The Effects of POS Implementation and Retail Technology on Sales and Profitability for Small to Mid Sized Retailers

By James E. Dion
Dionco Inc.
April 2003

>> Compliments of Microsoft Business Solutions
## Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purpose</td>
</tr>
<tr>
<td>1</td>
<td>Background</td>
</tr>
<tr>
<td>2</td>
<td>Executive Summary</td>
</tr>
<tr>
<td>2</td>
<td>What A Retailer Can Expect</td>
</tr>
<tr>
<td>3</td>
<td>Data Sources</td>
</tr>
<tr>
<td>3</td>
<td>Excerpted Results of The Survey on Technology for Independent Retailers</td>
</tr>
<tr>
<td>3</td>
<td>Constraints</td>
</tr>
<tr>
<td>4</td>
<td>Findings</td>
</tr>
<tr>
<td>4</td>
<td>What Causes Increased Sales/Decreased Operating Expenses</td>
</tr>
<tr>
<td>4</td>
<td>Point-Of-Sale</td>
</tr>
<tr>
<td>5</td>
<td>Merchandise Systems</td>
</tr>
<tr>
<td>6</td>
<td>Customer Database</td>
</tr>
<tr>
<td>7</td>
<td>Point-Of-Sale System</td>
</tr>
<tr>
<td>7</td>
<td>Merchandise/Inventory Control Systems</td>
</tr>
<tr>
<td>8</td>
<td>Customer Database</td>
</tr>
<tr>
<td>8</td>
<td>Sample Performance Results</td>
</tr>
<tr>
<td>9</td>
<td>The BC Ferries Study</td>
</tr>
<tr>
<td>9</td>
<td>Overview</td>
</tr>
<tr>
<td>9</td>
<td>Results</td>
</tr>
</tbody>
</table>
Purpose

From Microsoft Business Solutions

The purpose of this white paper is to explore the impact of the deployment of technology in a retail business. More specifically, we will look at the effects on sales, profitability and productivity of the use of Point of Sale, Inventory Control and Customer Profiling Software in small to mid-sized retail stores.

Background

It has been over 20 years since the introduction of the Personal Computer (PC). Roughly five years after its invention in 1980, retail stores began to put the PC to use in their stores and head offices. Prior to this development small and mid-sized retailers mainly relied on either electronic cash registers that simply gave a sales total for the day or more sophisticated registers that provided sales by department reporting via a cash register tape at the end of the day. Far too expensive for small retailers, there were also the more sophisticated registers used by larger retailers that were connected to mini or main frame computers to track individual sales by product number.

With the growing popularity of the PC, programmers started to write Point of Sale, Financial and Inventory programs for smaller retailers. The first of these systems started appearing in 1983 but were very primitive and did not provide extensive integration or functionality. Over the past fifteen years systems have improved dramatically and have become almost as sophisticated as large store systems. Many of the programs now available were originally written in DOS but have been converted to the Windows operating system. There is not much functionality that large stores have that is also not available today to small-to-mid-sized stores.

1 DSTM = Department Store Type Merchandise retailers (does not include Food, Convenience or Auto)
2 Small retailers are defined with sales under $10 million per year; mid-sized $10 to 100 million per year.
Executive Summary

Over the past fifteen years more and more independent retailers have installed software and hardware in their stores for the purpose of collecting sales data (POS) and ordering and tracking inventory (Merchandise Systems) and many have also added customer profiling in the last five years.

There can be little doubt that the deployment of technology in a retail store leads to higher sales, reduced expenses and increased gross margins which have ultimately produced an increase in the overall profitability of those stores who not only have deployed the technology but have also learned how to use it. Retailers who have both spent the money and taken the time to train their people on the technology reap the benefits of that technology. Many do not adequately learn their systems and therefore do not receive the level of performance increases that retailers who learn the systems do.

Data from a 1998 Technology Study indicates that on average stores experience a minimum sales increase of 16%, with some stores experiencing up to 23%, thanks to the deployment of technology. This was for POS only, and when asked about the impact of inventory/merchandise systems and customer databases, the sales increases were comparable in magnitude with customer database contributing to even higher sales increases. The expense savings in the study were an average of 13% after deployment of POS and slightly higher for merchandise systems (14.3%) and customer databases (15.7%).

The most definitive study on the effects of POS deployment was a study done by BC Ferries\(^3\) in 1996 when they were able to analyze the impact of POS by using a true control methodology that demonstrated the difference between a store with POS technology and one without. This study reported an amazing 29% increase in sales and a 34% increase in gross profit in the store with a POS system.

Working with clients over the past ten years and being able to observe performance in many of them after installation of POS technology, our findings have been very similar though not as spectacular as the BC Ferries study. On average, our clients experience anywhere between a 10% to 24% sales increase six months after installing their systems which is sustained for up to two years and then settles into a 8% to 10% increase thereafter. However, clients who have also customer databases are able to sustain larger and longer sales increases because the customer profiling allows them to continue to grow their business with not only existing customers but also with new ones.

What A Retailer Can Expect

Given an integrated POS, Merchandise and Customer profile system that is deployed properly (which in some cases can be up to 40 hours of training for management and 20 hours of training for staff but can be less if staff are computer literate) the following results will be possible after the first six months (it generally takes approximately six months for a system to be fully operational and for all staff to feel comfortable using it).

<table>
<thead>
<tr>
<th></th>
<th>High Performance(^4)</th>
<th>Mid Performance(^5)</th>
<th>Low Performance(^6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Increase</td>
<td>+ 20%</td>
<td>+ 10%</td>
<td>+ 5%</td>
</tr>
<tr>
<td>Expense Decrease</td>
<td>- 15%</td>
<td>- 8%</td>
<td>- 2%</td>
</tr>
<tr>
<td>Margin Increase</td>
<td>+ 25%</td>
<td>+ 15%</td>
<td>+ 8%</td>
</tr>
<tr>
<td>Net Profit Increase</td>
<td>+ 30%</td>
<td>+ 12%</td>
<td>+ 6%</td>
</tr>
</tbody>
</table>

\(^3\)BC Ferries Corporation is a British Columbia Crown Corporation that operates ferry service in the Province of British Columbia.

\(^4\)High performance are stores that really adopt and maximize all the components of the technology (see section titled What causes increased sales/decreased operating expenses in this report).

\(^5\)Mid performance are stores that utilize most but not all of the technology.

\(^6\)Low performance are stores that utilize just a few components of a system.
Expense reduction tends to be larger for smaller retailers who appear to be able to reduce one to two staff positions which in companies of a smaller size represent a larger percentage of the overall payroll. Gross margin improvements are experienced by most users of POS and merchandising software because markdowns are reduced and often optimum ordering quantities are achieved which leads to maximizing discounts from vendors.

It is difficult to put a total profitability increase on all these factors, but it is safe to predict that a store can increase its net profit by at least ten percent within a year of deploying technology and fully using it. This would translate into a substantial return on investment as the majority of independent retailers spend about two percent of sales to acquire the technology.

This study is brought to you in part by Microsoft Business Solutions and Microsoft Retail Management System. An affordable, easy-to-use solution suite for independent merchants, Retail Management System consists of Store Operations, for tracking and expediting point-of-sale and business processes, and HeadQuarters, for managing a multi-store business from the head office. Built on powerful Microsoft technologies, backed by expert services and support, Retail Management System can help you automate and integrate information and processes to reduce costs and increase revenues across your business.

**Data Sources**

Data for this white paper was collected from over 40 Independent Retail Clients of Dionco Inc., the 1998 National Technology Study, and the 1997 BC Ferries POS Study.

**Excerpted Results of The Survey on Technology for Independent Retailers7**

This study was conducted in 1998 using a field research team that interviewed 580 Independent Retailers via phone calls that lasted on the average 30 minutes. These retailers were using integrated Point of Sale, merchandising (inventory control) and customer profiling software. They were probed for satisfaction with their systems as well as increases in sales and decreases in operating expenses. This study did rely on the opinion of the retailer and clearly has a margin of error based on the fact that sales increases (although documentable) could not be totally attributed to the deployment of technology. The study also found that the newer the system, the lower the sales increases attributed to the technology, and also a high correlation with low sales increases and dissatisfaction with the technology.

And although the study is now almost 5 years old, the results would likely be even more impressive today as software has gained so much additional functionality over this time frame.

**Constraints**

In examining the impact of the deployment of technology in a scientific manner the major constraint is the impact of intervening variables on the results that are produced. For example, if we take a store's sales before the introduction of a POS system or inventory system and then measure the results a month or year later one could easily argue that any sales increases, expense reductions or profit increases could have been caused by other factors such as the economy, the “Hawthorne Effect”8, or even random chance. These other factors, known as intervening variables, cloud the results and make it very difficult if not impossible to assign any results to a specific cause. The only study to overcome this problem was a study done by BC Ferries Corporation in 1996 which allowed the use of a true control and experimental environment. Details of this study are in the body of this report.

Another constraint is that the Independent Retail community has not been studied in a disciplined manner by any organization and many Independent Retailers are hesitant to share any financial or operating data with outside groups. While it is true that many associations have conducted benchmark data analysis of members’ performance, no studies have attempted to quantify the results of the deployment of technology with the exception of the study done by a National Retail Association in 1998 where 580 Independent Retailers were interviewed to determine their satisfaction and results using technology in their stores. Results from that groundbreaking study will be quoted later in this report.

8 The Hawthorne Effect is a well known experiment conducted at the Western Electric Plant in 1929 that demonstrated significant changes in output based solely on workers perceptions and not on any real changes to work flow or practices.
Findings

Based on the data examined, the deployment of technology leads to sales increases and expense reductions which positively impact profitability. But how does technology accomplish all this? Technology by itself does not cause sales increases or expense reductions, but rather the way that information technology provides is used causes the increased sales and reductions in expenses.

Not every retailer experiences sales increases or cost savings on all the factors. Many are dependent on how the individual retailer uses the technology. For example, a pure fashion retailer may not get relevant benefits from automatic replenishment as fashion changes so often that most purchases are not replenishment of existing product but rather new product. This hypothetical fashion retailer however, would reap extensive benefits from fast/slow seller reporting as well as a suggested item feature in the POS systems.

It is also interesting to note that in the area of expense reductions, for some, the first six months expenses may actually increase! Although this is not universal. This is caused by the extra time required to learn the new systems and to integrate them into the store. Often during this period, extra staff and hours are used to fully implement the technology, but after six months most retailers find that they are able to reduce at least one if not two full time clerical people and often they reassign these hours to the sales floor.

What Causes Increased Sales/Decreased Operating Expenses:

Point-Of-Sale

- **Faster check out** of customers by scanning items increases throughput of customers at the cash register. At busy times this reduces the chances of a customer seeing a long line and not making a purchase.

- **Faster approval of charge purchases** via either dial up or always on connection increases the speed of the transaction thereby reducing the chance of a customer seeing a long line and not making a purchase.

- **Accurate capture of the exact item detail** being sold in combination with suggested re-order software increases the in stock position of merchandise. This ensures sales are not lost due to out-of-stock merchandise and ultimately leads to an increase in total sales.

- **Software with related item or suggested item prompts** (when an item is scanned, if there is a related or add-on item available, the software will prompt the sales associate to ask the customer if they would like the additional item) which leads to increases in average transaction value.

- **The Transaction Suspend feature** will place a transaction in suspense while the customer either goes to their car to get their check or charge card or goes back to the store to get an additional item and resumes the transaction when the customer returns. This speeds up processing of customers in line behind this customer and reduces waiting time. It also makes it easier for a customer to add on items to their purchase.

- **Production of “Gift Receipts”** which identify the transaction number and make returns much more accurate by identifying the selling price and method of payment when an item is returned or the storage of exact transaction detail permitting the reprinting of a receipt. These receipts can even be tied to a bar coded sticker that is placed on the item making return tracking even more accurate and reducing loss from too high a refund or reducing customer dissatisfaction with the returns process.

- **Automatic store credits** can be given on returned items which reduces cash refunds and tracks returned items. These store credit notes are serialized and can be used just like a gift card and often small credit balances either are not used or lead to larger sales when they are redeemed. They also replace manual issuance of store credit notes which are time consuming and open to fraudulent use.

- **Many systems allow the sales associate to view, right on the POS screen, average transaction and items per ticket data** for the current shift. This allows feedback to the sales associate and encourages them to suggestion sell to ensure they meet or exceed the average sale amount, thereby increasing the likelihood of add on sales. Some systems produce this information in a separate report which is just as valuable.
> The cash register receipt can be programmed to provide a “bounce back” coupon to the customer. This will give them a discount on their next purchase, thereby increasing the likelihood of a repeat purchase.

> By using the multimedia capabilities of many new systems, sales associates can receive product knowledge training right on the cash register which increases their knowledge and ability to sell more products and better satisfy their customers.

> Most POS systems make the sales associate do what is termed a “blind reconciliation” at end of day which reduces the occurrence of theft.

> Capture of customer information enables after-marketing to individual customers based on purchase habits and practices. This form of micro marketing is becoming more prevalent and can significantly increase a store's business.

> Every transaction is time stamped and retailers can run reports that identify the peak selling hours and increase staff for those times which leads to better customer service and increased sales.

> Sales associates “clock in” on the cash register and this tracks their work hours. Time and money are saved by not having to manually track hours. This information can then be exported to payroll systems which reduces the need for additional clerical staff.

---

### Merchandise Systems

> With data from POS the merchandise systems can ensure the proper level of inventory and the proper mix. This increases the productivity of the inventory and not only leads to sales increases (being in stock on what is selling) but also significant cost savings on inventory carrying charges and improved cash flow which in turn increases profitability by increasing payment discounts.

> Suggested Re-Order can vastly improve the in stock position of core merchandise and not only increase sales but also significantly decrease operating expenses by not having to assign staff to count on hand and manually prepare purchase orders.

> Slow and fast seller reports help retailers identify what is not selling so early markdowns can be taken (an early markdown reduces losses by clearing the item in season often at a much lower discount than later in the season). As well, it can identify other problems with merchandise (incorrect pricing, poor placement in store, breaking size/color problems etc.) and give the store a chance to correct those problems instead of taking a markdown. Fast seller reports tell a retailer when to increase inventory to meet high demand thereby increasing sales.

> Open to buy budgets help identify the overall inventory requirements of the store and maintain a balanced inventory that meets customer demand so you never have too little or too much inventory. Open to Buy has to be done outside the retail software as it is a “what if” exercise but good open systems allow for export of the required data to a spreadsheet for the calculation of OTB.

> Purchase order generation can save hours of manual writing of purchase orders and ensure timely ordering and receiving of merchandise, thereby increasing in stock on desired items.

> Purchase order receiving can save time and expenses on receiving an order into the store. By receiving by exception a retailer can expedite the receiving process and ensure that the proper price is placed on the item. Receiving systems send data to ticket printers so pricing is faster and more accurate. TTS (Time To Shelf) is reduced dramatically so merchandise is available for sale sooner.

> Purchase orders and order confirmations can be executed via Electronic Data Interchange (EDI). Retailers who use this function can save considerable time and money by transmitting their orders directly to suppliers who then return an order confirmation that can tell the retailer when and if they will get the products ordered (if they cannot get the products they can replace the order with another vendor or for another item which can dramatically reduce out of stocks). Many vendors today will accept email purchase orders and confirm availability within days.
Customer Database

Customer purchase history is tracked by the system allowing the store to query data for specific items and advertise very cost effectively to individual customers. For example, a retailer would be able to identify for every new item that they receive of a specific product or brand what customers would most likely be interested in purchasing based on data from previous purchases of a similar product or that specific brand. They would simply query the database for every customer who purchased that particular item and then merge the data with a word-processing file. They could then send a letter or postcard telling the identified customers that a product that they may like has been received. Rather than running an ad in the newspaper for this product the store just mails to ten or fifty or two hundred customers who are the most likely to buy based on past behavior. The savings in advertising expense is considerable and the increase in sales is also impressive.

The customer database also allows tracking and reporting of gross margin by customer which allows retailers to identify their most profitable customers and reward them to increase their loyalty. Under performing customers can be identified and moved to higher performance by targeted offers.

Many stores offer loyalty points to their customers which essentially reward customers for shopping at the store. The POS tracks each purchase and assigns points for the total value of the sale as well as over time. This, while it builds loyalty and increases the likelihood that the customer will shop in the store again, also increases sales by increasing the average transaction and number of visits. However many stores do not want to track points as it builds what is called an “unfunded liability” for the store. These retailers use the gross margin tracking to reward customers and stay away from a point system.

The “missing persons” query is one of the most powerful tools that this technology enables. A retailer simply queries their data base for the names of every customer who has spent over $500 (or whatever amount they choose) in the store in the past eighteen months, who has shopped more than five times and who has not been in the store in the past six months. This is a potential “missing person” someone who has been a good customer but for whatever reason has not been in recently. A letter is automatically sent to every customer who meets these criteria with a gift certificate to encourage them to shop again in the store. The results of this letter are substantial. It gets customers that might have been lost to the store back and they really appreciate the thoughtfulness of the store. Sales increases in excess of ten percent for this query alone are common.

Using the customer database stores are able to track past transactions and when a return is made they can determine what price was paid and the tender type for that transaction. This reduces fraud and also tracks customers who take advantage of the store return policy. Losses are minimized and gross margin increases.

There are many other uses of technology in the store, from electronic traffic counters, surveillance cameras, wireless scanners for inventory, wireless communication devices and many others that can help increase sales or decrease operating expenses. While difficult to specifically quantify, each technology leads to productivity gains resulting from lower costs and increased sales. Also realize that there is no software that will do all of the above tasks, however the good packages will do over 80% of them. Retailers need to identify what is important to them and find the package that will deliver most of their needs. It is often a good idea to work with what is called a “vanilla” package, that is one that is not modified. In almost every case a retailer is better off working with a standard release that does not have custom “patches” or modifications applied but can be adapted to their specific needs without expensive modifications.
Point-Of-Sale System

> Forty percent of the retailers surveyed stated that their point-of-sale system helped increase sales.

> The average sales increase reported from a point-of-sale system is 16% with the following groups having a greater increase:
  - gift retailers (23% sales increase)
  - those with annual sales under $1 million (21% sales increase)
  - retailers who have 1 cash register/POS device (21% sales increase)
  - those who have had their software in place for 5 or more years (19%) sales increase
  - single-store retailers (19% sales increase)
  - retailers who get service direct from the software company (19% sales increase)

> More than half (53%) stated that their point-of-sale system helped decrease expenses.

> The average expense decrease from a point-of-sale system is 13% with gift retailers (17% expense decrease), and those with annual sales under $1 million (15% expense decrease) earning a greater increase and retailers who have their software in place for 1 year or less (10% expense decrease) having a more moderate decrease.

Merchandise/Inventory Control Systems

> Slightly more than half (51%) of retailers surveyed stated that their merchandise / inventory control system helped increase sales. The groups more likely to receive an increase include:
  - those who poll their stores
  - apparel/shoe retailers
  - retailers who have had their software in place for 2 or more years
  - retailers who would buy the system again
  - those who felt they paid just enough for their system

> The average increase in sales from a merchandise / inventory control system was 16.7% with the following groups having greater sales increase:
  - retailers with 1 cash register/POS device (20.8% sales increase)
  - those with annual sales under $1 million (21.3% sales increase)

> Sixty-five percent of the retailers surveyed stated that their merchandise / inventory control system helped decrease expenses. Those who were more likely to report an expense decrease from their merchandise / inventory control system include:
  - retailers who have had their software in place for 5 or more years
  - retailers who would buy the system again

> The average expense decrease was 14.3% with the following groups having a greater expense decrease:
  - apparel/shoe retailers (16%/17.6% expense decrease)
  - retailers with annual sales under $1 million (15.9% expense decrease)

---

10 This survey was done in 1998 and today, it is likely that less than 2 years would pass before significant improvements would occur.
11 As noted above, far less than 5 years would be required for a significant decrease in expenses.
> On average 53% of the retailers surveyed stated that their customer database helped increase sales. Respondents who were more likely to receive a sales increase from their customer database include the following groups:
  · apparel/shoe retailers
  · retailers with 2-4 cash registers/POS devices

> The average sales increase from a customer database is 21.5% with the following groups having a greater increase in sales:
  · gift retailers (27.2% increase in sales)
  · retailers who have had their software in place for 5 or more years (25.4% increase in sales)

> On average only 22% stated that their customer database helped decrease expenses with those who have had their system in place for 5 or more years (26% expense decrease) more likely to have had a decrease in expenses and retailers who poll their stores (17% expense decrease) less likely to have expense decreases.

> The average expense decrease from a customer database is 15.7% with the following groups having a greater decrease in expenses:
  · gift retailers (21.4% expense decrease)
  · retailers with annual sales under $1 million (20.5% expense decrease)

> The following groups experience a lower than average expense decrease:
  · retailers who have had their software in place for 1 year or less (9.8% expense decrease)
  · those who get service from a local contact person (11.3% expense decrease)
  · retailers with annual sales from $1 - $5 million (11.3% expense decrease)

>> Sample Performance Results

Not every store will achieve these results, however, these are sample results of stores that we have worked with.

<table>
<thead>
<tr>
<th>Store Type</th>
<th>Sales Volume</th>
<th>% Sales Increase attributed to Technology</th>
<th>% Expense Increase attributed to Technology</th>
<th>% Gross Increase attributed to Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gift Store</td>
<td>+$3,000,000</td>
<td>29%</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>Sporting Goods</td>
<td>+$1,000,000</td>
<td>24%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Men’s Clothing</td>
<td>+$14,000,000</td>
<td>25%</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>Card Store</td>
<td>+$1,000,000</td>
<td>20%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>Accessory Store</td>
<td>+$4,000,000</td>
<td>10%</td>
<td>5%</td>
<td>NA</td>
</tr>
<tr>
<td>Book Store</td>
<td>+$800,000</td>
<td>22%</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Golf Store</td>
<td>+$6,000,000</td>
<td>10%</td>
<td>0%</td>
<td>NA</td>
</tr>
<tr>
<td>Women’s Fashion</td>
<td>+$3,000,000</td>
<td>25%</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Department Store</td>
<td>+$13,000,000</td>
<td>17%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Wine Store</td>
<td>+$50,000,000</td>
<td>20%</td>
<td>5%</td>
<td>NA</td>
</tr>
</tbody>
</table>
The BC Ferries Study

Overview

This study was the first study ever done that successfully eliminated almost all 'intervening variables' in the analysis of the impact of POS technology in a retail environment. Imagine having two identical stores, with identical staff (same people!), identical location, identical inventories and identical customers! It almost seems impossible, but it is not. The BC Ferries Corporation operates two vessels that are ferries from Vancouver to Victoria on Vancouver Island. These are Spirit Class vessels which are 550 feet long and can carry 470 cars and 2100 passengers on a 90 minute voyage from Vancouver to Victoria BC. The gift stores are in almost identical places on each ship and are 800 square foot stores. Most of the passengers that use the ferry either use it to go to work or are tourists. Almost all tickets sold are round trip. The staff alternates vessels, work three days on one vessel and then three days on the other. Each vessel makes six trips per day crossing each other in the middle of the channel. The gift stores carry books, magazines, candy, snacks, gift items and clothing (t-shirts, hats etc.).

BC Ferries wanted to test the impact of POS technology and in particular the impact on Sales and Gross Margin. In the spring of 1996 both ships started with identical inventories, the Spirit of Vancouver was outfitted with two POS registers with full bar code scanning capabilities, Price Look Up (PLU) files, inventory management with suggested reorder quantities. The Spirit of British Columbia kept its two electronic registers with just a PLU file and a bar code scanner. Inventory on the Spirit of British Columbia was done by the store manager taking a visual count every night after the last sailing of the day and inventory on the Spirit of Vancouver was tracked by the software and suggested orders (based on vendor minimums and optimum purchase factors) were produced each night and approved by the store manager for replenishment. These suggested orders were one of the main factors that led to increased gross margin as the system combined orders and most quantities qualified for volume discounts.

Results

Sales and gross margin were tracked for each vessel for a four month period (June – September 1996), this was high tourist season and the passenger counts were very high during this period. The results after four months were almost unbelievable.

<table>
<thead>
<tr>
<th></th>
<th>With POS Technology</th>
<th>Without POS Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales (vs Last Year)</strong></td>
<td>+ 29%</td>
<td>- 3%</td>
</tr>
<tr>
<td><strong>Margin (vs Last Year)</strong></td>
<td>+ 34%</td>
<td>+ 4%</td>
</tr>
</tbody>
</table>

Based on these results, BC Ferries decided to equip all their gift shops with POS technology and calculated a full ROI in less than eighteen months.

Not all stores will have these results, when we presented these results to the board we advised a more conservative figure of 19% sales and gross margin increase.

As the ships had a minimum staff that was defined by shipping safety laws, there was no appreciable savings in operating expenses.
This study is brought to you in part by Microsoft Business Solutions and Microsoft Retail Management System.

An affordable, easy-to-use solution suite for independent merchants, Retail Management System consists of Store Operations, for tracking and expediting point-of-sale and business processes, and HeadQuarters, for managing a multi-store business from the head office. Built on powerful Microsoft technologies, backed by expert services and support, Retail Management System can help you automate and integrate information and processes to reduce costs and increase revenues across your business.

> Get started fast.

Retail Management System does not require an extensive IT staff to set up and maintain, and can be adapted to fit your specific retail needs. Easy to learn and use, it helps ensure store managers and associates get up to speed quickly, minimizing training time and costs and providing a rapid time to benefit.

> Streamline point-of-sale processes.

Associates can check prices, availability and stock location instantly; access complete customer information; handle multiple tenders at checkout; and process returns, backorders, and layaways quickly. Built-in support for point-of-sale peripherals increases speed and accuracy for sales transactions.

> Maximize cash-in per customer.

Access to complete customer histories let you make the most of every transaction. You can target customer preferences to suggest up-sells and cross-sells, advertise other products at point of sale with onscreen graphical displays; and expand your customer reach and increase revenues with multi-channel marketing, catalog sales, and phone orders.

> Simplify card processing and reduce transaction costs.

Retail Management System provides quick access to authorizations and makes it easier to capture electronic signatures. In addition, you can take advantage of integrated card processing that reduces data entry, facilitates easier reporting and reconciliation of transactions, and eliminates the need for additional card terminals.

> Automate inventory tracking and procedures.

Reduce costs and save time by eliminating inefficient, manual stock counts, automatically tracking items using any inventory method that fits your business needs. Up-to-the-minute inventory control allows you to know what sells best and when to replenish items before you run out, while managed purchasing and in-store transfers enable you to replenish items efficiently and cost-effectively.

> Make fast, informed decisions.

Full visibility into store operations with daily sales graphs and journals that can also be shared across multiple store locations. Access and analyze data from across your entire business, using detailed current information to identify sales trends, evaluate operations and financials, set and monitor business policies, and more.
About Microsoft Solutions for Retail
A complete point-of-sale solution designed for Independent Merchants, Microsoft Retail Management System (RMS) empowers you to maintain your competitive edge and increase profitability. With Microsoft RMS, you get the best of both worlds: technology that helps to streamline business operations and connect customers, employees and business partners, and an economical, easy-to-use solution suite that integrates with other applications and adapts to your specific needs.

Microsoft RMS is affordable for small merchants, but is scalable to accommodate larger, high-growth organizations. It gives retailers of all sizes the power to:

> Make smarter, faster business decisions
> Improve employee and business productivity
> Gain a competitive advantage

Microsoft Makes the Difference
With Microsoft RMS, you can begin a long-lasting relationship backed by one of the world's leading technology providers. Microsoft Business Solutions is a family of connected applications and services for small and mid-sized business, with years of experience delivering business applications and services known worldwide for top quality.

You Don't Have Wait
With the Microsoft Capital program, you may already qualify to have your complete solution financed. And there's a certified Microsoft Business Solutions partner near you - ready to customize your solution to meet your unique requirements.

For more information and to receive a FREE product demonstration CD, please call 1-800-263-2880.