

Third
Annual
Kiosk
Benchmark
Study

Pathways to Profit:

Kiosks Extend Their Reach

Produced By
Gartner

Research Partner

Gartner



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NCR EasyPoint kiosks: Our experience makes a real difference.



Third Annual Kiosk Benchmark Study

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Table of Contents

- 4 Editorial Note
- 5 Executive Summary
- 8 Reaching ROI
- 12 Commentary: Fanning the Flames in Retail
- 14 Enticing Users
- 20 Commentary: Self-Service Travel
- 22 How to Purchase
- 28 Commentary: Government Anytime, Anywhere
- 30 Know Thy Application
- 35 Commentary: Financial Growth—Beyond Transactions
- 36 Barriers to Overcome
- 39 Commentary: Ready for Prime Time in Media & Entertainment
- 40 Who Responded
- 41 Commentary: Consumer Goods Cast a Wider Net

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Editorial Note

Welcome to the *Kiosk Business* 3rd Annual Kiosk Benchmark Study. This year we partnered with Gartner. A team of six principal analysts shared their knowledge of the vertical markets that deploy kiosks to develop the survey used for the study, adding new areas of investigation and creating new drill-down questions for each individual vertical. Many questions were tweaked, combined, or added, based on reader input and the combined ideas of our Gartner analysts. Other areas, which showed little change from previous studies or little interest as of yet (like biometrics), have been excluded from this study's analysis.



Mary Carlin
Editor

The big news this year is diversification—of applications, locations, target users, and technologies. This is to be expected in a maturing marketplace, and is a promising sign for self-service technologies in general. We widened the choices this year for many of the survey questions, yet our respondents still had many new options to fill in under 'Other.' The biggest business driver for kiosk deployment is now profitability, and many of the new applications are pathways to potential revenue streams. Locations are also becoming more diverse as kiosks extend their reach through wireless, improved robustness for the outdoors, and better security and monitoring features. As kiosks move untethered into the wireless space, look for an even more expanded range of applications to come.



Michael Kachmar
Publisher

Targeted end users now include employees and business partners, another version of the hybrid model we've been watching develop in applications for kiosks. The majority of our respondents deploy kiosks targeted at customers, employees, and/or business partners, rather than the traditional model of kiosks for customers only.

We'd like to thank our dedicated team of Gartner analysts, Robert Goodwin, Jeff Roster, Venecia Liu, Susan Cournoyer, Rishi Sood, and Geraldine Cruz, for doing an outstanding job on the research and analysis. Venecia Liu was a great team leader, and Jeff Roster and Robert Goodwin contributed particularly insightful ideas on the data. We feature a commentary from each analyst on his or her vertical area of expertise in the study.

A special thank you goes to our sponsors, without whom this study wouldn't have been possible.

The most important purpose of our research is to serve you, our readers, in the planning and realization of your kiosk project goals. Please send your ideas, questions, and suggestions for new areas of investigation to mkachmar@edgellmail.com. Together we can build on the knowledge from this year's study to make next year's even better!

The Push Towards Profit

The business case for kiosk projects is being increasingly built around generating revenue and reducing costs, as kiosks are being pushed to prove their worth on the balance sheet. Over 50% of our survey respondents expect to reach ROI within the first year of their kiosk deployments. And the good news is, they are: 33% of our respondents claim profits within the first year of deployment.

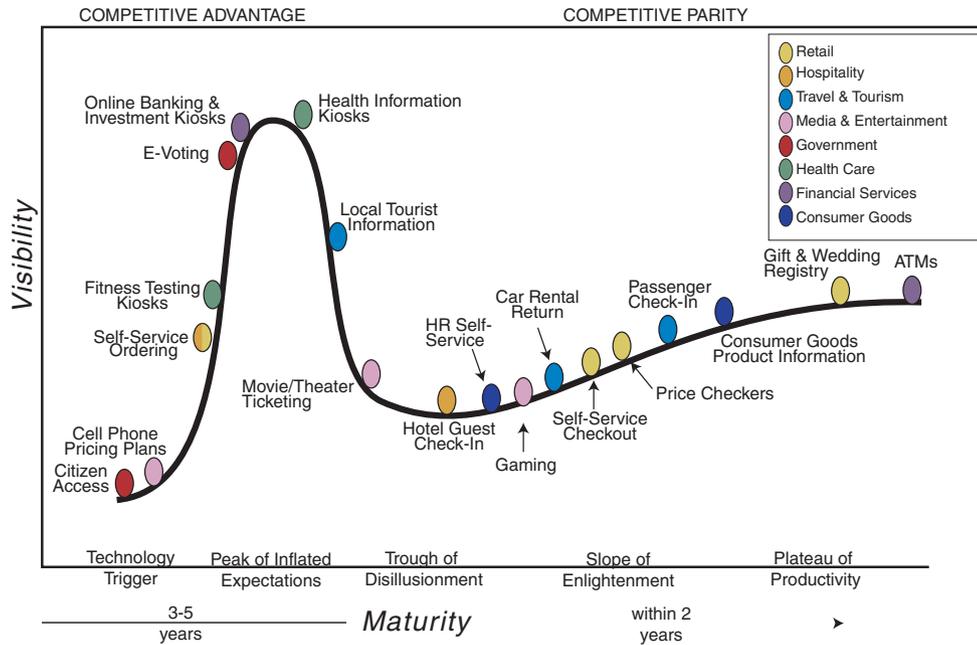
Kiosk budgets have held this year, and look to be building for next year. Estimated budgets for 2004 indicate increased budgets in the higher ranges (\$250,000-\$10 million). Budgets for kiosk projects are being shared across different departments, as hybrid kiosks perform more applications. Software now accounts for 23% of budget allocations for kiosk projects, as costs have come down for 'off-the-shelf' components like remote monitoring and maintenance.

Kiosks are becoming increasingly central to business strategies, with half of our respondents now rating their kiosks as 'very beneficial,' 21% as 'vital,' and 28% as 'somewhat beneficial.' The concept of in-store kiosks opening up virtual inventory for retailers is also gaining a firm hold, as half of our retail respondents deemed increased inventory choices to be either 'very important' or 'important' benefits from their kiosks. Location is still the most vital factor for encouraging kiosk use, with 69% of respondents rating it as 'very important,' but emerging factors also rated as 'very important' include active staff promotion (27%), exclusive services on kiosks (24%), and discounts/bonus offers/coupon printing (21%).

Targeting employees and business partners as well as customers with kiosks is a big growth area, tying in with the move towards hybrid kiosks. In retail, product information kiosks serve both customers and sales staff, and across the verticals human resource kiosk applications are helping to screen potential employees and keep deskless employees in touch with news and benefits on the corporate Web site. Customer-facing only kiosks are now in the minority, whereas employee- and customer-facing applications—as well as 'all of the above' (including business partners)—together got the majority of responses in all vertical markets. In this study, 'end user' always refers to the targeted user of the kiosk.

Another increasing trend in the industry is for component vendors and integrators to form business partnerships offering end-to-end kiosk solutions. Our respondents clearly prefer the convenience of such one-stop shopping (with over half selecting kiosk vendor or turnkey kiosk vendor as their kiosk source)—especially when something goes wrong, and they don't have to contact a chain of vendors to get their kiosk up and running again. For support, 43% of respondents favored a kiosk business solution including hardware, software, and services. Kiosk expertise and cost/price reigned supreme among the critical success factors for selecting a vendor. Speed to market is also improving, with nearly 60% of respondents going from testing to full deployment within a year.

Kiosk Hype Cycle by Vertical



Our Gartner analysts assessed kiosk applications for each vertical market based on their visibility and maturity.

Kiosk applications are wide ranging and growing, and this year the options included customer information, self-checkout, Internet access, HR/employee self-service, photo imaging, and gift registry. The 'Other' option drew a list of new applications like e-learning, blood pressure/body composition screening, video phoning, storage unit rental and payment, and customer satisfaction surveys. Kiosk location options now include theaters/amusement parks, hospitals, convention centers/arenas, as well as the more established inside stores/restaurants/hotels, malls, public facilities, and airports. The 'Other' category included car dealerships, military bases, corporate offices, and manufacturing floors.

Wireless is showing the most growth among the new technology offerings, enabling deployers to cut costs on cabling, trial new locations, and expand the reach of their kiosks. Of our respondents, 22% described their kiosks as mobile, and 10% as handheld.

This year for the first time we included questions on the inhibitors for kiosk adoption for those respondents without plans for kiosk projects within the next two years. The biggest barrier (at 41%) was no budget. Lack of application (with 19%) came second, but the above-mentioned range of applications should soon overtake that problem. Low usage was the chief reason for half of those whose kiosk projects had failed in the past.

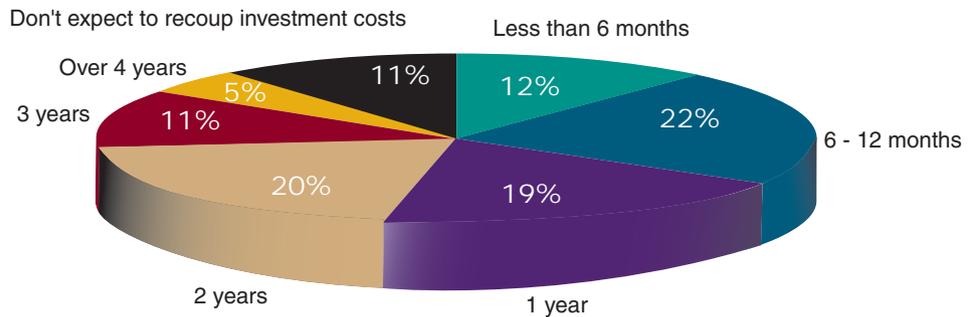
For the majority of respondents—those with current or imminently planned kiosk deployments—vandalism and harsh operating environments are still taking their toll, along with poor maintenance and Internet failure, but the numbers citing these problems are now in decline. ♦

Section 1: Reaching ROI

Does ROI really matter?

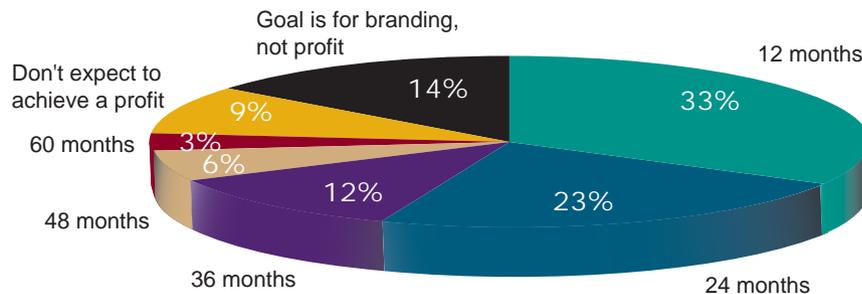
What determines the business value of information technology? With restrained capital on kiosk deployments, buyers and vendors alike need to consider and demonstrate not only the business benefits of kiosks but also the expected ROI (return on investment) costs and long-term profitable gains from a kiosk deployment.

Figure 1: Return on Investment



More than 50% of end-users indicate an expected ROI after the first year of kiosk deployment. This is critical to point out, especially given today's budget scrutiny among CFOs. Buyers who can indicate quantifiable metrics of returns on their kiosk investments can typically garner greater support for budget approval. While 11% indicate that they did not expect to recoup investment costs, Gartner expects that more and more budget will be allocated in the future to those projects that can illustrate anticipated ROI benefits.

Figure 2: Achieving Profitability



Profitability can be difficult to quantify for many kiosk deployments. Kiosks have never been fast payback investments in information technology budgets. There is also an important distinction to be made between 'hard ROI'—demonstrable returns on your kiosk investment viewable on a balance sheet—and 'soft ROI' such as improved customer service or competitive advantage gained by offering extra services on kiosks. Multi-channel initiatives such as kiosks offering 'elastic walls' or 'virtual

Product Profile: MONITORS FROM 3M

MICROTOUCH™ CHASSISTOUCH™

LCD monitors are the ideal touch monitor choice for kiosk applications. The undeniable simplicity and durability of these monitors plays a key role in their popularity in numerous kiosk and self-service applications. ChassisTouch LCD monitors are available in 15" and 17" sizes with integrated, proven 3M touch technology to meet the widest range of needs.

Known worldwide for technological innovation and touchscreen reliability, 3M Touch Systems offers MicroTouch ChassisTouch monitors in three touch-enabling technologies.

- MicroTouch ClearTek™ capacitive touch technology has been industry proven through years of use in ATM and self-checkout environments. A ClearTek sensor with Industrial Etch has been tested in a laboratory environment to withstand over 225 million mechanical touches without noticeable degradation to the surface.¹ MicroTouch ClearTek capacitive technology has been a leading touchscreen choice of major ATM manufacturers for years. ClearTek capacitive technology has a proven track record of durability and reliability in heavy usage applications—standing up to spills, dirt, grease, and other contaminants.

- Major POS and retail device integrators rely on 3M resistive touch technology. It accepts input from both bare and gloved fingers as well as a broad range of styli, making it ideal for applications where ADA compliance is a concern.

- 3M Near Field Imaging touch technology offers maximum durability and input flexibility, and has been

field-proven through years of application history in demanding kiosk and industrial environments. This technology will accept input from both bare and gloved hands and is available in our ChassisTouch 450 product which carries a NEMA 4X/IP66 (waterproof) rating²—making it an ideal choice for applications where spillage on the screen or even hose-down conditions are possible.

ChassisTouch capacitive and resistive monitors from 3M offer a 3-year warranty on the display, and a 5-year warranty on the touchscreen and touch electronics. The ChassisTouch 450 product offers a 1-year warranty on the touchscreen and the electronics, as well as the display.

Regardless of your installation environment, ChassisTouch monitors from 3M offer the touch and display technology combinations required to make your kiosk project a success.

If your kiosk program depends on your touch monitor, then depend on MicroTouch ChassisTouch monitors from 3M—Innovation you can touch.

¹Mechanical touches for capacitive were tested on a single x,y location using a finger-like stylus of 45 durometer, "A" shore hardness, 0.5 diameter with a load of 0.46 pounds, +/- .01 pounds of force.

"Our value is in our quality, our experience, and our brand."

— Paul Baril
3M Touch Systems



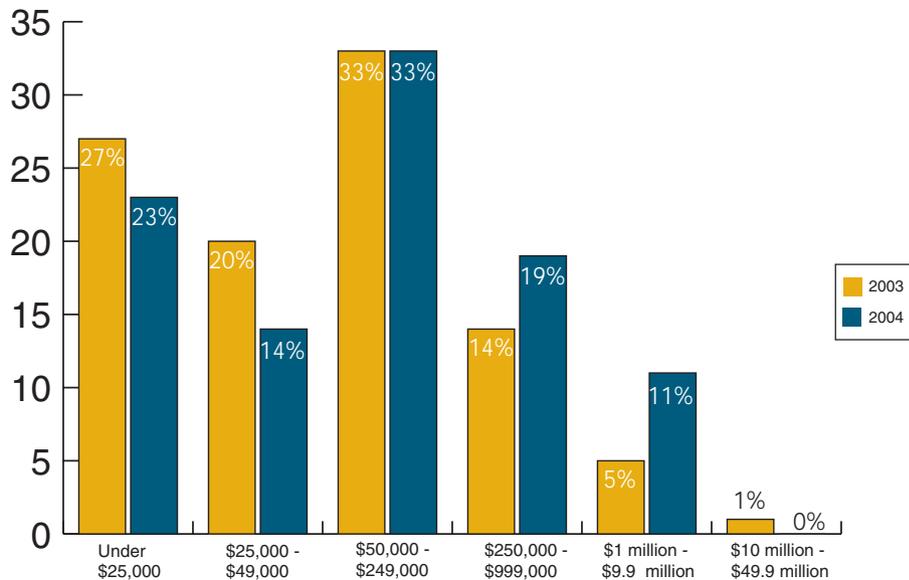
MicroTouch
3M

inventory' through in-store access to retailers' Web sites often lack strategies to measure sales affected through the kiosks—for instance if the customer finishes the transaction at the store register or via their home computer. Around 33% of our respondents indicate profits within the first year of their kiosk deployment—again, a great example to illustrate when requesting additional budgets for kiosk projects. Vendors' solution offerings should also include metrics built around profitability status or reduced costs associated with freeing up manpower to do other things.

Soft ROI

In terms of 'soft ROI' 14% of respondents indicate that the purpose of their kiosk is for branding objectives or to gain competitive advantage rather than striving for quantifiable metrics around profitability. An example of this is Cendant's Wingate Inns providing hotel concierge kiosks where guests can look up restaurants and events in the area via a locked-down Web browser. As customers become increasingly time starved and tech savvy, they will begin to ask why there isn't a kiosk when there is a line at the front desk.

Figure 3: Comparing Budgets

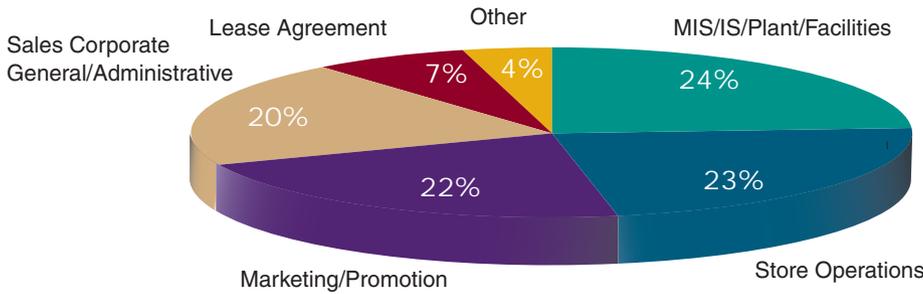


With the weakened economy continuing to hit the key verticals of retail and hospitality, it is a positive sign that kiosk budgets held this year and look to be building for next year. This is extremely significant because this data fully embraces the impact of the recession. This is a strong indication that self-service is a growing area, as boardrooms are planning in kiosks to reduce labor costs and to generate additional revenue sources. Estimated budgets for 2004 indicate increased kiosk budgets in the higher ranges—from 5% to 11% in the \$1 to \$10 million range as well as an increase from 14% to 19% in the \$250,000 to \$1 million range. Tight purse strings in budgets past will start to open in 2004 as economic indicators suggest a rebound across most vertical markets, including retail and hospitality.

Integrated IT

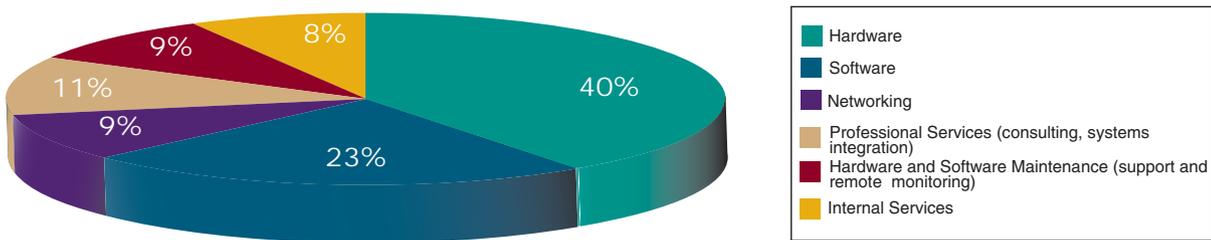
There has been a shift in budgeting for kiosk projects, with MIS/IS departments and store operations taking over the main burden from

Figure 3a: Departmental Budgets



marketing for financing a kiosk spend. The corporate and general/administrative budget comes in just behind marketing, indicating that kiosks are moving from a peripheral role as promotional tools to becoming more integrated components of a business's overall IT strategy. As this question was a 'select all that apply' the numbers reflect shared budgets for kiosks across different departments, again illustrating their new role as multi-taskers answering to different corporate masters. Such collaborative budgets call for skilled project management to insure the project succeeds in fulfilling different roles for different departments. The open-ended answers included human resource departments, indicating the emerging role of kiosks as access points for employees to tap into corporate Web sites, or as screeners for prospective employees filling in online applications, in addition to providing information on products and availability for customers. Other open ends included research and development, which could lead to expanded applications and greater hybrids down the road.

Figure 4: Budget Allocations



Kiosk budgets not only come in different sizes, but spending also varies by key component areas like hardware and software, and the associated maintenance and network costs. Needless to say the majority (40%) of kiosk spending is on hardware, which represents the front line defense for any unattended application. Software accounts for 23% of the budget, reflecting increased market maturity as costs come down for 'off-the-shelf' components like remote monitoring and maintenance. IT services such as consulting, system integration, and product support for hardware and software maintenance dictate about 20% of the budget. Other associated costs include internal staff support as well as network costs for Internet connectivity and transaction processing. ♦

Fanning the Flames



Jeff Roster is principal analyst covering the retail, wholesale, and consumer packaged goods industries for Gartner Dataquest's Global Industries cluster, communicating global IT trends in the retail, wholesale, and consumer product industries, analyzing end-user requirements, and consulting on strategies with IT vendor clients. He also has led consulting projects and developed syndicated research focusing on retail industry IT initiatives, outsourcing services, enterprise applications, and Internet/Extranet solutions. He is frequently quoted in *RIS News*, *Information Week*, *Darwin Magazine*, *Computerworld*, *The New York Times*, and *The Washington Post*.

Over the last two years retailers have wrestled with a very difficult economy and ever-increasing competition. Virtually every retailer now realizes that they compete with Wal-Mart in some respect. Few if any retailers have a chance at competing with them on the basis of supply chain efficiencies. So the only logical approach is in some form of customer service or CRM initiative. Unfortunately for many retailers, while these efforts are business strategies they have significant underpinnings of technology. This has not been a traditional area of strength for most in the retail sector. But this is changing and changing very dramatically, and will have a significant impact on the growth of self-service and kiosk technologies in the near future.

Key trends identified in this year's kiosk benchmark study include:

- The emergence of mobile (16%) and handheld kiosks (6%) in the retail sector are a strong indication that kiosks are moving into the heart of retail operations and not just in the traditional kiosk role of gift registry.
- The key drivers for deploying kiosks are to generate revenue closely followed by improving customer service. This is a good indicator that kiosks are finding their way into mass adoption if they can in fact deliver revenue.
- The top 2 pieces of information kiosks will pull from the back office are prices/costs (78%) and inventory (71%). This indicates that retailers intend kiosks to become key resources for customers to use in sourcing information.

From Technophobic to Technocentric

In addition to the valuable data gathered in this third annual kiosk benchmark study, Gartner, in collaboration with *RIS News*, identified this year in their 13th annual Retail Technology Study that the shift from technophobic to technocentric in the retail sector is gaining steam, not subsiding. 44% of the retail respondents are maintaining their investment levels, and 41% will increase their IT spending. Retailers realize that any short-term gain from reduced spending could jeopardize long-term survivability as IT underpins every new business initiative. Examine for one minute what retailers from across most retail sub-segments are telling us are their plans for kiosks. While 12% have addressed their kiosk needs in the last 3 years, 27% will by the end of 2005. That is a very significant uptake in kiosk use.

Uptake in Kiosk Adoption

Gartner has identified several key trends emerging this year that will drive kiosk adoption. There is continuing growth of multichannel retail—the number of customer touch points retailers interact with will continue to increase. Today it's Web sites and gift/wedding registry. Within a couple of years wireless will add a new dimension to how customers interact with retailers. Marsh Supermarkets has just deployed MyMarsh, a wireless interactive marketing display developed with NCR's Copient, which prompts customers to swipe their loyalty cards at the checkout to receive customized promotional offers. There is a continuing move to self-service—more and more retailers are now realizing that self-service can be better service. Customers are increasingly willing to do tasks themselves if they perceive that the benefits outweigh the time investment. Self-checkout helps mitigate the frustration many consumers feel about the lack of service in most retail stores. Customers are increasingly tech savvy, having tasted the power and flexibility of direct data access when using travel Web sites like Travelocity, and have grown to like it. Ongoing Gartner research indicates customers are becoming increasingly comfortable with the use of technology in performing various shopping tasks as long as they see some benefit from it, like speed to checkout and having more options.

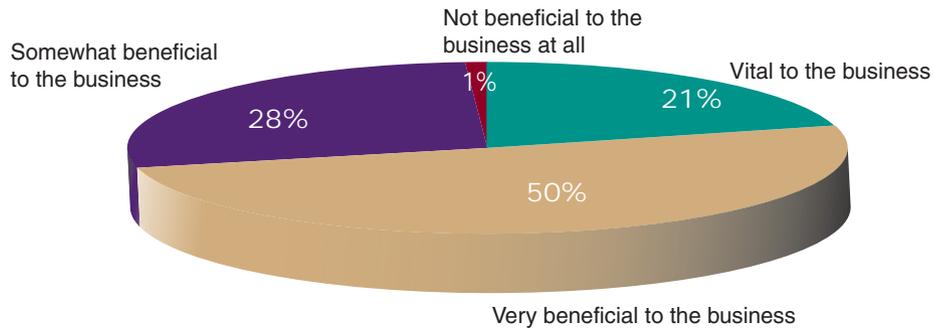
Through the rest of this year and well into the next, retailers will wrestle with how technology can enable their business strategies and whether they need to accelerate technology adoption. Kiosks and self-service technology tie directly into these mega-trends and will see significant uptake in adoption over the next three years.

Section 2: Enticing Users

How Do I Love Thee?

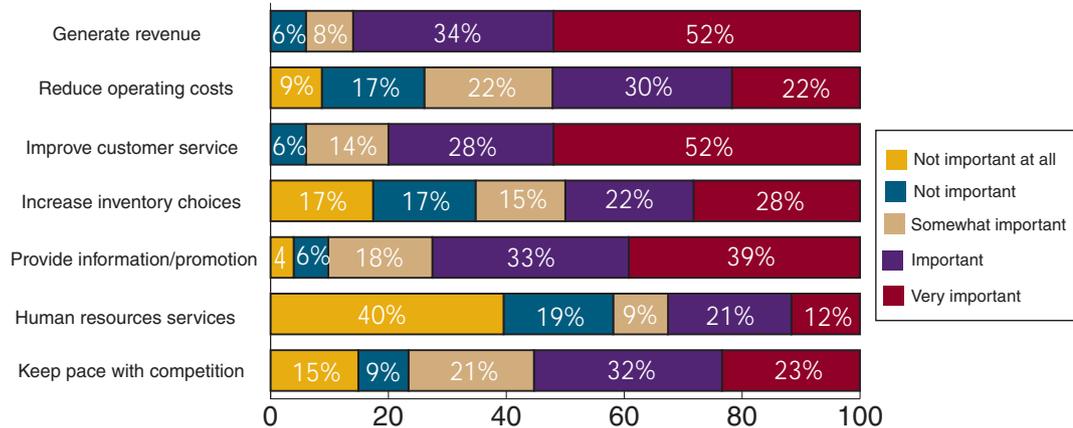
The paramount goal of every kiosk deployment is to draw users through beneficial applications, ease of use, and convenient locations. Without users, there will soon be no kiosk, almost like a party to which no one comes. End users will come to a kiosk if they perceive a tangible benefit to be gained by doing so [although a few will also stop by if they are looking to kill time]. Tangible end user benefits include avoiding long lines through retail self-checkout or airline check-in kiosks, cashing in loyalty points 24/7 at a casino, and printing out store coupons to be used during that visit. Even the least tech-savvy consumer will approach a kiosk if there is money or time to be saved by doing so. Some businesses try to 'force' users into self-service options by limiting the other options available, i.e. opening fewer staffed POS (point-of-sale) registers and more self-checkouts, but this is a risky strategy that can often drive customers over to your competitors' businesses. If the kiosk works intuitively and offers a real benefit to consumers both where and when they need it, it will sell itself; and customers will often sell each other on the kiosk's benefits as well.

Figure 5: How Kiosks Are Regarded



When a technology touches a customer and improves the revenue situation you will have a rapid technology adoption. Our survey asked respondents to rate the overall benefits of their kiosk projects to their businesses. The result shows half of all respondents rating their kiosks as 'very beneficial,' while 21% rated them as 'vital' and 28% as 'somewhat beneficial,' respectively. This illustrates the increasingly prominent role of self-service technologies—particularly in our main vertical samples of retail and hospitality, where pleasing your customer can become equivalent to succeeding in your business.

Figure 6: Benefits (Retail Only)



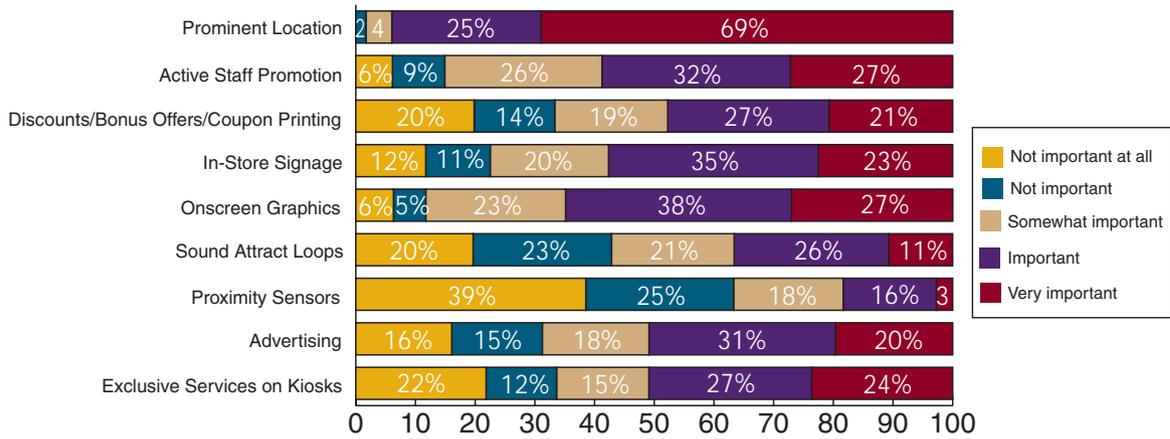
We asked our respondents to rate the importance of certain perceived benefits when deciding to deploy kiosks. This chart focuses on the benefits of kiosks for the burgeoning retail sector. Improving customer service and generating revenue are by far the critical objectives and of the highest importance for deciding upon kiosk adoption. Providing information and promotions by using kiosks as customer touch points ranks just after those, followed by increased inventory choices.

Elastic Walls

The benefits of kiosks increasing inventory choices for the retail sector have been significant, particularly for the all-important areas of increasing sales revenues and reducing overheads. Given the rising costs of display space, a kiosk can, within a small footprint, provide a retailer with ‘elastic walls’ to display a virtual inventory of products that can be delivered either to the store or to customers’ homes. This extends the potential product choices to include more sizes, colors, optional extras, etc., as well as large footprint items that would take up too much floor space. REI (Recreational Equipment Inc.) was an early adopter of kiosks to enable in-store access to their Web site for product information and online ordering. They recently added free delivery to the store and saw a significant increase in kiosk sales of large items such as kayaks as customers took advantage of the new service (which leveraged regular store delivery schedules).

Human resources services ranked low in importance for retailers, reflecting the relative newness of this application for kiosks. Home Depot has rolled out kiosks to process onscreen job applications that can be viewed in real time in the store manager’s back office, facilitating on-the-spot interviews before the candidates have left the store. The kiosk also sends the employment information via the Internet to ITax Group’s server, which scans the data to identify relevant federal, state, and local job tax credits that could benefit the retailer.

Figure 7: Factors Encouraging Use



Location, Location, Location

Across all verticals, location is by far the most important factor for encouraging kiosk use. This has been greatly improved since the early years of kiosk deployments, and lowered costs for wireless Internet access now enable flexibility in this area for store promotions and seasonal changes, or even for trial and error in getting the location right from the start. The expense of installing cable previously kept kiosks in place, even when their locations needed to be changed, and spelled doom for otherwise viable projects. In the past, deli ordering kiosks have been placed in the produce aisle and seen no use until they were moved near the ‘take a number’ stand. One nationwide retailer kept its gift registry kiosk at the back of the store near Customer Service, saw no usage, and then moved it to the front of the store, near the flow of traffic,

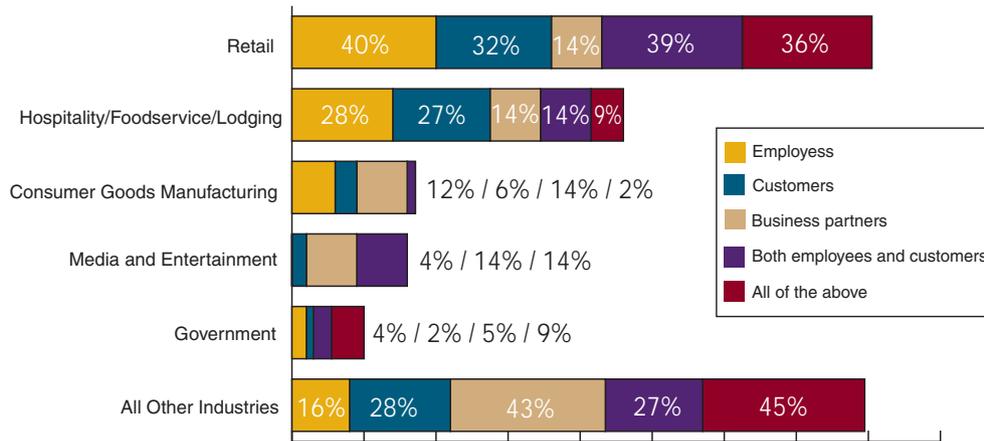
where it now sees a great deal of use. The kiosk needs to be visible and easily accessible, but not blocking passageways, entries, or exits where users will feel jostled or rushed.

Other factors encouraging use for our respondents’ kiosk projects include active staff promotion, exclusive services on kiosks, and discounts/bonus offers/coupon printing. Active staff promotion may seem counterintuitive to self-service, but it can make a huge difference in convincing customers to try out the new kiosks. Exclusive services, discounts, and coupons are also effective enticements giving customers a compelling reason to use the units. Onscreen graphics, in-store signage, and advertising all serve to draw users over to our respondents’ kiosks, but proximity sensors and sound attract loops have fallen from favor,

“Pleasing your customer can become equivalent to succeeding in your business”

most likely because they can startle customers and annoy nearby staff into unplugging the units (a more prevalent problem than you might expect).

Figure 8: Targeted Users by Vertical*



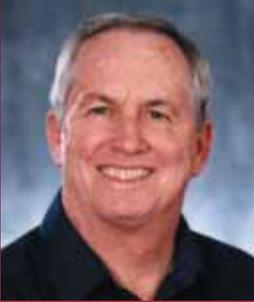
*Multiple responses were allowed for this question

Targeting Employees

A new area has opened up for kiosks in targeting employees, or both employees and customers, as opposed to the old model of providing self-service for customers only. Many new countertop kiosks for the retail market are designed to swivel around to be both employee- and customer-facing, primarily for providing product information for a fast-changing marketplace with high employee turnover. Employee-facing applications include kiosks enabling access to corporate Web sites for deskless employees, or the hiring application mentioned above currently deployed at Home Depot. Using kiosks, employees without computers can view internal job openings, submit employment applications, enter vacation requests, monitor sick, personal, and vacation time balances, and check the hours they've clocked in a given week. In the consumer goods sector, warehouse Internet access kiosks serve as portals for drivers and other staff, as well as business partners making deliveries (also reflected in our data), to view corporate Web sites for human resource and other data access.

Our retail, consumer goods, hospitality, and media and entertainment vertical responses all reflect this new trend, showing employee-facing and hybrid kiosk applications as having overtaken customer-only kiosks. 'All other industries', which includes health care and financial services among others, also shows this move to the hybrid model, with just 28% of kiosks targeting customers alone. Gartner predicts this trend will increase, particularly in the retail sector, where space is at a premium and investments must be stringently cost justified. ♦

Self-service Travel



Robert Goodwin is managing vice president for Gartner's Global Industries Practice and Business Strategies & Performance Metrics Practice. Prior to joining Gartner, Mr. Goodwin spent 10 years as a senior research and marketing executive with three other IT-oriented research firms, INPUT Inc., Killen & Associates, and Zona Research. Earlier, he was senior vice president of Hotel Information Systems, president and COO of Command Data Systems, and director of marketing at Xerox Computer Services. He saw active duty as a line officer in the US Navy, and is a volunteer and docent aboard the USS Hornet Museum.

Although the air travel, rental car, and lodging industries share common elements in seeking to satisfy individual consumers in a very cost-sensitive, labor-intensive, and brand-challenged environment, they differ in terms of how kiosks are deployed in their industries. Airports and airlines have deployed stationary passenger check-in kiosks enthusiastically in the US and Canada. Gartner projects that this same automation process will be delivered to airports in Europe and Asia. Rental car agencies have pioneered the mobile check-in device for rental car returns, as well as stationary kiosks. But hotels are still lagging in this adoption.

Airport Passenger Check-in

While kiosks have been available in select US airports for some years, only in the last two years has the deployment taken on critical mass. This has been prompted by several factors: the economic collapse of the airline industry starting in 2000, with resulting stringent cash flow and cost reduction pressures to provide added traveler convenience in the post-9/11 era of tightened airport security, longer lines, and generally negative emotional atmospheres in airports. Finally, there is the new emergence of Common Use Self-Service (CUSS) kiosks, which employ standard, open architectures, and facilitate multi-airline usage from a single kiosk station.

Now going into extended deployment, airline kiosks offer the traveler a variety of functions: ticketing, flight check-in, printed boarding passes, customer loyalty account information, attention to traveler's preferences for seats, meals, etc., and sightseeing information.

Airline kiosks are not yet being used for two functions that might appear in the future: biometric identification and security screening. Biometric identification techniques can verify that the boarding pass is issued to the correct person, but the urgency for biometric processes to validate travel identity has faded since Sept. 11, 2001. Gartner's survey shows that 60% of respondents lean toward fingerprinting as the preferred technique for possible future biometric deployments. Gartner note: This preference does not square with the successful passenger iris-scanning applications installed at Ben Gurion (Tel Aviv) and Schiphol (Amsterdam) airports. The anticipated TSA deployment of the new Computer Assisted Passenger Prescreening System (CAPPS II) presents the opportunity to link the passenger using the kiosk to government and commercial databases which build profiles of potential security risks. Identifying high-risk individuals in real time at an airport could be a valuable security tool.

One of the more consumer-friendly kiosk applications yet developed is the car rental return kiosk, which prompts the traveler to answer questions about mileage and fuel status and then prints out the receipt. This in a sense competes with the portable PC/printer worn by roving employees which provides the same service. The kiosk offers more promise in controlling rental firms' labor costs.

Hotel Guest Check-in

In theory, hotels should be able to use kiosks for check in, check out, and local concierge information, just as airports do. And hotels suffer from revenue and margin pressures nearly as challenging as the travel industry. The long-term potential for hotel kiosk deployments is driven by the cost reduction potential. But in practice, hotels have not embraced kiosk use, for a number of reasons.

Hotel management is not concentrated in a few major chains/players, but broadly among independent owners and franchise operators. Economies of scale in marketing kiosk solutions are not readily available outside a handful of major chains. Management is currently making very fast ROI demands on new investments, and kiosks are generally not considered mission-critical for hotel operations. Conventional wisdom says that the majority of hotel clients prefer human interaction upon arrival at a property, even if some queuing is required. The issuance of specifically cut or electronically coded hotel keys is an additional, complex task for a kiosk to perform.

NCR Case Study: GRAND OLE' OPRY (LAND)

"PEOPLE DO NOT WANT TO WAIT

in line, especially to check out," says Rod Armstrong, project manager for Gaylord Entertainment—owners of the Opryland Hotel in Nashville, TN, and the Gaylord Palms hotels in Orlando, FL. "We do everything we can to make it as painless and customer friendly as possible. That's why we installed our NCR EasyPoint self-checkout kiosk." The company presently has nine NCR self-checkout kiosks installed between their Nashville and Orlando locations. When checking out, patrons can skip the lines at the customer service desk and use the 15-inch touchscreen kiosk to swipe their credit card and confirm their departure while the bell-boy brings down their bags. There's even a slot at the top of the unit to insert their keys.

"A lot of times, customers just want to get a copy of their receipt," Armstrong explains. "Even if they check out electronically using their hotel room television set, they can still stop by the kiosk and get one." The entire transaction takes less than 30 seconds. "That's why they love it," Armstrong says. "It's all about convenience."

Speed And Quality

Gaylord Entertainment initially entered the kiosk world with an NCR application that sold transportation shuttle tickets to and from the local airport. "We sell one-way tickets or round-trip tickets from the airport and back," Armstrong said. "We use it for customer service as an overflow option."

If customers do not want to wait in line, or it's late

at night and the customer service area is unmanned, they can use the kiosk to purchase their shuttle tickets. Users can swipe their credit cards through and choose the number of tickets they want. The company has earned \$1.3 million since installing the kiosk in July 2000.

According to Armstrong, the NCR kiosks have held up well over the years. "The only thing we ever wore out was a door on the printer from replacing the paper so much," Armstrong said. "We receive great support from NCR."



Updates And Upgrades

Armstrong says that the company plans to add some nifty new features to their self-checkout kiosks in the near future, including a self-check-in system that will include hoppers for keycard encoding and signature capture pads.

"We're actually working towards testing that configuration here in Nashville," he explains. The kiosks aren't the only things receiving an upgrade at Gaylord Entertainment. The company will be opening a Dallas, TX, Opryland Hotel in April 2004, featuring at least four new NCR self-checkout kiosks.

"We do everything we can to make checkout as painless as possible."

— Rod Armstrong
Gaylord Entertainment



www.ncr.com/kiosk

Section 3: How to Purchase

From Soup to Nuts

Simple question: Where do you purchase a kiosk? Simple answer: from a kiosk vendor. This has been the case for many years. However, a recent trend indicates that businesses are now seeking solutions and not just an end product. Turnkey kiosk vendors offering a complete solution to business problems have increasingly gained marketshare, and mindshare, in the eyes of kiosk buyers.

Figure 9: Kiosk Source

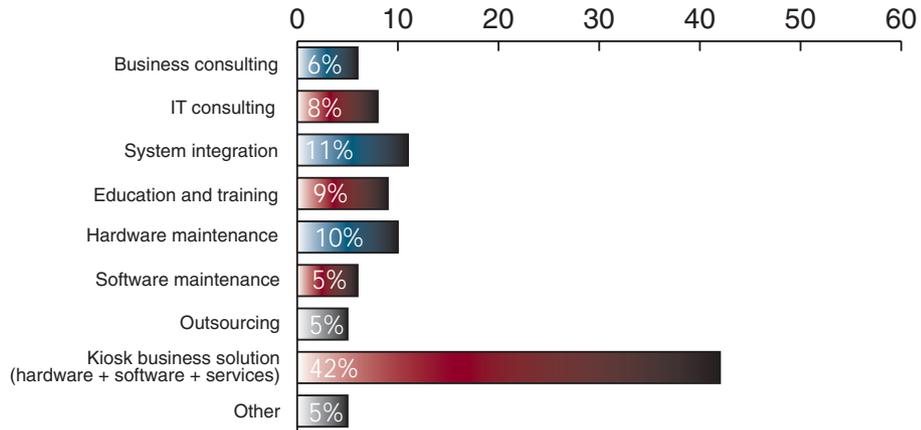


This year we offered ‘turnkey kiosk vendor’ as an alternative to ‘kiosk vendor’ and found that 17% of respondents chose that option. This is an increasing trend in the industry, as software and hardware vendors form business partnerships to offer end-to-end or ‘soup-to-nuts’ kiosk solutions including everything from components and integration to remote monitoring and maintenance. Beyond the convenience of one-stop shopping, kiosk purchasers want to know who will ‘own the problem’ when something goes wrong, rather than contacting a chain of vendors. An IT operations manager of MIS for a nationwide jewelry retailer describes the buying process: “We identify a need, and then we look for a competitive price bid for what can integrate with the systems we have. We look both ways—turnkey and individual component vendors. But it’s not that much cheaper when you’re putting it together yourself.” As interactive kiosks become more complex, there is a greater need for someone to build and integrate the units—you can’t do it in house nearly as easily.

Integration and Compatibility

Many buyers are also looking to their software providers for kiosk solutions, as systems integration and compatibility are vital elements of the overall package. Our study shows ISVs (independent software vendors) providing 12% of our respondents’ kiosk solutions this year (up from 8% last year). Most responses for ‘Other’ cited in-house development, particularly for software.

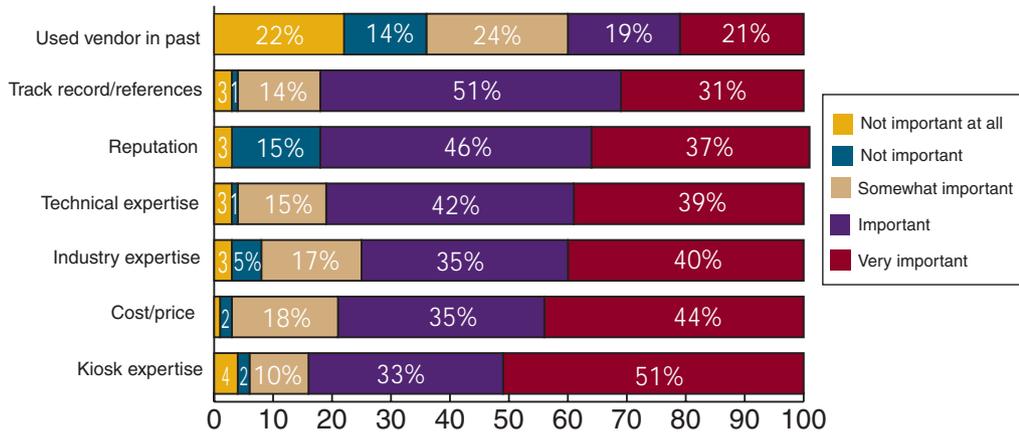
Figure 10: Types of Services



Support is Paramount

Here again we see the growing power of the complete kiosk business solution—hardware, software, and services—in the responses (42%) specifying the types of services utilized for their kiosk initiatives. In a new drill-down question on maintenance, we asked about their organizations' overall approach to kiosk maintenance; 64% responded that all kiosks receive regular maintenance, and 18% said that maintenance is a low priority. This last figure could indicate some lessons yet to be learned in achieving optimal uptime for unattended devices like kiosks. A separate option, stating that transactional kiosks receive higher priority than informational ones, garnered 19% of responses, indicating that revenue sources often get higher priority. Jeffrey Hall, director of systems and technology for Macy's West, explains: "Bridal and gift registry are *very* high volume kiosks. It's like turning off a cash register when one is down. We look for ruggedization and support—how quickly they [the vendors] can get to our stores."

Figure 11: Critical Success Factors



Seeking New Relationships

In selecting a kiosk vendor, our survey respondents find all options to be relatively important except for an existing relationship with the vendor.

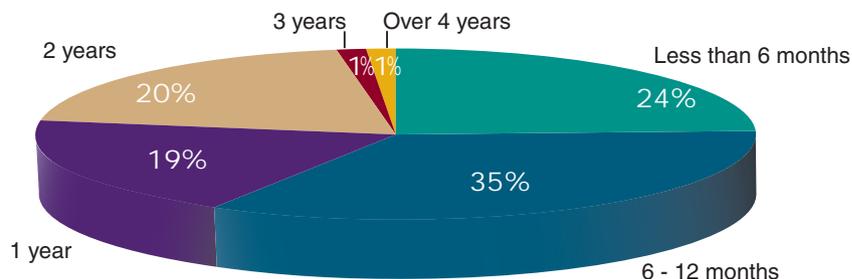
This is different from more mature technologies, where buyers highly value longstanding relationships. This is indicative of an emerging marketplace, and will not continue. There is a window for vendors to develop relationships with buyers, but that will not continue indefinitely. Kiosk expertise is the highest rated priority, but cost comes next, ahead of industry/vertical expertise. Vendors need to realize the importance of demonstrating

“Cost remains the single most limiting factor in kiosk deployment”

business value for providing a kiosk solution through their expertise. Emerging vendors with much kiosk experience can enter new contracts where buyers may have used another vendor in the past. This could be good news for vendors.

As mentioned earlier, cost cutting will remain a priority of the present economy for the foreseeable future. One survey respondent wrote the following in our Comments section: “Cost remains the single most limiting factor in kiosk deployment. Vendors continue to charge premium prices in the kiosk space. Over time, we would hope these premiums drop as choice and competition in the space increases.”

Figure 12: Kiosk Implementation Period



This chart shows the length of kiosk implementation from the testing/concept phase through to full deployment. This year we rephrased the question to include the testing/concept phase within the overall rollout time, and close to 60% have gone from testing through to full deployment within a year. That’s promising, as speed to market and shorter implementation times are necessary to realize ROI benefits more quickly for new projects. ♦

Government Anytime, Anywhere



Rishi Sood is principal analyst for Gartner's state and local government, federal government, and global public sector programs. His key technology areas include e-government, customer relationship management, outsourcing, homeland security, data warehousing, and enterprise resource planning. His key business issues include economic development, governance, and customer service. Within the federal government market, he covers the civilian, defense, and intelligence agency segments. He frequently presents at major industry conferences, is regularly quoted by leading IT services publications, and writes a monthly column called 'Across the Digital Nation' for *Washington Technology* magazine.

Service to the Citizen

Over the past ten years, state and local governments have tried to reorient public sector delivery capabilities around the citizen. New marketing slogans like “*Service to the Citizen*”, “*Customer Centric Government*”, and “*Government Anytime, Anywhere*” heralded new objectives for key government executives. Public sector organizations have begun the long process of breaking down agency silos and creating business functions guided by customer requirements rather than organizational boundaries.

In many respects, information technology has been a key component of the change. Government organizations have utilized technology to extend services and empower an increasing percentage of government personnel. Over the past five years, the growth of e-government applications has also created another channel for citizens to directly process government transactions.

Public Access

Kiosks represent a logical extension of this customer-centered movement. A number of key agency segments as well as horizontal functions have benefited from kiosk technology:

- **E-voting:** Spurred by recent federal funding, states are actively looking to replace punch card technology with e-voting kiosks. A number of major states like California, Florida, and Georgia have announced deadlines for statewide implementation. Although there are issues with respect to security and the audit trail, the number of e-voting kiosks will increase dramatically over the next three years.
- **Public assistance:** Kiosks in agencies such as Health and Human Services have helped align resources with new departmental objectives. These kiosks provide a wide array of functionality, such as job searching, benefits matching, and eligibility processing.
- **Licensing and permitting:** Public sector organizations involved in licensing and permitting have installed kiosks to efficiently process customers and provide alternative service delivery capabilities. In many cases, these kiosks enable full transactions and/or speed processing of customer requests.
- **Citizen access:** Government organizations have also begun to establish kiosks in major gathering areas (local malls, libraries, city centers, etc.) to help bridge the digital divide and provide pathways for citizens to access government services.
- **Employee access:** Like the private sector, government organizations have also utilized kiosks for employee-facing activities. This can run the gamut from simple information access to more complex human resources functions.

Getting the Green Light

State and local government decision-makers must make technology choices that help streamline government operations, improve overall agency efficiencies, and expand customer interactions. In particular, state and local government organizations continue to ‘green light’ technology initiatives that focus on one of four areas:

- **Cost containment:** applications that can help speed agency functions and thereby lower the costs of service delivery
- **Cost avoidance:** solutions that provide alternative pathways for service delivery and eliminate new cost streams
- **Revenue generation:** technologies that improve the collections process and increase compliance with revenue generating areas such as tickets collection, parking fines, or tax payments
- **Revenue maximization:** solutions that help state and local governments increase allowable federal revenue streams.

Section 4: Know Thy Application

The most important step in launching a new kiosk project is defining your goals. Dave Lyubarsky, project manager of retail systems for Sears Canada, explains: “Our business partners have a long wish list of applications for our next generation of gift registry kiosks: employee off-hours training, more product information, gift card acceptance [issuing needs to be a lot more secure, like an ATM-type machine], and maybe self-checkout.” The process of prioritizing then follows, smoothed with the fine art of compromise. “There are no benefits in a kiosk that only does one thing. Hybrids expand and penetrate more customer base—and cost justify more units,” he adds.

Follow Your Goals

Kiosk goals are defined differently depending upon the type of kiosk. And types of kiosk vary by vertical industry. Government point-of-information kiosks are specific to the needs of government agencies, whereas Internet access and gaming kiosks are targeted for the media and entertainment industries. Check-in kiosks for the airline industry will have different requirements from check-cashing financial services kiosks. This

“Hybrids expand and penetrate more customer base—and cost justify more units”

year we extended drill-down questions on the specific types of kiosks tailored to each specific vertical industry. Industry-specific kiosk types are covered in the individual analyst commentaries.

We also expanded the options this year to include photo imaging, HR/employee self-service, job recruitment, advertising, and gift registry. This spread the percentages more, as respondents

were able to select more specific answers than last year. For retailers, by far kiosks providing customer information lead. Point-of-sale kiosks and self-checkout have also become more popular. Many grocery stores, and hardware stores such as Home Depot, have implemented customer self-checkout service because faster lines lead to increased customer satisfaction. Self-checkout, which trailed Internet access last year, has overtaken it this year. This implicitly indicates more tangible benefits from self-checkout, as opposed to mere Internet access, although that remains popular. Advertising and promotional kiosks, having shown up on the radar this year, are fairly popular among kiosk buyers.

There is still room for expansion in our list of options for kiosk types as the plethora of potential applications continues to grow. The ‘other’ category this year included: ticketing, e-learning, blood pressure/body composition screening, storage unit rental and payment, loyalty, video phoning, deli ordering, and customer satisfaction surveys.

NCR Case Study: GIANTS OF THE MESOZOIC

GIANT EXHIBITS GENERATE AN

enormous number of questions, and the Fernbank Museum of Natural History needed a way to feed that information to visitors in an easy and attention-grabbing format. The solution was a set of NCR EasyPoint kiosks providing everything a visitor needs to know about an exhibit at the touch of a screen.

“Up until we installed the NCR kiosks, all we had were paper handouts that essentially had descriptions of the exhibit,” explains Dana Harvey, vice president and Chief Technology Officer at the museum. “We wanted to make it more interactive and provide a better level of service for our customers—that’s what the kiosks provide for us.”

Super-Sized Information

Two NCR kiosks were initially installed in the “Giants of the Mesozoic” exhibit, but one was moved into the lobby and reformatted to serve as an electronic customer service unit, providing information on specific exhibitions and IMAX ticketing infor-

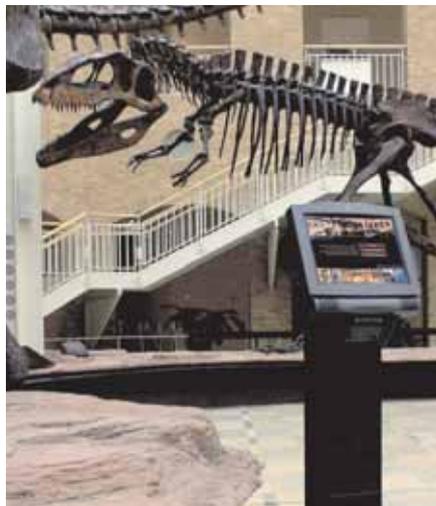
“We wanted to make the exhibit more interactive and provide better service.”

— Dana Harvey
Fernbank Museum of Natural History

mation.

“One of the challenges we have is providing enough information to people out in our lobby who are thinking about viewing our special exhibitions, or

whether they just want to go to our IMAX Theater,” Harvey says. “We wanted to put an interactive kiosk out in the lobby to help them decide which parts of the museum they would like to tour, and to provide information on what’s coming to the museum in the near future.”



According to Harvey, students on school field trips make great use of the kiosks. A whole class can gather around the touch screen and view a biography of the creature they are about to encounter. “People tend to congregate around the kiosk—it just attracts people to it,” Harvey says.

The kiosk in the “Giants of the Mesozoic” exhibit features a bevy of audio/video content to capture the viewer’s attention. Using screen captures from news specials, the kiosk streams video

interviews with dinosaur specialists giving the museum patrons a virtual tour of the history of these mammoth creatures.

Wireless Flexibility

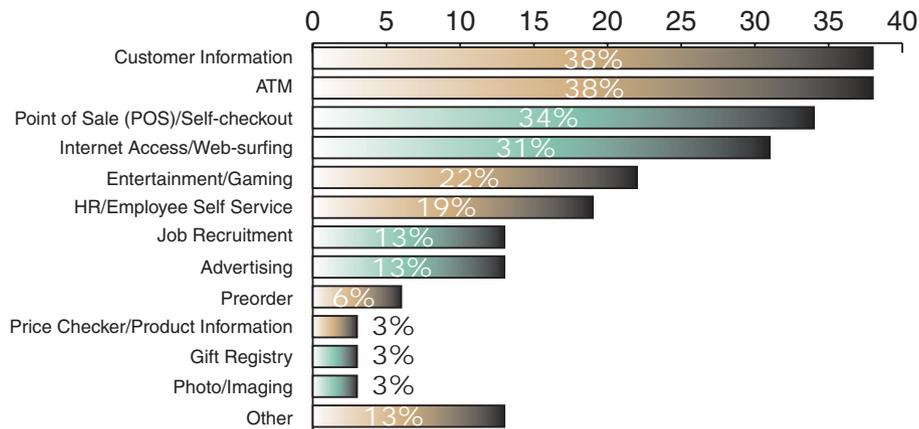
The museum would like to increase the number of kiosks in the permanent exhibits. The present kiosks are moveable, thanks to a wireless interface installed in the hardware. “We can update the content no matter where they are,” Harvey says. “We can put them any place in the museum where we can get power to them, and they work just fine.”

For special events, museum personnel have temporarily relocated the kiosk out of the dinosaur exhibit. “We want visitors to walk up to an interactive kiosk with a touchscreen interface and get the exact



www.ncr.com/kiosk

Figure 13: Types of Kiosks: Hospitality Only



Over X Billion (Self-) Served

Our second biggest vertical response this year came from hospitality [food service and lodging], and this chart shows the types of kiosks deployed by that specific sector. Customer information and ATM kiosks lead, followed by POS/self-checkout and Internet access. This reflects the growing numbers of these kiosks placed for convenient access in hotel lobbies, quick service restaurants (QSR—i.e. McDonald’s), and cafes/bars. Hotel check-in kiosks are included under POS/self-checkout, and QSR food ordering is emerging on the radar under Preorder. These are new areas with a huge potential for growth, along with HR/employee self-service and job recruitment kiosks (covered in Section 2: Enticing Users). One respondent wrote in the Comments section: “Without the terminals we would not have been able to handle the growth of our food service offer. These kiosks have improved throughput, reduced labor, and increased sales.” Other kiosks in food service environments include gaming/entertainment, as QSRs replace their children’s play lands with video game offerings, sadly because of litigation problems.

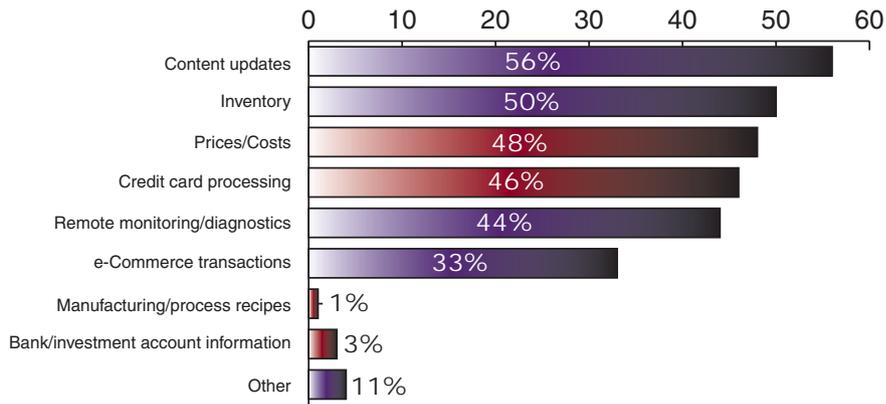
Kiosk locations cited by all verticals this year also reflected the greater variety of options offered, including theaters/amusement parks (8%), hospitals (7%), and convention centers/arenas (16%). The most prevalent locations (55%) were inside stores/restaurants/hotels for customer-facing use [with 16% citing the same locations for associate/employee self-service or job recruitment kiosks], followed by malls (28%), public facilities (20%), and airports (12%). Answers in the ‘other’ category reflected greater dispersal still: corporate offices, car dealerships, gas stations, military bases, train stations, and manufacturing floors. Accessibility has become even more key as the focus shifts toward driving incremental revenue and efficiencies.

Sexy Functionality

Kiosk technologies have continued to expand and improve, and costs have come down for many. Our surveys have found some ‘gee whiz’ technologies like biometrics still languishing on the sidelines, while wireless and others that contribute to cutting costs are experiencing rapid uptake. Sears Canada’s Lyubarsky offers this advice: “Decide exactly what the kiosk will be used for, and the environment it will be used in—how durable, how secure—and choose the components and peripheral devices that can best be integrated to be functional, slick, and ‘sexy’ (though I’m not sure you can say that about a kiosk!).”

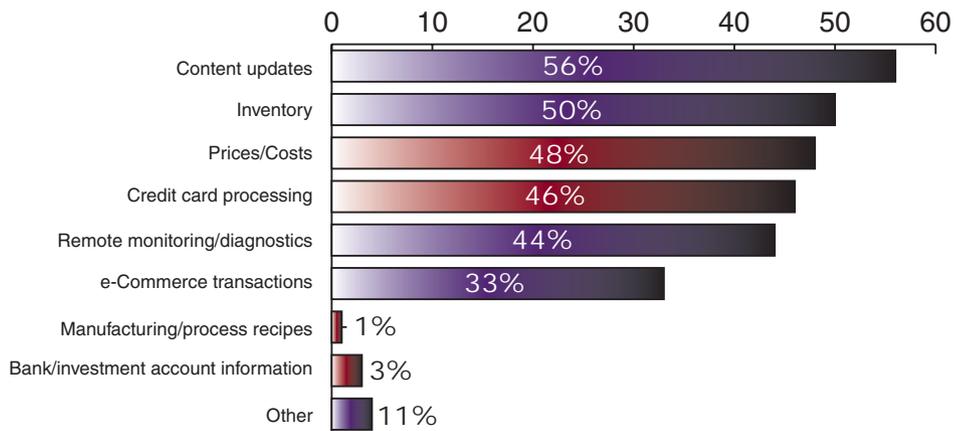
While the vast majority (88%) of kiosks remain stationary, mobile kiosks (22%), and handhelds (10%) are starting to emerge on the scene. As wireless and battery options come down in price and increase in capabilities, this trend will show a marked increase in the future—further extending the reach (and potential range) of kiosk applications.

Figure 15: Kiosk Connectivity



Internet connectivity is now the rule for the majority (81%) of kiosk projects, as remote content updates, monitoring, and maintenance have come down substantially in price, and kiosk networks are spread farther afield. The purpose of the kiosk will determine the connection requirements. Faster connection requirements and security will become issues with WiFi and other wireless connections. Other types of connections include Ethernet for local area networks. Considerations for deciding connectivity include budget, future intentions, security, and transaction processing requirements.

Figure 16: Access to Backend Information



The most important functions served by remote access to backend information are content updates, inventory and pricing information, credit card processing, and remote monitoring/diagnostics. That last category (combined with an overall improvement in industry best practices) is the reason why kiosks are no longer described by the public as “those things that never work.” E-Commerce transactions are also starting to pick up steam (at 33%). ♦

Financial Growth: Beyond Transactions



Susan Cournoyer is principal analyst for Gartner Research, Global Industries group, responsible for identifying major market trends and IT investment patterns in the financial services industry. Prior to joining Gartner, she was with the Federal Reserve Bank of Boston, analyzing regulatory compliance by retail banking organizations and focusing on their use of customer segmentation strategies.

Financial kiosks have become so closely identified with ATMs that it can be hard to imagine other roles for kiosks in the financial sector. Yet several new roles are emerging, often focused on supporting financial planning processes and targeting non-traditional channels. Investment companies are starting to test kiosks placed at transportation hubs such as airports and train stations, targeted at business travelers who may see value in turning a travel delay into a productive financial planning session. Such a kiosk can support business goals related to increasing market share and customer loyalty among retail banking and investment customers.

Initial Skepticism

New kiosk applications, such as the investment information kiosk, may seem unfamiliar and invite initial skepticism. To gain some perspective, though, consider that widespread acceptance of ATMs has taken several decades to achieve. In the longer run, having a competitive portfolio of branches and ATMs can be a key element of competitiveness in the banking sector. In the early 1990's, the Bank of Boston acquired a competitor known as Bay-Bank. The latter had established a significant network of ATMs and bank branches in the metropolitan Boston area, which in turn increased its competitiveness in retail banking.

The first generation of kiosks has become a well-accepted technology in banking, although traditional ATMs are being targeted for replacement through ATM refresh initiatives. A number of large banks in the United States have started to replace existing ATMs with Web-enabled ATMs. ATM refresh initiatives generally aim at aligning ATM technology with advancements in other channels, such as Internet banking, in order to support multi-channel integration goals. The banks tend to provide traditional capabilities like providing withdrawal and account status information through Web-enabled ATMs. However, awareness is growing that Web-enabled ATMs could support more personalized self-service in the future.

Market Testing

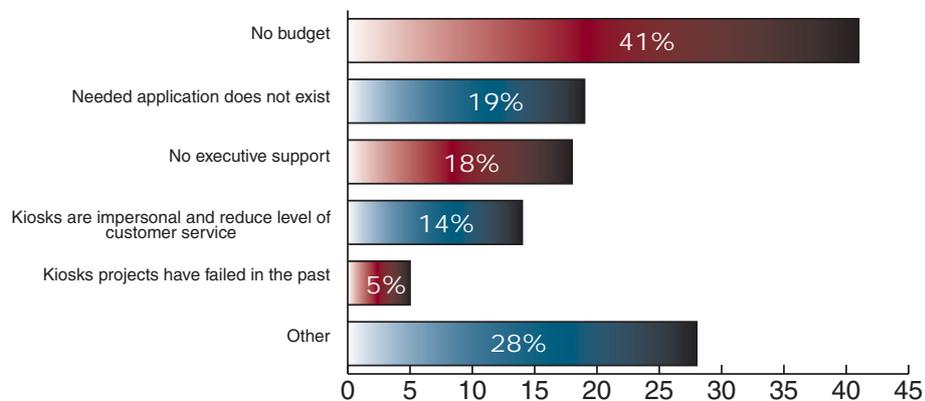
A good number of kiosk applications are being market-tested. Examples of emerging kiosk applications include the following:

- **Banking and investment information:** As FSPs (Financial Service Providers) compete to become trusted financial advisors, kiosks are being tested as vehicles to support inquiries about investment and financial planning. These kiosks can be free-standing to support customer self-service, or can be used as a support tool by relationship advisors at bank branches or investment offices. Also, as traditional ATMs are replaced with Web-enabled ATMs, financial information and product promotions can be integrated with transactional services.
- **Non-traditional channels:** Kiosks are emerging as a technology that can be used to support non-traditional channels:
 - **Transportation hubs:** Business travelers may find that reviewing investment and banking information can be a productive use of time at an airport or train station. Business travelers often include affluent customers that may be interested in a variety of financial products and services.
 - **Community centers:** Un-banked individuals at community facilities in urban and rural areas may be more willing to use a kiosk than to visit a traditional bank branch setting. Viable service offerings could include check cashing or money transfer services. Banks may choose such initiatives to help fulfill Community Reinvestment Act requirements. In the longer run, banks may recognize that customers with a regular pattern of cashing paychecks and money transfers can be good candidates for other types of financial products and services.

Section 5: Barriers to Overcome

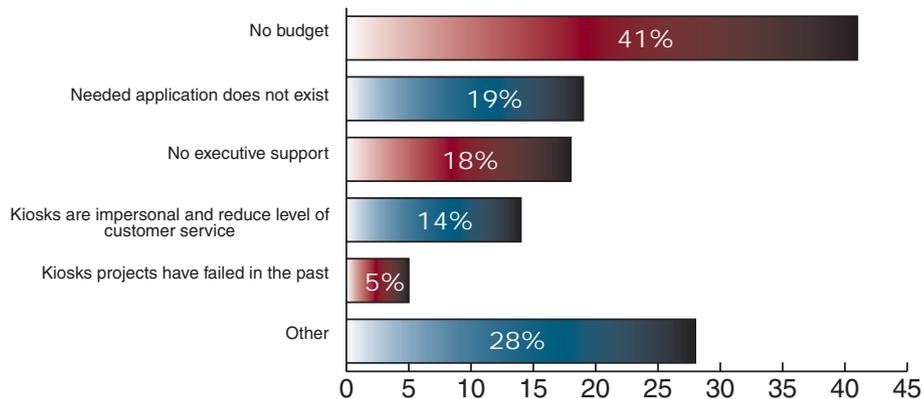
As with any nascent industry, there will be some bumps in the road before we see across-the-board acceptance of unattended self-service devices like kiosks. But the public is far more tech savvy now than when kiosks were first launched a decade or so ago, and the technology—particularly mechanical components like printers—is now robust enough to keep the units up and running. When the economy recovers, we should see a significant uptake in kiosk technologies across all major vertical markets—particularly in retail and hospitality.

Figure 17: Kiosk Deployment Timeframe



Even with the downturn in the economy, significant numbers are currently in the process of deploying kiosks, and more than 20% will implement kiosks in the next year. This shows a significant uptake over the next couple of years. For those who did not indicate any plans to install kiosks, as well as the 7% who indicated that their planning is more than two years out, we delved further to understand their inhibitors for adoption.

Figure 18: Reasons for Delay

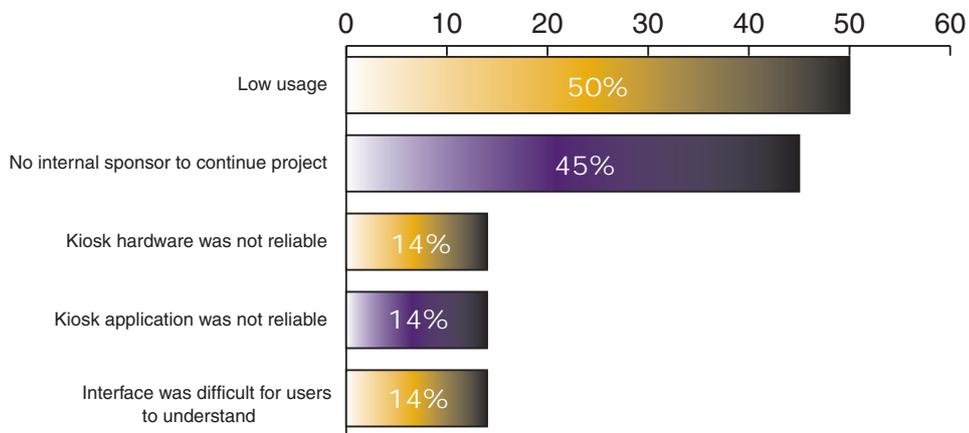


No Budget Blues

Our first question for those with no plans for kiosks was why. Unsurprisingly, the biggest barrier by far was no budget. This is fairly typical of a technology that is still emerging. Kiosks aren't as clear or easy to cost justify as POS or supply chain efficiencies. Customer self-service is

'squishy' [i.e. hard to measure or even to quantify]—and so is multichannel retail. Everybody knows it's important, but how do you verify that? The second barrier is classic: these technologies don't sell themselves. There need to be applications that will run on them. But this will change as adoption increases, and the suite of applications broadens to fill the niche. Having no clear executive champion can be another disadvantage for kiosks, and came in as the third biggest barrier. In retail, the typical technology adoption model is to have a business unit champion that drives the adoption. Someone has got to stick out his or her neck—it's the only way to drive technology into the organization. Placing the fault with the impersonal nature of kiosks themselves garnered 14% of respondents who had delayed their plans for kiosks.

Figure 19: Experience with Kiosks



For those respondents who said they had tried and failed with kiosk projects in the past, we asked for the reasons behind the failures. Low usage, always a death knell for self-service technologies, came in with half the responses, and no internal champion was the second major hurdle. Kiosks, while experiencing a strong uptake, still continue to search for a mission among many end users. Difficulties with the technologies—the interface, application, or hardware not being up to standard—each got 14% of responses, a fairly low number that reflects the improvements in these areas in recent years.

School of Hard Knocks

Unattended devices like kiosks take a real beating out in the public domain, so we asked our respondents with current kiosk projects to rate the factors most frequently causing kiosk failure. Intentional damage like vandalism is in decline, but 20% of respondents still cited it as frequent or extremely frequent. Unintentional damage like wear and tear are more of an issue, with 17% of respondents citing a harsh operating environment as a frequent or extremely frequent cause of kiosk failure, and poor maintenance drawing 18% of respondents to those same options. Internet failure caused 18% of respondents to choose frequent or extremely frequent, so this is clearly an area that needs improvement as it takes a more central role in kiosk networking and monitoring. Overall, the hardware (printers, displays, keyboards, card readers, etc.) appears to be standing up to the challenges of unprotected environments, with printers in particular fairing better than in previous years. ♦

Ready for Prime Time?



Venecia K. Liu is principal analyst at Gartner Dataquest in the Global Industries vertical markets media and communications program. She is responsible for analyzing and identifying industry trends, conducting primary research, and managing industry forecast projects. Her research includes carrier outsourcing, Linux adoption, IT convergence, and asset management. Prior to joining Gartner, she was with Epson Research and Development, where she led the investigative market research efforts for telecommunications opportunities in the US and was liaison to the general managers based in Japan. Before Epson, she worked with the Japanese Prefectural government as a coordinator for international relations in the International Affairs Division, where she handled diplomatic affairs.

Self-service technologies are making considerable headway in many industries. The media and entertainment sector is no exception. Thrill seekers and society overall have become impatient; waiting in long queues adversely impacts the overall experience, leaving many to think twice before re-visiting near term. High tech has created a more computer-savvy generation where information at real time is expected at one's fingertips. We live in a society where interaction with computers has become the norm.

Media and entertainment deployments are appearing in a variety of locations serving a multitude of purposes. Kiosks are utilized for gaming, music distribution, point of information, and even as wireless kiosk locators for parent and child guests in theme parks. Ticket dispensing kiosks are found at the entrances to movie theaters and theme parks. Stadiums, too, have brought in kiosks for player information, scores, and purchases. Resorts have launched ski lift ticketing kiosks both in town and at ski resorts. The critical key, however, to success for mass deployment is whether the dollars will roll in. In these times of constrained budgets, media giants need to evaluate innovative ways of generating revenues through technology—including self-service technology—and at the same time create a base for loyal fans and guests by building customer loyalty.

Hidden Benefits

No one could have imagined that sticker photo booths would become so popular. Placed in locations like malls, train stations, and amusement parks, these booths have drawn upon the disposable cash of visitors. Similarly, with the right type of application, kiosks can take the track of generating revenues—such as advertising partners, dispensing coupons, music and ticket selling, and creating a venue for cross-selling and up-selling opportunities. Kiosks reduce costs through labor replacement for transaction-based services and aid greatly in efficiency. Hidden benefits include building brand and adding value to the guest experience, and marketing an info-media culture (information at one's fingertips).

The Avalanche to Come

True to all IT initiatives, buyers not only need to determine the business benefit, but also to outline a clear strategy around business goals, and enlist quantifiable metrics for their return on investment and future strategic value.

Will kiosks make it to the top in media and entertainment? This industry is behind other industries in the adoption curve, yet as more pilot projects become available indicating measurable benefits, the avalanche of kiosk acceptance and deployment will hit the mass arenas in full stride.

Technology Impact

Some questions to consider for kiosk deployments in media and entertainment:

- What does the technology offer?
- What does it compete against?
- What are its strengths and weaknesses?
- What are the benefits?
- How will it drive growth?
- How will it aid my business?

Cast A Wider Net



Geraldine Cruz is principal analyst in Gartner's Global Industries group, covering the manufacturing and life sciences vertical markets. She provides strategic market intelligence, market sizing, and strategic marketing advisory services for vendors and service providers targeting the high-tech/electronics, automotive, aerospace, industrial equipment, and pharmaceutical/life sciences markets. Before joining Gartner, she was an industry analyst for Electronic Trend Publications in San Jose, California, where she conducted market research on the semiconductor wafer fabrication, system-on-chip, and board-level embedded computer markets. Prior to this, Ms. Cruz worked as a product and process engineer for Kraft Foods.

Business Managers Buying IT

Kiosks can be a creative and practical solution to enable manufacturers to address their business pains and achieve corporate objectives. Without a doubt, kiosks are not a new technology for manufacturers—particularly consumer packaged goods (CPG) manufacturers that have had experience in using kiosks to provide product information and impart product experiences to consumers. Moreover, manufacturers have used kiosks on the factory floor to monitor equipment, track personnel, and provision training.

Opportunities for new kiosk solutions in the manufacturing vertical market extend beyond traditional consumer-facing and human resources-related applications. Indeed, one of the most compelling issues for manufacturers today is the development of real-time linkages with supply chain partners in order to streamline production and synchronize demand and supply—thereby driving down the cost of operations. As a result, the growth in manufacturing budget allocations for IT solutions for the supply chain is growing faster than any other business area in the manufacturing process.

Some of the IT buyers, decision makers, and influencers of new solution deployments to support manufacturing processes are CIOs and IT managers. But many others are not. Indeed, Gartner's annual surveys suggest that in some industries—such as food and beverage, pharmaceuticals, automotive, and high tech—more than 75% of companies purchase IT outside of the IT budget.

Self-Service & Technological Prowess

Self-service may not be a compelling capability for everyone—if they cannot directly link the value of self-service with the business issues they need to address and the objectives they need to meet. Prospective kiosk buyers in the consumer goods manufacturing vertical must look at several key areas before making their purchasing decisions:

- What are the key business processes in a manufacturing organization and what types of IT applications and solutions support these processes?
- What are the key business processes in a manufacturing organization and what types of IT applications and solutions support these processes?

In order for kiosk vendors to develop relevant solutions and sell them effectively, they will need to know what IT tools their potential client base needs. Moreover, vendors will need to know what metrics are used to measure the individual performance of these IT buyers and decision makers and the departments, divisions, and business units they lead.

Digging Deeper

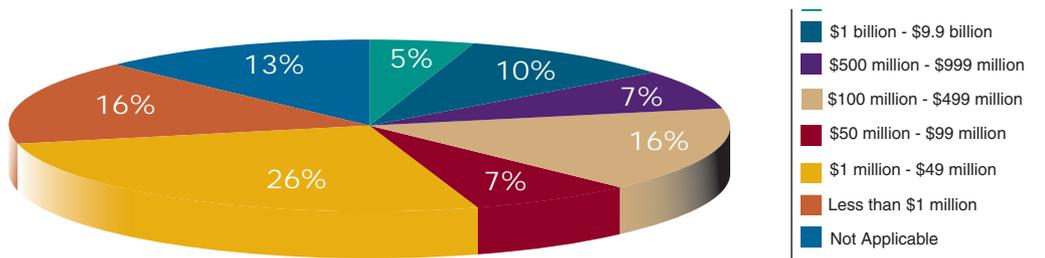
Deeper industry competence allows greater industry solution depth, but increases partnership management costs as industry technology players tend to be smaller and less operationally reliable than larger technology vendors.

The IT world is going vertical: the benefits of industry specialization have driven most of the large hardware, software, and services companies to develop vertical market practices and strategies to extend their reach in their client base. To leverage the rich opportunities in the manufacturing vertical market, kiosk vendors should do the same. Developing deep expertise in the manufacturing vertical market will enable kiosk vendors to refine their solutions, improve efficiencies, drive sales, and, ultimately, discover the next technology growth engine.

Section 6: Who Responded

Invitations to participate in this third annual benchmark study were emailed to the *Kiosk Business* subscriber list, along with a link to the survey Web site. The total number of respondents that completed the survey was 258, of which 102 respondents indicated that they did not have plans for kiosk deployment or that their plans were over 2 years out. For the first time, these respondents were fielded separate drill-down questions delving into why they did not deploy kiosks. The aggregate 258 are listed in the budget breakdown and size of organization. Each survey question has varied responses that deviate from the total N, since respondents were sent down various tracks based on whether they currently had a kiosk initiative as well as for their specific industry verticals.

Figure 20: Survey Respondents by Vertical

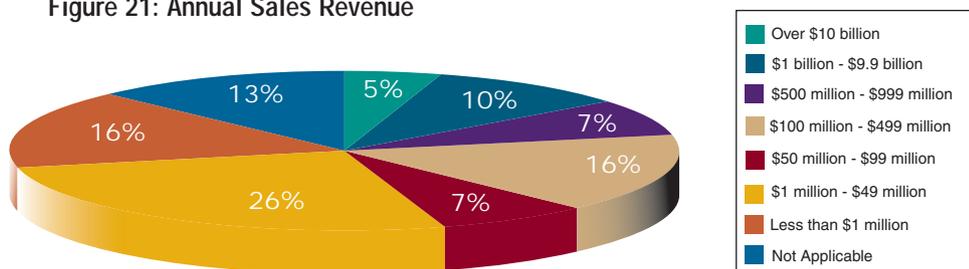


As would be expected in the current market, retailers are by far the biggest adopters of kiosks. The hospitality industry has also increased its usage of kiosks, and the media and entertainment industry has shown an up tick in growth.

For job function, we found a similar mix of respondents to our previous studies, with corporate management at 35%, and MIS/IS management at 21%. It is not surprising that the business unit executives are represented at a higher level than the technology managers, because kiosks are primarily a business unit sell.

Company sales revenues were extremely similar to last year's survey responses, showing some consistency in the sample of *Kiosk Business* subscribers. The chart also shows that the data collected by the study represents the full range of company sizes. ♦

Figure 21: Annual Sales Revenue



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3M Touch Systems	7, 9
CashCode	45
Frank Mayer & Associates	23
HHP	25
Instruments & Equipment Co.	37
Micro Industries	13, 15
NCR Corp.	2, 21, 31, 47
St. Clair Interactive	29
Seiko	43
Star Micronics	17
Telpar	33
Texas Digital Systems	27
TouchPoint Solutions	40

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