

## **Demand Driven Supply Chains – The Evolution of Customer Demand**

*The following article was written by Inez Blackburn, Market Techniques and Innovations, Markettechniques.com*

The best supply chains aren't just fast and cost-effective, they are also agile and adaptable, and they ensure that all processes and technologies are anchored to a strong value proposition for their customers.

Revolutions begin long before they are officially declared. For many years businesses have been struggling with how to increase profits exclusively through productivity and cost reductions and have concluded that new strategies and competitive realities demand new skills, processes and technologies. The days of driving market share through price and promotion are over, as consumers today want the fountain of youth at a discount. Reacting to your customers current needs are not enough, as you must understand the evolution of your customers requirements over time. In order to do this you must understand what drives customer satisfaction and loyalty and motivates competitors to target your customers. Visibility across your supply chain in an environment of collaboration with your trading partners is a critical success factor of supply chain efficiency and customer satisfaction.

Accurately and consistently forecasting demand requires the combined knowledge of all stakeholders and key influences at all customer touch points. Understanding sociological, psychological and situational forces that influence buying behavior must also be understood and reflected in the forecast. Grouping customers into strategic clusters and mapping consumer decision trees will improve forecast accuracy by creating a matrix and hierarchy of key influences. Ethnicity and acculturation should also be considered, as various ethnic groups represent a major force in Canada. You can no longer group consumers by income and size of household you must group consumers by the value they represent and their potential for growth. If you cannot understand your customer and the evolution of their needs you cannot accurately forecast their demand.

An accurate snapshot of consumer preferences can be created by grouping customers in accordance to buying motives. Consumers today buy into an experience rather than a product. Consider the value you are bringing to your customers through your products and services rather than focusing exclusively on product attributes. At the end of the day, if you don't correctly identify your target consumer and corresponding needs you cannot accurately forecast their demand. Accurately planning and forecasting is therefore the first step in deploying a demand driven supply chain.

Accurately forecasting demand has evolved into a collaborative and complex process that touches all points in the supply chain. Forecast accuracy will depend on and continue to draw from a disparate group of data sources and technologies, processes and preferences in the name of service, accuracy and efficiency. The shortest road to success will lie in your ability to leverage the combined strength of your organization, your people, your processes, and your technologies and the synergy these assets have with your trading partners and customers.

### **Trends to consider and opportunities they create!**

What do baby boomers want? – The fountain of youth at a discount! What do teenagers want? – They

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want value and someone else to pay for their purchase! What does a specific ethnic group want? – They want to be understood and respected!

It is my belief that our Retail landscape has evolved into a paradigm of globally enabled supply chains. Technology is changing at an exponential pace rendering laggards obsolete with each passing day. Communities of commerce have replaced communities of interest fueled by escalating competition and the power of the Internet. Consumers have been conditioned to demand more and pay less. Speed, accuracy, accountability and efficiency will remain centre stage and we will continue to embrace IP enabled solutions as the main catalyst for change in the evolution of Demand Driven Supply Chains.

The ability to capture and store information dates back many decades, but the ability to send, interpret and leverage information in real time through collaboration, is truly a revolution. Information technology has and will continue to change the way we work and play but even more important, it will impact how we learn and receive health care, how governments run, how ethnic groups preserve their culture, whose voices are heard and how nations are formed.

We can now shop from home, receive health care advice from home, work from home and get an education from home; unfortunately we must be at home to receive the goods and services that we order from home. Online purchases should therefore consider convenience in receipt where orders can be sent to a retail format close to the consumer location rather than traditional mail or courier. The internet will continue to play a pivotal role in how we work, play, entertain and communicate as we are propelled forward in the name of technology and service. Consumers react in a confluence of circumstance fueled by relevance, desire and convenience.

The late, Michael Dertouzos, former Professor at the Massachusetts Institute of Technology and Director of the M.I.T. Laboratory for Computer Science (LCS) from 1974 to 2001, believed that stores of the future will not carry a single product, but rather possess multiple cubicles outfitted with a: large video screen, a small tabletop which has a keyboard and a mouse, a few chairs, a microphone systems that records speech, special goggles, and some neatly instrumented gloves. Consumers shopping for clothes will stand in the front of a 3-D scanner that will take their measurements and then project an image of what each item will look like on the subject in question. Consumers of the future will select items from an electronic catalogue as if they were looking in a mirror. Consumers will also reap the rewards of more efficient global supply chains, as retailers continue to source products from around the world. There will be an explosion in smart electronics where taking a shower will result in a complete body scan and analysis of overall health.

During the past 15 years leading companies that focused on building and rebuilding supply chains to deliver goods and services to consumers as quickly and inexpensively as possible have realized varying degrees of success. Firms that invested in state-of-the-art technologies often proved to be inadequate which lead to the hiring of top notch talent. Many companies also teamed up to streamline processes, lay down technical standards, and invested in infrastructure they could share. For instance, in the early 1990s, American apparel companies started a Quick Response initiative, grocery companies in Europe and the United States touted a program called Efficient Consumer Response, and the U.S. food service industry embarked on an Efficient Foodservice Response program.

Interestingly, there is one fundamental problem that most companies and experts continuously ignore: Companies whose supply chains became more efficient and cost-effective often didn't gain a sustainable advantage over their rivals. In fact, in many cases the performance of those supply chains steadily deteriorated. For instance, despite the increased efficiency of many companies' supply chains, the percentage of products that were marked down in Canada and the United States rose from less than 10% in 1980 to more than 20% in 2007, and surveys show that consumer satisfaction with product availability fell sharply during the same period. Selling products efficiently across your supply chain

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without a measurable improvement on customer satisfaction will not result in a competitive advantage or a demand driven supply chain.

Top-performing supply chains possess three very different qualities.

1. Demand driven supply chains create an environment of trust by deploying processes that are compatible with your trading partners
2. Great supply chains are agile and are fueled by demand driven models they react speedily to sudden changes in demand or supply.
3. They adapt over time as market structures technologies and strategies evolve.
4. They align the interests of all the firms in the supply network so that companies optimize the chain's performance when they maximize their interests.
5. They result in a stronger value proposition for their customers at a reduced cost
6. They promote an environment of trust through effective Collaboration on key process, Planning Forecasting and Replenishment (CPFR)

### **Conclusion:**

Only supply chains that are collaborative, agile, adaptable, and aligned with the evolution of their customer provide companies with a sustainable competitive advantage and excellence in customer service.

*MTI Market Techniques & Innovations Inc. is an interdisciplinary firm dedicated to helping clients to maximize potential by developing and deploying market strategies that strengthen their value proposition. Creating a balance between emerging technologies and the evolution of consumer needs is critical to success. Market Techniques and Innovations helps corporations and government clients through: Customized, University-level, training and seminars for technology-based marketing; Supply Chain Strategies, CPFR (Collaborative Planning Forecasting and Replenishment) Strategic consulting; and Market Research.*

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### **Profit and Margin Update**

*The following data is sourced from Statistics Canada. The initial overview section is from the StatsCan report, "The Daily," February 21. The food and beverage manufacturing and retailing data is a specific Statistics Canada data run for the George Morris Centre.*

Statistics Canada released its "Quarterly financial statistics for enterprises," report for 2007 and fourth quarter 2007. Canadian corporations earned record high operating profits of \$262.5 billion in 2007, led by gains in the banking, retail, wholesale and petroleum refining industries. Fourth quarter operating profits edged up 0.5%, following quarterly gains averaging 3.7% in the previous two quarters. About half of the 22 industry groups lost ground in the quarter, with the manufacturing sector reporting the biggest decline.

Consumers propelled total retail profits to an all-time high of \$16.5 billion from \$13.6 billion in 2006. Operating revenues jumped 7.5% to \$433.2 billion for the year. Strong employment levels and higher disposable income helped prop up consumer demand. Clothing, department and other general merchandise stores fared well, as profits surged 26.3% to \$5.6 billion. Record high levels of residential building activity contributed to the demand for household related merchandise.

Manufacturers earned operating profits of \$45.0 billion in 2007, up 5.4% from 2006. Much of the gain was concentrated in petroleum, food and soft drinks, and computers and electrical products industries.

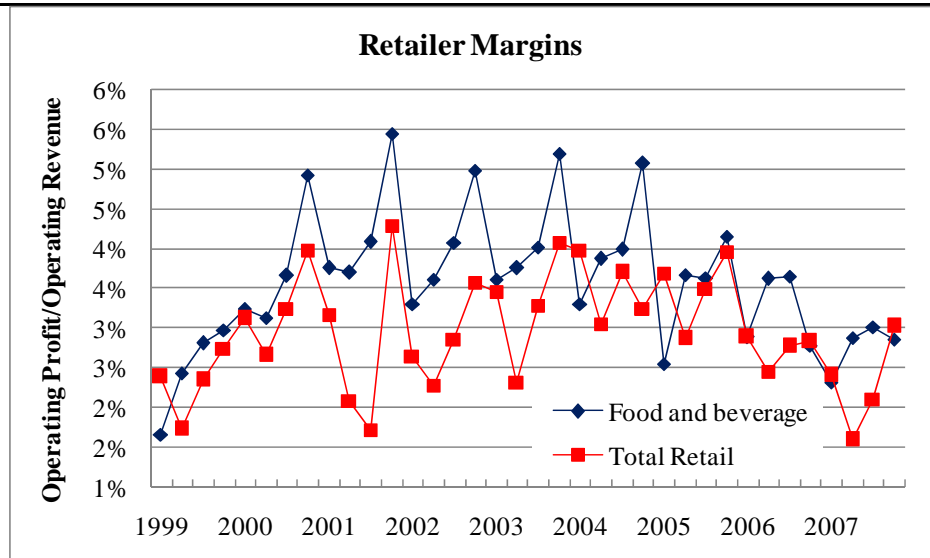
**Retailing**

The figure 1 shows Canadian operating margins for food and beverage stores as well as for total Canadian retailers. Food retailers saw operating margins hit 2.9% in the fourth quarter of 2007 while the average margin for 2007 was 2.8%. The average margin in 2006 was 3.2% and the five year average margin was 3.8%.

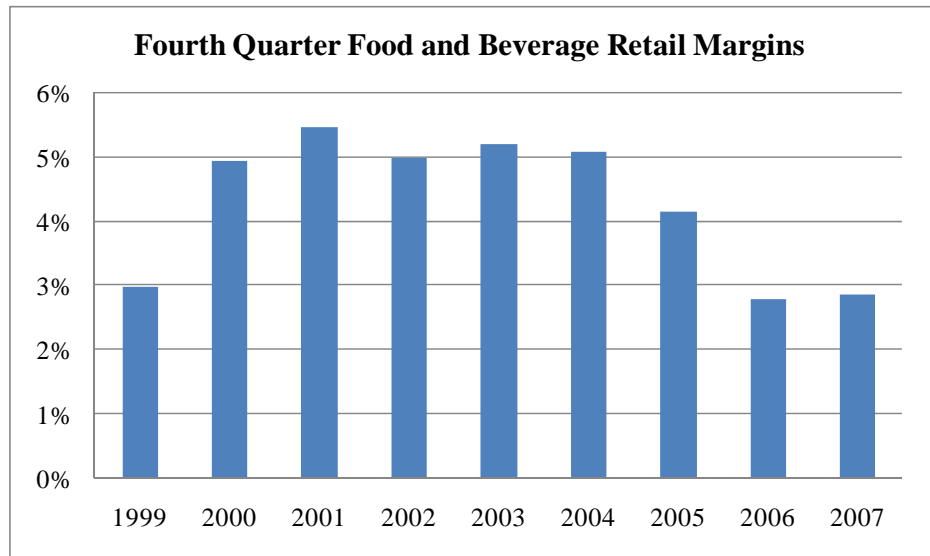
Fourth quarter operating profits increased 5% versus the fourth quarter of 2006. Over the previous five years, fourth quarter profits typically declined by 2% on a year over year basis. Prior to the fourth quarter of 2007, the year over year decline in fourth quarter margins is consistent with a general trend to lower margins at food retail in recent years. As can be seen on figure 1, the overall trend has been a gradual decrease in margins from 2004 through 2007.

Further to that point, figure 2 shows fourth quarter margins from 1999 through 2007. As can be seen, margins have been generally declining for the past few years. The fourth quarter margin in 2007 increased compared to 2006, but by a minimal amount.

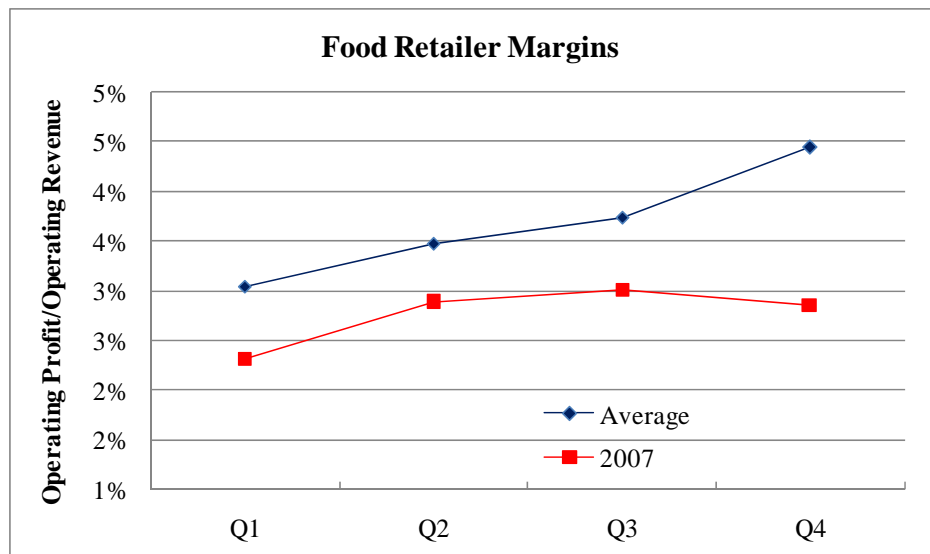
Another way to look at the situation is to compare margins in 2007 to the previous eight year average. Figure 3 shows that 2007 margins were well below average in all quarters. It also shows the strong seasonal strength that is typically exhibited in the fourth quarter,



**Figure 1** Source: Statistics Canada Industrial Organization and Finance Division and George Morris Centre



**Figure 2** Source: Statistics Canada Industrial Organization and Finance Division and George Morris Centre

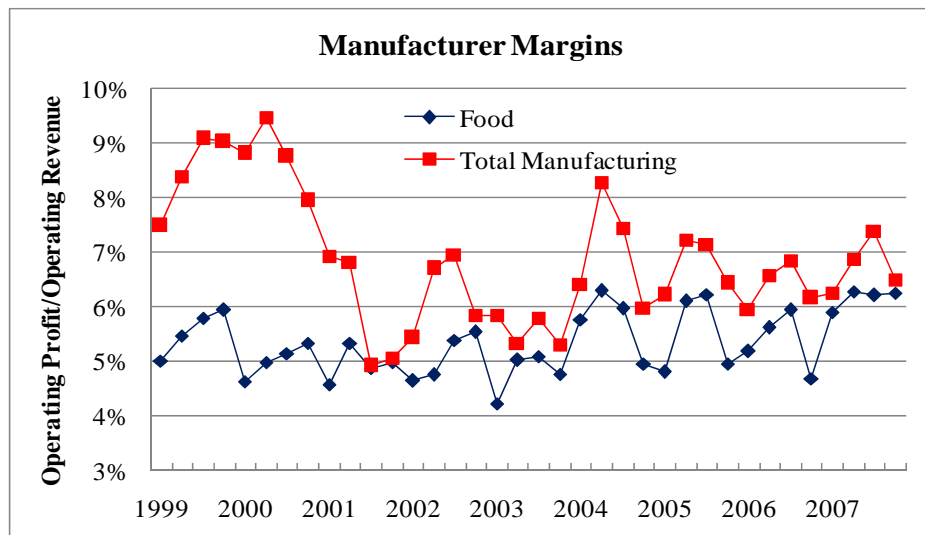


**Figure 3** Source: Statistics Canada Industrial Organization and Finance Division and George Morris Centre

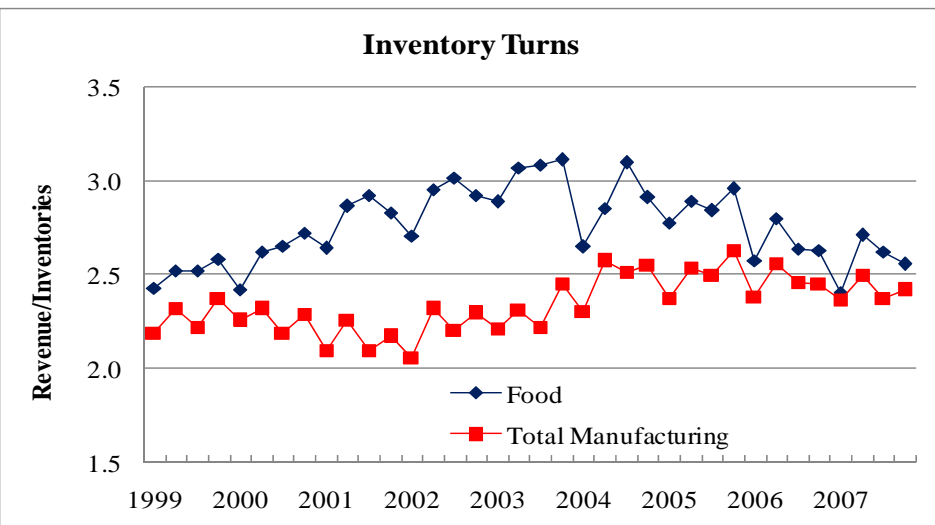
but was not seen in the fourth quarter of 2007.

For retailers in general, margins averaged 3% in the fourth quarter of 2007 and 2.3% for the entire year. In 2006 margins averaged 2.7%. In the fourth quarter total retail saw a 16% increase in year over year operating profits compared to the fourth quarter of 2006. Another point of interest is that total retail profits also appear to have been trending lower over the period from 2004 through 2007.

## Manufacturing



**Figure 5** Source: Statistics Canada Industrial Organization and Finance Division and George Morris Centre



**Figure 4** Source: Statistics Canada Industrial Organization and Finance Division and George Morris Centre

appear to be increasingly getting their inventories under control, or at least making their inventories more productive. Figure 5 shows food and total manufacturer inventory turns on a quarterly basis from 1999 through 2007.

Finally, figure 6 shows the quarterly investment trends in Canadian retail and manufacturing from 1999 through 2007. Figure 6 shows that after trending higher from 1999 through 2003, both retail and manufacturer investments appear to be moving in a sideways to slightly lower trend line. The slightly

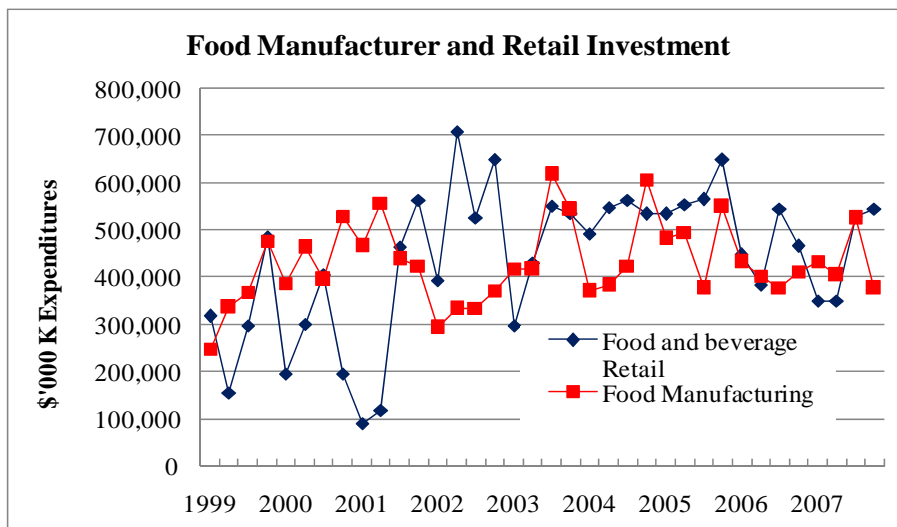
Figure 4 shows food and total manufacturer margins from 1999 through 2007.

Food manufacturer operating margins were 6.2% in the fourth quarter last year. Average margins were also at 6.2% for 2007. In 2006 margins for the year were 5.4% and the five year average annual average operating margin was 5.3%. Total operating profits for food manufacturers increased 39% in the fourth quarter of 2007 compared to the fourth quarter of 2006. That is a

huge year over year increase. The normal five year average fourth quarter year over year increase is just under 3%. As can be seen on the graph, 2007 operating margins may be characterized by their relative stability compared to recent years. Of course, food manufacturer margins do tend to be relatively stable. Since 1999, the standard deviation of the margins was about 0.6% compared to total manufacturing at 1.2%.

Another point of interest is that food manufacturers

lower trend line may be explained by the fact that the Canadian dollar has appreciated, making investment in plant and equipment less costly.



## Trend Briefings

- Surplus grocers sell "closeouts," which include products that manufacturers have discontinued, seasonal items that are outdated and goods that are near the date when manufacturers expect freshness to wane. Many such grocers also sell products that were damaged in transit but remain edible, such as a dented box of

Cheerios. Prices tend to be significantly lower than those at conventional stores and big discounters like Wal-Mart Stores Inc. Amelia's, a chain with 11 surplus stores in eastern Pennsylvania, saw its sales jump 17% last year from a year earlier. At SharpShopper, a rival chain in eastern Pennsylvania sales have risen recently, at least partly because of economic conditions. Similar grocers in other parts of the U.S. report sales increases. The size of the surplus food-retail segment isn't known. Analysts don't track the sales because most of the companies are closely held and independent. Some larger food retailers say they have noticed customers shifting buying habits amid high food prices. Supervalu Inc., the nation's third-largest food retailer by sales after Wal-Mart and Kroger, told investors in January that sales are up at its bargain chain, Save-A-Lot, and that customers are buying more food per shopping trip due to higher gasoline prices. Surplus stores mainly draw middle- and lower-income shoppers, and many accept food stamps. (wsj.com, February 22)

- The 500 largest U.S. restaurant chains registered slower growth rates, posting 5.1 percent annual sales growth in 2007 versus 6.1 percent in 2006. According to data released by Technomic Inc., in its annual reporting on the top U.S. restaurant chains, U.S. systemwide sales for the Top 500 rose to an estimated \$223.6 billion in 2007. The slower growth is likely due to rising fuel prices, increasing cost of labor and commodities and menu price increases. Current economic conditions have caused many chains to scale back their U.S. unit expansion with unit growth rates for 2007 of 2.4 percent compared with 3.8 percent a year ago. (Business Wire, February 29)
- Food companies are cutting back on ingredients and raising prices to grapple with higher commodity costs. Some analysts say price increases can't totally overcome higher costs and could turn away customers. Makers of premium products could benefit, and high prices could discourage eating out. (wsj.com, March 7)

## Distributor Briefings

- Planet Organic Health Corp**, Edmonton, Canada's largest natural foods retailer, announced that they have signed a Letter of Intent whereby it will acquire 100% of the shares of New Leaf Community Markets for (US) \$9,750,000. New Leaf is a leading natural foods retailer in Northern California. New Leaf generated revenues of (US)\$26.4 million in fiscal 2007 (unaudited). Planet Organic Health Corp. is a natural products industry company, comprising manufacturing, distribution and retail. Planet operates eight natural food supermarkets throughout Canada under the Planet Organic Market banner and eleven natural food supermarkets in the U.S. under the Mrs



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Green's Natural Markets banner. The Company also operates 48 natural health outlets under the Sangster's Health Centre banner and seven natural health outlets under the Healthy's banner. Another POHC company, Trophic Canada is the country's leading manufacturer of natural supplements. The company has a total of 63 stores throughout Canada and 11 in the U.S. (Press Release, February 19)

- **Safeway's** gross profit declined 44 basis points to 28.69% of sales in the fourth quarter of 2007 compared to 29.13% of sales in the fourth quarter of 2006. Operating and administrative expense improved 55 basis points to 24.21% of sales in the fourth quarter of 2007 from 24.76% of sales in the fourth quarter of 2006. (Yahoo! Finance, February 21)
- **Empire Company**, Stellarton, announced that it and certain of its wholly-owned subsidiaries, including Sobey Leased Properties Limited, have entered into agreements to sell a portfolio of 61 retail properties representing approximately 3.3 million square feet of gross leaseable area. The selling price in respect of the 61 properties is approximately \$428.5 million representing an effective capitalization rate of 8.12 percent before transaction costs. (Yahoo! Finance, February 25)
- **Second Cup**, Toronto, has been preparing for an increasing presence in the global market. It announced that its 400th Cafe opened for business in Istanbul, Turkey on January 26, 2008 and that the company intends to open more than 50 new cafes globally this year which will more than double its international presence and achieve overall growth of at least 10 per cent. In addition to the 366 Second Cup cafes in operation throughout Canada there are now 35 cafes in operation out-of-country, all of which are located in the Middle East. (PRNewswire, February 26)
- **Shoppers Drug Mart**, Toronto, will debut a new line of organic products called Nativa in the second quarter of this year. A pilot test of Nativa conducted in a handful of stores was "very successful." The line will roll out with 170 packaged food items nationally. The move comes because Shoppers is said to need to differentiate itself more in the area of food. It began trying to sell more in the food area five years ago as it rolled out larger stores. Some Shoppers outlets carry perishable grocery items such as salads and fresh fruit, although Nativa will, thus far, be restricted to so-called "shelf-stable" goods. (Financial Post, March 6)

## Manufacturer Briefings

- **Sara Lee** has been passing along higher ingredient and shipping costs to consumers. Wheat costs in particular have soared recently, and the Downers Grove, Ill., maker of Sara Lee bread, Jimmy Dean sausage and Ball Park franks has raised the prices of its baked goods as a result. The company says it is not seeing any change in the demand curve or trade-down from the consumer that one could expect to see when prices go up. They are not seeing a shift to private label. Sara Lee expects commodity costs for its full fiscal year to increase \$300 million over the previous year and the company will consider enacting further price increases. Sara Lee is not too worried about consumers cutting back on their food spending in the event of a recession. The one area of the business that could soften along with the economy, is the company's food-service division. Already, consumers have been trading down from so-called fast-casual to fast-food outlets or to cheaper menu items. (wsj.com, February 7)
- **Campbell** said it will raise retail prices of soup, sauces and beverages in the U.S. by an average of 5% in coming months. The Camden manufacturer said a downturn in the overall economy shouldn't hurt the company. The company thinks soup is a recession food and the soup business is said to be strong. Pepperidge Farm cookies now remain Campbell's only "indulgence" product. The rest of the company's fare, including low-sodium soups and V8 juice, has become increasingly focused on "wellness." (wsj.com, February 15)

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- **Kraft Foods**, says it made real strides in 2007 by investing in its brands, improving product quality, rebuilding the new product pipeline and strengthening its management team. They credit those things for the best top-line performance since going public in 2001. Unprecedented input costs are impacting Kraft and the entire food industry. Therefore, they are trying to reduce overhead and other costs, while continuing to make spend on brands. The Northfield, Illinois company says it is learning how to better use its scale to its competitive advantage. (Yahoo! Finance, February 19)
  - **General Mills**, Minneapolis, is in the midst of a top-to-bottom drive to improve the healthfulness of its products. General Mills last week raised its profit forecast for the year, and credited some of the more-healthy products for helping to boost sales. To get there, the Minneapolis-based maker of Trix cereal, Pillsbury toaster strudel and Progresso soup found that it had to compensate managers for meeting health goals. But unlike bonuses that are tied to hitting annual sales targets, the healthful-products incentives required executives to invest in new products that might not drive immediate growth in order to achieve longer-range goals. (wsj.com, Feb 25)
  - **Cott Corporation**, Toronto, in response to recent reports of reallocation of shelf space by Wal-Mart, confirmed that it has received notice of a reduction in shelf space and merchandising support for Wal-Mart's private label carbonated soft drinks in the U.S., including Sam's Choice, which would be significant to Cott's business plans. However, the 2008 programs have not yet been finalized and Cott is still actively negotiating with Wal-Mart appropriate space allocation and other merchandising programs associated with Sam's Choice brands. Wal-Mart is Cott's biggest customer and Cott is fully committed to deploying the necessary efforts to maintain a mutually satisfactory relationship for the long-term. Cott further confirmed that Wal-Mart's notice did not indicate any potential shelf space reduction for Sam's Choice water. Conversations between Cott and Wal-Mart are on-going and the final outcome of the 2008 merchandising, shelf allocation and other support programs for Sam's Choice carbonated soft drinks at Wal-Mart has yet to be determined. Regardless of the outcome, Cott will work hard to continue to diversify its customer base and to offset the potential impact on its profitability. (Press Release, Feb 26)

## E-Commerce

- More than 85 percent of the world's online population has used the Internet to make a purchase—increasing the market for online shopping by 40 percent in the past two years—according to the latest Nielsen Global Online Survey on Internet shopping habits. Globally, more than half of Internet users have made at least one purchase online in the past month, according to Nielsen. “The Internet is no longer a niche technology—it is mass media and an utterly integral part of modern life. Among Internet users, the highest percentage shopping online is found in South Korea, where 99 percent of those with Internet access have used it to shop, followed by the UK (97%), Germany (97%), Japan (97%) with the U.S. eighth, at 94 percent. Additionally, in South Korea, 79 percent of these Internet users have shopped in the past month, followed by the UK (76%) and Switzerland (67%) with the U.S. at 57 percent.

Globally, the most popular and purchased items over the Internet are Books (41% purchased in the past three months), Clothing/Accessories/Shoes (36%), Videos / DVDs / Games (24%), Airline Tickets (24%) and Electronic Equipment (23%). Among U.S. Internet users in the past month, 41 percent bought Clothing/Shoes/Accessories, 38 percent bought books and one in three Internet shoppers bought Videos/DVDs/Games. (Nielsen Press Release, January 28)