Cashing in on Contactless
The Roadmap to Successful Contactless Payment Implementation

October 2007

~ Underwritten, in Part, by ~
Executive Summary

As a follow-up to the December 2006 study, *Retail Contactless Payment Systems: Improving Customer Retention & Loyalty*, Aberdeen surveyed 225 companies in October 2007 to outline a roadmap for contactless payment implementations and measurement systems for tracking solution performance. To provide customers with convenience, 32% of the retailers surveyed have implemented a contactless payment solution. However, this study found that having an effective plan for implementation and measuring performance are critical components for success and deriving a Return on Investment (ROI).

Best-in-Class Performance

Aberdeen selected three key performance criteria to distinguish Best-in-Class companies from Industry Average and Laggards that are frequently measured within the retail industry. Based on these indicators, Best-in-Class companies showed the following performance:

- 86% have improved their total number of transactions
- Average check-out time of 1.9 minutes at the Point-of-Sale (POS)
- 93% have 80% or more of their customers extremely satisfied

Competitive Maturity Assessment

Survey results show that the firms enjoying Best-in-Class performance shared several common characteristics:

- Best-in-Class companies are over 10-times as likely as Laggards to compare transactional contactless data with non-contactless data
- Best-in-Class companies are over 4-times as likely as all other companies to provide customer-usage related goals and performance metrics to store employees
- Best-in-Class companies are 3.7-times as likely as all others to have an end-to-end contactless card solution

Required Actions

In addition to the specific recommendations in Chapter Three of this report, to achieve Best-in-Class performance, companies must:

- Collect and store contactless data for measurement
- Develop performance metrics and customer usage goals
- Develop a plan for downtime and troubleshooting

“Overall we have had good success in several segments with the addition of contactless. We have had very few issues with support related costs while we’re confident we can offset hardware, transaction interchange fees, and wireless costs through increased sales”.

~ Mark Jackson, Vice-President, Media Consumption, Cadbury Schweppes
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Chapter One: Benchmarking the Best-in-Class

The Need for a Contactless Roadmap

In December 2006, Aberdeen surveyed 180 companies for its first contactless payment report, Retail Contactless Payment Systems: Improving Customer Retention & Loyalty. (Aberdeen defines contactless payment systems as a technology that enables faster cash-less payment transactions through the use of smart-card based embedded forms or mobile carrier based technology.) Results of that 2006 study revealed that 55% of respondents had a contactless payment initiative in place for at least a year, where the top factor driving contactless adoption for 65% of respondents was greater customer convenience.

Alarmingly, 65% of the companies surveyed reported that they did not use their contactless data for any process or system, and 35% of the companies do not measure the effectiveness of their POS contactless payment solutions at all. The failure to measure their ROI is due to a lack of understanding as to how ROI should be tracked, as 37% of companies have not implemented a contactless solution because they cannot determine the ROI.

Because companies surveyed last year revealed they do not have a system in place to effectively measure ROI, they may be misinformed about which factors contribute to the success or failure of their contactless solution. Further, as contactless technology continues to evolve with Near Field Communication (NFC) and other advanced capabilities, having a clear understanding about how to effectively utilize this technology becomes increasingly necessary. (Further information about NFC is available in the Aberdeen Insight at the end of this chapter.)

This need lead Aberdeen to conduct a follow-up study in order to outline a roadmap that can be used to guide companies through implementation and the formation of a performance measurement system to track the performance of their contactless solutions.

Customer-Centricity Drives Contactless Interest

Nearly one year after the initial study, Aberdeen conducted a follow-up study surveying 225 companies. The top pressure driving contactless implementation for 64% of retail respondents remains customer convenience, where the top challenge for 55% of retailers is customer awareness, usage, and acceptance surrounding contactless payment technology (Figure 1).

Even though retailers acknowledge the potential benefit of contactless technology to customer convenience, they are also aware that the successful return on such an investment hinges on the extent to which customers are aware the technology is available and use it.

"In markets where contactless readers have been implemented, expectations have been exceeded thus far. The main benefits of contactless use are convenience to the customer, increased speed and efficiency at checkout, and security."

~ Senior Executive, Restaurant Chain (Americas)
As Figure 1 shows, in addition to being consumer-centric, retail companies struggle with selecting contactless hardware and seamlessly integrating the technology into their already established POS system. As contactless is an emerging technology, today's retailers feel pressure improve customer experience, but face difficulty in initiating the adoption of technology (such as contactless) that can be used as a tool to enhance customer convenience.

Figure 1: Top Contactless Challenges Facing Retailers

The Maturity Class Framework

As successfully implementing a contactless payment solution is a means retailers can use to improve customer convenience, Aberdeen used the following three key performance criteria to distinguish the Best-in-Class from Industry Average and Laggard organizations:

- Number of transactions
- Average check-out time
- Percentage of extremely satisfied customers

These Key Performance Indicators (KPIs) were chosen because they are standard measurements retailers can easily use to evaluate their POS system. They directly address the top pressure retailers are attempting to alleviate through contactless implementation: customer convenience.

Survey respondents were segmented using a weighted average that was defined and calculated based on the aforementioned defined KPIs. Best-in-Class companies were identified as the top 20% of performers, Industry Average companies were identified as the middle 50%, and Laggard companies were identified as the bottom 30% of performers. Table 1
provides a clear breakdown of how Best-in-Class companies performed in comparison to Industry Average and Laggard companies based on the defined KPIs.

### Table 1: Top Performing Companies Earn Best-in-Class Status

<table>
<thead>
<tr>
<th>Definition of Maturity Class</th>
<th>Mean Class Performance</th>
</tr>
</thead>
</table>
| **Best-in-Class:** Top 20% of aggregate performance scorers | • 86% have increased their total number of transactions  
• Have an average check-out time of 1.9 minutes at POS  
• 93% have 80% or more of their customers extremely satisfied |
| **Industry Average:** Middle 50% of aggregate performance scorers | • 61% have increased their total number of transactions  
• Have an average check-out time of 3.6 minutes at POS  
• 24% have 80% or more of their customers extremely satisfied |
| **Laggard:** Bottom 30% of aggregate performance scorers | • 35% have increased their total number of transactions  
• Have an average check-out time of 4.9 minutes at POS  
• 0% have 80% or more of their customers extremely satisfied |

Source: Aberdeen Group, October 2007

### The Strategy of Best-in-Class

Successfully implementing contactless technology to meet corporate goals requires a combination of strategic actions, organizational capabilities, and enabling technologies. Table 2 outlines the actions that Best-in-Class retailers are taking, and the capabilities and technology enablers they are equipping themselves with to ensure successful implementation of their contactless solution.

### Table 2: The Best-in-Class PACE Framework

<table>
<thead>
<tr>
<th>Pressures</th>
<th>Actions</th>
<th>Capabilities</th>
<th>Enablers</th>
</tr>
</thead>
</table>
| Customer convenience | • Define a set of ROI objectives and goals surrounding contactless adoption  
• Create a cost-effective strategy for contactless implementation | • Collect and store contactless data  
• Contactless data is compared to non-contactless data  
• Contactless data is stored for analysis in a centralized database  
• Cross-functional team (store operations, marketing, systems, finance) in place for store-level execution | • Touch pad for contactless transactions  
• End-to-end card and mobile contactless platform  
• Contactless technology that is compatible with current POS structure at all check-out locations  
• Self-check out systems with contactless transaction ability  
• Over the air payment enabling software (mobile contactless) |

Source: Aberdeen Group, October 2007
Sixty-four percent (64%) of Best-in-Class companies indicate the top pressure driving the decision to implement a contactless solution is to provide customers with convenience. In order to provide customers with a convenient experience with contactless payment technology, the top strategic action among 63% of Best-in-Class companies is to define a set of ROI objectives and goals surrounding contactless adoption when implementing their contactless solution (Figure 2).

**Figure 2: Top Best-in-Class Contactless Strategies**

[Bar chart showing distribution of strategies]

As shown by the Best-in-Class, having a pre-designated ROI strategy where adoption is linked to specific goals leads to higher performance. Without a roadmap of goals and objectives to follow, monitoring performance for improvement becomes meaningless as there is no end-point in sight. Even though unforeseen occurrences will inevitably arise, having an end-goal established helps to re-set short-term targets accordingly.

The additional Best-in-Class strategies are also windows to their success. While creating a cost effective strategy for implementation is not the top strategy, nearly half of Best-in-Class companies utilize this approach for implementation. Taking the time beforehand to ensure a cost-effective strategy is outlined not only eliminates superfluous costs, but increases ROI.

Lastly, 37% of the Best-in-Class pilot their contactless solution in pre-designated areas first. This allows Best-in-Class companies to work out unforeseen problems and quantify the benefits before an enterprise roll-out where challenges have more of an impact.
# Aberdeen Insights - What is NFC?

Last year’s contactless study found that 25% of respondents had either implemented or had plans to implement a contactless solution. This year’s study found that 27% of responding companies have deployed a contactless solution to some extent within their enterprise. The slow increase in adoption is a result of a lack of education within the industry and among consumers.

Thirty-nine percent (39%) of retailers surveyed are not aware of NFC technology, which enables mobile contactless payments. This technology works via a two-way short-range exchange of contactless data through magnetic field induction, where information is exchanged when two devices are placed in close proximity of each other; typically a few centimeters. Contactless cards work via RF technology and, the mobile magnetic contactless technology is compatible with the RF infrastructures currently available.

A misnomer within the industry is that contactless technology is Radio-Frequency Identification (RFID) technology. While NFC is based on RFID and is similar in that it uses a chip and a reader, NFC differs from RFID because it operates within a very short distance (centimeters) and allows two separate devices to interconnect. More specifically, NFC and RFID are used in to distinctly different ways; NFC is primarily used for consumer payments and to enable loyalty programs (storage of loyalty or promotion information), while RFID is mainly used for track and trace.

In the next chapter, we will see what the top performers are doing to achieve these gains.
Chapter Two:
Benchmarking Requirements for Success

The process of selecting a contactless solution, successfully implementing that solution, and deriving scalable ROI can result in significant benefits, as exemplified by the following case study.

Cadbury Schweppes Improves Contactless Transactions and Sales in Select Market Segments

Cadbury Schweppes, a confectionery and beverage company, implemented contactless payment ability on 600 beverage vending machines in 2007. The company adopted a location-based strategy, targeting its contactless-enabled vending machines on college campuses, recreational facilities, hospitals, and other locations that are primarily populated with white-collar occupations. This solution provided contactless payment ability on vending machines to improve customer payment convenience of using cashless means of payment.

Cadbury has recorded higher contactless sales by specifically targeting the 18 to 25 age group customer segments. Over the last ten months, this company has been monitoring these vending machines on a monthly basis to track the sales and types of transactions. According to Cadbury, contactless transactions are typically around 25% of all credit and debit transactions; whereas, credit and debit transactions comprise 3% to 30% of all sales transactions.

According to Mark Jackson, Vice-President of Media Consumption, “Overall we have had good success in several segments with the addition of contactless. We have had very few issues with support related costs while we’re confident we can offset hardware, transaction interchange fees, and wireless costs through increased sales”, says Jackson.

Cadbury Schweppes has determined that their contactless investment can attain a positive ROI when the company attains 15% increase in contactless sales across multiple locations. According to the company, they have a firm ROI model in place to realize the payback from contactless platform investment.

Competitive Assessment

The aggregated performance of surveyed companies determined whether they ranked as Best-in-Class, Industry Average, or Laggard. In addition to having common performance levels, each class also shared characteristics in five key categories: (1) process (the ability to detect and respond to changing conditions without placing additional burdens on the organization); (2) organization (corporate focus and collaboration among stakeholders); (3) knowledge management (contextualizing data and exposing it to key stakeholders); (4) technology (the selection of appropriate tools and intelligent deployment of those tools); and (5) performance measurement
(the ability of the organization to measure the benefits of technology deployment and use the results to improve key processes further). These characteristics (Table 3) serve as a guideline for best practices and correlate directly with Best-in-Class performance across the key metrics.

Table 3: The Competitive Framework

<table>
<thead>
<tr>
<th></th>
<th>Best-in-Class</th>
<th>Average</th>
<th>Laggards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collect and store contactless data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36%</td>
<td>18%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-functional team (store operations, marketing, systems, finance) in place for store-level execution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25%</td>
<td>14%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contactless data is compared to non-contactless data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31%</td>
<td>9%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Contactless data is stored for analysis in a centralized database</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26%</td>
<td>7%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ 26% end-to-end contactless card platform</td>
<td>▪ 7% end-to-end contactless card platform</td>
<td>▪ 7% end-to-end contactless card platform</td>
<td></td>
</tr>
<tr>
<td>▪ 23% contactless technology that is compatible with current POS structure at all check-out locations</td>
<td>▪ 11% contactless technology that is compatible with current POS structure at all check-out locations</td>
<td>▪ 6% contactless technology that is compatible with current POS structure at all check-out locations</td>
<td></td>
</tr>
<tr>
<td>▪ 19% touch pad for contactless transactions</td>
<td>▪ 10% touch pad for contactless transactions</td>
<td>▪ 3% touch pad for contactless transactions</td>
<td></td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ 25% review contactless performance on a regular basis and set corrective action</td>
<td>▪ 13% review contactless performance on a regular basis and set corrective action</td>
<td>▪ 10% review contactless performance on a regular basis and set corrective action</td>
<td></td>
</tr>
<tr>
<td>▪ 21% customer-related contactless goals for store teams</td>
<td>▪ 6% customer-related contactless goals for store teams</td>
<td>▪ 3% customer-related contactless goals for store teams</td>
<td></td>
</tr>
<tr>
<td>▪ 15% performance metrics and contactless goals for store teams</td>
<td>▪ 4% performance metrics and contactless goals for store teams</td>
<td>▪ 3% performance metrics and contactless goals for store teams</td>
<td></td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, October 2007

“We have contactless payment ability at all our 2,100 locations nationwide. Our internal processes including data measurement and employee training are moving in the right direction. However, we would like it if banks issued more cards and customer response is higher.”

~ Michael Verdesca, Divisional Vice-President, Systems Development, Jack in the Box
Process

From a process perspective, the following aspects are a clear differentiator for Best-in-Class companies when compared to Industry Average and Laggard companies:

- Best-in-Class companies are over two-times as likely as all others to collect and store contactless data
- Best-in-Class companies are 2.5-times as likely as all others to record POS trouble shooting and downtime
- Best-in-Class companies are 3.7-times more likely than the Industry Average to possess a contactless security or loss prevention guidelines for secure store-level execution
- Best-in-Class companies are 2.5-times more likely than Laggards to have the ability to have procedures for monitoring and taking corrective action for contactless downtime / transaction failure
- Best-in-Class companies are 1.5-times as likely than Laggards to calculate cost-benefit analysis related to contactless investment

Thus, Best-in-Class companies are more conscious of the investment made when deploying a contactless payment ability at their merchant locations, despite the high instance of hardware costs being shared by credit associations. Best-in-Class companies have reformed their assumption-based process approach towards a more systematic process by monitoring their contactless payment readiness, instilling security guidelines, and reducing downtime or abandoned transactions. For instance, a key indicator of process development is the fact that 50% of Best-in-Class indicate that combining loyalty programs with mobile contactless and card or fob-based contactless would advance customer convenience and improve sales.

Organization

Contactless deployment in the industry so far indicates that the Best-in-Class consider a pre-determined organizational strategy as one of the essential components for successful contactless implementation. In order to carry out their clearly defined roadmap for implementation, Best-in-Class companies are 1.7-times as likely as the Industry Average and 2.7-times as likely as Laggards to use a cross-functional team consisting of various departments (store operations, store systems, marketing, and finance) at the store-level to ensure implementation is successfully executed. Collaboration between internal departments within a retail company is an essential element for creating a successful campaign, particularly in meeting the challenge of ensuring customers are aware of the technology and knowledgeable about how to use it.

In the case of several merchants, the store operations and human resources teams are responsible for training associates in how to use the technology, marketing is responsible for generating customer awareness, and the finance team is responsible for determining a cost-effective strategy and ROI.
timeline. Out of the three departments, marketing’s role in generating programs for customer awareness needs further refinement and renewed focus.

Knowledge
From a knowledge perspective, the following aspects are a clear differentiator for Best-in-Class companies:

- Best-in-Class companies are 2.4-times as likely as the Industry Average and are over 10-times as likely as Laggards to compare contactless transaction data with non-contactless transaction data
- Best-in-Class companies are 3.7-times as likely as all others to store contactless data for analysis in a centralized database
- Best-in-Class are nearly five-times as likely as Laggards to measure and report POS contactless transaction data

The process for measuring and reporting the progress of contactless payment results has become a hallmark of Best-in-Class innovation. These companies have adopted solutions to help build a knowledge culture around contactless payments. While Industry Average and Laggards are not measuring any results beyond the number of contactless transactions, Best-in-Class companies are deriving improved business intelligence from contactless transactions that are in turn supporting further improvement to in-store experience and sales.

Best-in-Class companies are measuring the unit and category level impact of contactless or cashless transactions through advanced analytics such as impact of cashless transaction on daily sales. Aberdeen data shows that 45% of Industry Average and Laggard companies are not measuring the impact of contactless at all. As a result, ROI timeline and KPIs that lead to a positive payback are being overlooked by these companies.

Performance
From a performance perspective, Best-in-Class companies are over four-times as likely as all others to provide customer-usage related goals to store employees and visibility to performance metrics such as cashless sales, check-out time, and the number of contactless transactions. These companies are also two times as likely as all others to review contactless performance on a weekly basis and set corrective action for store teams. In the case of retail or the restaurant industry, the current state of contactless deployment indicates that Best-in-Class companies are striving to establish an environment where both store and headquarter teams have visibility towards results related to contactless usage, customer satisfaction, or sales. Visibility towards results facilitates further improvement in contactless usage.

“We continue to monitor our contactless results and have been actively redeploying low performing beverage vending units with contactless ability to venues where we have had success such as college campuses and recreational facilities.”

~ Mark Jackson, Vice-President, Media Consumption, Cadbury Schweppes
Technology
Overall, the contactless system landscape has fewer fragmentations when compared to other POS enabling technologies such as bar-code scanning and peripherals such as receipt printers. Based on Aberdeen's sample of respondents, amongst the varied forms of contactless initiatives, the adoption of a contactless card payment platform is most prevalent in the industry, followed by mobile contactless or NFC, due to ongoing trials surrounding this technology (Figure 3). One should also note that companies that have deployed card-based contactless payment solutions are the most likely candidates to adopt mobile contactless, indicating a strong potential for NFC or mobile contactless initiatives to take place among current contactless card users and locations that currently accepting contactless card payments.

Figure 3: Technology Landscape of Contactless Solutions

- **End-to-end card and mobile contactless platform**: 22% (Best-in-Class 2%, Average 5%, Laggard 14%)
- **End-to-end mobile contactless platform**: 19% (Best-in-Class 6%, Average 8%, Laggard 5%)
- **End-to-end contactless card platform**: 26% (Best-in-Class 14%, Average 12%, Laggard 0%)
- **Pin pad for contactless acceptance**: 24% (Best-in-Class 12%, Average 4%, Laggard 0%)

Source: Aberdeen Group, October 2007
Aberdeen Insights — Contactless ROI Maturity is an Evolution

Contactless ROI is attainable when a company fulfills the three primary stages in the contactless lifecycle management process. Following the initial cost-benefit analysis, trial, and deployment, customer use and process execution is a vital step in the maturity curve. This step can propel companies toward a positive payback on their contactless investment. The upward climb on the ROI maturity curve would mean that companies are actually utilizing performance management and transaction data analytics to measure and report contactless KPIs such as checkout time, sales, number of transactions, and customer satisfaction (Figure 4).

Figure 4: Stages of Contactless ROI Maturity

Key organizational characteristics of each stage are identified below in Table 4.

Table 4: Characteristics of Contactless ROI Maturity Stages

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key driver</td>
<td>POS improvement plan</td>
<td>Store training, cross-functional teams, and consumer marketing drive</td>
<td>Transaction data utilization, and preset performance drivers for store teams</td>
</tr>
<tr>
<td>IT capability</td>
<td>IT project plan, testing, and actual release</td>
<td>Track contactless transactions and mandate use of employee training modules</td>
<td>Ability to predict and improve contactless results through performance reporting and dashboards</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, October 2007
### Chapter Three: Required Actions

The purpose of this study was to outline a roadmap to guide retailers in implementing a contactless solution effectively to derive the most ROI possible; but actions without understanding are less effective. Therefore, in order to gain a more clear perspective as to how each segment perceives contactless ROI, the top KPIs used to measure contactless solutions, where ROI is expected to be derived, and additional functionalities retailers could implement to speed up time to ROI are broken down in Table 5.

#### Table 5: ROI Contactless Breakdown

<table>
<thead>
<tr>
<th>Classification</th>
<th>Top Two KPIs Used to Measure</th>
<th>Where ROI is Expected</th>
<th>Additional Functionalities to Advance ROI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Best-in-Class</strong></td>
<td>43% customer satisfaction</td>
<td>68% improved process efficiency (in terms of POS time, shorter lines, easier cash management)</td>
<td>50% contactless loyalty programs could help</td>
</tr>
<tr>
<td></td>
<td>29% POS transaction time</td>
<td>32% increased transaction volume and improved business intelligence</td>
<td>42% contactless coupons and promotions in mobile phones could help</td>
</tr>
<tr>
<td><strong>Industry Average</strong></td>
<td>57% customer satisfaction</td>
<td>58% improved process efficiency (in terms of POS time, shorter lines, easier cash management)</td>
<td>55% contactless loyalty programs could help</td>
</tr>
<tr>
<td></td>
<td>29% POS process efficiency</td>
<td>39% improved lifetime value of customers</td>
<td>25% over-the-air payment enabling software (mobile contactless) could help</td>
</tr>
<tr>
<td><strong>Laggards</strong></td>
<td>47% customer satisfaction</td>
<td>65% improved process efficiency (in terms of POS time, shorter lines, easier cash management)</td>
<td>54% contactless loyalty programs could help</td>
</tr>
<tr>
<td></td>
<td>35% increased sales</td>
<td>38% improved sales</td>
<td>35% contactless prepaid programs (gift) coupons or promotions in mobile phones could help</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, October 2007

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### Fast Facts

- Best-in-Class companies are 2.5-times more likely than Industry Average companies to record contactless troubleshooting and downtime. This process strength ensures customer convenience and completion of every possible contactless transaction.

- Performance management for contactless payments must include weekly reporting of number of contactless transactions, transaction downtime, customer inquiries or complaints, check-out time, and transaction size.
The three segments are aligned in that their top KPI measurement is customer satisfaction, the top area ROI is expected is in improved process efficiency, and the functionality believed to advance ROI the most is a loyalty program. However, as seen in Table 5, while all of the segments are aligned in terms of their top choices, they differ in terms of their second and following responses.

Examining the second set of differing choices, the lack of cohesive direction among merchants becomes clearer. Beyond the focus on customer service and efficiency, merchants appear to be undecided as to how best to measure and use contactless ROI. In order for contactless technology to thrive within the industry, retailers need to have a clear focus around how their solutions can best serve their customers and company. Overall, the absolute survival or abandonment of this technology hinges on the actions of every adopting retailer collectively, not just the success of an individual retailer.

It is also evident from the results that process efficiency is seen as the gateway to ROI success and consumer loyalty initiatives are a compelling requirement for further advancing ROI efforts in the case of Best-in-Class, Industry Average, and Laggard companies within the next 12 to 24 months.

Whether a company is trying to move its contactless ROI performance from Laggard to Industry Average, or Industry Average to Best-in-Class, the actions in this chapter will help spur the necessary performance improvements.

**Laggard Steps to Success**

- **Before creating a cost-effective strategy for contactless implementation, outline a set of objectives to be met**

  Only 20% of Laggards indicate that standards of contactless implementation are a vital attribute in their contactless program, compared to 38% of Best-in-Class companies. The Best-in-Class have seen initial successes in the deployment of contactless payments as they consider established standards of implementation as one of the top factors to ensure seamless growth and adoption of the technology. In the initial cost-benefit analysis stage of a contactless project, Laggards must develop an implementation strategy with a best-of-breed integrator or credit association that includes evaluation of current POS infrastructure, customer behavior, network and commerce infrastructure, deployment timeframe, and technology road map.

- **Collaborate internally between departments to ensure success**

  Only 9% of Laggards indicated they have a cross-functional team to ensure seamless store-level contactless process execution, when compared to 25% of Best-in-Class companies. Customer-facing technologies at the POS require all-round internal collaboration.
between information retail / restaurant technology, marketing, and store operations departments to address technology adoption. Fewer Laggards are focused on this aspect. Internal collaboration is the first step towards Laggard success in driving contactless use.

- **Collect and store contactless data for measurement**
  Only 15% of Laggards have the ability to collect and store contactless POS data, when compared to 36% of Best-in-Class companies. Data feeds organizational intelligence. Utilizing contactless transaction data in the organization is necessity and not an exception to determine whether contactless transactions are impacting customer behavior and shopping experience in any meaningful way. Laggards must adopt contactless data collection, storage, and analysis to set-up a learning curve for contactless process improvement.

- **Develop performance metrics and customer usage goals to drive ROI**
  Only 3% of Laggards provide their store teams with contactless performance metrics and customer usage goals, when compared to 21% of Best-in-Class companies. Our data shows that Laggards will be unable to follow a path to contactless ROI unless these companies introduce performance benchmarks through the assistance of best-of-breed contactless integrators and credit associations. Performance management for contactless payments must include weekly reporting of the number of contactless transactions, transaction downtime, customer inquiries or complaints, check-out time, and transaction size. Accountability must be given store operations and store teams to follow-through with performance goals on a weekly basis.

**Industry Average Steps to Success**

- **Develop a plan for downtime and troubleshooting**
  Only 11% of Industry Average companies indicate they record contactless troubleshooting and downtime, compared to 30% of Best-in-Class companies. A pre-requisite of any retail or restaurant is that point-of-sale registers need to be up and running at all times for smooth customer and transaction flow. This fundamental requirement also applies to contactless payments as this technology facilitates a payment transaction. While Best-in-Class companies are recording the downtime of contactless equipment or the payment process, Industry Average companies are not as proactive. To scale contactless adoption further and ensure extremely satisfied customers, these companies need to follow the troubleshooting guidelines for contactless payments that are similar to other forms of payments including cash, gift card, mag-stripe debit / credit, and check transactions.
• Implement technology to measure and report contactless payment data in real-time

Only 11% of Industry Average companies have the ability to measure and report contactless POS data in real-time, compared to 25% of the Best-in-Class. Real-time contactless POS data measurement and reporting has become a component of timely response to customer demand. Currently, the Best-in-Class are more than twice as likely to be processing POS data in real-time when compared to Industry Average companies. Real-time contactless data measurement and reporting can enable Industry Average companies to not only build a timely profile of customer behavior that can facilitate merchandising and marketing programs, but also build timely corrective measures to improve contactless customer experience.

Best-in-Class Steps to Success

• Capture, measure, and compare contactless transactional data against non-contactless transactional data for insight

Only 31% of Best-in-Class companies are comparing contactless data and non-contactless transaction data for further improving customer adoption and utilization of customer analytics for cross-selling and up-selling programs. A comparison of contactless transactions with non-contactless transactions can provide companies with customer preferences, affinity, and above all data to drive contactless execution improvements. While Best-in-Class companies are well ahead of the curve in capturing and sharing contactless transactional data with vendor partners, they are not effectively drawing cross-comparisons between contactless and mag-stripe data that can lead to deeper customer and merchandising insight.

• Establish a plan for NFC and invest in mobile contactless technology to remain Best-in-Class

Thirty-two percent (32%) of Best-in-Class companies are not aware of NFC technology. Contactless payments and loyalty programs driven by mobile phones of customers present an opportunity for expanding the consumer payments horizon to a whole new level of convenience. Overall, our data has shown that NFC is the next wave for mobile retailing. Best-in-Class companies must lead by innovation and drive to increase market share. Evaluating the benefits and cost scenario for NFC through mobile service providers, credit associations, ISV partners, and integrators might be the first step towards exploring new customer experience enablers.
Create and implement a plan to build customer awareness

Fifty-four percent (54%) of the Best-in-Class indicate they are challenged to build customer awareness, usage, and acceptance. However, only 19% of the Best-in-Class revealed that one of their top two contactless strategies is informing customers about how to use contactless cards and where they will be accepted as one of their top two strategies. As the success of contactless technology is reliant on the amount of customers that are aware of its existence and choose to use it, creating and launching a marketing awareness campaign to increase awareness is essential for Best-in-Class companies to continue the success they have already derived from their contactless solution.

Aberdeen Insights - Summary

As this study found, a large portion of respondents are unfamiliar with contactless ROI process control. Such unawareness, coupled with the broad disagreement within the industry as to how to best use and measure contactless technology, sets the stage for lackluster results.

This brings Aberdeen to the conclusions that contactless ROI is attainable through the contactless maturity curve, consumer awareness, and a higher circulation of contactless form factors, including the acceptance of NFC. Next year’s study will go a step further and explore whether retailers have become more knowledgeable about NFC and whether a more discernable plan for contactless technology has emerged.
Appendix A:
Research Methodology

Between September and October 2007, Aberdeen examined the use, the experiences, and the intentions of more than 225 enterprises using contactless payment technology in a diverse set of retail enterprises.

Aberdeen supplemented this online survey effort with telephone interviews with select survey respondents, gathering additional information on contactless strategies, experiences, and results.

Responding enterprises included the following:

- **Job title / function:** The research sample included respondents with the following job titles: manager (23%); director (22%); senior management (20%); consultant (14%); staff (9%); vice president (6%); other (4%); CIO (1%); and CFO (1%).

- **Industry:** The research sample included respondents from retail industries such as: store retailers (15%); supermarkets (7%); consumer electronics (6%); furniture and hardware (5%); apparel (4%); restaurant (3%); mass merchant (2%); hospitality (2%); and other (53%).

- **Geography:** The majority of respondents (58%) were from North America. Remaining respondents were from Europe (16%), the Asia-Pacific region (14%), South / Central America and Caribbean (7%), and the Middle East, Africa (5%).

- **Company size:** Twenty-three percent (23%) of respondents were from large enterprises (annual revenues above US $1 billion); 29% were from midsize enterprises (annual revenues between $50 million and $1 billion); and 48% of respondents were from small businesses (annual revenues of $50 million or less).

- **Headcount:** Thirty-four percent (34%) of respondents were from large enterprises (headcount between 1 and 99 employees); 30% were from midsize enterprises (headcount between 100 and 999 employees); and 36% of respondents were from small businesses (headcount greater than 1,000 employees).

Solution providers recognized as sponsors of this report were solicited after the fact and had no substantive influence on the direction of the Cashing in on Contactless report. Their sponsorship has made it possible for Aberdeen Group to make these findings available to readers at no charge.
Table 6: The PACE Framework Key

<table>
<thead>
<tr>
<th>Overview</th>
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<tbody>
<tr>
<td>Aberdeen applies a methodology to benchmark research that evaluates the business pressures, actions, capabilities, and enablers (PACE) that indicate corporate behavior in specific business processes. These terms are defined as follows:</td>
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<tr>
<td>Pressures — external forces that impact an organization’s market position, competitiveness, or business operations (e.g., economic, political and regulatory, technology, changing customer preferences, competitive)</td>
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<tr>
<td>Actions — the strategic approaches that an organization takes in response to industry pressures (e.g., align the corporate business model to leverage industry opportunities, such as product / service strategy, target markets, financial strategy, go-to-market, and sales strategy)</td>
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<tr>
<td>Capabilities — the business process competencies required to execute corporate strategy (e.g., skilled people, brand, market positioning, viable products / services, ecosystem partners, financing)</td>
</tr>
<tr>
<td>Enablers — the key functionality of technology solutions required to support the organization’s enabling business practices (e.g., development platform, applications, network connectivity, user interface, training and support, partner interfaces, data cleansing, and management)</td>
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</table>

Source: Aberdeen Group, October 2007

Table 7: The Competitive Framework Key

<table>
<thead>
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<th>Overview</th>
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<td>The Aberdeen Competitive Framework defines enterprises as falling into one of the following three levels of practices and performance:</td>
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<tr>
<td>Best-in-Class (20%) — Practices that are the best currently being employed and are significantly superior to the Industry Average, and result in the top industry performance.</td>
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<tr>
<td>Industry Average (50%) — Practices that represent the average or norm, and result in average industry performance.</td>
</tr>
<tr>
<td>Laggards (30%) — Practices that are significantly behind the average of the industry, and result in below average performance.</td>
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In the following categories:

- **Process** — What is the scope of process standardization? What is the efficiency and effectiveness of this process?
- **Organization** — How is your company currently organized to manage and optimize this particular process?
- **Knowledge** — What visibility do you have into key data and intelligence required to manage this process?
- **Technology** — What level of automation have you used to support this process? How is this automation integrated and aligned?
- **Performance** — What do you measure? How frequently? What’s your actual performance?

Source: Aberdeen Group, October 2007

Table 8: The Relationship Between PACE and the Competitive Framework

<table>
<thead>
<tr>
<th>PACE and the Competitive Framework – How They Interact</th>
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<tbody>
<tr>
<td>Aberdeen research indicates that companies that identify the most impactful pressures and take the most transformational and effective actions are most likely to achieve superior performance. The level of competitive performance that a company achieves is strongly determined by the PACE choices that they make and how well they execute those decisions.</td>
</tr>
</tbody>
</table>

Source: Aberdeen Group, October 2007
Appendix B: Related Aberdeen Research

Related Aberdeen research that forms a companion or reference to this report includes:

- **Retail Contactless Payment Systems: Improving Customer Retention & Loyalty;** December 2006
- **80% of Retailers Unfazed By Contactless Security Concerns;** December 2006
- **Contactless Payments Go Global: A Slew of Partnerships in EMEA;** January 2007
- **Titans Battle over Contactless Adoption;** February 2007
- **Removing the ROI Guesswork from Contactless Payment Solutions;** September 2007

Information on these and any other Aberdeen publications can be found at [www.Aberdeen.com](http://www.Aberdeen.com).

Authors: Sahir Anand, Retail Analyst, Retail, Sahir.Anand@aberdeen.com
Jeanette Keene, Research Associate, Retail, Jeanette.Keene@aberdeen.com

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MasterCard PayPass is ideal for traditional cash-heavy environments where speed is essential, and has led the way in bringing contactless technology to consumer categories such as quick serve restaurants, drug stores, gas stations, vending machines, convenience stores, sports arenas, movie theaters, transit systems and parking garages. As of 3Q 2007, there are more than 19 million PayPass cards and devices issued globally, and PayPass is currently accepted globally at more than 73,000 merchant locations, including participating 7-Eleven, CVS, McDonald’s, Regal Entertainment Group theaters and many others. PayPass is also accepted at numerous National Football League and Major League Baseball stadiums. For more information about MasterCard PayPass and a full list of participating merchants, visit www.mastercard.com/paypass.

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For additional information on ViVOtech:
451 El Camino Real, Santa Clara, CA 95050
408 248 7001

www.vivotech.com
sales@vivotech.com