# Research Brief



August 2007

## Battle for Kiosk Dominance: IBM Kiosks Outperform Best-in-Class Kiosk Implementations

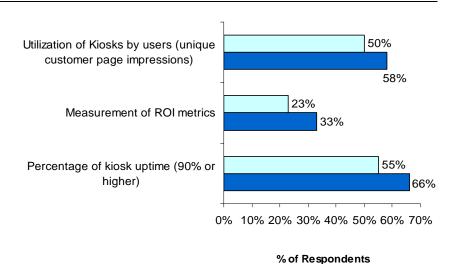
According to recent data from the Aberdeen Group report, "Killer Kiosks: Redefining the Customer Experience through Self-Service," companies that are current users of IBM kiosks are experiencing better performance on several key performance indicators (KPIs) when compared to Best-in-Class companies that use kiosks built and configured by other kiosk integrators. IBM users are trouncing Best-in-Class kiosk performance on most performance parameters due to innovative use of kiosk process management, enabling an improved customer interface and smoother task execution at kiosk locations.

## **IBM Users Edge Past Best-in-Class**

Companies that have deployed kiosks should ideally adopt a mix of KPIs to measure the success of their investment. Based on Aberdeen data, IBM users are outperforming Best-in-Class organizations on three critical kiosk-specific metrics, enabling improved performance management and smoother operations at field locations (Figure 1).

Figure 1: Critical KPIs for Kiosks

■ IBM Users ■ Best-in-Class Users



Source: Aberdeen Group, August 2007

A key component of the success experienced by IBM kiosk users is the fact that a third of these companies kiosk ROI metrics more diligently, on a daily basis, when compared to the Best-in-Class companies. The ability to view performance reports has enabled IBM users to forecast promotion and

### Fast Facts

- √ IBM users are outperforming Best-in-Class organizations on kiosk-specific metrics that enable improved performance management and smoother operations at field locations.
- √ A key component of the success seen by IBM users is the fact that a third of the companies are measuring and reporting kiosk metrics more diligently than Best-in-Class.

## Best-in-Class Criteria

√ The criteria for calculating Best-in-Class performance are: process measures – customer conversion rates, financial measures –labor cost to sales, and quality measures –customer satisfaction scores.



selling programs, as well as provide timely content upgrades for greater customer convenience.

Further, out of 260 companies that responded to the survey, a mere 19% are measuring kiosk-related metrics on a daily basis. Most companies that have adopted kiosks are struggling to measure kiosk-centric metrics in a timely manner and extract business intelligence for improved programs. Their ability to measure payback on a timely basis or generate a consistent revenue stream is impeded. The second key aspect where IBM users have excelled is ensuring consistently high kiosk uptime when compared to Best-in-Class. This ensures that kiosks are functioning effectively through better network management and are available for customer use most of the time.

## Case Study: Restaurant Chain Adopts Multi-Functional IBM Kiosks

A 136-store specialty restaurant chain adopted IBM touch screen kiosks for their restaurant kitchen and employee operations two years ago. This chain was looking for a touch-screen based single kiosk interface to streamline their kitchen management system, employee scheduling software, and recipe viewing abilities. Durability, ease of use, and ruggedness were the key attributes required by this company due to their harsh kitchen environment. From a technology standpoint, this chain needed infrared based touch screens for easy access by employees, voice and video collaboration for recipe viewers, thin systems (removed hard drive) for easier data management, and embedded operating system. A core objective for this deployment was standardization of processes and applications for consistent results. This company has stated several successes since the deployment. According to the VP, Technology services, the kiosk deployment has enabled better utilization of restaurant space through smaller footprint, agility in operations, and reduced maintenance costs overtime. "Our kiosk failure rates are lower than any other devices that we are using in our restaurants", according to the company.

## **Capabilities that Ensure Success**

A successful kiosk program is dependant on the business process management capabilities adopted by companies at the early stages of the kiosk deployment. When considering kiosk adoption, it is vital that companies take into account a combination of:

- Process capabilities: Ability for customers to self check-out with their in-store purchases or orders is an example of a core process capability that companies must develop for a successful kiosk deployment. The components of this capability must include a strong and intuitive customer interface that facilitates a simple and secure online or in-store check-out for customers.
- Organizational capabilities: These capabilities focus on the development of effective organizational support to enable a convenient kiosk experience for customers. An example of a core capability required for almost all vertical industry segments,



including retail is employee or associate responsibility to ensure customer support is available daily to help guide and navigate kiosk use.

Our data shows the reasons for better KPI performance of IBM users is due to the fact that these companies have established some core kiosk process management fundamentals in their kiosk operations. Figure 2 shows some of the organizational and process capabilities that IBM kiosk users are adopting more effectively than the Best-in-Class in terms of efficient kiosk process management.

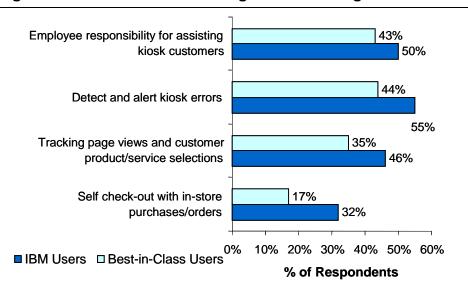


Figure 2: IBM Users Succeed through Process Management

Source: Aberdeen Group, August 2007

The marked difference between IBM and BIC users lies in the greater use of kiosk support capabilities. These capabilities include tracking of kiosk usage demographics and error patterns that enable IBM users to continuously improve their approach towards kiosk product selection and selling strategies.

## **Kiosk Technology Tools Aiding Kiosk Success**

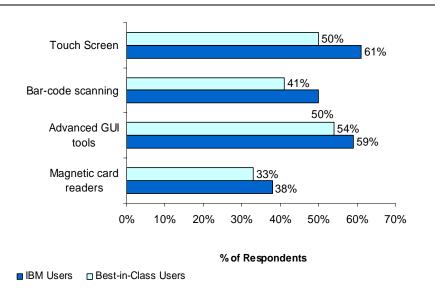
Besides the capabilities supporting the kiosk infrastructure, enabling technology tools are also included in the kiosk implementation by kiosk integrators, including IBM. Both indoor and outdoor kiosks have several hardware and software application components that enable customers to interact intuitively and complete transactions/orders effectively. IBM users are currently utilizing four key enabling components at a higher level when compared to Best-in-Class companies (Figure 3). However, there is a



marked difference between IBM users and Best-in-Class users in the integration of two technologies:

- Touch-screen technology: Touch-screen based systems are replacing keyboard based kiosks as they enable easier user navigation. This technology has also enabled companies to offer customer-friendly loyalty programs, gift cards, POS reporting, special and multi-channel orders, cash management, and several other operational functionalities that can be configured for companies on a single screen. These tools enable improved customer management and store operations.
- Bar-code scanning (I-D & 2-D imaging technology): Bar-code scanning has expanded beyond just scanning products to bring up prices and other product details for informational or check-out purposes. With 2-D imaging upgrades, kiosks can enable digital signature captures, capturing of digital images from receipts and paper documents, and read driver's licenses for verifying age and identity for the sale or return of products.

Figure 3: Enabling Technologies



Source: Aberdeen Group, August 2007

## Improvements Required by IBM

As a point-of-service customer-facing technology, kiosks have to be functional and user-ready at all times. The most vital factors ensuring kiosk readiness includes having an internal or external kiosk support structure to monitor kiosk errors, tracking data from kiosk usage, and following alerts for troubleshooting purposes.

The top three factors for selecting a support provider are: cost of maintenance, length and extent of expected troubleshooting, and the available resources for launching the support infrastructure. This is an area

#### Case Study Quote

"We have seen successes through the 500 kiosks we have adopted through IBM since 2004. Customers have the ability and have utilized checkin, check-out, and print their boarding passes. Overall IBM has helped us to stabilize the kiosk adoption in our hotels. However, we are currently facing a challenge in terms of lack of internal support infrastructure for kiosks".

- IT Director, Hotel Chain, Americas



where IBM and ISV partners must adopt a more aggressive strategy to ensure that companies have a more assured infrastructure for kiosk support and maintenance services.

Most companies with multiple kiosk deployments are struggling with their internal kiosk support teams from a repair and manpower standpoint. This is an area where Best-in-Class companies score over IBM users. Seventy-three per cent (73%) of Best-in-Class companies possess the ability to remotely troubleshoot kiosks for most of the kiosk errors. IBM does offer a robust remote management offering. However, less than half (46%) of IBM customers are currently using some form of remote management capabilities.

Despite tangible network, troubleshooting, and data management benefits of kiosk remote management, companies that have not adopted are concerned about changes to their existing support infrastructure and associated costs. Companies must consider the cost and benefits associated with remote management more closely as the foremost objective is for any company is to develop capabilities that reduce the labor and resource burden of an internal support infrastructure.

## **Conclusion**

Companies using IBM self-service kiosk solutions have outperformed Best-in-Class companies on some key attributes of self-service kiosk performance both in terms of capabilities as well as some enablers that are required for smooth customer interface. Our data shows that IBM users are benefiting from kiosk deployments from a customer usage, uptime and measurement of ROI standpoint. This momentum can continue if companies look to enhance their kiosk process management on a consistent basis and make the necessary adjustments to the process from time to time.

One of the ways that companies can further strengthen their kiosk platform and ensure low kiosk operational costs overtime is by upgrading their kiosk support, process, and organizational capabilities to suit changing needs and the ongoing innovation in kiosk technologies. These capabilities help build a strong process management structure that can lead to standardization of kiosk best practices for the entire organization.

#### IBM Kiosk ISV Partners

ISV partners names to consider when evaluating IBM kiosk solutions:

- √ Experticity
- √ Infospec Systems Inc.
- √ Net Key
- √ Nanonation
- √ Health Notes
- √ Retail Anywhere
- √ St. Clair Interactive
- √ Custom Business Solutions



Telephone: 617 723 7890

For more information on this or other research topics, please visit <a href="https://www.aberdeen.com">www.aberdeen.com</a>.

#### Related Research

<u>Killer Kiosks: Redefining the Customer</u> <u>Customer-Centricity and Self-Serve Kiosks;</u> <u>Experience Through Self-Service;</u> July 2007 May 2007

Author: Sahir Anand, Research Analyst, Retail, (<a href="mailto:sahir.anand@aberdeen.com">sahir.anand@aberdeen.com</a>)
Jeanette Keene, Research Associate, Retail (<a href="mailto:jeanette.keene@aberdeen.com">jeanette.keene@aberdeen.com</a>)

Founded in 1988, Aberdeen Group is the technology- driven research destination of choice for the global business executive. Aberdeen Group has over 100,000 research members in over 36 countries around the world that both participate in and direct the most comprehensive technology-driven value chain research in the market. Through its continued fact-based research, benchmarking, and actionable analysis, Aberdeen Group offers global business and technology executives a unique mix of actionable research, KPIs, tools, and services.

This document is the result of research performed by Aberdeen Group. Aberdeen Group believes its findings are objective and represent the best analysis available at the time of publication. Unless otherwise noted, the entire contents of this publication are copyrighted by Aberdeen Group, Inc. and may not be reproduced, stored in a retrieval system, or transmitted in any form or by any means without prior written consent by Aberdeen Group, Inc.