MEI: Cash Management Systems

Survey Report

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Introduction

This project was developed to assist MEI in better understanding retailers' perceptions of, and experiences with, the adoption and use of cash management systems. The survey was designed to collect information from retailers regarding their familiarity with cash management systems; their opinions of the importance of cash management systems; their use of smart safes and satisfaction with their performance; the cash-handling procedures of those who do not use smart safes; and, their implementation of new cash-handling technologies.

The survey targeted retailers in a variety of retail segments: Big Box, Convenience/Gas, Department Stores, Fast Casual Restaurants, Grocery Stores, Quick Serve Restaurants, and Specialty Retailers. The FSRC contacted company representatives from Loss Prevention, Corporate Finance, and Corporate Operations for survey completion. This report details the responses of the 78 retail executives who completed surveys.

The survey instrument included a variety of questions about cash management systems, smart safes, cash-handling procedures, and the implementation of new technologies in retail settings. The specific categories of questions are as follows:

- General Questions about Cash Management Systems
  - Familiarity with cash management systems
  - Importance of cash management systems
  - Issues related to cash handling and management
- Current Use of Smart Safes
  - Year of first use; Percentage of stores using; Number of smart safes per store
  - Level of effectiveness of smart safes
  - Benefits of smart safes
  - Issues with smart safes
- Implementation Process for Smart Safes
  - Factors influencing decision to use smart safes
  - Team members contributing to decision to use smart safes; Final decision-maker
  - Pilot testing smart safes
  - Data on effectiveness of smart safes
  - Performance and ROI expectation for smart safes
- Non-Users
  - Current cash-handling procedures
  - Current/Past testing of smart safes
  - Factors influencing decision to implement new technologies
  - Team members contributing to decision to use new technologies; Final decision-maker
  - Pilot testing new technologies

The results of this study provide MEI with a substantial amount of information about the experiences and opinions retailers have for the adoption and use of cash management systems such as smart safes.

Format of the Report

This report is divided into several sections that first present background on the survey process and then present the results of the completed surveys in sections corresponding to the questions asked in the survey (see outline above).

The report begins with an Executive Summary, a brief overview of the survey results. The sections that follow provide more detailed information on the findings, including tables and figures summarizing the retail executives' responses to each question. Please note that each Table or Figure indicates the total number of respondents who answered the question and/or the percentage providing each response. Any "open-ended" answers provided by respondents are quoted directly and were transcribed directly by interviewers.

Survey Procedure & Methodology

The survey of retailers was conducted by telephone from the survey facilities of the FSRC at the University of Florida in Gainesville, Florida, and by internet, using the FSRC on-line survey system.

Sampling

The sample of retailers was developed from three sources: a sample of convenience stores and restaurants provided by Glenn Mason of MEI, with internet look-up for telephone numbers (containing 100 convenience stores, 45 quick serve restaurants, and 32 fast casual restaurants); a sample from a NACS Tech post-show mailing list provided by Glenn Mason of MEI (containing 149 IT contact telephone numbers); and, a sample of retail loss prevention executives provided by the Loss Prevention Retail Council (containing 25 grocery stores, 40 department stores, 240 specialty retail stores, and 7 big box stores).

Respondent Composition

The final sample of respondents who completed surveys included executives from a variety of backgrounds including Loss Prevention, Operations, Finance, and IT.

Respondent Type	Frequency	% (N=78)
Loss Prevention	25	32.1%
Operations	24	30.8%
IT	6	7.7%
Finance	5	6.4%
Unknown	18	23.1%

The final sample of respondents represents an array of retail segments as well.

Respondent Retail Segment	Frequency	% (N=78)
Specialty Retail	29	37.2%
Convenience Store	20	25.6%
Department Store	11	14.1%
Supermarket / Grocery Store	9	11.5%
Quick Serve Restaurant	6	7.7%
Fast Casual Restaurant	2	2.6%
Big Box Store	1	1.3%

Survey Procedure

The Florida Survey Research Center makes substantial efforts to reduce error from non-responses. Non-response error results in a bias because those individuals who either refuse to participate or cannot be reached to participate may be systematically different from those individuals who do complete the survey. Our efforts to reduce non-response bias begin with thoughtful preparation of both the introductory statement and the survey instrument in a format that promotes participation and full response to all questions. In addition, we train our interviewers extensively to ensure that they understand the survey instrument and the material content of the questions it poses, and to ensure proper completion of the form itself.

Pretest

Pretesting is used to identify any problems with questionnaire design, including question wording, transitions between sections of the survey, and clarity of language and concepts. Following construction and approval of the survey instrument by MEI, the survey was coded and loaded into the FSRC CATI system, an interactive front-end computer system that aids interviewers in asking questions over the phone. The FSRC pretesting process began by repeated testing of the CATI programming language to insure that the questionnaire was working properly and that all responses were properly coded.

After the program was completely tested and found to be operating soundly, the FSRC conducted a pretest of the survey instrument with respondents from the sample group. The interviewer who conducted the pretest surveys is an experienced member of the FSRC staff who was carefully trained in the use of the survey instrument. The research coordinator then noted any issues that arose with the use of the instrument, revisions were made as needed, and implementation began.

Implementation

The first step of the implementation process is loading the final version of the survey instrument into the FSRC Computer-Aided Telephone Interviewing (CATI) system. The FSRC CATI system is an interactive front-end computer system that aids interviewers in asking questions over the telephone. As surveys are completed, respondents' answers are keyed into the computer system immediately by the interviewer. The CATI system helps prevent errors as it prompts the researcher to ask correct questions based on built-in skip patterns and eliminates out-of-range responses. This supports extremely

complicated questioning patterns, branching, and multiple survey designs for the same project. Data are automatically and instantaneously recorded into an ASCII database.

To maintain consistent quality in data collection and to best support business call-backs and contacts, one experienced interviewer was used to complete the MEI survey. This interviewer was trained by a supervisor in the implementation of the survey instrument. A test survey instrument was loaded in the CATI system for the interviewer to practice before making calls to potential respondents. The FSRC supervisor reviewed each question in the instrument with the interviewer and then resolved any difficulties the interviewer experienced before she began live calls.

The survey was conducted on weekdays, Monday through Friday, from 9:00 a.m. until 5:00 p.m. (and at later eastern times, when necessary, to accommodate surveys with those in other time zones). A total of 78 interviews were completed between March 25, 2011 and July 18, 2011.

The FSRC Research Coordinator reviewed and monitored all surveys completed for this project for performance and accuracy.

Data sets were downloaded at regular intervals and analyzed. Each question option and branching set was checked to be certain that everything was working correctly and that accurate data were being recorded. At the conclusion of the data collection, the final data files were again analyzed using the SAS® data analysis system, and compiled for this summary report.

Executive Summary

Cash Management Systems

More than one-quarter (28.2%) of the respondents indicate that they are "very familiar" with cash management systems like smart safes, and more than one-half (51.3%) indicate that they are "somewhat familiar" with these systems. About one-fifth (19.2%) of the survey respondents say they are "not at all familiar" with cash management systems like smart safes.

Overall, about one-half of the respondents from Quick Serve Restaurants (50.0%), Fast Casual Restaurants (50.0%), and Convenience Stores (45.0%) indicate that they are "very familiar" with cash management systems like smart safes. In contrast, just one-third (33.3%) of those from Grocery Stores, one-sixth (17.2%) from Specialty Stores, and about one-tenth (9.1%) from Department Stores say they are "very familiar" with these systems, and one-fifth to one-quarter of respondents from these retail segments say they are "not at all familiar" with the systems.

More than one-third (36.7%) of the respondents who are at least somewhat familiar with smart safes indicate that they first learned about these systems from a "trade show" – the most frequent response. Although a substantial percentage of respondents believe smart safes are important in today's retail environment, a higher percentage believes smart safes will be important in retail environments over the next five years. More than two-fifths (44.9%) of those surveyed rate cash management systems such as smart safes as either a "4" or "5" (very important) in today's retail environment, and more than one-half (52.6%) rate these systems as either a "4" or "5" in importance over the next five years.

Respondents rate three issues related to cash handling as problematic than others (combining ratings of "4" and "5"): "Cost for armored car services" (34.7%); "Amount of Manager time involved in cash handling" (30.8%); and, "Reconciling against POS sales" (30.8%). Nearly one-fifth (18.0%) of the respondents rate "Reconciling against POS sales" as a "major problem" in their retail stores. More than one-quarter (26.9%) of the respondents rate "Amount of Manager time involved in cash handling" as a "4" of a 5-point scale. Conversely, just nine percent of respondents rate "Counterfeit bills" as a "4" or "5" (major problem), and nearly three-quarters (71.8%) rate the issue as a "2" or "1" (not a problem).

Current Use of Smart Safes

About one-quarter (25.6%) of the executives surveyed indicate that at least some of their retail stores currently use smart safes. More than two-thirds (70.0%) of the respondents who currently use smart safes in their retail stores began using them within the past five to six years (since 2005).

Nearly one-half (45.0%) of the respondents who currently use smart safes use them in fewer than 10 percent of their retail stores. However, nearly one-third (30.0%) of those who use smart safes use them in all of their stores. The vast majority (85.0%) of those who currently use smart safes in their retail stores indicate that, on average, only one smart safe is in operation in a typical store that uses the technology.

Three-quarters (75.0%) of the respondents who currently use smart safes rate their effectiveness as either a "4" or "5" (very effective). One-fifth (20.0%) of these respondents rate the effectiveness of smart safes in the middle of the scale as a "3," and none rate them as ineffective.

Two-fifths of the respondents who currently use smart safes note "Reduced cash loss" (40.0%) and "Reduced time to reconcile cash" (40.0%) as benefits of smart safes in their stores. One-quarter or more of these respondents cite "Improved reporting/tracking of revenue" (30.0%); "Improved safety and security" (30.0%); "Make it possible for the Manager to be more productive" (25.0%); or, "Keeps the manager in the store" (25.0%) as benefits of smart safes. Nearly one-third (30.0%) of those that use smart safes indicate that "Reduced cash loss" is the most important benefit of smart safes.

Nearly one-half (45.0%) of the respondents that currently use smart safes say they have not had any issues with them. One-fifth (20.0%) of these respondents indicate having had problems with "Note jams," and a similar percentage report issues with "Capabilities of the safe" (15.0%) or "Incompatibilities with existing systems" (15.0%).

Implementing Smart Safes

Four-fifths of respondents who currently use smart safes indicate that "Overall effectiveness of smart safes in improving cash handling" (80.0%) and "Overall effectiveness of smart safes in reducing loss" (80.0%) were important factors in considering smart safes for their stores. Three-quarters (75.0%) of these respondents considered "Safety and security" in implementing smart safes, and a similar percentage (70.0%) considered the "Overall cost of implementing smart safes." About two-thirds (65.0%) of these respondents considered the "Amount of manager time required to manage cash"; three-fifths (60.0%) considered the "Return on investment (cost v. reduction in theft)"; and, two-fifths (40.0%) considered "Compatibility with existing systems and workflows."

When asked to indicate which of these factors was "most important" in their decision, more than one-third (35.0%) indicate "Overall effectiveness of smart safes in improving cash handling," while one-fifth (20.0%) indicate "Return on investment (cost v. reduction in theft)."

One-quarter or more of the respondents who currently use smart safes indicate that "IT Personnel" (30.0%), the COO (25.0%), or the VP of Operations (25.0%) contributed to the decision-making about implementing smart safes. One-fifth of these respondents say the President/CEO (20.0%) or "Financial / Accounting Personnel" (20.0%) contributed, and 15 percent say "Senior Operations Personnel," the VP of Loss Prevention, or "Senior LP Personnel" contributed to the decision-making. Of note, nearly two-thirds (65.0%) of these respondents indicate "Other" types of personnel who contributed to decision-making about smart safes. One-quarter (25.0%) of the participants who currently use smart safes indicate that the final decision about implementing this technology was made by the Chief Operating Officer, while 15 percent indicate the decision was made by the President/CEO. Just five percent of these respondents report that the Vice President of Loss Prevention was the ultimate decision-maker regarding smart safes. Nearly one-half (45.0%) of those with smart safes note some "Other" final decision-maker for this technology.

About two-thirds (65.0%) of the respondents who currently use smart safes indicate that they pilot tested smart safes before implementing them in their stores. Nearly one-half (46.2%) of the stores that conducted pilot tests of smart safes before implementing them widely did so in only one or two stores. More than one-half (53.8%) of the stores that conducted pilot tests of smart safes before implementing them widely did so for only three months or less. And, just 15 percent of the respondents who currently use smart safes have gathered data to determine how effective they have been for their companies.

Nearly all (95.0%) of the respondents who currently use smart safes indicate that they have met their expectations in terms of performance, while three-quarters (75.0%) indicate that smart safes have met their expectations in terms of ROI.

Respondents That Do Not Currently Use Smart Safes

Almost all (93.1%) of the retailers who do not currently use smart safes say they secure store revenues in a traditional safe before depositing them in the bank. One-half (50.0%) of the respondents who do not use smart safes indicate that an "Armored car service takes revenues to the bank (CIT, cash-in-transit)," while nearly as many (46.6%) indicate that a "Manager or other employee takes revenues to the bank (self-transit)."

More than two-fifths (41.4%) of those who do not use smart safes say that they are "Very Satisfied" with their current cash-handling process, and more than one-half (55.2%) say they are "Somewhat Satisfied." About four percent of these respondents report that they are "Not At All Satisfied" with their current cash-handling process.

Tested Smart Safes

Only about one-eighth (13.8%) of the respondents who do not use smart safes indicate that they have ever tested this technology. One-half (50.0%) of those who do not currently use smart safes but have tested them indicate that they are currently testing, while one-half (50.0%) indicate that they completed tests in the past. Of those currently pilot testing smart safes, one-half (50.0%) report that smart safes are meeting expectations, one-quarter (25.0%) report they are not meeting expectations, and one-quarter (25.0%) do not know whether expectations are being met at this point in the test.

Implementing New Cash-Handling Technologies

Almost all of these respondents note that the following factors are important in making decisions about new technologies: "Return on Investment (cost v. reduction in theft)" (96.6%); "Overall cost of implementing the technology" (94.8%); "Safety and Security" (91.4%); and, "Overall effectiveness of the technology in reducing loss" (89.7%). In addition, more than four-fifths of these respondents mention the importance of "Compatibility with existing systems and workflow" (82.8%) and "Amount of manager time required to manage cash" (81.0%) in decision-making.

When asked which of these factors is most important in decision-making about new technologies, nearly two-fifths (37.9%) indicate "Return on Investment." More than one-quarter (27.6%) of these respondents feel that "Safety and security" is the most important factor, and more than one-fifth (22.4%) believe that the "Overall cost of implementing the technology" is the most important factor.

More than one-half (53.4%) of the respondents who do not currently use smart safes indicate that the Vice President of Operations contributes to the decision-making when the company considers new cash-handling technologies, and more than two-fifths say "Financial/Accounting Personnel" (43.1%) or the Vice President of Loss Prevention (41.4%) contribute. About one-third of the respondents who do not currently use smart safes indicate that the Chief Financial Officer (36.2%), "Senior Loss Prevention Personnel" (32.8%), or "Senior Operations Personnel" contribute to the decision-making. About one-fifth to one-quarter of these respondents say the COO (25.7%) or "IT Personnel" contribute to decision-making, and about one-eighth say the President/CEO (12.1%) or LP Managers contribute to the decision-making about new technologies.

More than one-fifth (22.4%) of the participants who do not currently use smart safes indicate that the final decision about implementing new cash-handling technology is made by the Chief Operating Officer, while 15.5 percent indicate the decision is made by the President/CEO. More than one-sixth (17.2%) of these respondents say the final decision-maker regarding new technology is the Chief Financial Officer, and just four percent report that the Vice President of Loss Prevention is the ultimate decision-maker regarding new cash-handling technology. Nearly two-fifths (37.9%) of those without smart safes note some "Other" final decision-maker for new cash-handling technology.

Almost one-half (46.6%) of the respondents who do not currently use smart safes indicate that they "Always" pilot test a new cash-handling technology before introducing it widely in their stores, while another five percent say they "Sometimes" pilot test. More than one-fifth (22.4%) of these respondents report that they "Rarely" pilot test new cash-handling technologies, and more than one-eighth (13.8%) say they never pilot test new cash-handling technologies before introducing them widely in their stores.

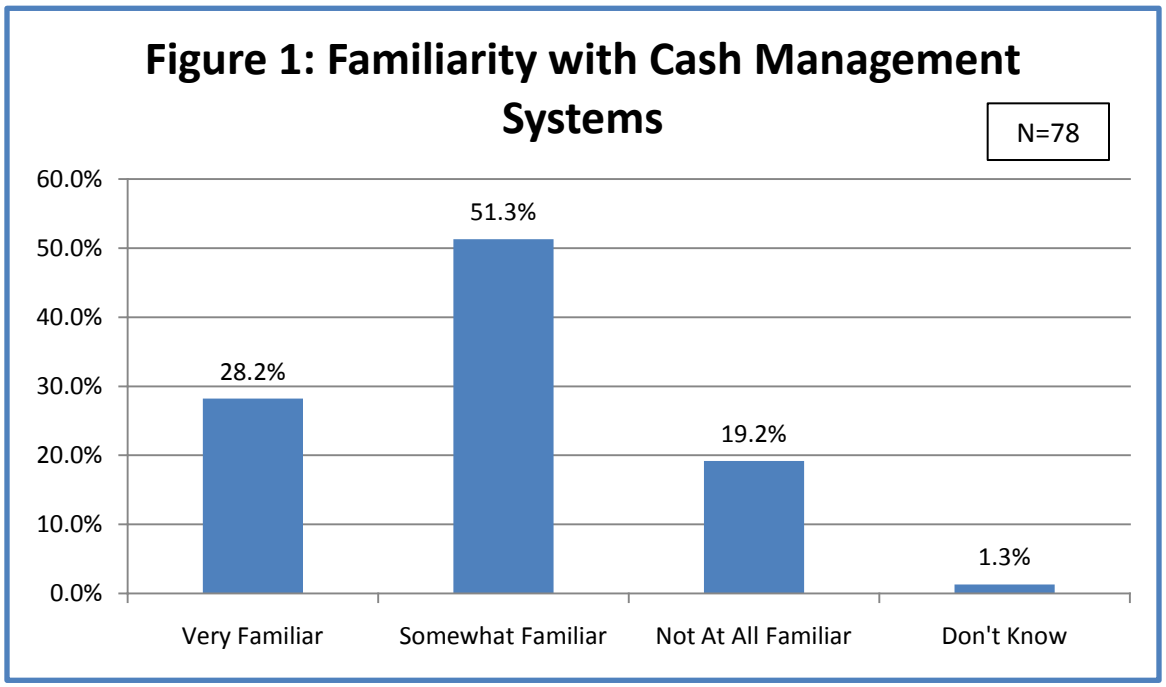
Of those respondents who indicated that they always, sometimes, or occasionally pilot test a new cash-handling technology before implementing them in their stores, more than two-thirds (70.6%) report that 10 or fewer stores typically receive the technology in the pilot test. More than three-fifths (61.8%) of the stores that conduct pilot tests of new technologies before implementing them typically do so for two to six months.

Cash Management Systems

The first set of survey questions focused on general topics related to cash handling and cash management systems.

Familiarity with Cash Management Systems

The first questions asked: "*How familiar are you with cash management systems like smart safes? Would you say that you are very familiar, somewhat familiar, or not at all familiar with cash management systems like smart safes?*" The results appear in Figure 1 below.



More than one-quarter (28.2%) of the respondents indicate that they are "very familiar" with cash management systems like smart safes, and more than one-half (51.3%) indicate that they are "somewhat familiar" with these systems. About one-fifth (19.2%) of the survey respondents say they are "not at all familiar" with cash management systems like smart safes.

Familiarity with Cash Management Systems by Retail Segment

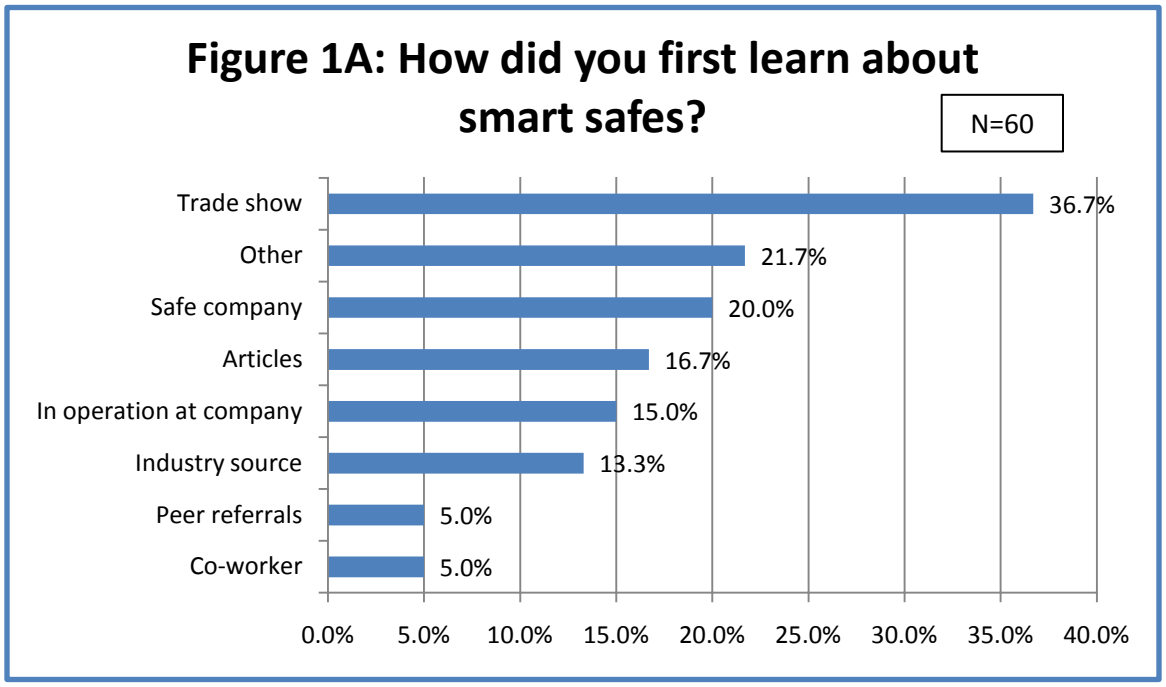
The following contingency table shows familiarity with cash management systems by type of retail segment.

Familiarity	Type of Retail Segment						
	Dept. Store	Specialty Store	Grocery	Quick Serve	Fast Casual	Convenience Store	Big Box
Very Familiar	9.1%	17.2%	33.3%	50.0%	50.0%	45.0%	0.0%
Somewhat Familiar	63.6%	58.6%	44.4%	50.0%	0.0%	40.0%	100.0%
Not at All Familiar	27.3%	24.1%	22.2%	0.0%	50.0%	10.0%	0.0%
Don't know	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%
Total N	*11*	*29*	*9*	*6*	*2*	*20*	*1*

Overall, about one-half of the respondents from Quick Serve Restaurants (50.0%), Fast Casual Restaurants (50.0%), and Convenience Stores (45.0%) indicate that they are "very familiar" with cash management systems like smart safes. In contrast, just one-third (33.3%) of those from Grocery Stores, one-sixth (17.2%) from Specialty Stores, and about one-tenth (9.1%) from Department Stores say they are "very familiar" with these systems, and one-fifth to one-quarter of respondents from these retail segments say they are "not at all familiar" with the systems.

How did you first learn about smart safes?

Those respondents who indicated that they were either somewhat or very familiar with cash management systems like smart safes were next asked: "How did you first learn about smart safes?" The responses appear in Figure 1A below.



*Percent may add up to more than 100% as respondents could choose more than one response

More than one-third (36.7%) of the respondents who are at least somewhat familiar with smart safes indicate that they first learned about these systems from a "trade show" – the most frequent response. One-fifth (20.0%) of these respondents first heard about smart safes from a "safe company," and a similar percentage (16.7%) learned about smart safes from "articles." While 15 percent of these respondents learned about smart safes "in operation at their companies," about one-eighth (13.3%) of those who are familiar with smart safes learned about them from an "industry source." Just five percent of these respondents learned about smart safes from either "peer referrals" or a "co-worker."

In addition, more than one-fifth (21.7%) of respondents who are familiar with smart safes indicate learning about them in "other" ways. These responses are detailed below.

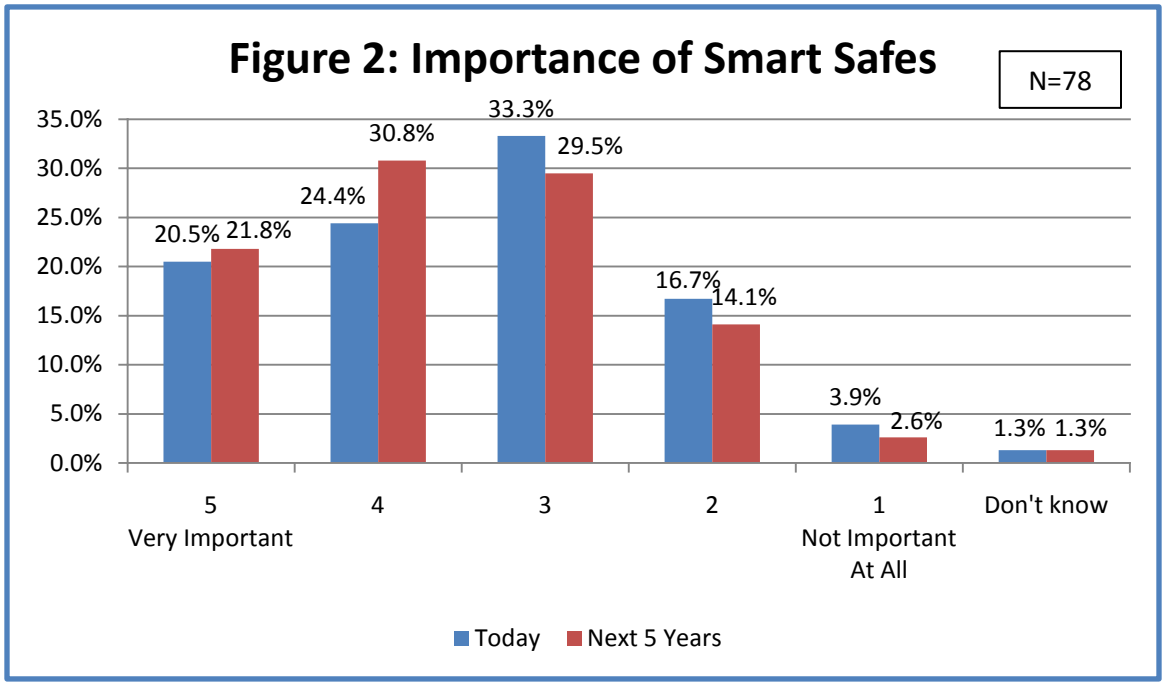
"Other" Responses (N=13)	Frequency
Previous employer	2
Sales people	2
We are in the process of testing them	2
Armored car company	1
At a bank	1
Bank	1
Conference	1
Had considered them and made a few calls to some smart safe companies	1
Publications	1
Vendor	1

Importance of Cash Management Systems (Smart Safes) in Retail Environments: Today & Over the Next Five Years

After being read a short definition of smart safes ("safes that accept and verify notes, provide electronic transmissions for accountability, and may provide information for provisional credit"), respondents were asked the following two questions:

- "Using a scale from 1 to 5, where 1 is 'not important at all' and 5 is 'very important,' how important would you say cash management systems such as smart safes are in today's retail environment?"
- "And, using the same scale, how important do you think cash management systems such as smart safes will be in retail environments over the next five years?"

The results appear in Figure 2.



Although a substantial percentage of respondents believe smart safes are important in today's retail environment, a higher percentage believes smart safes will be important in retail environments over the next five years. More than two-fifths (44.9%) of those surveyed rate cash management systems such as smart safes as either a "4" or "5" (very important) in today's retail environment, and more than one-half (52.6%) rate these systems as either a "4" or "5" in importance over the next five years.

About one-fifth (20.6%) of those surveyed rate cash management systems such as smart safes as either a "2" or "1" (not important at all) in today's retail environment, and about one-eighth (16.7%) rate these systems as either a "2" or "1" in importance over the next five years.

Issues Related to Cash Handling & Management

Next, respondents were read a list of issues related to cash handling and management. They were asked to rate "how much of a problem each is in [their] retail stores" using a scale from 1 to 5, where 1 is "not a problem at all" and 5 is "a major problem." The results are presented in Table 1.

Table 1: Issues Related to Cash Handling & Management

Issue	Major Problem				Not a Problem
	5	4	3	2	1
Loss from improper cash handling	6.4%	9.0%	23.1%	44.9%	16.7%
Counterfeit bills	2.6%	6.4%	18.0%	38.5%	33.3%
Amount of Manager time involved in cash handling	3.9%	26.9%	34.6%	23.1%	11.5%
Enforcing cash drawer limits	5.1%	14.1%	16.7%	33.3%	29.5%
Reconciling against POS sales	18.0%	12.8%	25.6%	24.4%	19.2%
Cost for armored car services	16.7%	18.0%	12.8%	19.2%	30.8%
Time & cost of making deposits at banks	6.4%	11.5%	26.9%	21.8%	33.3%

**Note: Percentage of respondents indicating they "don't know" is not presented above. The highest response percentage in each category*

Combining the ratings of "4" and "5," three of the issues related to cash handling are more likely to rank as problematic than the others: "Cost for armored car services" (34.7%); "Amount of Manager time involved in cash handling" (30.8%); and, "Reconciling against POS sales" (30.8%). Nearly one-fifth (18.0%) of the respondents rate "Reconciling against POS sales" as a "major problem" in their retail stores. More than one-quarter (26.9%) of the respondents rate "Amount of Manager time involved in cash handling" as a "4" of a 5-point scale.

Conversely, just nine percent of respondents rate "Counterfeit bills" as a "4" or "5" (major problem), and nearly three-quarters (71.8%) rate the issue as a "2" or "1" (not a problem).

In addition, nine respondents note "other" issues related to cash handling and management that may be problematic in their stores. These issues are presented below.

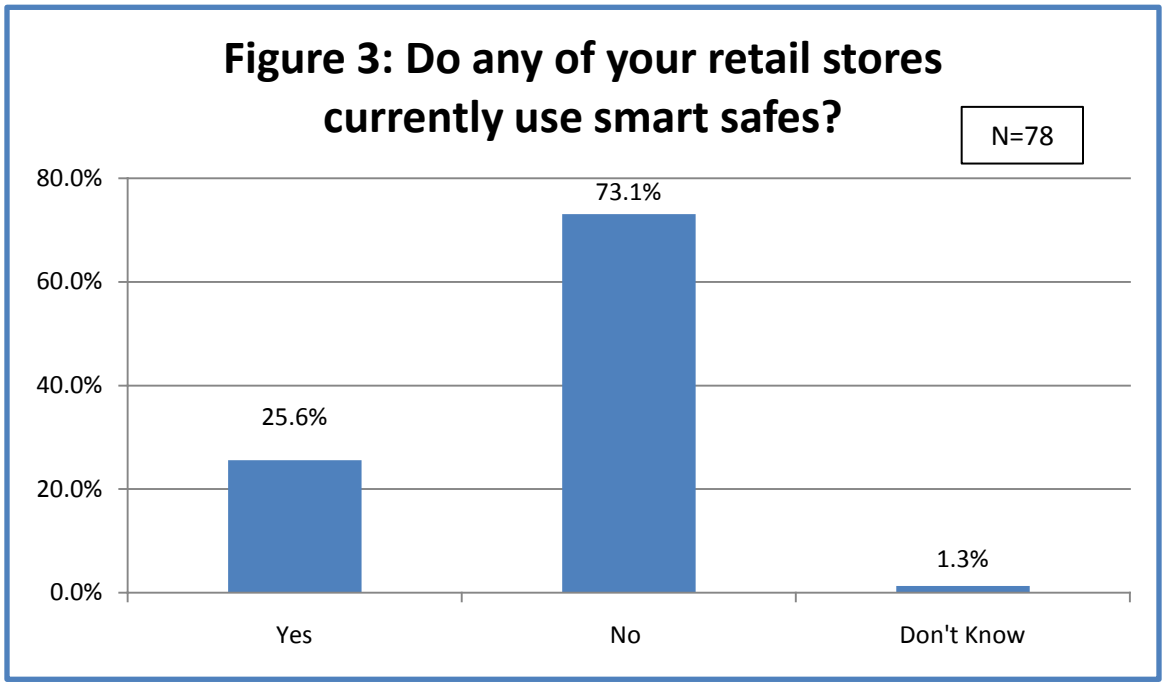
"Other" Responses (N=9)
80% of our sales are credit cards; cash handling is not as critical anymore
Application of smart safes varies by markets and locations
Cash is taking a back seat as opposed to plastic; smart safes are too expensive
Employee theft
Losses as a result of computers going down or bad software
Our smart safes need to have the mechanics controlled so they don't jam because the armored car won't pick up until the cash is manually counted
Smart safes are not always easy to use, issue with ease of use
Software doesn't work in reconciling fast lines relating to POS
We have a problem with employee theft

Current Use of Smart Safes

The next section of the survey focused on retailers' current use of smart safes.

Stores Using Smart Safes

The first question in this section asked respondents: "Do any of your retail stores currently use smart safes?" The results appear in Figure 3.



About one-quarter (25.6%) of the executives surveyed indicate that at least some of their retail stores currently use smart safes.

Year of Adoption

Those respondents who indicated that they use smart safes in their retail stores next were asked: "In what year did your stores first start using smart safes?" The results appear in Table 2.

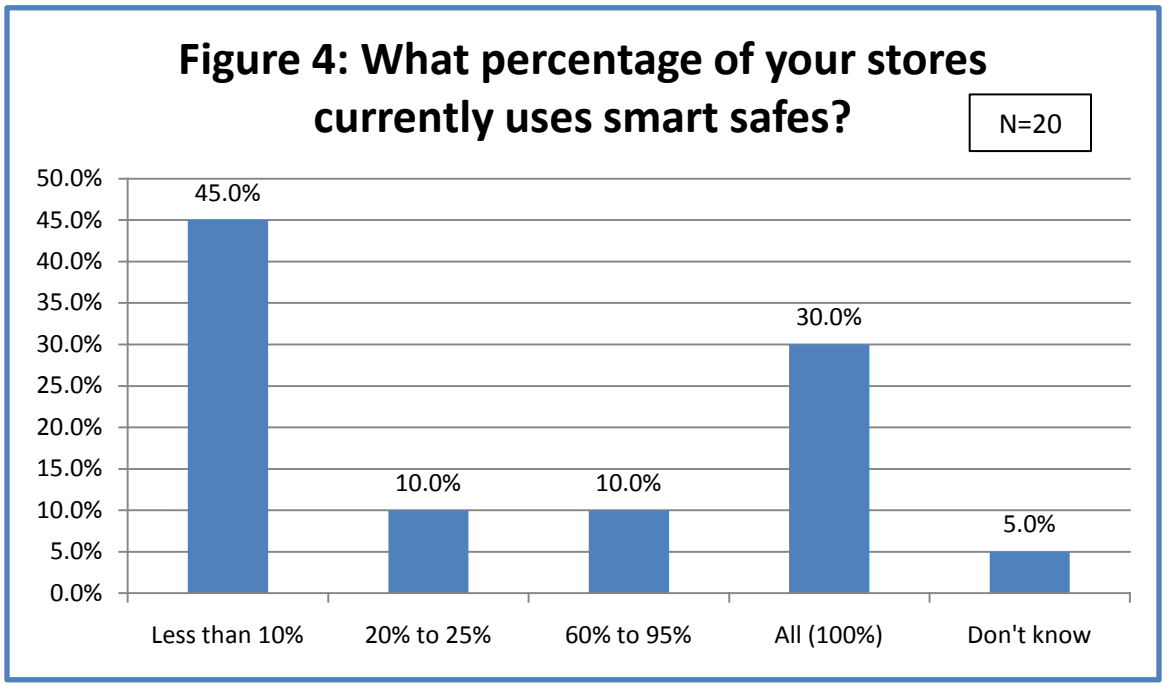
Table 2: Year of Adoption for Smart Safes

Response	Frequency	% (N=20)
1986	1	5.0%
1996	1	5.0%
1997	1	5.0%
2002	1	5.0%
2003	1	5.0%
2004	1	5.0%
2005	2	10.0%
2007	1	5.0%
2008	4	20.0%
2009	1	5.0%
2010	2	10.0%
2011	1	5.0%
Don't know	3	15.0%
Refused	0	0.0%

More than two-thirds (70.0%) of the respondents who currently use smart safes in their retail stores began using them within the past five to six years (since 2005).

Percentage of Stores Using Smart Safes

Those respondents who indicated that they use smart safes in their retail stores next were asked: "What percentage of your stores currently uses smart safes?" The results appear in Figure 4.



Nearly one-half (45.0%) of the respondents who currently use smart safes use them in fewer than 10 percent of their retail stores. However, nearly one-third (30.0%) of those who use smart safes use them in all of their stores.

Number of Smart Safes per Store

Those respondents who indicated that they use smart safes in their retail stores next were asked: "On average, how many smart safes are in operation in a typical store that uses this technology?" The results appear in Table 3.

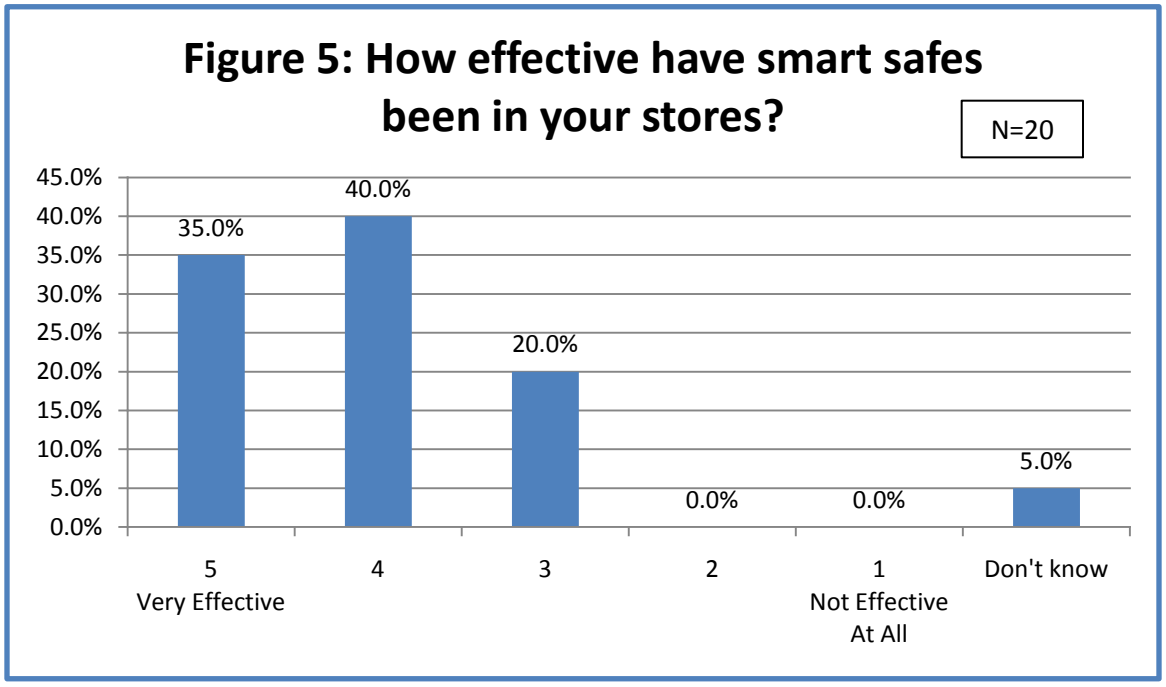
Table 3: Average Number of Smart Safes per Store

Number of smart safes	% (N=20)
1	85.0%
2	5.0%
4	10.0%

The vast majority (85.0%) of those who currently use smart safes in their retail stores indicate that, on average, only one smart safe is in operation in a typical store that uses the technology.

Effectiveness of Smart Safes

Those respondents who indicated that they use smart safes in their retail stores next were asked to rate how effective smart safes have been in their stores using a scale from 1 to 5, where 1 is "not effective at all" and 5 is "very effective." The results are presented in Figure 5.



Three-quarters (75.0%) of the respondents who currently use smart safes rate their effectiveness as either a "4" or "5" (very effective). One-fifth (20.0%) of these respondents rate the effectiveness of smart safes in the middle of the scale as a "3," and none rate them as ineffective.

Benefits of Smart Safes

Next, those respondents who indicated that they use smart safes in their retail stores were asked, "What benefits have you seen from smart safes in your stores?" Then, respondents were asked to indicate which of these benefits is "most important." The results appear in Table 4.

Table 4: Benefits of Smart Safes

Benefit	Mentioned (N=20)	Most Important (N=20)
Reduced cash loss	40.0%	30.0%
Reduced time to reconcile cash	40.0%	5.0%
Improved reporting/tracking of revenue	30.0%	5.0%
Improved safety and security	30.0%	10.0%
Make it possible for the Manager to be more productive	25.0%	5.0%
Keeps the manager in the store	25.0%	10.0%
Other	25.0%	15.0%
Reduced employee theft	20.0%	5.0%
Improved enforcement of cash drawer limits	5.0%	0.0%
Bank consolidation	5.0%	0.0%
Reduced counterfeit currency	0.0%	0.0%
Reduced need for/use of armored cars	0.0%	0.0%
Don't know	10.0%	15.0%

*Percent for "Mentioned" may add up to more than 100% as respondents could choose more than one response

Two-fifths of the respondents who currently use smart safes note "Reduced cash loss" (40.0%) and "Reduced time to reconcile cash" (40.0%) as benefits of smart safes in their stores. One-quarter or more of these respondents cite "Improved reporting/tracking of revenue" (30.0%); "Improved safety and security" (30.0%); "Make it possible for the Manager to be more productive" (25.0%); or, "Keeps the manager in the store" (25.0%) as benefits of smart safes.

Nearly one-third (30.0%) of those that use smart safes indicate that "Reduced cash loss" is the most important benefit of smart safes.

In addition, five of these respondents note "other" benefits of smart safes, which are presented below.

"Other" Responses (N=5)
Holds money in a timely manner
Improved cash handling
Overall labor reduction in the store has been the greatest benefit of using smart safes
Too early to tell
You have to put money in before you take it out

Issues with Smart Safes

Those respondents who indicated that they use smart safes in their retail stores next were asked what issues, if any, they have had with smart safes in their stores. The responses are presented in Table 5.

Table 5: Issues with Smart Safes

Issue	% (N=20)
None	45.0%
Note jams	20.0%
Capabilities of the safe	15.0%
Incompatibilities with existing systems	15.0%
Uptime of the safe	10.0%
Employee training issues	5.0%
Capacity of the safe	5.0%
Don't know	5.0%
Accuracy of cash reporting	0.0%

*Percent may add up to more than 100% as respondents could choose more than one response

Nearly one-half (45.0%) of the respondents that currently use smart safes say they have not had any issues with them. One-fifth (20.0%) of these respondents indicate having had problems with "Note jams," and a similar percentage report issues with "Capabilities of the safe" (15.0%) or "Incompatibilities with existing systems" (15.0%). One-tenth (10.0%) of those using smart safes have had problems with "Uptime of the safe," and five percent have had problems with "Employee training" or "Capacity of the safe."

In addition, a few respondents provided additional comments about issues they have experienced with smart safes, which are summarized below.

Response
Ease of use; not balancing with POS
Maintenance costs, less expensive parts
Minor problems w/bill readers; make it able to do software upgrades remotely
Very few problems
Being able to retrofit unit in ideal location; ability to make it smaller, ability to handle coins as well as bills

Changes to Smart Safes

Finally, those respondents who indicated that they use smart safes in their stores were asked if there are any changes they would make to smart safes to make them more effective. The responses of the seven participants who affirmed that there are changes they would make to smart safes to make them more effective are presented below.

Responses (N=7)
Have standard interfaces for POS and networking
Make it smaller; at our convenience stores it is at the counter and sodas spill on it
Have more robust software
Provide better training, most employees do not read the manual; programming concerns with smart safes
Upgradability and more durability
We have dual feeders and they still jam; we need to have more reliability with the mechanics for our daily operations
We have older safes but the software for bills needs to be easier to upgrade

Implementing Smart Safes

The next section of the survey focused on the process retailers who use smart safes followed when implementing smart safes in their stores.

Factors that Influenced Decision to Implement Smart Safes

The first question in this section asked those respondents who indicated that they use smart safes in their retail stores: "Many factors may influence a company's decision to implement a new technology. Which of the following factors were important to you in considering smart safes?" Then, respondents were asked to indicate which of these factors was "most important" in their decision. The results appear in Table 6.

Table 6: Factors in Decision to Implement Smart Safes

Factor	Mentioned (N=20)	Most Important (N=20)
Overall effectiveness of smart safes in improving cash handling	80.0%	35.0%
Overall effectiveness of smart safes in reducing loss	80.0%	10.0%
Safety and security	75.0%	15.0%
Overall cost of implementing smart safes	70.0%	0.0%
Amount of manager time required to manage cash	65.0%	15.0%
Return on investment (cost v. reduction in theft)	60.0%	20.0%
Compatibility with existing systems and workflows	40.0%	0.0%
Don't know	5.0%	5.0%
Other	5.0%	0.0%

*Percent may add up to more than 100% for "Mentioned" as respondents could choose more than one response

Four-fifths of respondents who currently use smart safes indicate that "Overall effectiveness of smart safes in improving cash handling" (80.0%) and "Overall effectiveness of smart safes in reducing loss" (80.0%) were important factors in considering smart safes for their stores. Three-quarters (75.0%) of these respondents considered "Safety and security" in implementing smart safes, and a similar percentage (70.0%) considered the "Overall cost of implementing smart safes." About two-thirds (65.0%) of these respondents considered the "Amount of manager time required to manage cash"; three-fifths (60.0%) considered the "Return on investment (cost v. reduction in theft)"; and, two-fifths (40.0%) considered "Compatibility with existing systems and workflows."

When asked to indicate which of these factors was "most important" in their decision, more than one-third (35.0%) indicate "Overall effectiveness of smart safes in improving cash handling," while one-fifth (20.0%) indicate "Return on investment (cost v. reduction in theft)."

In addition, one respondent notes "Other" factors in smart safe decision-making, which are presented below.

"Other" Response (N=1)
Cost vs. reduction in overall store labor

Team Members who Contributed to Decision-Making about Smart Safes

The next question in this section asked those respondents who indicated that they use smart safes in their retail stores: "Within various companies, many team members may contribute ideas and opinions about new technologies. When you company considered implementing smart safes, who contributed to the decision making?" The results appear in Table 7.

Table 7: Team Members Contributing to Decision-Making about Smart Safes

Team Member	Frequency	% (N=20)
Other	13	65.0%
IT Personnel	6	30.0%
COO	5	25.0%
VP of Operations	5	25.0%
President / CEO	4	20.0%
Financial / Accounting Personnel	4	20.0%
Senior Operations Personnel	3	15.0%
VP of Loss Prevention	3	15.0%
Senior LP Personnel	3	15.0%
CFO	2	10.0%
CIO	2	10.0%
LP Managers	1	5.0%
All LP Personnel	1	5.0%
Research Personnel	1	5.0%
Don't know	1	5.0%
Outside consultants	0	0.0%

*Percent may add up to more than 100% as respondents could choose more than one response

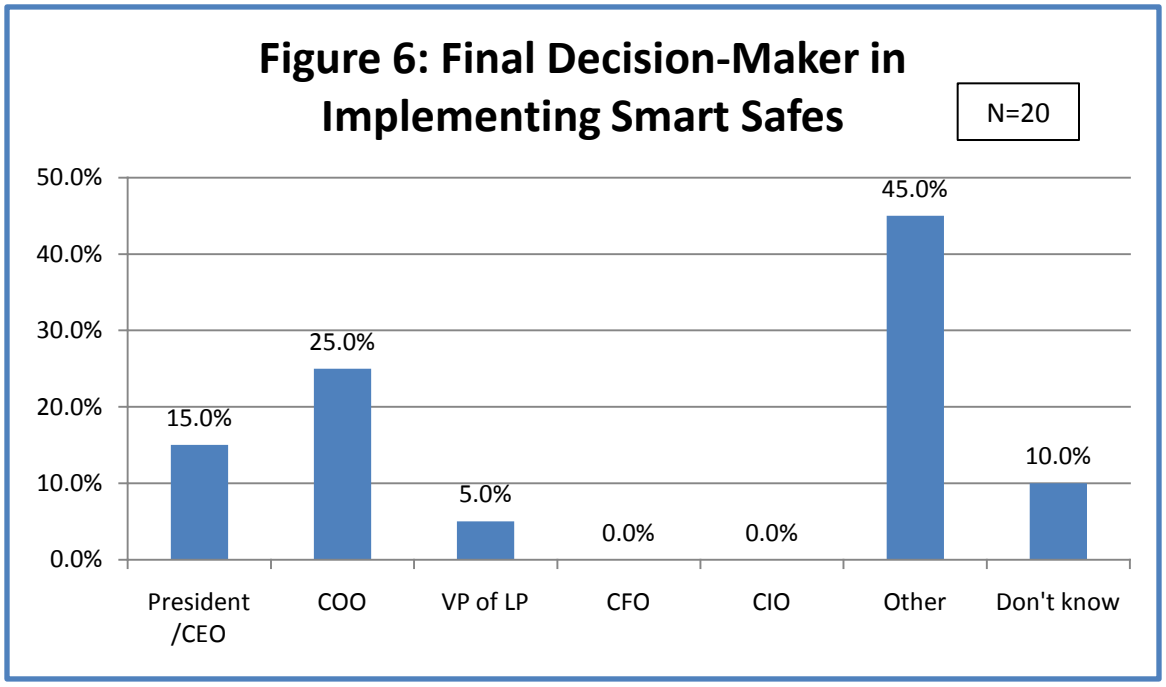
One-quarter or more of the respondents who currently use smart safes indicate that "IT Personnel" (30.0%), the COO (25.0%), or the VP of Operations (25.0%) contributed to the decision-making about implementing smart safes. One-fifth of these respondents say the President/CEO (20.0%) or "Financial / Accounting Personnel" (20.0%) contributed, and 15 percent say "Senior Operations Personnel," the VP of Loss Prevention, or "Senior LP Personnel" contributed to the decision-making.

Of note, nearly two-thirds (65.0%) of these respondents indicate "Other" types of personnel who contributed to decision-making about smart safes. These responses appear below.

"Other" Responses (N=13)
All senior management
Asset Protection
Asset protection, peers from other companies
Controller
Director of C Stores
Director of Security
Executive staff from all departments
Facilities engineers
Marketing/Operations
Owner and store managers
Purchasing
Senior management and Executive Board Members
Store Operations personnel

Final Decision-Maker in Implementing Smart Safes

Next, those respondents who indicated that they use smart safes in their retail stores were asked who ultimately made the final decision about whether to implement smart safes in their stores. The responses appear in Figure 6.



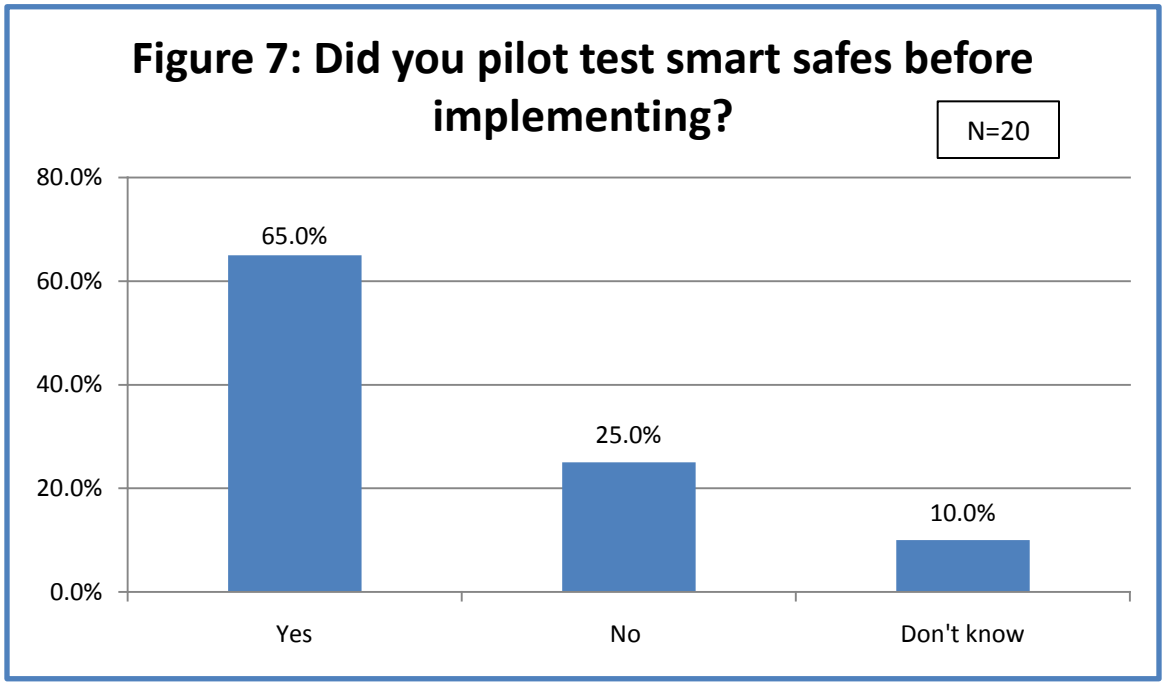
One-quarter (25.0%) of the participants who currently use smart safes indicate that the final decision about implementing this technology was made by the Chief Operating Officer, while 15 percent indicate the decision was made by the President/CEO. Just five percent of these respondents report that the Vice President of Loss Prevention was the ultimate decision-maker regarding smart safes.

Nearly one-half (45.0%) of those with smart safes note some "Other" final decision-maker for this technology. These responses appear below.

Other Responses (N=9)
Director of C stores
Executive Board members
Owner
Owner
Process Excellence Manager
Senior Management Team
Share the decision
VP of Divisions
VP of Finance

Pilot Testing Smart Safes

Those respondents who indicated that they use smart safes in their retail stores next were asked: "Did you pilot test smart safes (or conduct a trial with smart safes) in your stores before implementing the technology?" The results appear in Figure 7.



About two-thirds (65.0%) of the respondents who currently use smart safes indicate that they pilot tested smart safes before implementing them in their stores.

Number of Stores in Pilot Test

Those respondents who indicated that they pilot tested smart safes before implementing them in their stores (N=13) were asked how many stores received smart safes in the pilot test. The results appear in Table 8.

Table 8: Number of Stores in Pilot Test

Response	Frequency	% (N=13)
1	3	23.1%
2	3	23.1%
3	2	15.4%
5	1	7.7%
8	1	7.7%
12	1	7.7%
50	1	7.7%
Don't know	1	7.7%

Nearly one-half (46.2%) of the stores that conducted pilot tests of smart safes before implementing them widely did so in only one or two stores.

Length of Pilot Test

Those respondents who indicated that they pilot tested smart safes before implementing them in their stores were asked how long the pilot test lasted before a decision was made about implementing smart safes. The results appear in Table 9.

Table 9: Length of Pilot Test

Response	Frequency	% (N=13)
1 month	1	7.7%
2 months	3	23.1%
3 months	3	23.1%
4 months	1	7.7%
6 months	2	15.4%
9 months	1	7.7%
2 years	1	7.7%
“We are still testing”	1	7.7%

More than one-half (53.8%) of the stores that conducted pilot tests of smart safes before implementing them widely did so for only three months or less.

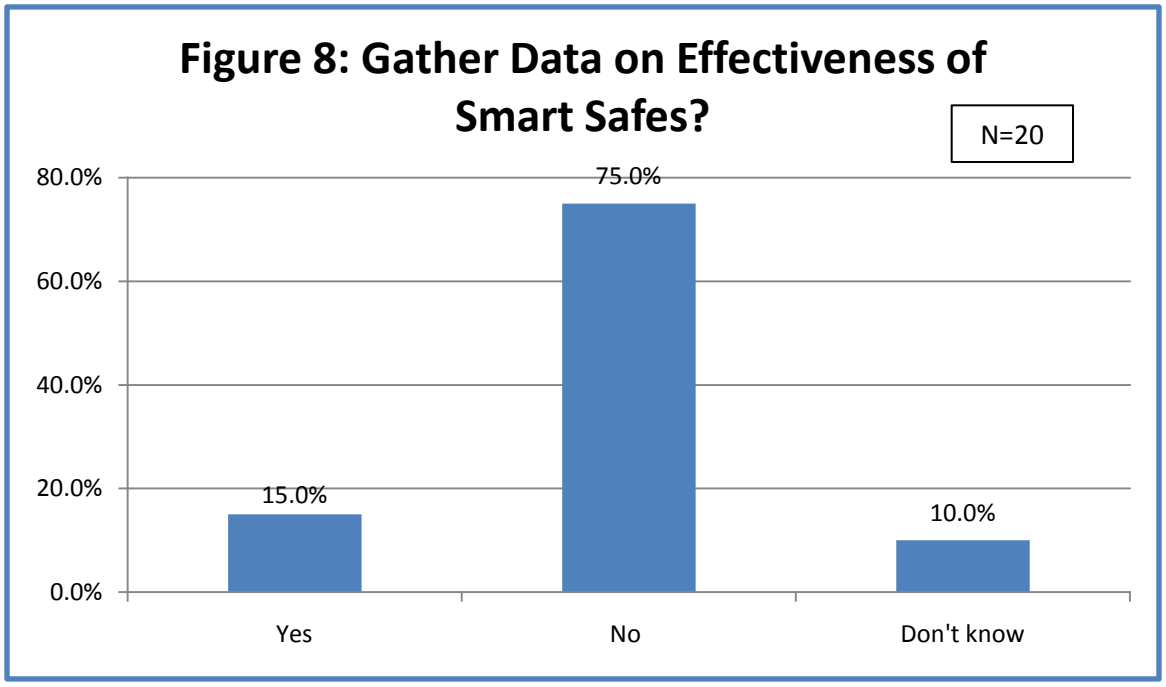
Determining the Success of Smart Safe Pilot Tests

Those respondents who indicated that they pilot tested smart safes before implementing them in their stores also were asked how they determined that the test was successful enough to choose to implement smart safes in their stores. The responses are detailed below.

Responses (N=13)
Feedback and dollar results
Feedback from test site
Input from operations and finance
It kept the manager out of the office and able to return to the floor quicker
Provided functionality we were looking for
Quality assurance; the cost didn't exceed the operational cost
Reduced store labor, increased associate satisfaction, more accurate bank deposits, faster customer service
Reviewing time management shortages
We classified issues/defects based on a rating scale of 1-3. Once all class 1 defects were addressed, we approved deployment.
Not yet -- have to see if provisional credit is working, cost of savings at bank if armored car comes less and we save by going to the vault rather than bank branch
Too early to know
It is not determined yet
Don't know

Data on Effectiveness of Smart Safes

Those respondents who indicated that they use smart safes in their retail stores next were asked: "Since implementing smart safes in your stores, have you gathered any data to determine how effective they have been for your company?" The results appear in Figure 8.



Just 15 percent of the respondents who currently use smart safes have gathered data to determine how effective they have been for their companies.

Types of Data Gathered

The retailers who indicated that they have gathered data to determine how effective smart safes have been for their companies (N=3) were asked what types of data they have gathered. These responses are presented in Table 10.

Table 10: Types of Data Gathered about Effectiveness of Smart Safes

Type of Data	Frequency	% (N=3)
Cash loss figures	3	100.0%
Employee theft figures	1	33.3%
Changes in labor hours to reconcile cash	1	33.3%
Other	1	33.3%
Counterfeit currency figures	0	0.0%
Changes in armored car usage	0	0.0%
Changes in ease to enforce cash drawer limits	0	0.0%
Changes in reporting/tracking of revenue	0	0.0%
Changes in banking costs	0	0.0%
Don't know	0	0.0%

*Percent may add up to more than 100% as respondents could choose more than one response

All (100.0%) of the respondents who indicated that they have gathered data to determine how effective smart safes have been for their companies say they've collected "Cash loss figures." One respondent has collected "Employee theft figures," one has collected "Changes in labor hours to reconcile cash," and one notes "Other" data which is presented below.

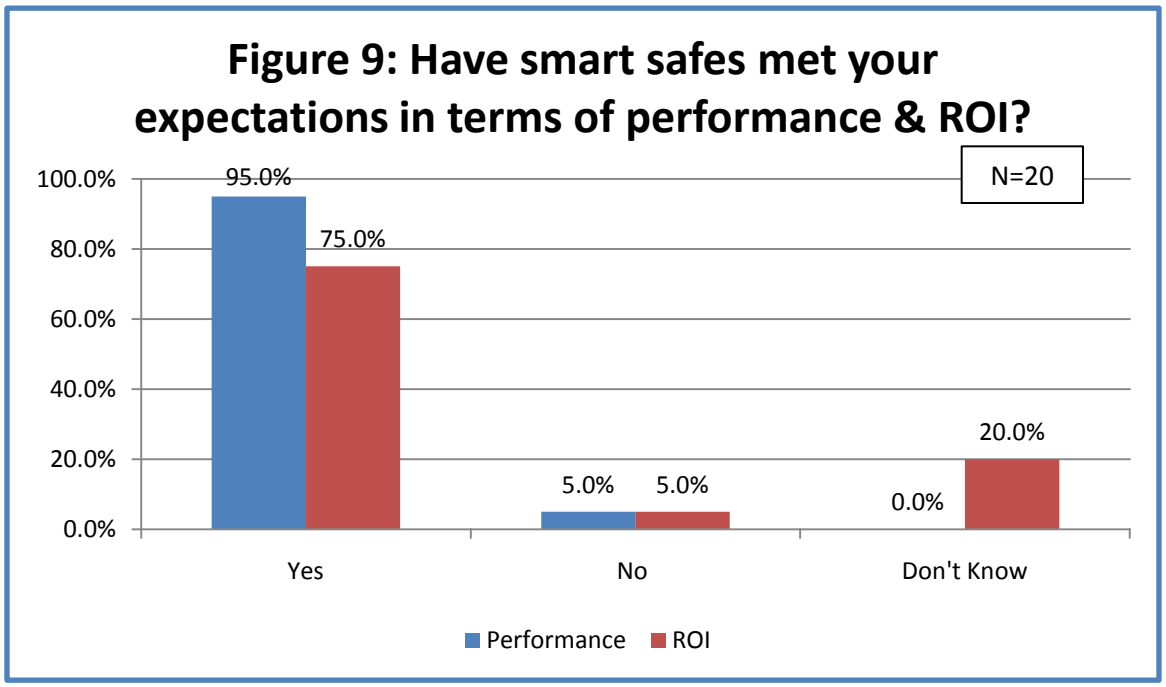
"Other" Response (N=1)
We recycle cash back in the system at truck stops and smart safes aren't as effective for that.

Expectations in Terms of Performance & ROI

Those respondents who indicated that they use smart safes in their retail stores next were asked two questions about their expectations regarding smart safes:

- "So far, have smart safes met your expectations in terms of performance?"
- "And, have smart safes met your expectations in terms of ROI?"

The results appear in Figure 9.



Nearly all (95.0%) of the respondents who currently use smart safes indicate that they have met their expectations in terms of performance, while three-quarters (75.0%) indicate that smart safes have met their expectations in terms of ROI.

ROI Expectations

Next, respondents were asked if they could share their companies' ROI expectations for smart safes. Six of the respondents did so, and they are detailed below.

Responses (N=6)
14% hurdle rate
6%
All the operations are effective
Reduce the amount of time in cash handling
We have a 3-year depreciation payoff, we're saving more than spending
Work flow and security efficiencies are up

Additional Comments

Finally, respondents who have implemented smart safes in their stores were asked to share any other comments about smart safes or cash management systems that might help researchers better understand their implementation. Three respondents did so, and they are detailed below.

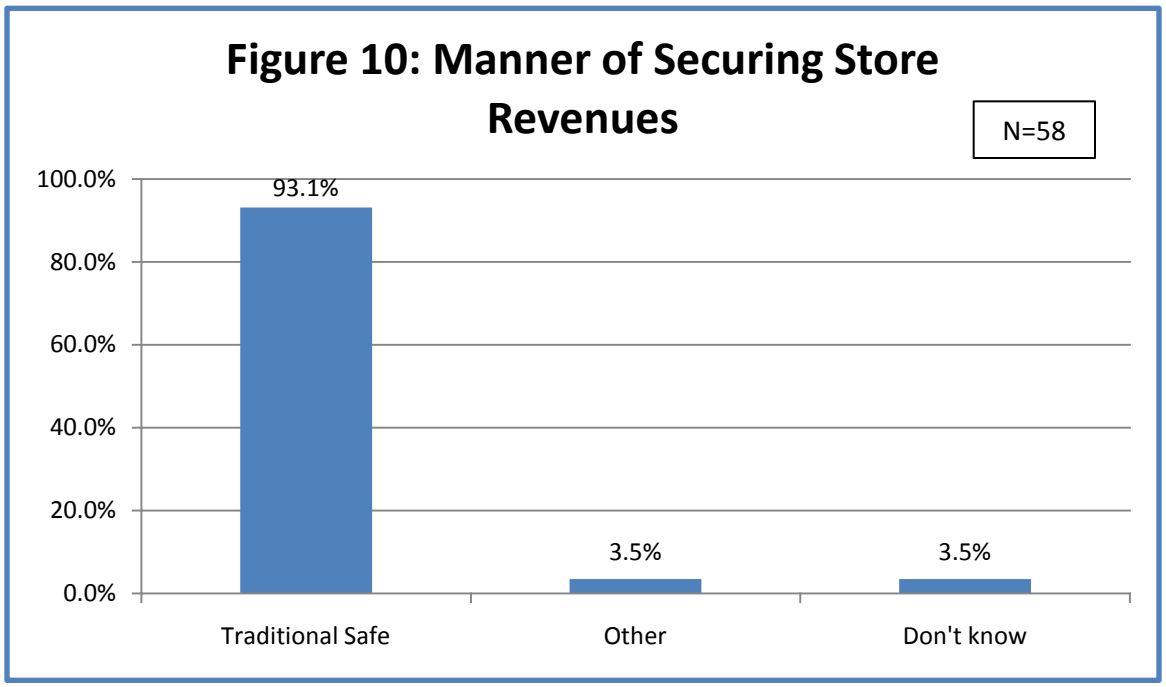
Responses (N=3)
Best solution is that the vendor is able to coordinate CIT's and banks to offer retailer a full solution, which needs to offer a line item price breakdown and not just a single quote.
I would consider virtual safe
Smart safes have been one of the greatest pieces of technology we have implemented in our stores. They are the hub of our operation's cash management system.

Respondents That Do Not Currently Use Smart Safes

The next section of the survey asked a series of questions of the retailers that do not currently use smart safes in their stores.

Securing Store Revenues

The first question in this section asked those who do not use smart safes: "Before store revenues are deposited in the bank, are they secured in a traditional safe, or in some other way?" The results appear in Figure 10.

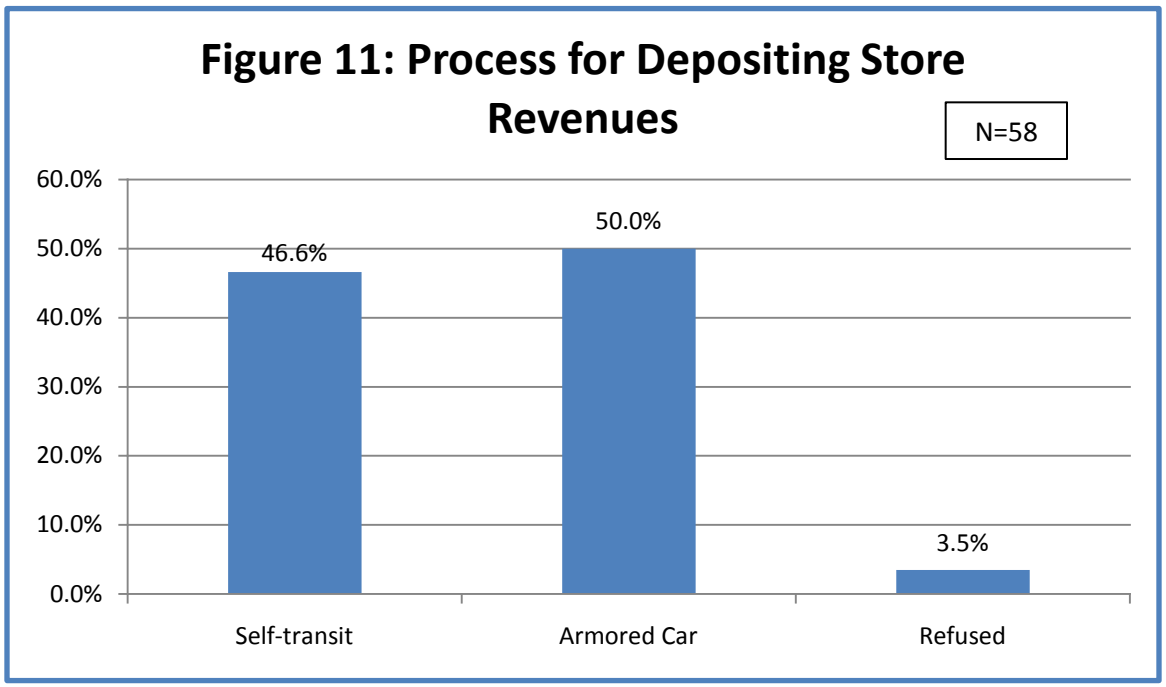


Almost all (93.1%) of the retailers who do not currently use smart safes say they secure store revenues in a traditional safe before depositing them in the bank. Just two of these respondents use some "Other" method for securing store revenues. These methods are detailed below.

"Other" Responses (N=2)
Dual key control drop safe
Nightly closing deposits are made at the bank, very few traditional safes are used

Process for Depositing Store Revenues

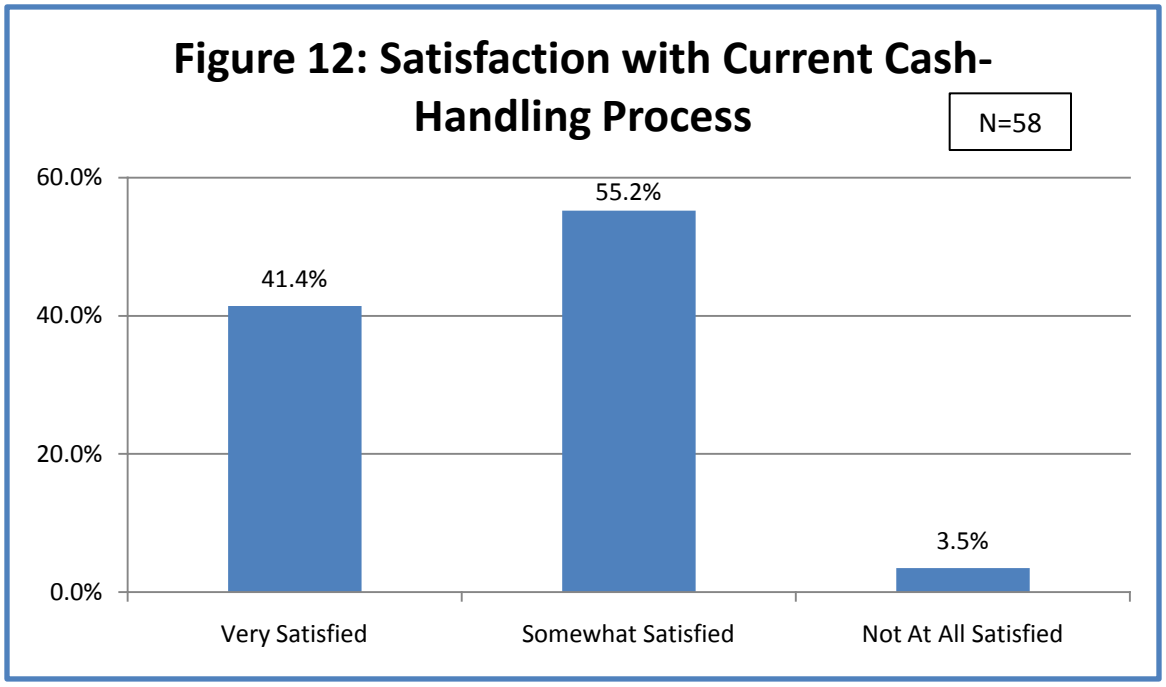
Next, those who do not use smart safes were asked: "What is your process for depositing store revenues?" The results appear in Figure 11.



One-half (50.0%) of the respondents who do not use smart safes indicate that an "Armored car service takes revenues to the bank (CIT, cash-in-transit)," while nearly as many (46.6%) indicate that a "Manager or other employee takes revenues to the bank (self-transit)."

Level of Satisfaction with Current Cash-Handling Process

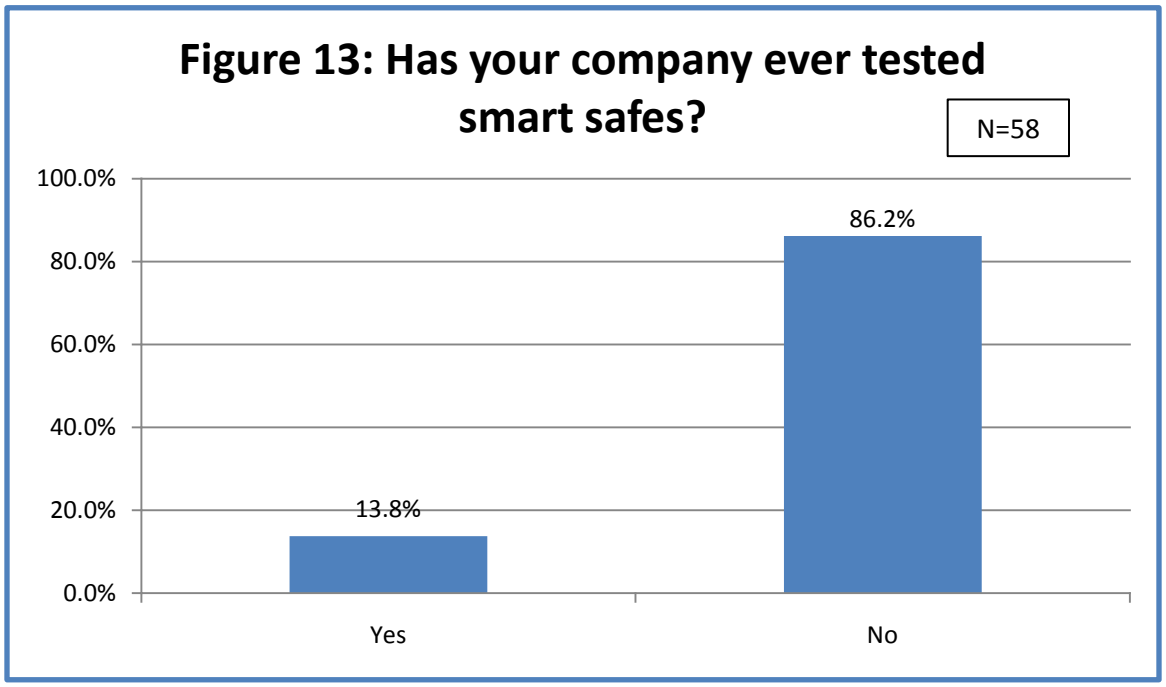
Those who do not use smart safes next were asked: "Would you say that your company is very satisfied, somewhat satisfied, or not at all satisfied with this cash-handling process?" The results are presented in Figure 12.



More than two-fifths (41.4%) of those who do not use smart safes say that they are "Very Satisfied" with their current cash-handling process, and more than one-half (55.2%) say they are "Somewhat Satisfied." About four percent of these respondents report that they are "Not At All Satisfied" with their current cash-handling process.

Tested Smart Safes

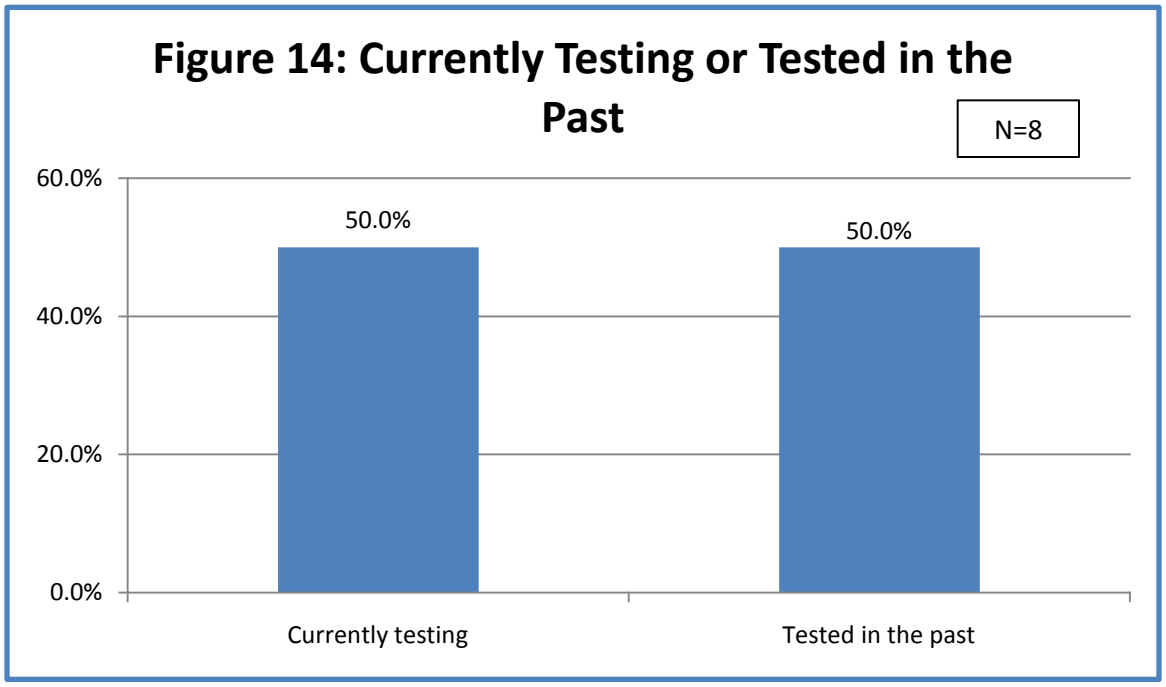
Those who do not use smart safes next were asked: "Has your company ever tested smart safes?" The results appear in Figure 13.



Only about one-eighth (13.8%) of the respondents who do not use smart safes indicate that they have ever tested this technology.

Currently Testing or Tested in the Past

Those respondents who indicated that they have tested smart safes were asked whether they are currently testing smart safes, or if they tested them in the past. The results appear in Figure 14.



One-half (50.0%) of those who do not currently use smart safes but have tested them indicate that they are currently testing, while one-half (50.0%) indicate that they completed tests in the past.

Currently Testing: Length of Pilot Test

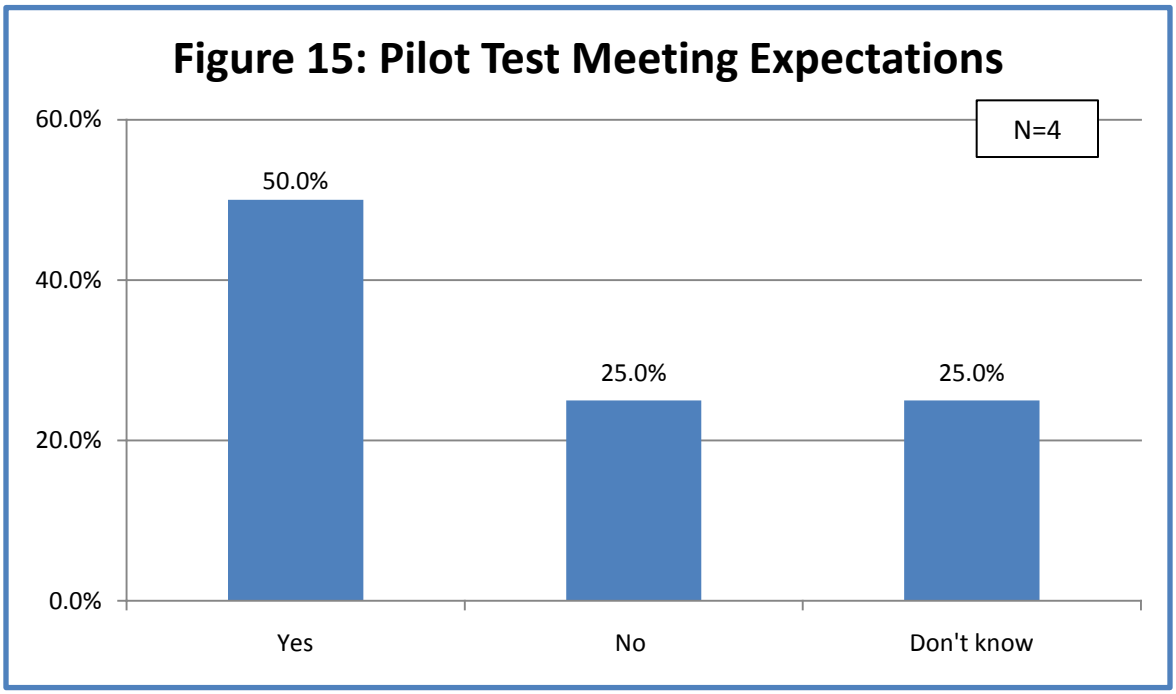
Those respondents who indicated that they are currently pilot testing smart safes were asked how long their companies have been testing the safes. The results appear below.

Responses (N=4)
1 month
2 months
3 months
4 months

All of those currently testing smart safes have been doing so for four months or less.

Currently Testing: Meeting Expectations

Those respondents who indicated that they are currently pilot testing smart safes were asked: "At this point in your trial, are smart safes meeting your expectations?" The results appear in Figure 15.



Of those currently pilot testing smart safes, one-half (50.0%) report that smart safes are meeting expectations, one-quarter (25.0%) report they are not meeting expectations, and one-quarter (25.0%) do not know whether expectations are being met at this point in the test.

Currently Testing: Decision

Those respondents who indicated that they are currently pilot testing smart safes were asked: "When do you expect to make a final decision based on this trial?" The results are summarized below.

Responses (N=4)
In six months
We already made it
We will not use them because cost is prohibitive
Don't Know

Tested in the Past: Prior Test Date

Those respondents who indicated that they pilot tested smart safes in the past were asked: "How long ago did you test smart safes?" The results are summarized below.

Responses (N=4)
3 months ago
Last year
16 months ago
5 years ago

Three of the four respondents who previously tested smart safes did so a year or more ago.

Tested in the Past: Decision

Those respondents who indicated that they pilot tested smart safes in the past were asked: "Why did you decide not to implement smart safes in your stores?" The results are summarized below.

Response (N=4)
Didn't meet change order needs
No return on investment
Savings from reduced labor and liability did not justify the extra expense, and down time when they did not work properly.
Store tested was too high-volume, next time we'll use a medium-volume store to provide an accurate time and motion study with non-smart safe stores

Implementing New Cash-Handling Technologies

The next section of the survey focused on the process retailers who do not use smart safes follow when implementing new cash-handling technologies in their stores.

Factors that Influence Decision to Implement New Cash-Handling Technologies

The first question in this section asked those respondents who indicated that they do not use smart safes in their retail stores: "Many factors may influence a company's decision to implement a new technology. Which of the following factors are important to you in considering a new cash-handling technology?" Then, respondents were asked to indicate which of these factors was "most important" in their decision. The results appear in Table 11.

Table 11: Factors in Decision to Implement New Cash-Handling Technologies

Factor	Mentioned (N=58)	Most Important (N=58)
Return on investment (cost v. reduction in theft)	96.6%	37.9%
Overall cost of implementing the technology	94.8%	22.4%
Safety and security	91.4%	27.6%
Overall effectiveness of technology in reducing loss	89.7%	3.5%
Compatibility with existing systems and workflows	82.8%	1.7%
Amount of manager time required to manage cash	81.0%	6.9%
Other	0.0%	0.0%
Don't know	0.0%	0.0%

*Percent may add up to more than 100% for "Mentioned" as respondents could choose more than one response

Almost all of these respondents note that the following factors are important in making decisions about new technologies: "Return on Investment (cost v. reduction in theft)" (96.6%); "Overall cost of implementing the technology" (94.8%); "Safety and Security" (91.4%); and, "Overall effectiveness of the technology in reducing loss" (89.7%). In addition, more than four-fifths of these respondents mention the importance of "Compatibility with existing systems and workflow" (82.8%) and "Amount of manager time required to manage cash" (81.0%) in decision-making.

When asked which of these factors is most important in decision-making about new technologies, nearly two-fifths (37.9%) indicate "Return on Investment." More than one-quarter (27.6%) of these respondents feel that "Safety and security" is the most important factor, and more than one-fifth (22.4%) believe that the "Overall cost of implementing the technology" is the most important factor.

Team Members who Contribute to Decision-Making about New Cash-Handling Solutions

The next question in this section asked those respondents who indicated that they do not use smart safes in their retail stores: "Within various companies, many team members may contribute ideas and opinions about cash-handling solutions. When you company considers implementing a new cash-handling technology, who contributes to the decision making?" The results appear in Table 12.

Table 12: Team Members Contributing to Decision-Making about New Cash-Handling Technologies

Team Member	Frequency	% (N=58)
VP of Operations	31	53.4%
Financial / Accounting Personnel	25	43.1%
VP of Loss Prevention	24	41.4%
CFO	21	36.2%
Senior LP Personnel	19	32.8%
Senior Operations Personnel	18	31.0%
COO	15	25.7%
Other	14	24.1%
IT Personnel	11	19.0%
President / CEO	7	12.1%
LP Managers	7	12.1%
CIO	4	6.9%
All LP Personnel	1	1.7%
Research Personnel	1	1.7%
Outside consultants	1	1.7%
Don't know	0	0.0%

*Percent may add up to more than 100% as respondents could choose more than one response

More than one-half (53.4%) of the respondents who do not currently use smart safes indicate that the Vice President of Operations contributes to the decision-making when the company considers new cash-handling technologies, and more than two-fifths say "Financial/Accounting Personnel" (43.1%) or the Vice President of Loss Prevention (41.4%) contribute. About one-third of the respondents who do not currently use smart safes indicate that the Chief Financial Officer (36.2%), "Senior Loss Prevention Personnel" (32.8%), or "Senior Operations Personnel" contribute to the decision-making. About one-fifth to one-quarter of these respondents say the COO (25.7%) or "IT Personnel" contribute to decision-making, and about one-eighth say the President/CEO (12.1%) or LP Managers contribute to the decision-making about new technologies.

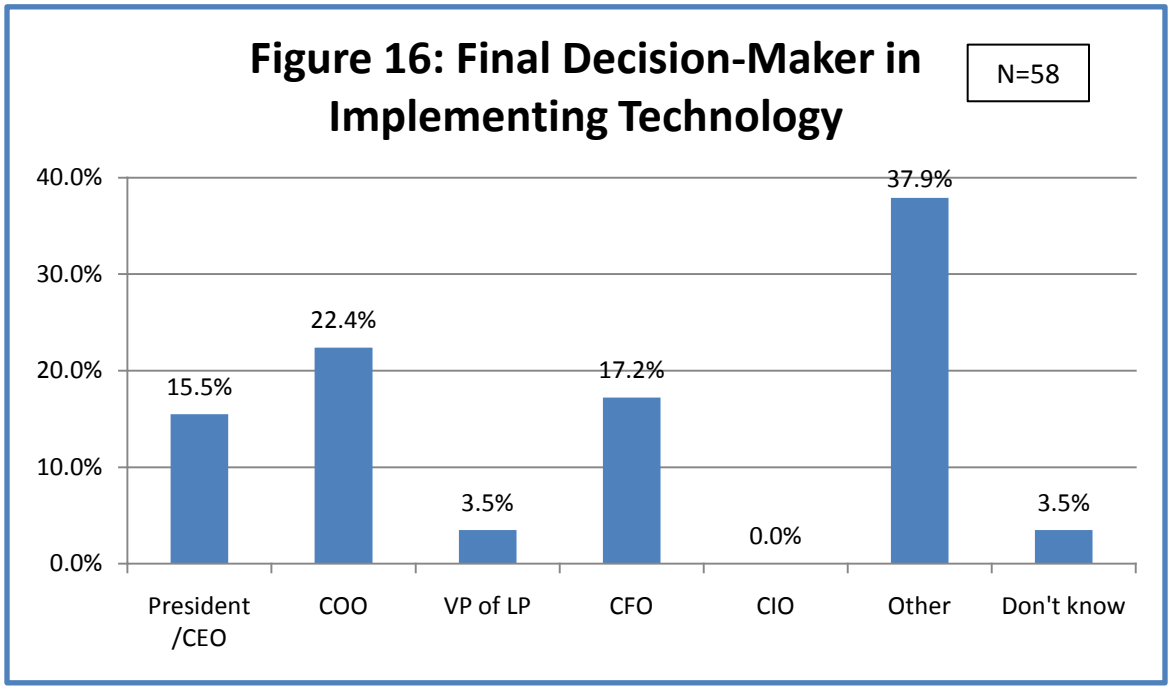
Of note, nearly one-quarter (24.1%) of these respondents indicate "Other" types of personnel who contribute to decision-making about new cash-handling technologies. These responses appear below.

"Other" Responses (N=14)
All district managers, VP's, and store managers
Buyer and Director of LP
Cash Manager
Cash/Banking
Director of LP, Executive Officer of Retail Efficiencies
Director of Store Operations
District Managers (Supervisory Personnel)
General Manager
Procurement
Retail Operations

"Other" Responses Continued (N=14)
Retail operations
Sales Auditing
Store Supervisor
VP Retail Division Heads

Final Decision-Maker in Implementing New Cash-Handling Technology

Next, those respondents who indicated that they do not use smart safes in their retail stores were asked who ultimately made the final decision about whether to implement a new cash-handling technology in their stores. The responses appear in Figure 16.



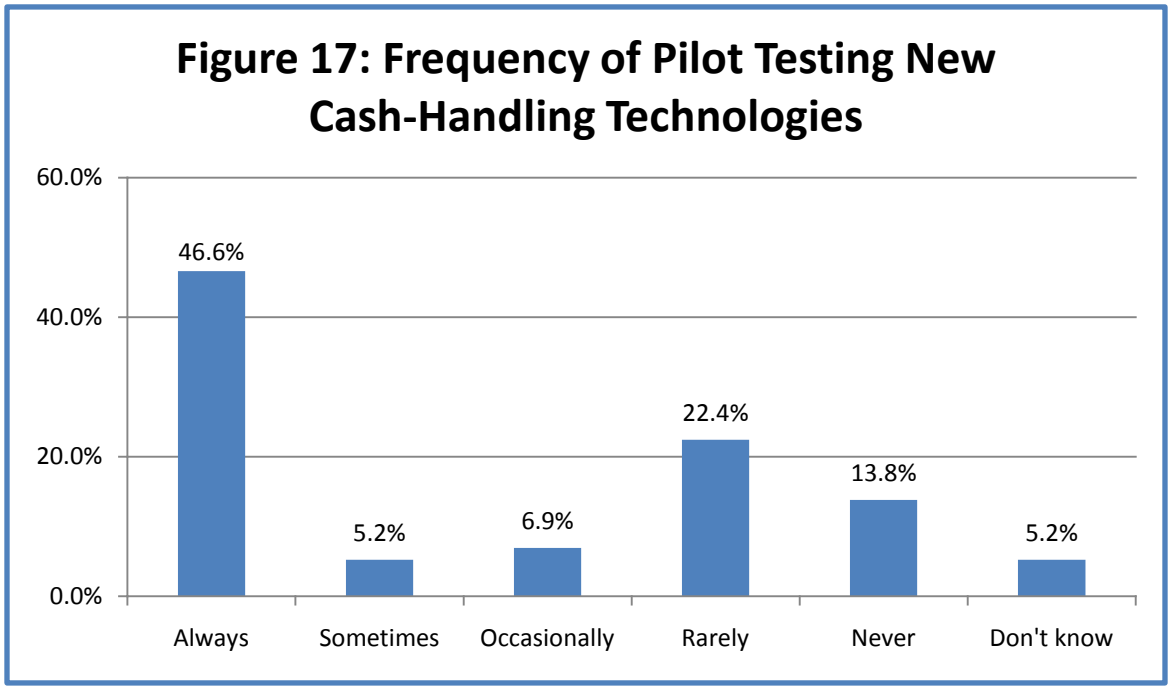
More than one-fifth (22.4%) of the participants who do not currently use smart safes indicate that the final decision about implementing new cash-handling technology is made by the Chief Operating Officer, while 15.5 percent indicate the decision is made by the President/CEO. More than one-sixth (17.2%) of these respondents say the final decision-maker regarding new technology is the Chief Financial Officer, and just four percent report that the Vice President of Loss Prevention is the ultimate decision-maker regarding new cash-handling technology.

Nearly two-fifths (37.9%) of those without smart safes note some "Other" final decision-maker for new cash-handling technology. These responses appear below.

"Other" Responses (N=22)	Freq
Director of LP	2
Retail operations	2
A joint decision between Store Operations and Retail Operations	1
Accounting	1
Both CFO and Sr. LP Personnel	1
Both COO and VP of LP	1
Brand Leadership	1
Executive team of super "C" levels: CFO, CEO & COO	1
Executives	1
General Manager	1
Group of: Senior Operations personnel, VP of Loss Prevention, Financial / Accounting personnel and Procurement	1
It's a joint decision	1
It's a joint decision among the three departments	1
It's a joint effort of departments: Operations, LP, and Financial	1
Joint decision between Treasury and Operations	1
No response (web)	1
Owner	1
Senior VP	1
VP of Finance	1
VP of Operations	1

Pilot Testing New Cash-Handling Technologies

Those respondents who indicated that they do not use smart safes in their retail stores next were asked: "How often do you pilot test a new cash-handling technology before introducing it widely in your stores?" The results appear in Figure 17.



Almost one-half (46.6%) of the respondents who do not currently use smart safes indicate that they "Always" pilot test a new cash-handling technology before introducing it widely in their stores, while another five percent say they "Sometimes" pilot test. More than one-fifth (22.4%) of these respondents report that they "Rarely" pilot test new cash-handling technologies, and more than one-eighth (13.8%) say they never pilot test new cash-handling technologies before introducing them widely in their stores.

Number of Stores in Pilot Test

Those respondents who indicated that they always, sometimes, or occasionally pilot test a new cash-handling technology before implementing them in their stores (N=34) were asked how many stores typically receive the technology in the pilot test. The results appear in Table 13.

Table 13: Number of Stores in Typical Pilot Test of New Technology

Number of Stores	Frequency	% (N=34)
1	3	8.8%
2	1	2.9%
3	5	14.7%
4	1	2.9%
5	5	14.7%
6	2	5.9%
8	1	2.9%
9	1	2.9%
10	5	14.7%
11	1	2.9%
12	2	5.9%
15	1	2.9%
20	1	2.9%
200	1	2.9%
Don't know	4	11.8%

Of those respondents who indicated that they always, sometimes, or occasionally pilot test a new cash-handling technology before implementing them in their stores, more than two-thirds (70.4%) report that 10 or fewer stores typically receive the technology in the pilot test.

Length of Pilot Test

Those respondents who indicated that they always, sometimes, or occasionally pilot test a new cash-handling technology before implementing them in their stores were asked how long their pilot tests typically last before a decision is made about implementing the technology. The results are presented in Table 14.

Table 14: Length of Typical Pilot Test

Response	Frequency	% (N=34)
3 to 4 weeks	1	2.9%
30 days	1	2.9%
45 days	1	2.9%
30 to 60 days	3	8.8%
6 to 8 weeks	1	2.9%
2 months (60 days)	1	2.9%
8 weeks	1	2.9%
6 to 10 weeks	1	2.9%
3 months (90 days)	7	20.6%
3 to 6 months	5	14.7%
6 months	4	11.8%
6 months to a year	1	2.9%
It depends on the study, 1 week to 1 month	1	2.9%
One pilot is taking a year, smaller pilots can be ruled out quickly	1	2.9%
Several months	1	2.9%
Don't know	4	11.8%

More than three-quarters (76.2%) of the stores that conduct pilot tests of new technologies before implementing them typically do so for two to six months.

Determining the Success of New Technology Pilot Tests

Those respondents who indicated that they always, sometimes, or occasionally pilot test a new cash-handling technology before implementing them in their stores were asked how they determine that the pilot test was successful enough to choose to implement a technology in their stores. The responses are detailed below.

Responses (N=34)	Frequency
ROI	6
Cost benefit	1
Cost of service, cost of potential labor, potential decrease in cash variance	1
Cost savings, increased safety, time management	1
Cost vs. efficiency	1
Cost, effectiveness, ROI, compatibility with existing systems, amount of manager time, safety and security	1
Criteria is established at beginning based on the objectives, objectives depend on what is being tested	1
Depends on type of test	1
Depends, we evaluate different criteria	1
Ease of use, systemic issues, reduction in costs and risks	1
Efficiency, results prior and post test	1
Employee feedback	1
Establish metrics beforehand and see if it meets the metrics	1
Feedback from store, cost	1
It must be able to function within our environment and according to our expectations and align with our ROI expectations.	1
Labor savings	1
Management has input and they look at ROI, funding and budgeting	1
Operational success and ROI	1
Overall labor savings and cash losses compared to equipment cost	1
Reduce costs	1
Reduction of time of management in store; less loss	1
Review with operations personnel and get feedback; review from financial aspect	1
ROI, savings, ease of use	1
ROI, time involved, is it user friendly, whether or not it improves current process	1
Time to utilize, ease of utilization, safety and security of tested process	1
When it's working	1
Don't Know	3

Additional Comments

Finally, respondents who have not implemented smart safes in their stores were asked to share any other comments about implementing new cash-handling technologies such as smart safes that might help researchers better understand issues that retailers face. Twelve of the respondents did so, and their responses are detailed below.

Responses (N=12)
Alternative methods of handling POS check conversion, check acceptance
Armored car services are reducing pick-ups; concerned that we will have enough daily change for store operations; new safes like smart safes concerned about time involved entering data
Bank industry should avoid driving the smart safe products and let the safe companies provide service and sales because they have more technical knowledge.
Cost is the issue - too many stores (850)- can't afford it
Cost is the specific factor; will tolerate certain risk of loss depending on the cost; risk-benefit is always a consideration
Planning on piloting smart safes- problems: size of safe, whether you can put in front, access into existing equipment
ROI wasn't high enough
Smart safes weren't compatible with our electronic banking: would still have had to use armored cars: broaden number of online banking that's available to smart safe vendors
The cost and effect is important to consider; we would talk to other retailers for input
The speed of transactions in smart safes is not fast enough for our daily operations according to what I read
Timing is everything, the priority now is not obtaining new safes due to slow sales but it could change in the future
We do a very low percentage of cash sales, it's mostly electronic transactions.