19/98 10/19/98 10/19/98 10/19/98		S.D.	0.50	0.30	0.58			
S.D. 6.84 15.23 6.97 90.08 90.84 Mean 6.53 14.48 6.06 90.08 90.84 S.D. 3.76 9.01 3.61 80.00 90.84 Mean 16.87 13.09 17.00 80.00 17.00 80.00 S.D. 5.01 2.36 5.76 8.76 103.03 3,760.28 3,7 S.D. 68.43 121.87 69.70 1,036.05 1,145.31 1,0 * 20% price off between 9/20/98 and 10/19/98		Mean	11.02	24.00	10.30	282.90	320.28	315.05
Mean 6.53 14.48 6.06 6.06 S.D. 3.76 9.01 3.61 7 Mean 16.87 13.09 17.00 7 S.D. 5.01 2.36 5.76 8 S.D. 68.43 121.87 69.70 1,036.05 1,145.31 * 20% price off between 9/20/98 and 10/19/98		S.D.	6.84	15.23	6.97	90.08	90.84	87.45
S.D. 3.76 9.01 3.61 Mean 16.87 13.09 17.00 S.D. 5.01 2.36 5.76 Mean 110.23 189.57 103.03 3,332.85 3,760.28 S.D. 68.43 121.87 69.70 1,036.05 1,145.31 * 20% Drice off between 9/20/98 and 10/19/98		Mean	6.53	14.48	90.9			
Mean 16.87 13.09 17.00 S.D. 5.01 2.36 5.76 Mean 110.23 189.57 103.03 3,332.85 3,760.28 S.D. 68.43 121.87 69.70 1,036.05 1,145.31 * 20% price off between 9/20/98 and 10/19/98		S.D.	3.76	9.01	3.61			
S.D. 5.01 2.36 5.76 Mean 110.23 189.57 103.03 3,332.85 3,760.28 S.D. 68.43 121.87 69.70 1,036.05 1,145.31 * 20% price off between 9/20/98 and 10/19/98		Mean	16.87	13.09	17.00			
Mean 110.23 189.57 103.03 3,332.85 3,760.28 S.D. 68.43 121.87 69.70 1,036.05 1,145.31		S.D.	5.01	2.36	5.76			
S.D. 68.43 121.87 69.70 1,036.05 - 1,145.31		Mean	110.23	189.57	103.03	3,332.85	3,760.28	3,764.09
* 20% price off between 9/20/98 and 10/19/98		S.D.	68.43	121.87	69.70	1,036.05	- 1	1,071.43
* 20% price off between 9/20/98 and 10/19/98							-	
		* 50	% price off	between 9/2	20/98 and	10/19/98		

		E.	Campaign Effect on Product/Group Behaviour	ct on Proc	iuct/Group	Behaviour.		
				301 - Atta	Vtta			
			16047	160471 - Pilsbury Atta	y Atta		Group	
			Pre	During	Post	Pre	During	Post
	Days		19	31	72	61	31	72
	Stock out days		8	3	42	છા	α	0
	Available days		11	28	30	19	31	72
	Bill Count		35	500	136	943	1150	2686
	\ \		37	682	166	1,389	1,510	3,777
	Value		1,221	19,096	5,773	40,126	43,832	107,539
	Oty per Bill	Mean	1.06	1.36	1.22	1.47	1.40	1.41
		S.D.	0.08	0.24	0.27	0.29	0.18	0.16
^	Oty per day	Mean	3.36	24.36	5.53	73.11	51.94	52.46
		S.D.	2.19	12.92	2.75	25.57	16.59	19.02
	Bills per day	Mean	3.18	17.85	4.53	49.63	37.10	37.31
•		S.D.	1.99	7.86	1.93	16.56	10.72	11.61
	Value per Bill	Mean	34.89	38.19	42.44	42.55	38.11	40.04
		S.D.	2.72	6.72	9.31	14.13	5.54	7.20
1	Value per day	Mean	111	289	192	2,112	1,414	1,494
		S.D.	72.12	361.70	96.06	775.62	523.44	538.50
		* RS	Rs 5 price off between 8/20/98 and 9/19/98	between	8/20/98 and	d 9/19/98		
-								

221038 Lizol Floor and Bathroom Cleaners 200 ml	room Cleaners 200 ml	
MRP: Rs 18.00	Sale Price: Rs 15.00	Discount: 16.67 %
	Pre During	Post
Period	22 Aug-20 Sep 21 Sep-19 Oct	Oct 20 Oct-17Nov
Duration	30	29 29
Saturday	5	4
Sunday	4	4
No Bill Days	0 .	0
Bill Count	154	231 70
Quantity	168	266 77
➤ Bill Count per Day	5.13	7.97 2.41
Quantity per Bill	1.09	1.15 1.2
➤ Quantity per Day	5.6	9.17 2.66
Category Quantity	1434	1340 1151
Category Quantity per Day	47.8	46.21 39.69

- ----

605 Unbrand 1860 80 Mints Snacks Puri Balls 6 pcs	605 Unbranded Snacks ri Balls 6 pcs	Snacks	
Normai Price: Rs 3.50	Discount Price: Rs	rice: Rs 2.97	Discount: 15 %
	Pre	During	Post
Period	1 Aug-19 Aug	20 Aug-19 Sep	20 Sep-20 Oct
Duration	19	31	31
Saturday	8		5
Sunday	m	7	5
No Bill Days	. 2		0
Bill Count	283	926	563
Quantity	434	1584	\$ 863
Bill Count per Day	14.9	30.8	18.2
Quantity per Bill	1.53	1.66	1.53
Quantity per Day	22.8	51.1	27.8
Category Quantity	13754	23162	21048
Category Quantity per Day	723.7	747.2	629

	ous Unbranded Shacks	S	
1860 90 Mitts Dhal Ring			3
Normal Price: Rs 8.50	Discount Price: Rs 7.23	Rs 7.23	Discount: 15 %
	Pre During	D)	Post
Period	1 Aug-19 Aug 20 Aug-19 Sep	ug-19 Sep	20 Sep-20 Oct
Duration	19	31	31
Saturday	က	3	4
Sunday	e .	4	5
No Bill Days	Ö	0	0
Bill Count	266	883	385
Quantity	367	1352	551
Bill Count per Day	14.	28.5	12.4
Quantity per Bill	1.38	1.53	1.43
 Quantity per Day 	19.32	43.61	17.77
	·		
Category Quantity	13754	23162	21048
Category Quantity per Day	y 723.7	747.2	629

Exhibit 7.6

	904 Choc Coated		
121089 Cadburys Dairy Milk 48 gms	k 48 gms		
MRP: Rs 15.00	Sale Price: Rs 13.00		Discount: 13.33 %
	Pre During		Post
Period	22 Aug-20 Sep 21 Sep-19 Oct		20 Oct-17Nov
Duration	30	58	29
Saturday	.5	7	4
Sunday	4	4	4
No Bill Days	0 🕻	0	0
Bill Count	535	551	365
Quantity	094	216	572
Bill Count per Day	17,83	19	12.59
Quantity per Bill	1742	1.66	1.57
→ Quantity per Day	25:33	31.62	19.72
Category Quantity	3009	2453	1950
Catanony Organity ner Day	100.3	84.6	67.24

903 Mints/ Candy/ Sweets	burys Perk Super Value Pack 105 gms	Sale Price: Rs 29.00 Discount: 12.12 %	Pre During Post	19-19 Aug 20 Aug-19 Sep	19 31 31	3 5 4	3 4 5	3 0!	41 540 256	132 1398 844	2.16 17.42 8.26	3.12 2.59 3.3	6.95 45.1 27.23	11664 24996: 25858	643 0 806 3 824 4
808	121261 Cadburys Perk Super V	MRP: Rc 23.00	J. J	Period 1 A	Ē	Saturday	Sunday	No Bill Days	Bill Count	Quantity	→ Eiil Count per Day	Quantity per Bill	→ Quantity per Day	Category Quantity	Category Organitiv per Day

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