



George Mason University

Business Case Study - Reducing the Incidence of
Organized Retail Crime Inventory Losses

Ron Charest
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Executive Summary

Within the department store retail industry, inventory shrinkage is a significant problem which costs an estimated \$50.6 billion in lost revenue. Although there are several underlying reasons, the fastest-growing cause is organized retail crime. Several strategies to combat inventory shrinkage have evolved within the industry with varying levels of effectiveness.

Acme Retailers Chain, a medium-sized nation-wide retailer chain, is experiencing inventory shrinkage losses that are in excess of industry averages. The company has previously established a robust Loss Reduction Division and this division has achieved success in reducing or controlling most inventory shrinkage. However, losses due to organized retail crime are increasing and senior management has decided to place additional focus on this issue.

Senior management has brought in an outside consulting firm to develop a business case analysis for dealing with organized retail crime losses. Given the current financial environment, Acme Retailers Chain needs to pursue the most cost-effective option that offers the greatest return on investment, as measured in reduced ORC losses.

Based upon in-depth analysis of Acme Retailers Chain issues and industry best practices, the consulting firm has developed four options for controlling ORC losses. These scope of these four options include financial analysis, expected return on investment, and time estimates for accomplishing each option. This report concludes with a recommendation on the most effective option and a high-level timeline for accomplishment.

Nature of the Learning Challenge / Opportunity

The annual National Retail Federation's (NRF) 2018 report "*National Retail Security Survey*" shows that the average inventory shrink rate of 1.38 percent across department store retailers has remained steady over the last few years. When extrapolated on an industry-wide basis, it shows an estimated \$50.6 billion impact on the retail industry.

The causes of inventory shrinkage fall under six general categories:

- Shoplifting
- Organized Retail Crime (ORC)
- Employee Theft/Internal
- Inventory Management Errors
- Vendor Fraud or Error
- Unknown Loss Reasons

ORC refers to groups of people who illegally obtain merchandise in substantial quantities through theft and fraud for the purpose of resale, using two general tactics:

- Theft of merchandise, frequently during warehousing or transport
- Monetization of stolen goods, including related financial crimes such as credit/gift card/return fraud and smuggling.

While shoplifting accounts for an average 31 percent of investigated crimes for all retailers, ORC accounts for 25 percent of all inventory shrinkage and is a fast-growing sector of inventory shrinkage.

Almost all retailers — 94.5 percent — report having been victims, and 84.8 percent report increased incidents over the past three years, with ORC losses averaging \$6,842 per instance compared to \$438 for shoplifting incidents in 2009, so ORC's financial impact is much greater than incident percentages indicate. Because thieves steal in bulk and concentrate on high-value easy-to-resell categories, indirect losses include inventory turns on popular items no longer available for retailers sale, and "frozen out-of-stock" conditions when shelves are depleted of a style or size.

Acme Retailers Chain Background

Acme Retailers Chain¹ is a well-established nationwide chain of off-price retail outlets. Their direct competitors are T.J. Maxx and Home Goods. Acme Retailers promote value as a combination of brand, fashion, price, and quality. As with T.J. Maxx and Home Goods, they do not sponsor promotional pricing activity like sales or couponing. Given their retail model, profit margins are very tight.

The chain has 478 retail outlets in 35 states organized into five regions, with an office for each region, and the corporate headquarters located in Chicago, Illinois. Four years ago, the Board of Directors decided to build-up a strong Loss Reduction (LR) division to combat inventory shrinkage which at the time was rapidly increasing. As part of the build-up and reorganization all existing store security personnel were moved into the LR Division. This reorganization also included the creation of a centralized LR auditors' group.

The LR Division is headed by the Director of Loss Reduction with a corporate team of 30 Loss Reduction Auditors and one Loss Reduction Supervisor. Each regional office has a Regional Retail Loss Reduction Manager who oversees LR issues in that region and reports directly to the Director. Each retail outlet has a team of four to six Loss Reduction Officers (unarmed security guards), depending upon the size of the individual outlet, headed up by a Loss Reduction Detective. Figure 1 refers.

¹ "Acme Retailers Chain" is not a real business but is used in this business case study as an example of an actual retail chain problem.

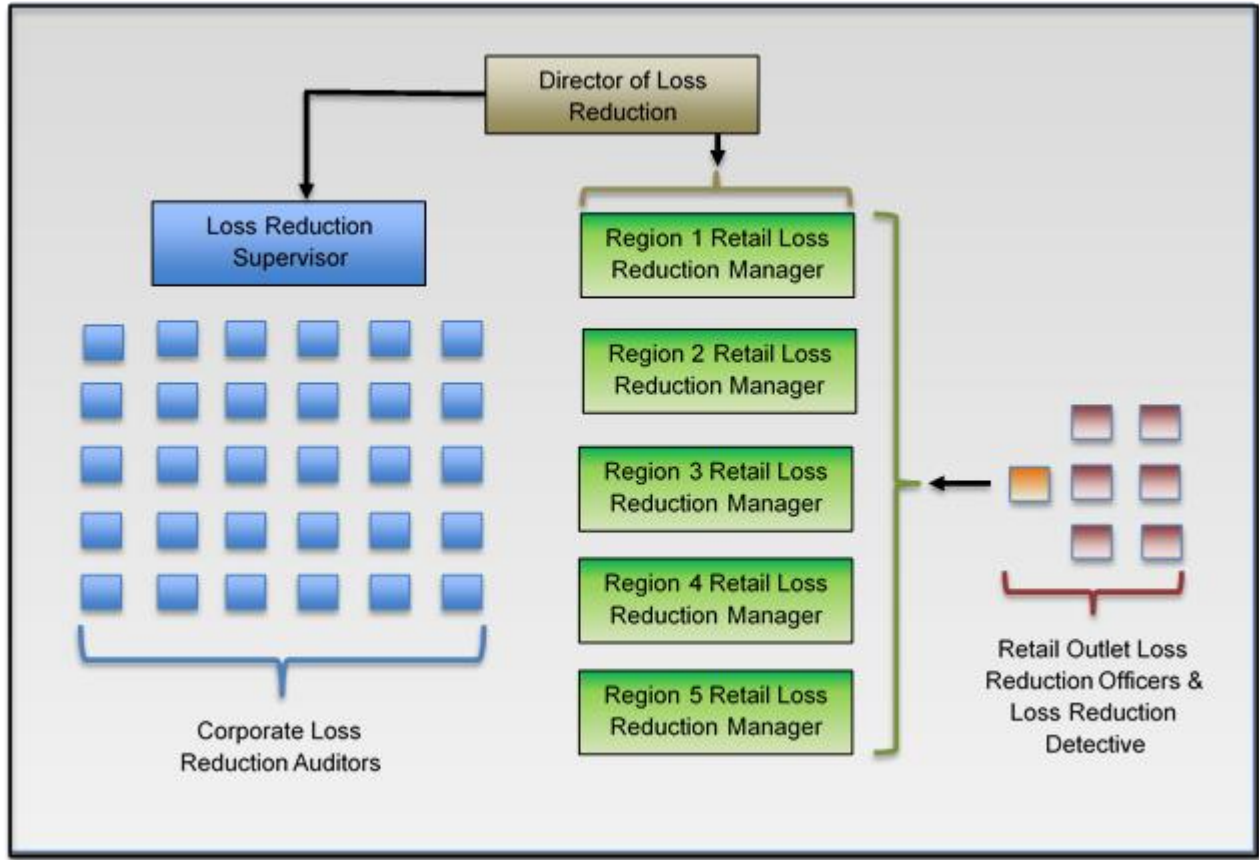


Figure 1- Acme Retailers Chain Loss Reduction Organization

The LR Division has demonstrated success in reducing overall inventory shrinkage across the entire chain of retail outlets. However, losses due to ORC have increased over the past three years and the Board of Directors is becoming concerned. The chain’s executives have set a corporate priority to reduce ORC inventory shrinkage.

Current inventory shrinkage rates as a percentage of sales are at 2.78 percent, above the retail industry median of 1.38 percent. Losses due to ORC are also above industry average. Table 1 refers.

Table 1 - Sources of Inventory Shrinkage by Percent

Source of Inventory Shrinkage	2019	2018	2017
Shoplifting	18.0%	20.80%	21.90%
Organized Retail Crime (ORC)	21.30%	18.50%	16.10%
Employee Theft/Internal	30.00%	35.80%	34.50%
Inventory Management Errors	16.50%	16.80%	21.30%
Vendor Fraud or Error	4.80%	5.40%	6.80%
Unknown Loss Reasons	6.80%	7.20%	6.10%

Alternatives to Consider

Within the retail industry there are typically three general lines of defense against inventory shrinkage:

1. Deploying new technologies
2. Increasing employee awareness and recognition of the issue
3. An organized lobbying response with public policymakers; and gaining greater assistance of law enforcement across stores, regions, and chains.

These tactics have been developed over years of efforts by retailers and are considered industry best practices. Various loss reduction strategies by major retailers all employ a mix of these tactics. The client has requested solutions to reduce their incidence of ORC across their chain of retail outlets. Using standard retail inventory shrinkage prevention tactics, the proposed alternatives to consider are:

1. **Do nothing.** Acme Retailers Chain already has a sizable Loss Reduction (LR) team, based at corporate headquarters, that works to control inventory shrinkage across their retail outlets. Option one is to allow this LR team continue their on-going efforts in reducing inventory shrinkage resulting from all causes.
2. **Deploy new technologies.** Option two is to implement new LR technologies specifically focused on ORC losses.
3. **Training programs.** Option three is to develop and implement training programs tailored to different stakeholders within Acme Retailers Chain, focused on skills necessary to reduce the incidence of OCR-caused inventory shrinkage.
4. **New laws and increased law enforcement efforts.** Option four is to increase lobbying and public awareness efforts at the Federal, state, and local (areas with existing Acme retail outlets) to change laws and increase law enforcement efforts on ORC. This approach would increase the likelihood of ORC perpetrators being caught, and then face increased legal penalties.

Option One: Do Nothing

This option has the advantage of allowing the existing LR team to continue working without outside control. This team has a track record of being proactive in addressing inventory shrinkage in the past. As losses from ORC mount, this team can recognize and implement tactics to combat this loss area as they currently do for other loss areas.

Option Two: Deploy New Technologies

New technologies are continually being developed to combat inventory shrinkage. These technologies involve a mix of approaches.

1. Devices that prevent customers from physically using the product without being removed at the point-of-sale with special tools. These devices include locking wires or security tags on merchandise that are highly visible. Some types of tags will spill non-removable ink if they are tampered with, making the product permanently unusable. These devices are intended to discourage potential thieves by making it more difficult to use stolen merchandise.

2. Radio Frequency Identification Devices (RFID) that allow a retailer to rapidly perform inventories. These devices can also be used in conjunction with entrance/exit scanners that sound an alarm if merchandise with an RFID passes the scanner. These devices, when used for inventory shrinkage, are designed to alert store personnel when unpaid inventory is leaving the sales floor.
3. Mirrors or video cameras around the merchandise sales floor, monitored by trained security personnel. These systems are designed to help make shoplifting more visible and give security personnel the ability to intercept possible thieves.
4. Keep merchandise inside locked cases and require intervention by store personnel to allow customers to handle the merchandise. Typically employed for small but extremely valuable merchandise such as fine jewelry, or merchandise that is potentially hazardous such as firearms. By having designated store personnel working with the customer, theft can be eliminated.

New technologies need to be focused on the specific cause of inventory shrinkage.

Option Three: Training Programs

Training programs can be tailored for different stakeholders within the retail organization. As examples, senior management training could be focused on anti-ORC strategies, which are issues for senior management to address. Training at the LR auditors' level could be more focused on daily tracking and reporting issues.

Training at the sales force levels could be focused on how to recognize ORC and the legal frameworks sales associates must comply with in dealing with ORC perpetrators. Training might also be focused on proactive measures that make the outlet a "hostile environment" for ORC. Training for the LR officers and detectives could be more focused on the legal issues of apprehending suspected ORC perpetrators and effectively working with local law enforcement to maximize prosecutions.

Option Four: New Laws and Increased Law Enforcement Efforts

There are currently no federal laws on ORC, which means theft rings can operate across state lines. Legislation targeting ORC have been introduced in Congress since 2008, but none have yet been signed into law. State and local laws impact ORC by setting limits on the value of merchandise stolen before the theft is considered a felony. Without exceeding the limits for committing a felony, local police can only write tickets on people caught committing merchandise theft. Changing local laws to lower the value of stolen merchandise would help deter theft by enabling law enforcement to prosecute for felonies.

Assumptions and Risks Associated with Each Alternative

The metric used to measure effectiveness of the selected alternative is Return on Investment (ROI), with the “return” defined as a measurable financial reduction in losses. Senior management has set the requirement that all investment in combating ORC should be realized in an equal or greater savings from reduced ORC losses, over a one-year reporting cycle starting with implementation.

Regardless of the option chosen, there are some assumptions that will equally apply to all.

1. The trend of increasing ORC observed over the past few years will continue to grow at a comparable or increased rate in future years, which justifies the added expenses involved with prioritizing this cause of inventory shrinkage over other known causes.
2. Implementing one approach to combating ORC will be equally effective across all Acme Retailers Chain outlets.

Regardless of the option chosen, there are some risks that will equally apply to all.

1. The primary risk is that while prioritizing investment in combating ORC, this cause of inventory shrinkage will reduce due to reasons outside Acme Retailers control while another cause of inventory shrinkage increases. The result will be misdirected resources, and increased inventory shrinkage while Acme Retailers Chain redirects their resources on the new inventory shrinkage issue.
2. A second risk is that employing one option for combating ORC across the entire chain is effective only in some retail outlets and not in others. In the retail outlets where the selected approach is not effective, ORC may show a greater increase than if another alternative was selected. The net result is that across the entire chain, ORC continues to show a net increase.

Risk Exclusive to Options Two, Three, and Four:

A risk with bringing in outside consultants to address ORC is a perceived assumption that the existing team is not capable enough to manage on their own. Bringing in outside specialists to manage ORC risks alienating the existing LR Team and losing their cooperation with the consultant team.

Table 2 shows the assumptions and risks specific to each option.

Table 2- Assumptions / Risk Matrix

Option	Description	Assumption	Risks
1	Allow the existing LR team continue their on-going efforts in reducing inventory shrinkage resulting from all causes.	Existing efforts of the LR team are generally successful. Allowing them to continue working their existing processes offers the greatest ROI.	Efforts of the existing LR team are presently not effective in combating ORC and allowing the team to continue will result in increased inventory shrinkage.
2	Implement new inventory-management technologies specifically focused on ORC losses.	New technologies are the most cost-effective approach to combating ORC, and the option that offers the greatest ROI.	Implementing new technologies may incur unexpected costs, which increases the payback time and reduces ROI.
			Implementing new technologies that have a limited track record may prove ineffective in combating ORC.
3	Develop and implement training programs tailored to different stakeholders within Acme Retailers Chain, focused on skills necessary to reduce the incidence of OCR-caused inventory shrinkage.	Training different stakeholders in ORC-awareness and Loss Reduction is the most cost-effective approach to combating ORC and offers the greatest ROI.	Implementing training programs to different stakeholders within Acme Retailers is time intensive. While training programs are being implemented, ORC losses continue to increase above what another alternative might have achieved.
			As personnel are trained, people involved in committing ORC learn the techniques and adapt their methods, rendering the existing training invalid.

Table 2 – Assumptions / Risk Matrix (cont’d)

Option	Description	Assumption	Risks
4	Increase lobbying and public awareness efforts at the Federal, state, and local (areas with existing Acme retail outlets) to change laws and increase law enforcement efforts on ORC.	Lobbying for new laws and increased law enforcement efforts is the most cost-effective approach to combating ORC and offers the greatest ROI.	<p>It can be expensive to buy politicians, and dishonest politicians do not stay bought. Despite extensive lobbying efforts, new laws targeting ORC and benefitting Acme Retailers Chain are not created.</p> <p>Under the best circumstances, getting laws changed is time intensive. While new laws are being created, ORC losses continue to increase above what another alternative might have achieved.</p>

Financial Metrics and Measures

Acme Retailers Chain has current annual gross sales of \$4,625,510,400, with profit margins averaging about 2.2 percent. Current budgeting allots 3.5 percent of annual gross sales towards LR. Out of that budget, \$145,271,793 pays for LR Division personnel, with the remaining funding allotted to individual retail outlets at an average of \$34,772 per outlet. This funding pays for all LR technology including installation, maintenance, and vendor help-desk support.

Acme Retailers Chain is currently experiencing an annual inventory shrinkage of 2.78 percent, a total annual loss of \$128,589,189. Of this amount, annual loss due specifically to ORC is \$27,389,497; an average of \$57,300 per retail outlet. The NRF’s 2018 report “*Organized Retail Crime Survey*” reported that retailers who were successful in reducing losses due to ORC dedicated an average of 10.2 percent of their LR budget to combat ORC, with about a quarter devoting over 10 percent.

Appendix A provides tables detailing the chain’s financial analysis.

Due to tight profit margins and the current economy, Acme Retailers Chain expects that any additional investment in ORC must at minimum pay for itself year-for-year of investment in reduced inventory shrinkage.

Cost Analysis of Options

Option One: Do Nothing

Option one is to allow the LR team to continue their work as before but increase focus on reducing ORC. There is no impact to the organizational structure or LR operations. Based upon internal estimates of the LR team, the target for observable measure of success by implementing this option is to show a reduction of at least one percent of inventory shrinkage due to ORC every year for the next several years. Implementation can start immediately.

Option Two: Deploy New Technologies

Option Two is to deploy new technologies to control inventory shrinkage from ORC, which has been a typical industry-wide response. Anti-theft technology typically includes a mix of the following equipment.

- Merchandising Security: Equipment used for merchandise display.
 - Security Stands
 - Physical locks and cables
 - Security Mirrors
- Smart inventory Management tools. All require initial operation training.
 - Smart Barcode Scanners
 - Secure Point-of-Sales security software
- Anti-theft Signage
 - Signage used to advise shoppers of store policies on shoplifting
- Cameras & Video Analytics
 - Video Monitoring Cameras
 - Video Analytics Software
 - Facial Recognition Software
- Electronic Article Surveillance (EAS): Equipment attached to merchandise. Some are reusable, others are one-time use.
 - Security Tags
 - Security Labels
 - Radio Frequency (RF) Antennas
 - Spider Tags
 - Radio Frequency Identification (RFID) Tags

Over the past three years retail outlet investment has been targeted at anti-shoplifting technology and improved inventory management. Senior management has credited this technology as being largely responsible for the decrease in inventory shrinkage in the areas of shoplifting and inventory management.

The patterns of ORC operations are different than shoplifting, and the mix of merchandise targeted by ORC differs from the type of merchandise targeted for shoplifting. ORC targets merchandise in transit or warehouse storage, credit card and merchandise return fraud. The mix of anti-ORC technology needs to be different than for shoplifting.

Under this option, Acme Retailers Chain will allocate an additional .20 percent of annual gross sales to LR and distribute the funds to each outlet for the purchase of technology focused on ORC, about \$19K per outlet. Contracted labor required for installation and one-time training on the use of new equipment will also be funded out of this expenditure along with on-going maintenance and help-desk support. Labor provided by retail associates to mount merchandise on secured display stands and install EAS will be folded into their normal duties. Table 3 refers.

At a minimum, all additional funds invested into increased technology on an annual basis must pay for itself over a one-year period following implementation. Any reduction in ORC losses over the additional investment will be considered a success. Implementation will require about six months to purchase, install, and train retail associates in the use of the new technology.

Table 3 - Additional Funding Allotted for New Technology

Retail Metric	Value	Present Funding	Increased Funding
Annual Corporate Gross Sales	\$4,625,510,400		
Present LR Funding Allocation as percentage of Annual sales	3.50%		
Number of Retail Outlets	478		
Annual LR Allotment Per Retail Outlet for Technology and Misc. LR expenses		\$34,772	
Allocated LR Increase as Percentage of Annual Sales	0.20%		
Allocated LR Increase Total Dollars for Additional ORC Technology			\$9,251,020
Annual Additional Allotment Per Retail Outlet			\$19,354
Implementation Time – Six months to purchase, install, and implement use of all new technology.			

Option Three: Training Programs

Research has shown that ORC operations are radically different than shoplifting and the tactics rapidly change. Typically, top management does not understand the complexity and severity of ORC. This lack of understanding reflects in not identifying effective corporate focus on combatting ORC. Retail outlet managers, warehouse personnel, and retail sales associates lack knowledge in how ORC differs from shoplifting.

The NRF’s 2018 report “Organized Retail Crime Survey” indicated that retailers with successful anti-ORC programs were characterized by support from top management who understood the complexity and severity of ORC. The successful retailers also had LR staff trained and dedicated to dealing with ORC.

The proposed training will be a multi-tiered program focused at different levels of the Company.

1. **Senior-Management:** A one-time training workshop using in-person delivery will be offered to upper management, with the objectives of increasing their awareness of ORC. This one-day (eight hour) program will cover the latest finding as published by the NRF, and proven techniques for combatting ORC.
2. **Corporate LR Team:** A one-day (eight hour) training workshop using in-person delivery will be offered to the Corporate Loss Reduction Supervisor and Loss Reduction Auditors, with the objectives of increasing their understanding of the operational concepts behind ORC.
 - a. This one-day workshop will be followed up with four quarterly online eLearning modules presented over a period of one year as continuous training. Each one-hour module will provide compiled feedback from the Regional Retail Loss Reduction Managers quarterly synchronous conferences.
3. **Regional Retail Loss Reduction Managers:** The same one-day (eight hour) workshop curriculum provided to the corporate LR team but presented in a synchronous online format.
 - a. This will be followed up with a quarterly synchronous moderated four-hour conference among the five regional managers and the corporate LR team, over a period of one year, allowing each regional manager to present specific recent observations and lessons learned in dealing with ORC.
 - b. The quarterly conferences will provide a medium for the managers to compare field experiences, and as a means of a summative assessment of the training.
4. **Retail Outlet Loss Reduction Officers and Detectives:** a one-time mandatory self-paced four-hour eLearning course in ORC awareness.
 - a. This one-day workshop will be followed up with four quarterly online eLearning modules presented over a period of one year as continuous training. Each one-hour module will provide compiled feedback from the Regional Loss Reduction Managers quarterly synchronous conferences presented in a training format.
 - b. A new requirement to report incidents of ORC to regional managers using an online form. Form data feeds into the Corporate reporting system and will be viewable by Regional Loss Reduction Managers and the Corporate LR Team.
5. **Retail Outlet Sales Associates and Store Managers:** An initial one-hour self-paced eLearning training course on ORC awareness. This will be focused on recognizing key indicators and reporting requirements.
 - a. An annual one-hour online refresh training course reinforcing key awareness concepts of ORC, and delivery to all new hires as part of their onboarding.

Table 4 defines the budgeted training development and delivery costs. The training development firm provided an estimate of 185 hours of development time for every hour of delivered eLearning, and 150 hours of development time for every hour of stand-up in-person training delivery. The stand-up trainer bills 40 hours of preparation time for the first time an eight-hour course is delivered, and two hours classroom setup time for every eight hours of delivered stand-up training time.

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Table 4 - Training Developmental and Delivery Costs

Note: eLearning courseware billed at 185 hours per one hour of eLearning. Classroom training billed at 150 hours for one-hour standup training	Senior Instructional Developer - Supervision and Developmental Hours	Junior Instructional Designers - Developmental Hours	On-Site Trainer Hours	Total Cost
Labor Rates Per Hour	\$90	\$75.00	\$35	
Senior Management Workshop				
Number of billable Hours: 8 Hour Workshop	60	1,200	50	\$97,150
Corporate LR Team Workshop				
Number of Billable Hours: Initial 8 Hour Workshop	148	1,200	50	\$105,070
Four Quarterly one-hour training Modules	74	740		\$62,160
Regional Loss Reduction Managers				
Number of billable Hours: 8 Hour Synchronous online. Workshop Previously Delivered to Corporate LR Team	0	0	12	\$420
Use of Acme Retailer Chain Corporate Video Equipment for Delivery				\$0
Retail Outlet Loss Reduction Officers and Detectives				
Number of Billable Hours: 4 Hour self-paced eLearning Presentation	60	740	0	\$60,900
Four Quarterly one-hour training Modules, also delivered to the Corporate LR Team	0	0	0	\$0
Development of online Report	24	240	0	\$20,160
Integration into Corporate Reporting System	Performed by in-house IT staff as Normal System Maintenance			
Retail Outlet Sales Associates and Store Managers				
Initial one-hour online eLearning course	19	185	0	\$15,585
Total Training Development and Delivery Cost				\$361,445
Implementation Time – Nine Months to Develop and Deliver All Initially Required Training				

Under this option, Acme Retailers Chain will allocate the additional funds needed for training development and delivery to LR for training development and delivery.

There is an additional hidden expense in removing personnel from their normal duties for the time required for performing training. Due to this hidden cost, management has set a goal of three percent reduction in inventory shrinkage over one year due to ORC over a one-year payback period in order to justify this option.

Implementation will require about nine months to develop the new training, deliver the stand-up training classes, and have all employees view their eLearning classes.

Option Four: New Laws and Increased Law Enforcement Efforts

On the topic of laws and legal enforcement, the NRF's 2018 report "*Organized Retail Crime Survey*" reported:

"Combating organized retail crime requires assistance from local law enforcement. In some states, however, this has been offset as the threshold for what constitutes felony theft has increased. In states where the felony threshold has increased, over half report an increase in ORC case value. None reported a decrease. It appears that ORC criminals understand the new threshold and have increased their thefts to meet it. In states that do currently have ORC laws, retailers are more likely to see increased support on ORC cases from local law enforcement rather than state or federal law enforcement."

Under this option, Acme Retailers Chain will allocate an additional one-half percent of annual gross sales, about \$23M, for lobbying efforts to change federal ORC laws and increase law enforcement in the communities with retail outlets. Their federal lobbying efforts will be through the National Retail Federation, joining with other nation-wide retailer chains, to increase awareness and pass federal laws designed to combat ORC.

The observable measure of success for this option is a ten-percent increase in arrests and successful prosecution of ORC suspects by law enforcement personnel in the communities where Acme retail outlets are located, over the next five years. A second metric will be a federal law passed to address ORC within five years of the start of lobbying efforts.

Cost-Benefit Analysis

The cost-benefit analysis for the four possible options are shown in Table 5.

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Table 5 – Cost-Benefit Comparison of Four ORC Loss Reduction Options

Present LR Budget: 3.5% of Gross Annual Sales	Time to Implement	Percentage Funding Increase Under Option For ORC	Additional Dollar Amount Allotted to ORC	Total Dollar Amount Allotted to ORC LR	Existing Annual Loss Due to ORC	Expected Timeframe for Return on Investment	Expected Dollar Amount Reduction in ORC Loss	Expected Percentage of Reduction in ORC - Related Losses	Remarks
Present LR Budget				\$161,892,864	\$27,389,497				Existing State
Option One	Immediate	0%	\$0	\$161,892,864		One Year after Implementation	-\$3,857,676	-1.00%	Estimate provided by Internal Analysis of Existing LR Team
Option Two	Six Months	0.20%	\$9,251,020	\$171,143,884		One Year After Implementation	-\$9,251,020	-33.78%	Required Minimum Reduction in ORC Losses to Break Even on Investment
Option Three	Nine Months	0.01%	\$361,445	\$162,254,309		One Year After Implementation	-\$3,857,676	-3.00%	Expected Minimum Reduction in ORC Losses to Justify Hidden Costs of Training Disruptions
Option Four	Five Years	0.50%	\$23,127,552	\$185,020,416		Five Years After Implementation	\$0	0.00%	Focus is On Increasing Law Enforcement, Not Reduction in ORC Losses

Business Impact of Each Alternative

Option One – Do Nothing

Over the past several years the LR team efforts have a proven record of gradually decreasing inventory shrinkage due to other reasons, so now they should be allowed to focus on reducing shrinkage due to ORC. If successful, the LR team will show a minimum of one percent reduction while maintaining a steady percentage of losses due to other reasons.

However, research by the executive staff indicates that ORC has fundamental differences from conventional shoplifting. Management has concerns that the LR team does not understand the tactics of ORC, and without additional knowledge will not be effective in combatting it.

Under this option, the LR team will readjust priorities and focus on ORC. But they will be using tactics previously developed against an issue that is fundamentally different from previous challenges. What has worked for other inventory shrinkage issues may not be effective against ORC. A benefit of this option is immediate implementation, as the LR team can just refocus existing efforts.

Option Two – Implement New Technology

Acme Retailers Chain has been heavily investing in technology over the past several years on recommendations from the LR team. This investment has paid off through improvements in inventory management and purchase order tracing, reductions in inventory shrinkage due to internal theft, and reductions in shoplifting. But senior executives are concerned that investment in new technology is reaching the point of diminishing returns.

Electronic equipment used for LR requires periodic maintenance and vendor-provided help desk support. The equipment and related software have a rapid obsolescence cycle and equipment purchased just three years earlier is no longer supported by the vendors and will need to be replaced when it fails. Implementation time is officially estimated at six months to procure and deliver all new technology to all retail outlets, but management expects delays due to training issues by retail associates learning how to fully utilize capabilities of the new technology.

In addition, as new equipment is added to retail outlets, the time needed to train new retail associates increases. Already, new cashiers require several days on-job training with a mentor to gain proficiency with new Point-of-Sale (POS) cash registers, much longer than the replaced POS systems. Retail Associates require frequent vendor-provided help-desk support to deal with equipment issues, which is a paid service that increases retail outlet's overhead.

The cost-benefit analysis of adding additional technology shows that the required level of additional investment will require a thirty-three percent reduction of ORC in the first year after

implementation to break even on projected savings in reduced ORC. Given past LR trends, this does not appear to be a realistic objective.

Option Three – Training Programs

The option of providing training across the entire company has several benefits. Management recognizes that ORC is the fastest growing trend in organized theft rings, and they need to be proactive in combatting it. Although taking all senior managers, the Corporate LR team, and Regional LR Prevention managers away from their normal duties for an entire day is disruptive and will require extensive scheduling efforts, these senior managers rarely get a chance to meet with each other as a group.

Providing eLearning training to the retail outlet sales associates, loss reduction officers, and detectives, is an infrequent event. The general attitude of employees working in the retail outlets is that senior management ignores them unless they fail to make earnings. A side benefit of being proactive and providing training on a topic of concern is showing the retail outlet employees senior management is aware of their issues.

Providing ORC training also supports industry findings that the retailers who are most successful in combatting ORC are those who understand the problem, from senior management down to the retail associates. The cost to develop training, compared to the required returns, seems very attractive. There is a longer lead time to fully implement all training requirements than with options one and two, but the periodic retraining for retail associates ensures new hires (hires after the initial training is completed) will be included in ORC awareness.

Option Four – Lobbying Federal and Local Government

This option is focused on enforcement, and reduction in ORC losses will not be monitored for ROI. Given the current federal-level political climate, gaining new and effective federal laws targeting ORC appears problematic. In most communities with Acme Retailers Chain outlets, the law enforcement organizations are already overwhelmed in dealing with existing enforcement issues. Local government budgets do not support adding additional personnel needed to take on new law enforcement duties.

Any additional effort local law enforcement can provide towards supporting retail outlets must be shared among all retailers within that community. Acme Retailers Chain management recognizes that local law enforcement typically tends to focus on supporting the locally owned merchants (“Mom and Pop Stores”), with less attention given to the larger national retail chains. Additional lobbying efforts at the local level will likely not have a significant impact in changing this bias.

Conclusions and Recommendations

After reviewing all options, the consulting firm recommends option three, developing and delivering new training to all Acme Retailers Chain employees. This option has the overall best

return on investment in the immediate period of evaluation, but also offers a longer-term solution by including new hires joining the company after the initial period of performance.

High-level Implementation and Evaluation Plan

Implementation is estimated at nine months. Figure 2 provides a high-level implementation plan.

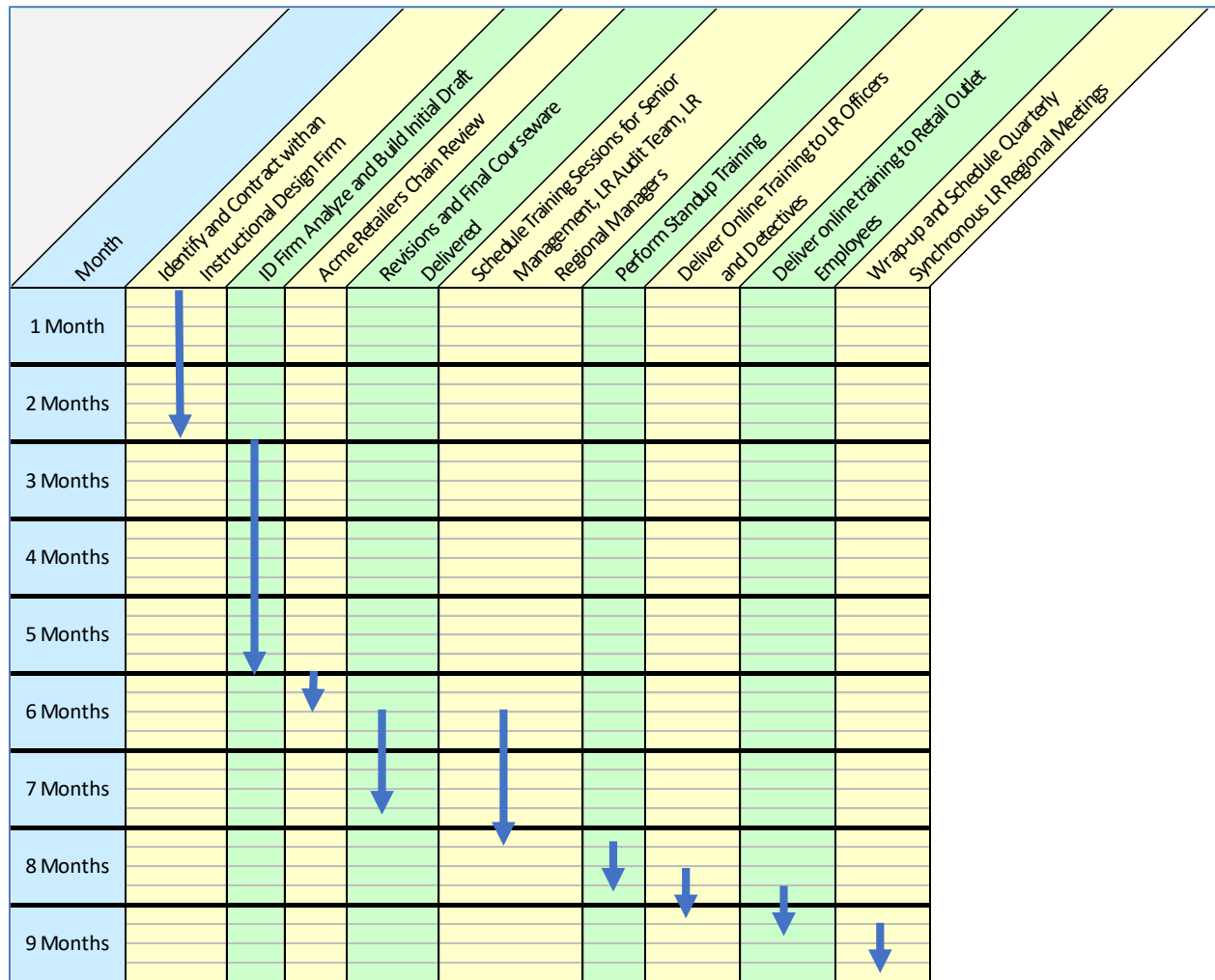


Figure 2- High level Timeline for Implementing Option Three

Management will immediately begin the process of selecting a training consultant to develop and deliver the training. The Corporate Loss Reduction Supervisor will take the lead in developing the request for proposal and reviewing bids, with support of the LR auditors, and evaluating bids. The Director of Loss Reduction will make the final contract award selection.

Evaluation of the training consultant will be based on prior experience developing training for the retail industry, references by prior customers, and lowest realistic cost.

Once contracted, the Corporate Loss Reduction Supervisor will be the point of contact with the training consultant throughout the training development cycle. The LR auditors will provide information necessary for training development and provide coordination with the Regional Loss Reduction Managers. Should the training consultants need to visit retail outlets for data collection, their visits will be coordinated by the Regional Loss Reduction Managers.

The Director of Loss Reduction will accept all training products and initiate the training delivery scheduling. The Director will be responsible for scheduling stand-up training for senior management and will participate in their training session. The Director will also later participate in the stand-up training delivered to the LR Auditors as a means of providing management insight into the ORC issue. The Loss Reduction Supervisor will schedule training for the LR Auditors and participate in that training session. The Loss Reduction Supervisor will also coordinate the synchronous training schedule with all five Regional Loss Reduction Managers.

The Regional Loss Reduction Managers will be responsible for setting training requirements to their respective retail outlet Loss Reduction Officers and Loss Reduction Detectives. The individual retail outlet managers will be responsible for setting training requirements to their respective retail associates and monitoring completion.

Scheduling the quarterly synchronous four-hour conferences among the Regional Loss Reduction Managers will be coordinated by the Loss Reduction Supervisor. All feedback will be collected by the conference moderator, a representative of the training consultant. Upon approval of the feedback by the Director of Loss Reduction, the training consultant will develop the quarterly one-hour presentations for Loss Reduction Officers and Loss Reduction Detectives.

This initiative will be evaluated successful if:

- All employees receive the initial training within the nine-month period of performance.
- The summative assessments show a positive learning experience.
- There is a minimum three percent reduction averaged across all retail outlets one year after completion of the initial training.

Appendix A – Financial Data for Acme Retailers Chain

Currently, Acme Retailers Chain budgets 3.5 percent of annual gross sales towards reducing all types of inventory shrinkage. This budget includes salary for dedicated LR employees, LR technology, LR-dedicated training, and miscellaneous LR expenses.

Table 6 shows Acme Retailers Chain annual revenue and LR budget.

Table 6 - Acme Retailers Chain Income and LR Budget

Retail Metric	Value	Totals
Retail Outlet Average Square Footage	21,600	
Sales Per Square Foot	\$448.00	
Total Annual Sales		\$9,676,800
Number of Stores in Chain	478	
Total Annual Corporate Sales		\$4,625,510,400
Budget for Loss Reduction as Percentage of Gross Sales	3.5%	
Total Annual LR Budget		\$161,892,864

Table 7 Shows fully loaded salary and overhead expense for the LR team. Salary and overhead for the LR team come from the LR budget.

Table 7 – Salary and Overhead Costs of Loss Reduction Team

Position	Median Fully Loaded Annual Salary	Number of Positions	Total Salary Cost	Total Annual Salary Cost
Director of Loss Reduction	\$183,926	1	\$183,926	
Loss Reduction Supervisor	\$92,085	1	\$92,085	
Loss Reduction Auditors	\$75,900	30	\$2,277,000	
Regional Loss Reduction Managers	\$136,217	5	\$681,083	
Loss Reduction Detective	\$55,650	478	\$26,600,700	
Loss Reduction Officers	\$48,300	2,390	\$115,437,000	
Total Annual Salary for LR Team				\$145,271,793

Table 8 - Budget Allotment of LR Funding

Retail Metric	Value	Totals
Total Fully Loaded LR Team Salary	\$145,271,793	
Remaining Budget for Retail Outlet LR Expenses		\$16,621,071
Number of Retail Outlets	478	
Annual Average LR Funds Allotted Per Store		\$34,772

Table 9 - Inventory Shrinkage Due to ORC

Retail Metric	Value	Sub-Totals
Average Gross Annual Revenue Per Store	\$9,676,800	
Number of Retail Outlets	478	
Annual Corporate Gross Revenue		\$4,625,510,400
Annual Inventory Shrinkage of 2.78 Percent	2.78%	
Annual Inventory Shrinkage Cost		\$128,589,189
Percentage Inventory Shrinkage Due to ORC in 2019, of Total Inventory Shrinkage	21.30%	
Annual Corporate Inventory Shrinkage Cost Due to ORC		\$27,389,497
Annual Inventory Shrinkage Cost Per Store Due to ORC		\$57,300

Appendix B – Other References

Salary Calculation Resources

My resource for estimating salaries and developmental costs came from the following resources:

1. Salary.com (<https://www.salary.com/>) : Provided base salary data for retail Loss Reductions specialists. For simplicity, I used Chicago as the location for Acme Retailers Chain corporate office, so all salaries are based on that geographic location. Note the salaries in this Business Case Analysis (BCA) are “fully-loaded” salaries. I added fifty percent of base salary to account for employee overhead and benefits cost shown in Table 7.
2. Freelance eLearning Contractor Rates (<https://elearning.net/freelance-elearning-developer-rates/>) : Provided learning development rates for freelance learning developers. I based my estimate on one senior Instructional Designer and a team of mid-level Instructional designers.
3. Association for Talent Development, Time to Develop One Hour of Training (<https://www.td.org/newsletters/learning-circuits/time-to-develop-one-hour-of-training-2009>) : Provided estimates for learning developmental time estimates. I used the median hours estimate for all learning development estimates.

Retail Industry Resources.

These are the primary resources I used to gain an understanding of the issues of inventory shrinkage.

1. Vend - 6 Anti-Theft Devices You Can Use To Protect Your Retail Store (<https://www.vendhq.com/blog/anti-theft-devices/>) : Provided background information on anti-theft technology.
2. Security Tags.com - The top retail Loss Reduction strategies (<https://www.securitytags.com/top-retail-loss-prevention-strategies>) : Provided background information on anti-theft technology and inventory shrinkage reduction strategies.
3. National Retail Federation (NRF) - 2018 Organized Retail Crime Survey (https://cdn.nrf.com/sites/default/files/2018-11/NRF_ORCS_IndustryResearch_2018_FINAL.pdf) : Provided survey data on types of inventory shrinkage and industry-wide losses.
4. National Retail Federation (NRF) - 2018 National Retail Security Survey (<https://cdn.nrf.com/sites/default/files/2018-10/NRF-NRSS-Industry-Research-Survey-2018.pdf>) : Provided general survey data on security issues within the retail industry.
5. ASIS International - Shoplifting, Inc. (<https://www.asisonline.org/security-management-magazine/articles/2019/09/shoplifting-inc/>) : Provided background information on inventory shrinkage, with links to source material.
6. Face First - 33 Shocking Retail Loss Reduction and Violent Crime Statistics For 2019 (<https://www.facefirst.com/blog/retail-loss-prevention-and-violent-crime-statistics/>) : Provided background reference information on inventory shrinkage.

7. Loss Reduction magazine - RESEARCH: Retail Theft and Loss Reduction Analytics (<https://losspreventionmedia.com/retail-theft-loss-prevention-analytics/>) : Provided background reference information on inventory shrinkage.

Modeling Retail Profits

I used this reference to model expected annual sales for Acme Retailers Chain: Camoin Associates - Average Square Footage and Retail Sales per Square Foot Across Major Brands (<https://www.camoinassociates.com/average-square-footage-and-retail-sales-square-foot-across-major-brands>)