Appendix 1. Memo to Residents

(For use with Chapters 1, 6, 7, and 10.)

The following draft is of a memo to residents of an apartment building from the building managers. Line numbers have been added for ease of reference.

MEMO TO ALL RESIDENTS: GARAGE CLEANING

The garages in your building are scheduled to be cleaned starting on Monday, August 28 and continuing through Friday morning, September 1. The work will consist of pressure washing all walls, ceilings, and pipes in the garage area. The cleaning is scheduled as follows: Monday August 28 stalls 13 through 25 beginning at 9:00 a.m. and finishing at 9:00 p.m. Tuesday, August 29 stalls 26 through 37 beginning at 9:00 a.m. and finishing at 9:00 p.m. Wednesday, August 30 stalls 3 through 12 beginning at 9:00 p.m. and finishing at 7:00 a.m. Thursday August 31 stalls 38 through 46 beginning at 9:00 p.m. and finishing at 7:00 a.m. or until the work is completed. Anyone planning on leaving or arriving after 9:00 p.m. on Thursday or Friday must plan on parking in the outside parking lot as the entrance and exit areas will be blocked off by equipment while the garages are being cleaned. Also, all articles in the garage stalls must be removed, including the bicycles. Any items left in the stalls will be considered trash and disposed of. Wall cabinets will be covered for protection. If you will be out of town during this time period and plan to leave your vehicle in the garage, please notify us and provide access to car keys so that your car can be moved at the appropriate time.

Thank you for your cooperation.
Appendix 2. Chris Montoya’s Job Application Letter

(For use with Chapters 11, 13, and 15.)

214 East 14th Street
Naperville, IL  60563
June 10, 2011

La-Z-Boy Furniture Galleries
2830 Patriot Blvd
Glenview, IL  60025

To Whom It May Concern:

An advertisement in the June 4, 2011 edition of the Chicago Tribune newspaper has informed me that La-Z-Boy is hiring entry-level managers for their Glenview location. I believe my academic background and work experience have adequately prepared me to assume one of these positions.

In the Management program at Northern Illinois University, I received basic instruction on various topics introducing me to the many facets associated with successful management. Managerial responsibilities were discussed and significant consideration was given to the important dimension of manager-subordinate communication. I desire to use this knowledge to establish and/or maintain a productive and satisfying working environment within your organization.

In the Navy, I was the supervisor for the ship’s electrical discrepancy repair team for about six people. I also performed supply functions for the electrical division and was fully responsible for the acquisition of parts and equipment as well as the generating and maintaining of all applicable financial reports. In addition, I worked part time all the way through college. These jobs have allowed me the opportunity to work and communicate with a wide variety of people from all over the country, a benefit which could prove to be very useful to a manager.

I would appreciate the opportunity to talk to you about how my training and experiences have prepared me for a management position at La-Z-Boy. Please feel free to call me at (630)555-1289 or write me to let me know a convenient time for you to talk to me.

Sincerely,

Chris Montoya

Chris Montoya
Appendix 3. Brian Carter’s Job Application Letter

(For use with Chapters 1, 3, 4, 15, and 16.)

The following letter was drafted in response to an ad asking “Recent Grads in Marketing” to apply for sales positions with “a national marketing firm of food products.” A draft of the writer’s résumé is given in Appendix 4.

83 Knight Avenue
Newark, NJ  27843

June 5, 2011

Mr. Hal Robinson
Bell Food Products
8100 Marshall Road
Camden, NJ  28193

Dear Mr. Robinson,

This June I will be graduating from Garden State College with a degree in Business Administration. I hope to follow a sales or marketing career. I am submitting an application for one of your sales positions advertised in the Sunday, May 21 edition of the Atlantic Times.

The courses we are required to take at Garden State for a sales/marketing degree reflect an in depth study of all aspects of this field. I am enclosing a résumé which further lists my educational background and work experience.

Also, I feel I am the type of person your company is looking for, hardworking, energetic, ambitious, and honest. My record of 50+ hours a week of summer employment reflects these qualities. I can offer your company an employee who is willing to give 110% all of the time.

If you feel I am the type of employee you are looking for please call me for an interview. I can be reached at 555-9813 any time convenient for you.

Sincerely

Brian Carter

Brian Carter

encl: résumé
Appendix 4. Brian Carter’s Résumé

(For use with Chapters 1, 3, and 10.)

Brian Carter

PRESENT ADDRESS  After June 15, 2011
83 Knight Avenue  7219 Whitman Drive
Newark, NJ 27843  Camden, NJ 28923
555-9813  555-7494

CAREER OBJECTIVES: MARKETING/MANAGEMENT FIELD

EDUCATION
Garden State College - Bachelor of Business Administration ‘06

WORK EXPERIENCE
2010–present  Cashier
Ingram’s Gifts

2009–2010  Quality Control
Old Navy D.C. Checked pullers orders for errors, corrected errors, and filled orders. Checked, priced and received merchandise. Also did inventory.

ACTIVITIES
B.A. Club
Intramural Softball
Tennis, rock climbing, skiing
Newark Affordable Housing Volunteer
Appendix 5. A Definition of Aphasia

(For use with Chapters 3, 5, and 14.)

The following draft was prepared as the introductory section of a pamphlet to be distributed by health professionals. Line numbers have been added for ease of reference. The purpose of the pamphlet is to help explain aphasia to the family and friends of patients with this disorder. (Other sections will deal with prognosis and treatment.) Aphasia typically has a sudden onset and is most common in older persons.

What is Aphasia?

Aphasia is a language disorder caused by damage to brain tissue, usually from a stroke, tumor, or trauma. The word aphasia comes from a Greek term meaning "without speech." However, it is used to today to describe a disorder of the higher-level mental processes involved in language, rather than to describe lower-level disorders.

In most humans, the left hemisphere of the brain is believed to be specialized for language; therefore, damage to certain areas of the left half of the brain often results in aphasia. Two major types of aphasia can be defined, according to the site of the damage and the syndromes that result. Broca’s aphasia (also known as motor aphasia) results from damage to the part of the left hemisphere known as Broca’s area. Wernicke’s aphasia (also known as sensory aphasia) results from damage to the part of the left hemisphere known as Wernicke’s area.

A patient with damage to Broca’s area typically retains the use of content words (nouns and verbs), but omits functors such as prepositions, articles, and inflections. In addition, the Broca’s aphasic typically speaks slowly, haltingly, and without normal intonation. The patient’s speech seems to require much greater effort than that of a normal speaker.

The symptoms of Wernicke’s aphasia are in many ways the exact opposite of those associated with Broca’s aphasia. In contrast with the slow, hesitant speech of the Broca’s aphasic, the speech of the Wernicke’s aphasic is fluent—that is, it is produced at a normal rate, with normal intonation, and with little or no impairment of functors. The hallmark of Wernicke’s aphasia is the production of neologisms (new words).
Appendix 6. Clinical Guidelines for Electrosurgery

(For use with Chapters 11 and 13.)

The following is a draft of guidelines for use by veterinary students. Line numbers have been added for ease of reference.

SELECTING THE ELECTRODE

1 The smallest electrode that will obtain the desired results should be used. Activated loop electrodes generate more energy during surgery than needle electrodes, resulting in a wider band of coagulation necrosis attributable to lateral heat production. Temperature increases in the adjacent tissue following use of the loop remain for longer periods of time than after use of a needle electrode. It has been calculated that a cooling interval of 15s is necessary to properly dissipate heat between successive entries with a loop electrode. Lateral heat production adjacent to a fine wire needle electrode requires a cooling period of 8s.

SPEED OF CUTTING

1 To achieve the best result, the cutting should be at a brisk speed. The motion should be at a rate that incises the tissue adequately without a cooked or charred appearance. The longer the electrode is in contact with the tissue, the greater the amount of lateral heat generated. It has been concluded that moving the electrode through tissue at a rate of 7mm/s was compatible with good clinical technique and minimal production of lateral heat.

POWER LEVEL

1 The power level is slowly increased until a satisfactory speed of cutting is achieved without resistance. At too low power levels there will be either failure to cut or resistance to cutting. There will be exaggerated arcing if the power is too high. Sparking also occurs if the tissues are dry, if the passive or ground electrode is not used, operating in diseased tissue or using a defective electrosurgical unit. If a malfunctioning unit is suspected, testing and calibration of electrosurgical devices has been made more accurate by the development of programmable waveshape generators and power output meters. These measurements are made to insure that a device is operating at a level sufficient to perform electrosurgical techniques with low radio-frequency leakage current to avoid the risk of burns to the patient or disruption of other electromedical equipment. This instrumentation also allows better monitoring and control to conduct experiments evaluating the effects of electrosurgery on tissues.
Appendix 7.
Research Proposal on “Poor Drainage at Hamlin Park”

(For use with Chapters 3, 4, 5, 6, 7, and 21.)

The following is a modification of a draft of a research proposal was prepared by a student for a technical writing instructor. It describes a longer report to be completed as one of the course requirements. Line numbers have been added for ease of reference.

Project Summary

Observation by parents and ballplayers at the Chicago Park District’s Hamlin Park indicated that the city’s neighborhood baseball facility drains terribly, causing many baseball and softball games to be rescheduled and cancelled. I propose that the Park District Board commission a study to determine the feasibility of repairing the baseball fields. This study would cover all aspects of the project, such as repairing damaged fields, installing a new drainage system, grading fields and surrounding areas, and preventive measures to take while caring for the fields. It should also include new fencing and related features of ball fields.

Project Description

Since the inception of the Chicago Park District’s neighborhood ball fields project, there has been a need to observe problems associated with fields. While the city has many parks and fields, the Hamlin Park fields have been in poor condition for many years. The park was originally created in 1910, but at that time it was not designed for baseball fields. In the 1930s the pool and fields were built at the park, but little has been done since. As it has come to the attention of many park-goers, the baseball fields have had terrible drainage problems. I propose that the Park District Board commission me to carry out a study to evaluate the drainage problems in the park. I will make investigations into equipment and methods needed to correct the problem and prevent its occurrence. Completion of this project would ensure the citizens of West Lakeview and other north side neighbors a vital and important recreation facility. The importance of these baseball facilities to the youth of Chicago is priceless. The fields serve as a medium where over 2000 boys and girls interact and participate in organized sports, as well as adult league players. If these fields are left in their present condition, the number of cancelled games will only increase, which would effectively eliminate summer baseball and softball leagues, things normally considered a key component of children’s summers.

This is not an uncommon problem in fields of this age. Similar problems have been identified and addressed in other Chicago parks. Summer showers are frequent, and without proper drainage, the rain can ruin a beautiful and expensive park. If action is taken in the near future, the costs will be more moderate than if the problem gets worse. Immediate action would allow a remedy to be completed in time for next season’s leagues, and little work other than maintenance would be necessary for years to come. Correction of drainage projects has been carried out successfully for other Chicago facilities. Other neighborhood park-goers can attest to the feasibility of a correction project. The green space is a key component of
their lives, especially in summer, and care of the park is important to them. This is why parents would spend countless hours and their own personal money to set up “bucket brigades” to remove water from fields in an attempt to make them playable. It is time to address the problem in a permanent way.

Plan of Work

The proposed study breaks into three steps:

1. Conducting research into the location and extent of all turf problems, mainly drainage in Hamlin Park.

2. Finding out how much equipment and what methods should be used for repair and prevention of further drainage issues.

3. Analyzing the collected data and writing the report.

I will determine the extent of the problem and make a thorough check of the surrounding park areas. This check would help locate any future trouble spots that may crop up in the future. For instance, I will seek the advice of several area residents on the degree of drainage problems and whether or not treatment is needed.

For the equipment, I will correspond with area construction companies to obtain estimates for the cost of equipment and labor. To obtain favorable methods for the repair and correction of drainage, I will contact several area park associations who have dealt with the problem previously. Also, I will contact officials at the City of Chicago’s Department of Transportation and Belleville Public Works to find out what methods were successful for them.

Personal Qualifications

I am a junior majoring in Civil Engineering. I am extremely familiar with Hamlin Park and the City of Chicago, having lived and worked in the area for four years. I have seen the progression of the problem over the past couple of years.
Appendix 8. Executive Summary on “ProWear Shoes”

(For use with Chapters 6, 7, and 9.)

The following draft is of an executive summary to accompany a report on “Increasing ProWear Shoes’ Appeal to Older Americans.” Line numbers have been added for ease of reference.

The idea that “America is Aging” is now a reality and not just a commonly voiced view. ProWear has been concentrating its advertising efforts towards younger, more affluent Americans (15–32) and ignoring the larger, older American market. By the year 2020, the number of older Americans will increase by 74 percent; the number of Americans less than 50 years of age will increase only 1 percent. ProWear could increase its profitability by advertising current products to the older market. A product that offers quality, arch and ankle support, a lot of comfort, and a reasonable price is what these consumers wish to have. ProWear’s current product line offers all of these requirements as well as a stylish appeal. ProWear could target the older market with few modifications to its product line. Many advertising attempts by other companies have only succeeded in offending older Americans, and ProWear needs to create an advertising campaign that will prevent this. ProWear should follow two general guidelines in their advertising for this market. No one will buy a product that portrays them as grotesque, mentally unstable, or silly, so ProWear must avoid any age stereotyping. ProWear should use advertising that takes into account perceptual and cognitive changes that accompany age: 1) changes in vision, 2) changes in hearing, 3) changes in motor skills, 4) changes in condition, and 5) psychological factors. Demographic changes are presenting ProWear with the opportunity to expand sales and profitability by targeting older Americans. If ProWear follows the advertising guidelines recommended above, they will succeed in capturing this growing and increasingly active market.
Appendix 9.  
Report on “Improving Employee Training at Becker Foods”

(For use with Chapters 3, 4, 7, 11, 14, 16, 17, and 19.)

The following is a draft of a recommendation report prepared for the management of Becker Foods. Line numbers have been added for ease of reference.

EXECUTIVE SUMMARY

While Becker Foods’ sales are booming, there is a need for consistently skilled employees. Techniques to overcome this problem is addressed. The strategies chosen to train and increase the skill of the cashiers, especially, are: formulating a structured training program, appointing a specific trainer and positioning a simulation machine in the back. Each alternative was addressed and the formulation of a structured training program and specifying a specific trainer was the most efficient alternatives for Becker Foods.

A drawback to the training program concerns training the cashiers during non-peak hours for the opportunity to efficiently train, which consists of early morning or late evening hours.

In support of a structured training program, the current program used by another company, Melrose Foods, has been mentioned. Their structured five-day program is analyzed and ways of adapting for Becker is considered.

A drawback to the simulation machine includes the initial investment to purchase the machine.

It is thus concluded that Becker Foods should design a structured training program and designate a specific trainer to perform the program.

INTRODUCTION

While Becker Foods’ sales are booming, there is an abundance of grocery stores within the Southville area. Although, they have shown through their current clientele and profits that they are prosperous. Due to the competition, Becker needs to form their own market niche in order to “shine” above the rest.

Currently, they have a reputation for excellent customer service and satisfaction. Due to this reliance on strong customer service, their is a need for skilled workers.

The first portion of this report will analyze the current training program and policies in effect and the training program used by another store in the industry. The second portion will analyze alternative solutions to their training situation to better serve the customer. Finally, provide recommendations for actions to be taken by the company to improve their training program.

In collecting data for this report, personal employment experience of the author with this company and another company in the grocery industry, will be used. The sequence of this report will be to address the problem, propose a solution, determine the feasibility of the solution.
This analysis leads to the recommendation to formulate a structured training program and an administrator of training to provide a concise form of training for the employees.

**BRIEF OVERVIEW**

Becker Foods relies heavily on customer satisfaction and friendly employees. If you question any of the customers they will explain to you that they appreciate the attention that is given to them by the employees and especially upper management. With only 85 employees in the store, there is a sense of family that the customer sees, senses and enjoys being made a part of.

The grocery market can be especially profitable if operated efficiently and in the correct context.

**Problem**

Becker Foods has an overall problem with their training program. There is no structured program or designated trainer. The employees, mainly cashiers, are trained by current cashiers and are instantly confronted with customers. The customers seem to be rather understanding but it is rather unnerving to the cashier trying to learn. Currently, cashiers train for one day and with their next shift, they are on their own relying on the help of near-by cashiers. Cashiers have different styles and understandings of the register and without a consistent trainer there could be some missed information or misunderstood information for the new employees.

**Melrose Foods’ Different Perspective**

Currently, Melrose Foods administers a five-day training program. According to Leslie Morgan, Customer Service Manager of Melrose Foods, they administer this training program in groups of 3–5 employees. They have the employees do a series of training rules to get the hang of the register and to gain an understanding of the different departments. All is done on the registers without customer interruptions. Ms. Morgan states that, “Our employees are confident when they confront the customer for the first time. Granted they are nervous, but they (the cashiers) feel they know the register well enough so they can overcome their fears easily.”

Before the cashiers are through with their training program, they have been quizzed on their produce codes, different department categories, the register as a whole, and situational analysis.

**Recommendations**

Becker Foods should adopt a structured program, such as the one that Melrose Foods enforces. Becker needs to appoint a specific trainer and program so that all is covered and consistently covered.

The five-day program is a little extreme for Becker to enforce, therefore, a program that consisted of eight hours or two days would be sufficient for the cashier to learn the needed material before confronting customers.

The management would need to set up a sufficient time that it would be slow enough so as to close a register and use it only for training.
I believe that they should continue to train only one cashier at a time due to the limited number of registers.

The drawback to this situation is that the non-peak times occur either late at night or during the morning hours and with many of the employees being college students the morning hours are used for school.

Another recommendation would consist of setting up a simulator register in the back. So that the cashier could be trained without consistent interruptions and could maintain a training atmosphere. This would also involve an appointed trainer. This would also eliminate the need to close a register and could adhere to the convenience of the trainer or the new employee.

This may be an initial investment to hire the trainer—which could be a part-time trainer and when not training they could cashier to cut back on the initial expense—and to purchase the simulator machine, but in the long run I believe it will pay off with increased consistency and overall efficient performance.

CONCLUSION

The solution which appears to be the most effective should be implemented in order to maintain the consistent quality customer service that Becker is known for and to become more efficient involving their training.

Evaluations should be conducted periodically to determine effectiveness. If the programs appear to not perform effectively, they need to be modified or discontinued and new solutions adhered to.

Becker Foods possesses the expertise to perform the tasks required for efficient training. The structured training program can be effectively initiated through appropriate measures. By structuring the training program, efficiency and overall satisfaction by the employees and customers will be achieved.
Appendix 10.
Report on "Security Methods for Ashley's Clothing Store"

(For use with Chapters 3, 4, 7, 9, and 21.)

The following is a draft of a report prepared for the manager of Ashley's Clothing Store.

WHAT SECURITY METHOD SHOULD ASHLEY'S ADOPT?

INTRODUCTION

Ashley's at Kenwood Mall is one of four clothing stores owned and operated by Ruston, Inc., of Philadelphia. Ashley’s is a retail clothes store that caters to teenage girls.

Over the past five years Ashley’s has experienced a marked increase in theft, or what is known in retail as inventory shrinkage. This is evident through the increasing loss the store has experienced every time the yearly inventory report comes out. Also, it can be seen daily in the store in the form of empty hangers found at the end of the day. Not only that, but there have also been incidents of customers “exchanging” their clothes in the fitting rooms. This is when a customer walks into a fitting room to try on an outfit and will walk out with that outfit on underneath their coat, leaving their clothes behind on the hangers.

Ashley’s currently has no security policy in implementation. They depend solely on the employees to be aware of any potential, or ongoing shoplifting within the store. The employees are not formally trained in any way, but are told to trust their own judgment.

The purpose of this study is to recommend a feasible solution to help control the inventory shrinkage that Ashley's has been experiencing. The report will look at various security methods available and make recommendations of programs that should be implemented in order to reduce theft in the store. The report is structured in such a way that the first portion will include an analysis of different methods of security currently available on the market. This will be followed by my recommendation, and finally a conclusion.

Four different methods of security were looked at to determine which would be best to implement at Ashley’s. These include employee awareness, magnetic systems, radio frequency systems, and acousto-magnetic systems. It is my recommendation that both employee awareness and the Electronic Article Surveillance system be put into effect immediately. The benefits of the programs will be discussed further into this report.

METHODS TO DETER SHOPLIFTING

Both the advantages and the disadvantages were pointed out in evaluating each method. Some of the factors that were considered include price, effectiveness, and ease of implementation.
A. Employee Involvement

This would range from training employees on security awareness, to preventive steps that sales associates could take to reduce theft. According to Sandra Kennedy, president of Retail Industry Leaders Association (RILA), "Because the Loss Prevention function continues to become more critical to retailing, RILA’s Loss Prevention Certification Council has designed a program to standardize the loss prevention education process, and continues to raise the level of quality, consistency and integrity in retail loss prevention associates." (May 8, 2006). Utilizing this program, through workshops offered to the mall employees, and also through in-house video tapes, will greatly reduce the current loss in assets. These tapes would point out suspicious behavior to look for and actions associates can take to prevent a potential shoplifter. Additionally, Ashley’s may consider having one employee become an expert in loss prevention, and who could regularly give tips to employees, as well as train new employees in loss prevention techniques. There are also preventive measures that could be taken which don’t require extensive training. One example would be to start locking the fitting room doors. This would require all customers to be escorted into the fitting rooms by a sales associate, thereby monitoring what people bring in and out of the fitting rooms. Another security measure would be the layout of the store merchandise. Smaller items, such as jewelry, could be placed near the wrap desk where the employees could keep a better eye on them. High ticket items could be placed away from the door, making them not as easy of a target for a quick getaway.

Employee awareness would be the least expensive route for the store to take in reducing inventory shrinkage. "Retailers lose billions of dollars each year from shoplifting, employee theft, and organized retail theft," said Anne-Marie Roerink, FMI director of research. "Even the slightest improvement in these areas will add significantly to the bottom line of every retailer." (2006). As Anne-Marie points out, the cost of not taking action is overwhelming. The program would be very easy to implement, for all it involves is heightening employee awareness.

But employees can’t be everywhere at once. When the store is busy it is still difficult to monitor all the customers in the store.

B. Magnetic Systems

The magnetic system of theft deterrence relies on small tags affixed to the merchandise. These tags are made of a strip of metal a very low magnetic saturation value. Most tags are also lined with an additional strip of iron-based metal to aid in detection. Detection is achieved by sensing harmonics and signals generated by the tags in the presence of particular kinds of magnetic fields, which would be produced at the store exits.

The doorway magnetic fields are demagnetizing the tags, which causes the strip to react, which sends a signal that will cause an alarm to sound. For legally purchased items, however, employees will be able to pass the merchandise over a magnetizing field situated at the check-out counter. Once the tag is magnetized, the tag will not produce the necessary harmonics to trigger an alarm.
Due to the convenient dimensions of the tags, and their very low cost, this system is popular in libraries and retail stores. It is very simple for employees to put this magnetic strip on the tag of the merchandise, or on a merchandise label that would not interfere with the wearing of the Ashley’s clothing item. David Mount, chairman of WEA, a music distributor said, of using magnetic strips in CD packaging, "We felt it was the right thing to do. It will take costs out of the system" (Don 1999).

This is not a perfect system, however, as shoplifters could magnetize the strips, rendering them useless to the store. Also, while these tags are very useful in books or on packaged goods, there are fewer places to put them on clothing items. They work best when shoplifters do not know they are on the merchandise, because when the alarm sounds you will be able to see the look of surprise on their faces. This gives employees a chance to see the shoplifter and call for help.

C. Radio Frequency Systems

Many current systems are simply outdated, like bulky plastic devices affixed to clothes that set off alarms, wire lanyards used to tie merchandise down, and ink tags that destroy garments if removed improperly. This is why I’m making no recommendation for those methods.

There are new technologies available that increase effectiveness of shoplifting-prevention efforts, while also limiting the downsides of other methods. The most promising development is RFID, which stands for radio-frequency identification (see BW Online, 8/31/04, "Inching Toward the RFID Revolution").

The basic idea is to tag merchandise with computer chips, which will allow the retailer to track goods throughout the retail supply chain. There are many benefits, including security features that are harder to foil and easier to disarm when appropriate. "Eventually you’ll know where everything is in the stock room and on the sales floor -- and even outside the store," says Judah Phillips, a senior analyst at Yankee Group (Stone 2004).

While this method is very promising, RFID still demonstrates problems that must be worked out before it can be implemented company-wide. First is its cost, which can be considerable. Second are privacy concerns, since the tags could be kept active as goods head home with shoppers. According to Phillips, "There are a lot of privacy issues that have to be overcome," such as a day when a thief could drive down a suburban street with an RFID reader in hand, learning the details of every expensive item inside (Stone 2004).

D. Acousto-Magnetic Systems

The two leading anti-theft technologies are acousto-magnetic and already discussed radio frequency method (Higgins and Koucky 2001). A less frequent method, microwave, is the oldest source-tagging technology. While it is still used in some North American stores, it is only about 80% accurate. This is why the focus will now be on acousto-magnetic systems.

The main difference between the radio frequency (RF) and acousto-magnetic systems are detection range and frequency. The paper-thin RF tags, which have disposable electronic circuits and antennas, work at about 7.8 to 8.2 MHz.
Acousto-magnetic labels, on the other hand, feature thicker plastic labels and a transmitter that detects tags in a wide area, typically about 18 ft, compared to the 3-ft range of most RF systems (Higgins and Koucky 2001). Also, acousto-magnetic tags operate at 58 kHz. By using a lower frequency, you get less interference from metal, which is a big advantage in the retail business that uses metal shopping carts. Additionally, acousto-magnetic labels can be applied at high speeds.

According to one leading provider, Sensormatic Electronics Corp., Boca Raton, Fla., acousto-magnetic systems look for specific characteristics before sounding off, making it much less prone to false alarms than other technologies.

The acousto-magnetic transmitter forms a surveillance zone where tagged merchandise is encountered. A likely scenario happens when somebody walks through the store’s gates. A transmitter in the gate sends a radio-frequency pulse to energize any tag in the area. The tag responds, giving off a signal that the system’s receiver detects. A microcomputer checks the signal frequency for several properties. If it matches correctly, the alarm sounds. (Higgins and Koucky 2001).

The 18 foot range is particularly useful, otherwise there would have to be transmitters every three feet. That clutters up a store entrance or exit, and is an unattractive nuisance for shoppers. The acousto-magnetic tags are also very easy to activate or deactivate, making it simple to handle purchases and returns.

E. Recommendations

After weighing the pros and cons of the available methods, I feel that by implementing both employee awareness and the acousto-magnetic surveillance system, Ashley’s will be successful in reducing theft. This strategy would enable the store to have a fairly sophisticated surveillance system, that would be backed up by trained, knowledgeable employees. All this can be done at a fairly reasonable cost that will soon pay for itself in the way of reducing inventory losses.

CONCLUSION

Ashley’s would benefit a great deal if it were to implement and integrate these security methods successfully. By backing up a new security system with increased employee awareness, the inventory shrinkage problem can be a thing of the past.
REFERENCES

Appendix 11.
Proposal to Study the Effect of the Garlic Mustard Plant on the Surrounding Ecosystem

(For use with Chapters 1, 7, 9, 16, and 21.)

The following draft is a section from a proposal to study the prevalence of the invasive plant garlic mustard in a woods in southern Wisconsin. The proposal was aimed at the ecology professor in charge of the class, who would also supervise the research project. Line numbers have been added for ease of reference.

Garlic mustard (*Alliaria petiolata*) is a highly invasive plant species introduced from Europe and can be found throughout the United States (WI DNR, 2002). It is currently displacing native species posing a threat to Wisconsin woodlands (Hartman and Morrisey, 2002) Garlic Mustard has been found at Chamberlin Woods, the Beloit College owned area widely used for geology and biology research by Beloit College students. The current density of garlic mustard is unknown in this area. Using aerial maps and GPS units we will measure how much garlic mustard has spread and the relative dispersion in the woods. Further this information will be used to understand why garlic mustard population has expanded so rapidly and the nature of how invasive species spread. Invasion of garlic mustard usually starts on the edge of a forest and spreads along streams and trails. Meekins et al. (2002) found significant differences in survival among demographic parameters in a forest in Southeastern Ohio. These parameters can be used to understand and predict future behavior of garlic mustard (Meekins et al., 2002). The competitive ability of garlic mustard was tested against that of native species to test the hypothesis that garlic mustard invades because it is a better competitor. Meekins and McCarthy (1999) found that it had lower aggressivity value, suggesting that the spread may be due to other factors in the invaded habitat. Garlic mustard could have many ecological advantages leading to the rapid spread. One such possibility is interference with other plants effective use of resources. Garlic mustard extracts can have a negative effect on root length of tomato and interruptive effects on growth of other plants (Roberts and Anderson, 2001). Using the understanding of demographic patters and other characteristics of garlic mustard we can study it’s spread at Chamberlin Woods. We will map the spread of garlic mustard in certain areas and see what abiotic and biotic factors are surrounding the high density areas. We will look for patterns of conditions in Chamberlin woods.