

A guide from Kiosk Marketplace

# The Benefits of Retail Kiosks



**INSIDE:** Few industries stand to gain more from self-service than retail. Learn how to get the most from kiosks and other digital merchandising technologies.

Developed and published by:

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SELF SERVICE NEWS, TRENDS & COMMENTARY

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# Contents

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Page 3	<b>About the sponsors</b>	
Page 4	<b>Introduction</b>	By Travis Kircher, contributing editor, Kiosk Marketplace
Page 6	<b>Chapter 1</b>	<b>Self-service in the retail environment</b> Do-it-yourself shoppers Convenience seekers An interactive experience But what can it do for me? Self-service applications: I want my DVD now! Motorcycles, anyone? No business like show business Human resources on the go
Page 14	<b>Chapter 2</b>	<b>Getting started</b> Where to begin Management buy-in Employee buy-in Customer buy-in
Page 21	<b>Chapter 3</b>	<b>Integration — out of the many, one</b> Introducing integration Advantage #1: Risk reduction Advantage #2: Cost savings Advantage #3: Trend analysis
Page 25	<b>Chapter 4</b>	<b>Avoiding the pitfalls</b> Pitfall #1: A bad location Pitfall #2: Underestimating security needs Pitfall #3: Being a cheapskate
Page 28	<b>Chapter 5</b>	<b>The emergence of digital signage</b> Digital signage defined Cutting through the clutter A digital marriage
Page 32	<b>Chapter 6</b>	<b>A few words about ROI</b> Tangible and intangible revenues
Page 34	<b>Conclusion</b>	<b>First steps into the future</b>
Page 35	<b>Appendix</b>	<b>Related articles from Kiosk Marketplace</b> <i>Nine tips for a user-friendly interface</i> <i>New self-checkout options</i> <i>Bill-pay deployments increase</i>

# About the sponsors



**Netkey Inc.** is a market-leading provider of applications, management software and turnkey solutions for the creation, monitoring, management and control and operation of kiosks and digital signs. Recognized as a pioneer in the self-service industry, the company is a trusted partner to organizations including Avery Dennison, Bank of America, BMW, Circuit City, Disney, Fidelity Investments, Healthy Advice Networks, The Home Depot, JCPenney, Nationwide Insurance, Pfizer, Swift Transportation, Target, Toys “R” Us/Babies “R” Us, the United States Postal Service and others who count on Netkey to deliver reliable, scalable and secure kiosk and digital signage systems for customers and employees that increase sales and reduce costs.



**Kiosk Marketplace**, owned and operated by Louisville, Ky.-based NetWorld Alliance, is the world’s largest online provider of information about and for the kiosk and self-service-technology industries. The content, which is updated every business day and read by business and industry professionals throughout the world, is free.

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# Introduction

“**W**hy should I put a snack machine in my store?”

It's the nagging question in a retailer's mind. You've heard all the noise about kiosks and self-service technology — that they're changing the way retailers do business, that they're becoming an increasingly integral part of customer expectations, that they're the wave of the future. You have your doubts. You can't help it; they said the same thing about aerosol-spray ketchup.

It's not that you're always a skeptic.

When self-service checkout lanes popped up in stores across the country, you were quick to jump on that bandwagon. That was a brilliant application, and it was easy to see how enabling your customers to scan and bag their own products would cut lines in half and allow store personnel to cover more pressing issues.

What you can't see is how deploying machines that dispense Twinkies and Milky Way bars is going to substantially increase your profits.

Well, before reading any further, you need to understand what kiosks are — or

more precisely, what they've become.

Kiosks today are far more than snack and soda machines. They dispense movies, music, and information. They can be used as a quick (and discreet) means for paying utility bills or as a photo shop that creates prints of digital images.

They also can act as mechanical salespeople.

Imagine a kiosk in a music store that not only prints sheet music to a customer's favorite songs but, for an added fee, also can upload the songs to his iPod. At the same time, the kiosk can assemble a list of additional songs and artists that interest the customer. The upselling opportunities are limitless.

The retail sector is only just beginning to number the infinite applications that self-service technology can bring to the store environment. It's true — there have been some unsuccessful deployments, but those instances are few and far between.

Success is never an arbitrary commodity. It's not usually something one comes



*Travis Kircher, contributing editor, Kiosk Marketplace*

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## INTRODUCTION

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across by accident. More often than not, success is the result of careful planning and diligence. The same holds true for kiosk deployments. The key to success is not discovered by dropping a kiosk in the back of a store as a novelty, just for the sake of having one to seem on-trend. A retailer's kiosk must meet a rational consumer need and respond to an identified demand.

As you read through this guide, we hope

it will redefine your view of kiosks and help you see their relevance in today's marketplace. If we've accomplished our goal, you'll view self-service technology with new eyes. Instead of being sold on a particular kiosk application — digital music uploads or photo prints — you might even discover some of your own.

Our thanks to Netkey Inc., whose sponsorship of this guide enables us to bring it to you at no cost.

# Chapter 1 Self-service in the retail environment

“Customer experience is the new battleground in retail,” said V. Miller Newton, CEO of Netkey, a provider of applications and management software for retail kiosks and digital signage. “Consumers today truly are multichannel creatures and increasingly are as comfortable shopping online as they are in the store. They expect a consistent and satisfying experience with your retail brand, regardless of the channel they use to shop. Self-service is critical to the empowered consumers of today, and multichannel synchronization is paramount to delivering an enhanced experience in the retail store.”

So what does “self-service” mean? Twenty years ago, the closest most retail stores got to “self-service” was allowing customers to grab their own shopping carts. If a particular chain was really daring, it would let the patrons bag their goods themselves or provide in-store catalogs where shoppers could find the location of a product without having to ask for a salesperson.

But since then, the entire concept of “self-service” has radically changed into a brand new landscape. Self-checkout lanes have not just appeared in grocery stores, they have become the norm. Customers are able to completely take over the role of the cashier, scanning and bagging their own goods at their own pace and paying for their items, usually without interacting with a single store employee.

**“Self-service is critical to the empowered consumers of today, and multichannel synchronization is paramount to delivering an enhanced experience in the retail store.”**

— V. Miller Newton, CEO, Netkey

Computer terminals now line the aisles of bookstores. Looking for the name of that thriller about the Soviet sub crew that wanted to defect? Just type in the author’s name or a subject keyword and in a matter of seconds the title, publishing house, page count and ordering instructions are displayed.

It would seem that this do-it-yourself mindset has swept the consumer population. At first glance, it doesn’t make much sense. Why should customers want to serve themselves when they’ve got store personnel willing to do all the work for them? The answer, according to many experts in the self-service industry, lies in our culture, our technology and, put simply, our need for speed.

## Do-it-yourself shoppers

Ron Bowers is senior vice president of business development for Frank Mayer and Associates, Inc., a company that has specialized in creating in-store merchandising opportunities through interactive kiosks for 25 years. He said that when kiosks made their debut, no one expected them to be a part of the retail environment.

## CHAPTER 1 Self-service in the retail environment

“Initially, it started out in the government sector and in the education sector, pretty much as a wayfinder for specific information,” he said. “In the education sector, it was used at a number of symposia at large university campuses where people were being flown in from all over. They were put out in front of the major venues so people could find out what lectures were going on there, at what time, in what rooms — that kind of stuff.”

As the concept of interactive kiosks began to catch on, Bowers said he saw a change take place in the way consumers conducted commerce. In other words, the typical consumer was becoming increasingly independent.

He didn’t want to rely on a salesperson to get the information he needed; he wanted to find it himself.

“There has been a transformation in our society where people are starting to prefer do-it-yourself, whether it’s kiosks or anything general, like the success of Home Depot and Lowe’s and do-it-yourself stores,” said Stephanie Kropkowski, director of marketing and sales for KioWare. “There’s really a new generation that prefers self-service over actually dealing with a person.”

The introduction of the Internet in the 1990s only strengthened this tendency. Suddenly, consumers could research the products online before they even walked into a store. The result has been shop-



*Consumers are becoming increasingly independent. They don’t want to rely on a salesperson to get the information they need; they want to find it themselves.*

pers who are much more informed, more selective in their questioning and more impatient with salespeople who provide unnecessary or trivial information.

“Speaking personally, I know the last thing I generally want to do in a store is go ask an associate for help, because I (may be) told the wrong answer,” said Chris Peter, project manager for St. Clair Interactive Communications Inc. “A very high percentage of people who come into a store know exactly what product they want at this point, having done research at home or online. It’s a matter of serving themselves efficiently.”

### Convenience seekers

Not only do self-service technologies, such as kiosks and interactive digital signage, empower the independent consumer, but they also provide an added level of convenience to the shopping experience. In many cases, customers are able to get through their trips to the store much quicker when they can serve themselves.

“As the population of the U.S. — and of the world, for that matter — becomes more computer-savvy and the urge for instant gratification becomes increasingly important, self-service terminals deliver not only information, but allow consumers to purchase things and have them provided at the point of sale,” said Dave McCracken, president of Livewire Kiosk Inc. “Shorter lines at self-service kiosks create happier customers.”

Short lines and a tighter, more focused shopping experience spell convenience, which is what will attract customers, according to Derek Fretheim, general manager of ULTIMedia, a kiosk design and manufacturing firm.

“You’ve got to look back 20 or 30 years ago,” Fretheim said. “What made microwave ovens so popular? It’s all about convenience. I used to give presentations all the time, and I asked the younger crowds, ‘If I gave you popcorn kernels that weren’t microwavable, could you pop the popcorn?’ A lot of times the

20-below would look at you like, ‘What are you talking about?’ What did we do before microwave popcorn existed? It’s all about convenience.”

### An interactive experience

It also helps to know the culture of today’s consumer. Generation X grew up on Atari, Nintendo and Sega video-game systems. PacMan, Frogger, Sonic the Hedgehog, Donkey Kong and Super Mario are now antiquated audiovisual icons that get them all misty-eyed when



*Today’s consumers grew up on video-game systems. They’re used to touchscreens and enjoy interaction with computer terminals.*

they sit around their class reunions and talk about “the good old days.” They’re used to touchscreens. They’re not frightened by machines that talk back to them. In fact, talking machines bring back fond memories of C-3PO, R2-D2 and that goofy robot in Short Circuit that chased butterflies with Ally Sheedy.

The point is, today’s consumers enjoy interaction with computer terminals. They relish the ability to manipulate the interface of a kiosk or other self-service unit, as opposed to units that simply spout information like televisions and radios.

“They demand interactivity,” said Kevin Kent, vice president of business development at Meridian Kiosks. “It’s certainly more of a push-and-pull connection, in terms of marketing, as opposed to the classic push method that we all grew up on. The younger generation is not only comfortable with interactivity during the sales process, they actually demand it.”

And it’s not just the gaming crowd that has warmed up to interactive kiosks. Older, more seasoned shoppers are drawn to them as well, in part by their intuitive and easy-to-navigate interfaces. Their gradual immersion into 21st-century banking technologies, such as ATMs, also has played a role.

“As time progressed, ATMs started to appear in retail more often,” Bowers said. “People started to become more confident and more comfortable utilizing technology as an input device and then getting information. A trust factor started to develop a little bit.”

### But what can it do for me?

By now it should be clear how self-service kiosks have gradually become more appealing to shoppers looking for a more empowering, streamlined and interactive in-store experience. Fair enough. Customer satisfaction always should be at the top of the list for a retailer who wants to succeed in today’s competitive market.

But aside from improving customer satisfaction, what can kiosks do for a retailer? For one, they can help cut labor costs. If customers are able to obtain their own information from a kiosk — in essence, to sell themselves on the products — then the need for salespeople and other in-store personnel inevitably decreases.

Such was the case at the Dave & Buster’s bar and arcade chain. St. Clair’s Peter said the chain came to the company for custom-made, interactive kiosks where

**Kiosks can help cut labor costs. If customers are able to obtain their own information from a kiosk, the need for salespeople and other in-store personnel inevitably decreases.**

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patrons could either purchase a new card to store play time on the arcade games or add credit to an existing card. The value of the machines to Dave & Buster's was that the chain didn't need a full-time sales associate to take cash.

"Their goal was \$1 million (in) labor savings," Peter said, and he claimed the chain met that goal. He also pointed out an additional benefit of the interactive kiosks over human personnel: a more complete and efficient sales presentation.

Dave & Buster's sales associates often forgot to mention special drink discounts, new items on the food menu or Power Hour — one hour during the day when patrons could play as many video games as they wanted for \$10. By programming special advertisements into the kiosks, management could ensure that such features received proper promotion.

"So it allows you (labor-cost savings), it allows you efficient and correct information with no training involved and it allows you 24/7 uptime," Peter said.

Indeed, the opportunities for upselling and cross-selling afforded by interactive kiosks are immeasurable. When a consumer purchases a product, the kiosk can present him with a predetermined list of advertisements for similar products and services.

For example, a kiosk at a sporting goods

store may be programmed to print special coupons for skis any time a customer calls up information on winter coats or snowshoes. Meridian's Kent explained how the company's "Shop-to-Cook" kiosk application succeeds in this area.

"It offers the ability to do price checking and location checking in terms of where items are in the store, but then it also ties in with a recipe checker," he said. "You can scan an item, and it will pull from a database a list of recipes that include that item as an ingredient."

That means that a customer who accesses a kiosk to find out which aisle contains Ragu Old World Style Traditional pasta sauce may instantly receive printouts of recipes for dishes such as spaghetti, lasagna, ravioli and chicken parmesan. If intrigued by these recipes, the customer may be inclined to purchase additional ingredients and try something new.

### **Self-service applications: I want my DVD now!**

The benefits of self-service in each of these scenarios are clear, but what about tailoring a kiosk solution to a particular retail environment?

That's a difficult question to answer because every retail establishment is different. A kiosk in a high-end clothing retailer will serve a much different purpose than one in a wilderness-supply store, and a bookstore kiosk won't have

the same functionalities as one in an Office Depot.

Different retailers have different needs, and as more companies take note of self-service's advantages, new applications will continue to be created.

One application that is gaining momentum in the retail world is identified by a variety of names — inventory extension, endless aisle — but the concept is the same: Use the kiosk to provide customers access to product SKUs not found on the shelves.

"We recently deployed a project for a large specialty retailer that provides gear for outdoor activities," said Netkey's Newton. "The company brought their extensive online catalog into the store using kiosks. If a customer can't find a product in the exact size or color they want, they can order on the device and have it delivered to the store or their home.

"Self-service then becomes a powerful competitive advantage for that retailer — they don't lose the sale, and the customer won't be walking out the door unhappy and shopping at Brand X retailer down the street."

Another such application is the ability to burn movies to DVDs by request.

That's the purpose behind interactive kiosks deployed by Polar Frog Digital, Inc., a partner of St. Clair Interactive. On the

user interface, a customer can pick from a list of movies and television shows, and the kiosk burns the DVD while he waits. The effect is that the kiosk creates a unique DVD containing the specific shows the user wants to see.

"What we're doing with Polar Frog is we're building custom disks on the fly from MPEGs, so if somebody comes along and says they missed their Discovery Channel show, they missed their A&E show, they want to get a workout tape and they feel like putting some wrestling on the disc as well, they can choose the disc from a compilation that they are building," Peter said.

### Motorcycles anyone?

Another niche where self-service has staked a claim is the automotive industry. Auto sellers are quickly discovering that, when it comes to showing off their newest vehicles, nothing works better than an interactive kiosk with an impressive graphical interface.

Just ask the folks at some Suzuki dealerships.

**Auto sellers are quickly discovering that, when it comes to showing off their newest vehicles, nothing works better than an interactive kiosk with an impressive graphical interface.**

“You go into a dealer that has this kiosk, and you’re interested in one of their Suzuki bikes and they say, ‘OK, let me work up a price for that particular bike that you’re interested in.’ So they go to the kiosk,” Fretheim said. “They show the bike. It’s 3-D, so it’s very, very clean on a nice screen.”

The vehicles can be shown from various angles and in various colors. What’s more, the salesperson (or the customers themselves) can modify the image to display the same vehicle with added options.

“The guy’s just clicking on all of these little accessories and the next thing you know, he’s upselling the customer on the accessory packages that are available on that bike,” Fretheim said.

“The guy says, ‘I really like that. Can you print me a picture?’ Boom! Out it comes, just the way the guy configured the bike.”

### No business like show business

In the modern world of retail, kiosks can be used to sell practically anything, including tickets to concerts or other events.

“We have a product called ‘eConcierge’ which is a combined transactional kiosk along with a digital signage component,” Livewire’s McCracken said. “Let’s say you’re at a kiosk — in Las Vegas, for ex-

ample — and you’re looking to purchase a show ticket. You can go to the kiosk and use a touchscreen to drill down to the type of show that you might want to see, and then the digital signage component either above or beside the kiosk can focus on show trailers associated with what you might be interested in to sell the show to the prospect.”

McCracken said his application is popular at hotels but also can be effective in any location that might serve consumers interested in checking out local entertainment. The kiosks also provide the perfect venue for companies to advertise their products and services.

### Human resources on the go

The customer isn’t the only potential beneficiary of self-service technology. Many retailers also use kiosks to automate the employee-recruitment and job-application processes. Others provide secure access to the company intranet or human resources information systems.

Netkey’s Newton offers the example of a large supermarket chain in the Southeast with more than 900 stores, each with standardized kiosks to support the hiring process. The kiosks are integrated with the retailer’s SAP human resources back-end system and process applications immediately and with total accuracy. A comprehensive audit trail also is established to address any state or fed-

## CHAPTER 1 Self-service in the retail environment

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eral compliance requirements or identify potential workforce tax benefits.

Completely paperless, the electronic applications are automatically screened and, if accepted, routed to the store manager. The system alerts the store manager of high-quality candidates in real time, so a job offer can be made immediately.

The benefits to the retailer have proved immediate and impressive. “The kiosk system has enabled the retailer to grow its pool of qualified applicants by 400 percent and allows store managers to view applications from other stores for greater hiring efficiency,” said Newton. “The company is able to hire the right person for the right job with a faster

time-to-hire. The new system has improved both the speed and quality of hires, while reducing recruiting costs by 25 percent.”

Once employees are hired, kiosks can help them manage their personal information and stay in touch with company news. Kioware’s Kropkowski said kiosks can act as an automated human resources department.

“You can have your 401(k) benefits information displayed,” she said. “That reduces all of the paperwork that the HR person has to do for however many employees there are that don’t have regular computer access. Then they can focus on more of their regular job description instead.”

## Chapter 2 Getting started

**F**ar too many first-time kiosk deployers quickly become so impressed with the new technology that they completely ignore the message the kiosk is meant to convey.

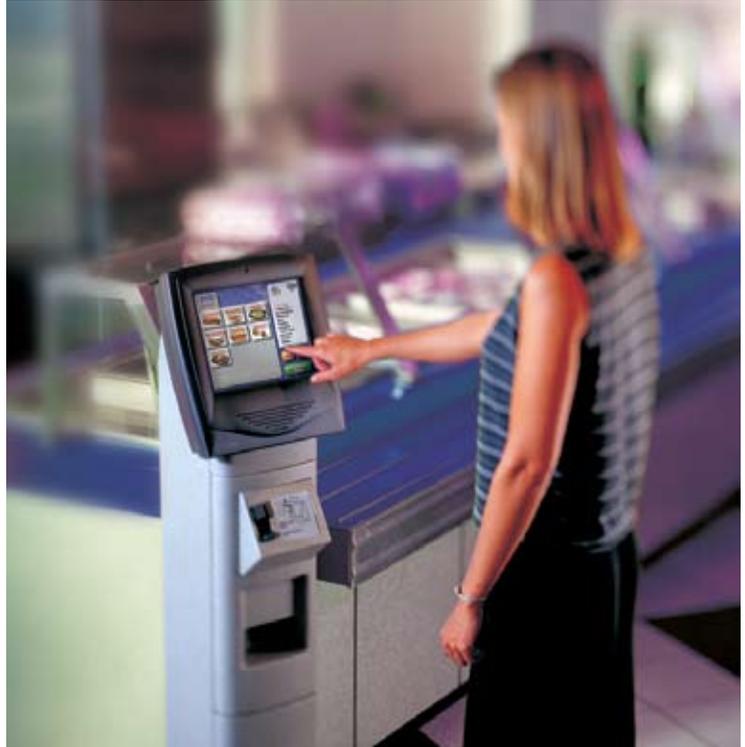
“A self-service initiative is no different than any other complex project undertaken in business — there needs to be a valid and verifiable business case,” said Netkey CEO Newton. “Everything must focus on supporting the strategy and delivering value to the customer. The bells and whistles exist only to support that goal. Fall short on any of these key criteria, and the project will likely fail.”

Chris Peter, project manager for St. Clair Interactive Communications Inc., said he’s seen similar scenarios on several occasions.

“That happens a lot more often than we would like to see,” he said. “I think there are a lot of cases where people do a kiosk project for the sake of doing a kiosk project and don’t properly think it out.”

The result? Because these companies have little or no experience working with kiosks, they don’t know what pitfalls to avoid. They pile on too many options, the audio is too loud and intrusive, the interface is too complicated, or users can’t concentrate on what they’re doing because the screen is flashing or the speakers are blaring.

“Everybody in the industry suffers



*With all the options and add-ons available for kiosks today, it’s easy for deployers to be hypnotized by the new technology, but in some cases, simpler is better.*

when that happens,” Peter added. “The customer will have a bad experience. It doesn’t just turn them off kiosks for that particular retailer — it turns them off kiosks industry-wide, if you will. So we really don’t like to see that happen. A proper project for us goes through intense testing and piloting. We do not want to just dump it on the market and hope it works.”

Livewire Kiosk’s McCracken said retailers need to take their eyes off the bells and whistles — amazing as they are — and concentrate on meeting demand.

“What is the intent to provide by the kiosk?” he asked. “What is the easiest way, as far as the consumer is concerned, to gain those benefits? Technology that doesn’t make you wait.”

### Where to begin

Most industry experts agree that companies deploying kiosks for the first time need the help of a kiosk solutions provider — someone who can pull together the hardware, the software and the necessary expertise to make the kiosk project happen.

There are important questions to answer. Who is going to take charge of ensuring the kiosk content is updated? Will that be the job of the IT department, or will it be outsourced to the solutions provider? What about integration? Should all a retailer’s kiosks be networked together, or should they operate independently?

Ron Bowers, senior vice president of business development for Frank Mayer and Associates Inc., said it’s particularly important that retailers understand that a kiosk deployment is not a separate undertaking, apart from the other aspects of the store. It should be viewed as an extension of the store’s mission and should operate as an integrated part of the overall marketing strategy.

“Is the kiosk part of that so that it works seamlessly?” Bowers asked. “We try to educate the retailer or the brand mar-

### Things to Consider Prior to Deployment

- Kiosk content: Will it be updated by the IT department or outsourced to the solutions provider?
- Integration: Should the kiosks be networked together or operate independently?

keting of the importance of having an integrated program. Whatever is being done in your media advertising — in radio, television, magazines, newspaper — should really coordinate with what’s online with your Web site so that the experience is reinforced at the point of purchase and at the retail environment.”

### Management buy-in

It’s no secret that in big companies, no project succeeds unless it receives support from the top down. The management team sets the tone for the organization and can apply the appropriate “carrot/stick” approach to enforce the behavior necessary to ensure the project’s success.

So how can an employee who recognizes a self-service opportunity win the support of his managers? Derek Fretheim, general manager for ULTIMedia USA,

## CHAPTER 2 Getting started

says that, in most cases, it comes down to the dough.

“First of all, it’s all about the dollar. They want to know how much it’s going to cost and how much they’re going to make from it,” he said. “It’s as simple as that. It becomes very complicated, because you have to identify the cost of ownership and life expectancy, the IT support — all of those elements have to be factored into it. They really need to see supporting data that shows what you’re going to achieve from it.”

Facts and figures, case studies, charts, graphs, proof — that’s what management is looking for, proof that it can make money or save money.

Often, the responsibility of assembling this information falls on the shoulders of a single individual who believes the project can happen — ideally, a “project champion.”

“To succeed, a kiosk initiative needs management support, a project team led by a champion, a budget and clear and attainable goals,” Newton said. “The line

**“To succeed, a kiosk initiative needs management support, a project team led by a champion, a budget and clear and attainable goals.”**

— V. Miller Newton, CEO, Netkey

of a business manager driving the project needs to clearly define the purpose of the self-service application and how it supports the retailer’s go-to-market strategy. The I.T. group then needs to work closely to bring that vision to reality from both a deployment and operational standpoint, while staying in budget.”

In the best of circumstances, the project champion would be a well-rounded individual who has experience working among the various departments and can look at the project from different angles.

“In our experience, if marketing drives the program, they underestimate the requirements on the technology, the reliability and the up-time,” Peter said. “It’s a flashy attention-grabber, as opposed to a real, functional device of the store. And if the I.T. department heads up the project, then you end up with something that may work very well but the average person doesn’t know how to use.”

Armed with the proper figures, the project champion can begin bringing the issue before management’s attention. But it doesn’t all come down to numbers. Sometimes, all one needs to do is look to his competitors to know when it’s time to act.

“If your competition is rolling out kiosks and you’re not, what’s the implication of that?” Kevin Kent, vice president of business development at Meridian Kiosks, asked. “If your competition is rolling

## CHAPTER 2 Getting started

them out and they're doing an effective job of it, I think you have to be mindful of that. It will build the perception that you don't take services seriously and customers won't want to go to your store because they'll have to wait longer. So there are a couple of different things: what are you losing by not having kiosks?"

USA's Fretheim agreed.

"If Suzuki implements something, now does Honda need to do something?" he asked. "Yamaha? Harley? You know, Harley's got (its) own kiosk solutions. So the first thing I'm going to do is I'm going to assess what my competition is doing. What's been their success, and how can I better that and at the same time justify our operations?"

The third — and perhaps most effective — method of convincing reluctant managers to buy into a kiosk project is by demonstrating customer demand for it.

"A lot of it is customer-driven; it's what the customers in the store are requesting," Peter said. "Now if somebody is dead-set against it, they're dead-set against it, but a lot of the time, they're getting requests from their store managers, their department managers — 'Why don't we have this yet?'"

Customer demand for a kiosk — or any kind of service, for that matter — is a surefire sign that it's time to get the ball

rolling. Customer demand means opportunity, and if the managers of a company are sharp, they'll be quick to take advantage of that opportunity.

### Employee buy-in

It's tempting to think that if managers sign on to a kiosk implementation, employee buy-in is irrelevant. After all, managers are the ones who make the



*Store employees play an integral role in any kiosk deployment. They're the ambassadors — the ones who introduce customers to the kiosks and show them how they work.*

## CHAPTER 2 Getting started

rules and dish out the funds. Employees simply follow orders and collect a paycheck, right?

Not exactly. The truth is that store employees must play an integral role in any kiosk deployment. They're the ambassadors — the ones who introduce customers to the kiosks and show them how they work. They're also the ones who have to keep an eye out for malfunctioning kiosks and be quick to move when something goes wrong.

But how can you get employees excited about the success of a machine that could, in theory, replace them? Dave McCracken, president of Livewire Kiosk Inc., admitted this can happen, but in most cases, it doesn't.

Actually, the presence of the kiosk often changes the relationship of the employees to the customer. Instead of acting as salespeople, they become consultants.

"In most cases, a kiosk can free up employee time for working on the things they need to be or should be working on — things associated with their real job definition," McCracken said. "For example, we're implementing a kiosk solution for county government here in New York for various departments of social services. Each department has a specific method of dealing with clients that either have appointments or come in. But the first step is that they come in, sign in on a log at the receptionist's desk

**"In most cases, a kiosk can free up employee time for working on the things they need to be or should be working on — things associated with their real job definition."**

— Dave McCracken, president, Livewire Kiosk Inc.

and then the receptionist has to contact the specific caseworker. The receptionist then has to take the log and black out the name per particular requirements."

McCracken said that's a lot of work for the receptionist to do, but an interactive self-service kiosk like one of the solutions his company offers can cut down on the load. Instead of taking valuable time from the receptionist's other tasks, users simply type in their name, and the kiosk takes it from there, determining the appropriate caseworker and sending that person an e-mail to notify him or her of the client's presence.

Retailers can create an incentive for employees to direct customers to the kiosks. "One of our customers — a national retailer of toys and clothing for children — asked us to enable a feature in the kiosk application that allows the employee to enter their ID number so they can get credit for a sale made through the kiosk," Netkey's Newton said. "The kiosk application is tightly integrated with the store's POS system, so it's a seamless process. Knowing that

they will be recognized, employees will now see the kiosk as a tool rather than a threat.”

Self-service applications truly make life easier for employees, and it's the job of management to show them this. Once staff members see that kiosks can take over many of their mundane tasks and enable them to refocus their energies on the jobs that really matter, they'll be quick to buy in to the project.

### Customer buy-in

The last, and possibly most important, factor to consider in a rollout strategy is obtaining customer support for the project. How does a retailer convince customers to use self-service technology? After all, if consumers aren't going to interact with the terminals, what's the point of getting management and employees behind the project? Aside from the obvious answer of providing the customer with a kiosk that meets a designated need, a retailer can use several techniques to get them interested.

One idea is to do a special promotion when the new kiosks are unveiled and make a production out of introducing customers to the machines. If it's plausible, a retailer even can let them use the machines a couple times for free.

Such was the case when ULTIMedia USA created and installed kiosks for a local mini-mart.

Under normal circumstances, the kiosks provided prints of digital photos for a small fee. To use it, a customer would insert the memory card from his digital camera and select an image for the kiosk to print onto special glossy sheets. But the kiosk was new, and the mini-mart had to get the word out by drawing attention to the it.

Fretheim said the company came up with the perfect solution. It offered a free digital image print for every customer who purchased coffee and a bagel.

“Lo and behold, we succeeded,” he said. “The person would come in with their one or two pictures. They'd get their free photo. The next time they came in, we'd see them do five or six photos. By their fourth or fifth time, they'd do close to a regular roll of 15 to 20 photos, and that's what they're printing on a monthly basis.”

He said his company had to donate enough glossy photo sheets to create 500 prints for the promotion, but it was worth it. The mini-mart's coffee and bagels sales increased, and before long, traffic at the kiosk took off.

“So we engaged the employee with that situation and created a marketing scheme that was of benefit to the kiosk,” he added. “We didn't receive the results financially at the kiosk because we were offering something for free, but we were trying to get usage at the kiosk and

## CHAPTER 2 Getting started

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leveraging a baked good purchase to substantiate it. So it was a very creative marketing campaign and it actually worked in some of the stores that we were working in.”

Meridian Kiosks’ Kent agreed that marketing is key. Far too many companies fail to see that a kiosk deployment is a major event for customers and should be advertised as such. He even suggested rolling out a sweepstakes when the kiosk is launched. For example, all customers who use the kiosk get their names thrown into a hat for the chance to win \$100 worth of groceries, or gas, or baseball caps or coupons. The prize actually isn’t all that important — just get them to use it.

“Advertise it! Market it!” Kent said. “Treat it as a new part of your store that you want people to go in. If you open up a new deli at your store, you’re obviously going to tell people about it. You’re obviously going to have people point folks to that deli in your store. It’s the same sort of thing with the kiosk. View it as an expansion of your store and do the appropriate marketing and sales around that.”

# Chapter 3

## Integration — out of the many, one

**T**o integrate or not to integrate, that is the question.

Anyone who's had to manage a large-scale kiosk deployment knows headaches will inevitably happen. No matter how well-designed a kiosk is, it still has to obey the laws of nature — specifically the second law of thermodynamics.

Entropy (that scientific concept that unfortunately demands that all matter must break down with age) also applies to self-service devices. Kiosks will malfunction, parts will need replaced, and if the kiosk dispenses a particular product, that product will have to be refilled on a regular basis. And, as all retailers know, customers become quickly dissatisfied when a device is out of order or malfunctioning. Two or more such experiences will likely drive the customer away, so it's in a deployer's best interest to take care of these malfunctions as quickly as possible.

But consider a nationwide deployment of 25,000 kiosks. How can one instantly be aware if a machine goes down? And when it does, how does a deployer fix it in a timely fashion?

### Introducing integration

A lot of companies ask such questions. They have an army of kiosks deployed throughout the country — the world, even — and they have to find a way to



*A kiosk network is a sort of closed web or communications grid that ties all a deployer's kiosks — even the ones on the other side of the planet — to a central location.*

remotely manage them. That's where an integrated network comes in.

But first, what exactly does the word “network” mean? A kiosk network is a sort of closed web or communications grid that ties all a deployer's kiosks — even the ones on the other side of the planet — to a central location. It enables seamless communication between the units and the kiosk administrator, and the power that it puts in the administrator's hands is a significant advantage.

Network communication can be facilitated in a number of ways. A network can be hard-wired through a series of cables, or they can operate via wireless technology. It may even be hosted online, in which case the administrator can

access his kiosks by logging on to the Internet through his laptop and entering a password.

But why use a network? What are the advantages of integration?

### Advantage #1: Risk reduction

There's nothing more annoying for customers than approaching a kiosk only to discover that it's malfunctioning.

Just ask Derek Fretheim, general manager for ULTIMedia USA.

"Take someone like Kodak, who doesn't network any of their picture-making kiosks," he said. "Quite frankly, it irritates the heck out of me when I see a Kodak picture kiosk that's been down for two weeks with an out-of-order sign on it. It's because they don't have a network. They don't know unless the store calls Kodak or a Kodak service technician is out at certain times."

A network can all but eliminate such difficulties. When properly configured, an integrated network can instantly alert the administrator and the appropriate service technicians of serious malfunctions that might occur on any of the integrated kiosks. Some networks even can enable administrators to repair certain software problems from an office without even having to send a technician to the site.

"The health of not only the software itself, but the hardware, is monitored re-

**When properly configured, an integrated network can instantly alert the administrator and the appropriate service technicians of serious malfunctions that might occur on any of the integrated kiosks.**

motely," said Karla Guarino, vice president of sales and business development at Livewire Kiosk Inc. "Let's say, for example, that a printer is running out of paper. Our software recognizes that and sends a notification alert to the network at the back end. This can be in the form of an e-mail or text message and serves to announce an issue with that particular kiosk. Most times, these alerts will hit before the people inside the store actually know that there is a problem."

Without such automatic notification, service technicians must rely on personnel within the retail store to alert them to kiosk malfunctions. Even more alarming, they may find out about problems through the worst means possible — disgruntled customers.

The truth is, the popularity of a kiosk hinges precariously on its reliability. The more reliable a machine is, the more likely customers are to use it. On the other hand, a blank screen can sound death bells for a kiosk's chances at success.

"If you roll out a pilot and you have down time or you have the perception of down time among the employees of the store

... they'll pass on the impression that the kiosk doesn't work, and your pilot is doomed to failure," Kent said. "Conversely, if you're able to be proactive about it, then people will see that it's usually up and running, that if it goes down it comes right back up and that this is going to be a really great thing. That, in some cases, can be make-or-break in terms of the project going forward."

### Advantage #2: Cost savings

As noted in previous chapters, the success of a kiosk deployment often is judged by the almighty dollar. As with any business endeavor, the primary goal should be to maximize revenue while minimizing cost.

A closely monitored network can help a deployer do just that. An automatic-alert function eliminates the need for routine on-site maintenance checks.

"You don't have somebody standing beside the kiosk to make sure everything is working or driving around from site to site, checking on things and making sure they work," said Chris Peter, project manager at St. Clair Interactive Communications, Inc.

Instead of constantly looking for the machines that are malfunctioning, service technicians can spend time responding only to the kiosks that are down, thereby executing better time management and shaving labor costs.



*With integrated remote management, service technicians spend time responding only to the kiosks that are down, resulting in better time management and decreased labor costs.*

By the same token, broken kiosks are expensive kiosks. It's best to get them up and running before more cash is wasted. "Every minute your kiosk is down is costing you money, so being informed of these problems immediately, as opposed to waiting three weeks until the next service technician gets there is a major cost saver and revenue generator," Peter added.

Integrated remote management is especially effective as a geographically dispersed kiosk network grows.

"One of our retail customers has (more than) 1,300 stores and up to five or six kiosks in each," Netkey CEO V. Miller Newton said. "They are able to monitor,

manage and update (more than) 7,000 devices running four to five different applications, all from a single PC.”

Newton said the customer recently downloaded an operating-system update to all the kiosk PCs on the network.

“Previously, it required sending a technician out to each store to manually install the software. It took weeks to complete the update,” Newton said. “Using the remote-management system, they were able to update the entire kiosk network in a matter of hours. How can you calculate the ROI of time and labor savings like that?”

### Advantage #3: Trend analysis

But perhaps the most overlooked advantage of having and integrated kiosk network is the ability to receive real-time updates about customer behavior. Which products or services on the kiosks are the most popular? Which hours of the day bring the most traffic to the kiosks? Do customers tend to use them more in the morning or the evening? Which promotions are most successful? Which on-screen ads capture customer attention most effectively? What are the trends? Networked kiosks can measure these insights by mining the information customers enter into them.

“It gives a strong picture of growth and maturity of products in the retail environment,” said Ron Bowers, senior vice

**Perhaps the most overlooked advantage of having and integrated kiosk network is the ability to receive real-time updates about customer behavior.**

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president of business development for Frank Mayer and Associates Inc. “It gives the retailers a strong identity of the success of different types of promotions for products at retail. It gives them good input as to the operations of their store makeup — what product mix they should have and what products are being used by the consumers.”

A network can glean this type of information from kiosks all over the world and report it back to the administrator. Retailers then can analyze the data and react accordingly, moving quickly to respond ahead of time to any inconsistent trends. Bowers said it’s just one more reason why retailers are integrating their kiosks into real-time networks.

“The networked — or integrated — kiosks are becoming more of a force than the freestanding kiosks of the past, which are slowly becoming more and more unusual,” he said.

# Chapter 4

## Avoiding the pitfalls

**T**he experts cited in this guide have close to a century of combined experience in the self-service field. They've witnessed a lot of successes — and a lot of failures. The mistakes are common, and first-time kiosk deployers typically stumble into at least a couple of them during a rollout, so here is some advice on how to avoid them.

### Pitfall #1: A bad location

When it comes to kiosk deployment, it's impossible to overestimate the importance of location — it is everything.

A good location can spell instant success, while a bad one can mean certain failure.

So how can a deployer distinguish a good location from a bad one? Ideally, a good location is in a high-traffic area. But the kiosk also should be in an area where customers have time to pause and use it without causing a traffic jam. Thus, the center of a shopping aisle — though highly traveled — isn't a great location. Lastly, the machine should be well within the customer's line of vision.

“Good locations can vary depending on the kiosk's application,” said Chris Peter, project manager at St. Clair Interactive Communications Inc. “In the giant stores, they are scattered storewide. There is one as soon as you walk in the door, as well as one in every department. You want things like the ends of



*The importance of kiosk location cannot be overemphasized. Hiding your kiosks in an area of the store that doesn't see a lot of foot traffic can mean certain failure.*

aisles and close by the products it's associated with.”

Livewire Kiosk's McCracken said kiosks that dispense coupons should be positioned near the items to which the coupons apply. He cites a kiosk that provides coupons for ski equipment as an example.

“If it's in a retail location — like The Sports Authority, you may dispense coupons for ski rental discounts, which

makes sense to have the kiosk located in the ski rental area,” McCracken said. “Or you can have it up front for people who simply want to come in and purchase ski equipment, with discount coupons for sponsored products.”

Sometimes, there can be no strategy. For whatever rhyme or reason, some locations work and others won't. Either way, Kent said, you can't simply plant a kiosk and hope it bears fruit. Smart deployers determine a kiosk's popularity using trial and error. A site analysis is an effective way to make this analysis.

“If you can, have a kiosk that doesn't need to be bolted down or can be quickly located in different spots so you can do some testing to see what works best,” he suggested. “There aren't any hard and fast rules to this. I don't know that there is any one right way to do it or any standard, so do some trial and error to see what works best in your environment with your client base.”

### **Pitfall #2: Underestimating security needs**

The average computer owner goes to great lengths to protect his machine, using virus protection, spyware detection, firewalls, passwords, system lockouts, spam blockers and privacy filters. So why would a retailer even consider deploying kiosks without the necessary software to block malicious consumers? Stephanie Kropkowski, director of mar-

keting and sales for KioWare, recalled one incident in which a retailer who purchased software from a competitor did just that.

“There is one high-end retailer that had a vending kiosk,” Kropkowski said. “They weren't using any kind of software that locked down the system, so users actually had the Internet Explorer window open and they could get into the file menu and browse into the menu and then trick the computer into thinking that they had purchased some of the high-end merchandise. They were able to get the high-end merchandise out of the kiosk without actually paying for it.”

In 2006, popular retailer T.J. Maxx suffered a major data breach when thieves managed to hack into one of the store's computers and install malicious software. That software compiled and stole more than 45 million customer records over a period of years, costing the company millions of dollars.

The earlier case study of the large Southeastern supermarket chain that uses kiosks in its stores for job applicant processing also provides a lesson in security.

“Those public-facing kiosks are linked to the company's HR system,” said Netkey's V. Miller Newton. “An unsecured kiosk could provide easy access to the network, other corporate applications and confidential data. Prior to selecting

## CHAPTER 4 Avoiding the pitfalls

Netkey as the solution provider, they gave our software to a computer security firm — essentially, professional hackers — to see if they could break through the secure application shell and access the underlying network. They gave up after days of trying. That’s how reliable and secure the software needs to be.” The moral of the story? Think of a kiosk as a mini-computer. If your kiosk software doesn’t include robust and proven security features, it’s time to invest in new software.

### Pitfall #3: Being a cheapskate

It’s important to do everything possible to minimize costs, but a healthy desire for profit sometimes can morph into a destructive propensity for skimping on critical aspects of a deployment. When a deployer starts taking shortcuts on quality, the success of the kiosk project is jeopardized.

“Even if you have the best logistics plan in the world, if you’re changing out your printer or your touchscreen or your PC or your credit card swipe — if you’re changing those out on every other machine across your pilot or your rollout, you’re losing money,” said Kevin Kent of Meridian Kiosks. “But a lot of times, if you pay the 5 percent or 10 percent more for a quality enclosure, a quality screen — all those different components

— and you think about the warranty aspect of what the manufacturers will cover, you’re going to be better positioned to realize the ROI, as opposed to it becoming a huge expense.”

In the end, the desire to save a few bucks can backfire, causing precious revenue to be lost.



*Paying a little extra for quality components can save money in the long run. Kiosks that constantly are in need of repair will negatively affect the deployer’s ROI.*

# Chapter 5

## The emergence of digital signage

**T**he average consumer already is well acquainted with digital signage, though he may not recognize it when he sees it. This emerging technology is transforming the advertising and marketing industries.

### Digital signage defined

Digital signage is a form of communication that utilizes video or graphic content on a flat-screen digital display — usually a plasma screen or liquid crystal display, or LCD. Digital screens are more compact, more lightweight and provide a much better image than do traditional televisions. The colors are vibrant, the motion dynamic and the picture sharp.

When it comes to capturing the attention of consumers, digital signage is rapidly developing as a viable communications option. The technology allows advertisers to catch audiences' attention in unexpected ways, delivering information with sight, sound and motion. The industry has seen steady growth, fueled by declining prices in flat-screen technology and advancements in wireless communications, said Steve Gurley, vice president of global marketing for Symon Communications.

“The last five years have played host to a revolution in the way people acquire information and interact with one another,” Gurley said. “The ubiquity of the Internet and the burgeoning adoption of multimedia wireless communications



*Plasma screens and liquid crystal displays (LCDs) are rapidly outperforming banners, posters and other printed marketing materials because of their ability to show full-motion video in a dynamic way.*

have given individuals unparalleled access to information — virtually anytime, anywhere — and have radically changed the way and pace in which people manage their lives.”

### Cutting through the clutter

Digital signage is more than just a pretty picture. As time goes on, it may be one of the only means left of reaching prospective customers.

It's no secret that the attention span of the typical consumer grows shorter with every generation. Movies are more action-packed. Newscasts are increasingly fast-paced. At the same time, consumers are growing fickle about the types of advertising to which they subject themselves.

## CHAPTER 5 The emergence of digital signage

Newspapers and magazines are downsizing or even shutting down completely in the wake of a significant drop in readership. Even television advertising is taking a major hit. The development of digital recording methods, such as TiVo, means viewers can automatically skip the commercials, potentially neutering any effect they might have.

Instead, consumers are making a bee-line for the Internet, Gurley said.

“Current trends clearly demonstrate that the general population has been abandoning traditional print media in favor of information delivered via the Internet and mobile technologies,” Gurley said.

“Text messaging, instant messaging and multimedia messaging have been replacing voice communications as a primary means of rapid, distance-based personal interaction — especially among the younger consumers. Both business professionals and consumers are now increasingly presenting concepts and information via video, as witnessed by the rise of YouTube and similar video-sharing sites and technologies.”

Children of the information age crave the empowerment that comes with the ability to cut through the clutter and look up their own answers. They want customized, relevant information, and they have little tolerance for random advertising that comes at them unbidden.

And that’s where digital signage comes in.

**“Current trends clearly demonstrate that the general population has been abandoning traditional print media in favor of information delivered via the Internet and mobile technologies.”**

— Steve Gurley, vice president of global marketing,  
Symon Communications

The content is brief, direct and to the point. It’s in the dynamic digital format with which today’s generation is most comfortable and, perhaps most importantly, it’s information that can be directed to them at the point of sale, when the content is most relevant.

### A digital marriage

So what does it all mean for a business operator? Retailers must do things differently to capture consumers’ attention, influence their behavior and keep them informed, Symon’s Gurley said.

“It means that retailers must communicate with their customers in ways that are ast, visible, highly graphical, up-to-date and to the point,” he said. “Digital signage is a medium that industry-leading companies are rapidly embracing to achieve these goals. This is why the adoption of digital signage is growing at a double-digit pace ... even in a down economy.”

Digital signage and self-service are closely related technologies and can complement each other in a number

## CHAPTER 5 The emergence of digital signage

of beneficial ways. Digital signage can point the way to a retailer's kiosks, thereby corralling customers and delivering them to the machines. On the other hand, kiosks can bring a level of interaction to digital displays that would not be feasible otherwise.

"We see digital signage as part of an overall store strategy," said St. Clair's Chris Peter. "Let's say there's a kiosk nearby and a customer looks at a certain product or a certain inquiry, then maybe we'll take over the digital signage and we'll run a promotional video with some audio or we'll pop up some nice high-resolution product shots of whatever it is the customer is looking at on the kiosk. It works in conjunction."

To demonstrate how digital signage can complement a kiosk, Peter cited an example of a self-service application his company provided for a paint store.

"It had three components: the digital signage application, the kiosk application and the associate application," he said. "So the customer will come in and — rather than having their paint chip and waiting in line and speaking with somebody and hoping that they get their order correct — they come up to the kiosk, they choose the type of paint and the quantity and then they get put into an order queue." Peter explained that a digital sign was positioned nearby so the waiting customers could keep track of their position in the queue.

"As associates are completing jobs, they update the status of the order queue on the signage," he added. "So not only is the customer not waiting in line for the paint, they're out shopping the store while they're waiting for the paint that they're going to buy at any case."

Ron Bowers of Frank Mayer Inc. said the key to marrying the two technologies is doing it in such a way that the customer doesn't know they're using two separate components.



*Digital signage and self-service are closely related technologies and can complement each other in a number of beneficial ways. Kiosks can bring a level of interaction to digital displays that would not be feasible otherwise.*

## CHAPTER 5 The emergence of digital signage

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“It is all part of a total package that, if it’s done correctly, should be a seamless operation,” he said. “It doesn’t look like the kiosk starts here and the digital signage starts there. It is all one integrated solution that seems seamless to the consumer.”

Ultimately, the technology to support interactive kiosks and digital signage will converge, according to industry experts.

“If you think about it, a kiosk that’s not being used is, in essence, a digital sign,” said V. Miller Newton, CEO of Netkey. “And we’re working with customers now on large-format screens that have interactive touch capabilities. But it’s

important to remember that the software to run a digital signage network needs to have features and functions that support the unique requirements of that channel — things like advertising inventory, playlist creation and campaign management and proof-of-performance reporting.”

Newton added that Netkey recently acquired a digital signage company and will offer “best-in-class” software for digital signs as well as kiosks.

“Eventually, you’ll be able to buy one software platform from a company like Netkey that will support both channels with all the required functionality,” he said.

# Chapter 6

## A few words about ROI

**S**unk costs — they're the dreaded words that no experienced businessman wants to hear.

Yet sunk cost is exactly what a retailer gets when he deploys a kiosk with no regard for its potential return on investment, or ROI. When a company's management makes the decision to launch a kiosk rollout, the goal should be to maximize revenue while minimizing cost.

If a kiosk project fails to make sufficient revenue or — worse yet — actually loses money, all the funds that went toward that project are gone forever.

That said, it helps to have a firm understanding of exactly what ROI is and how to calculate it.

### Tangible and intangible revenues

The most obvious type of ROI consists of the tangible returns that come from a transactional kiosk. These kiosks represent a point of sale. They typically come equipped with a cash acceptor or a device that enables the user to swipe their debit or credit cards.

Tangible revenue is easy to measure: It's simply the total amount of sales that took place at the kiosk.

"If you're selling tickets through a kiosk, well, that's pretty straightforward. You can see it right away," Meridian Kiosks' Kent said. "If it's transactional, as long

**"As long as you build your systems the right way and integrate the data, you should be able to know on a moment-by-moment basis what your ROI is and when it's increasing and decreasing."**

— Kevin Kent, vice president of business development,  
Meridian Kiosks

as you build your systems the right way and integrate the data, you should be able to know on a moment-by-moment basis what your ROI is and when it's increasing and decreasing."

But what about devices that don't represent a point of sale, such as informational kiosks? Such kiosks might be used by customers at large superstores to look up which aisle contains a particular brand of microwave popcorn. No cash is accepted, and no transaction takes place. At first glance, there's no tangible revenue.

But dig a little deeper. Could it just be that the revenue is difficult to identify? Easy-to-find products, like that microwave popcorn the customer just looked up, have a much greater chance of being purchased. Hard-to-find products rot on the shelves. If a kiosk brings an added level of convenience to the customers' shopping experience, they'll be much more likely to buy that box of popcorn. They'll remember the convenience and will want to visit that store again. That translates into increased

## CHAPTER 6 A few words about ROI

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sales, even if those sales don't necessarily take place at the kiosk itself.

Transactional kiosks, too, can have added intangible benefits. Livewire's McCracken gave the example of a self-service device that dispenses ski-lift tickets in grocery stores.

"One of the benefits of lift ticket kiosks is that they reduce the pressure on lines at the actual ski resorts," McCracken said. "Many times people will be waiting in line to purchase a lift ticket for 20 minutes or half an hour on a very busy day. But if you stop at a store and just pick up your lift ticket on the way and go right to the lift, you're reducing the cost to the resort, and you're improving customer satisfaction. Customer satisfaction is the hardest type of ROI factor to try to quantify."

The bottom line is that it's essential to quantify the intangible to effectively measure ROI. McCracken stressed that it's not as hard as it sounds. It may just

mean measuring overall product.

"Perhaps you have to look at basket size since the kiosk project was implemented, or average orders since the kiosk project was implemented — the number of sales or transactions of certain products," he said.

"We think it's critically important that you measure consumer expectations and consumer experience — the positive reactions, the amount of repeat sales from loyal customers who come into stores that have the kiosks," Bowers, of Frank Mayer Associates Inc., added. "How can you manage and create the type of experiences where consumers are coming back on a regular basis because their expectations have been met on a regular basis?"

If a retailer can discover the extent to which a kiosk project contributes to loyalty and repeat business, he will have a handle on measuring and enhancing that kiosk's ROI.

# Conclusion

## First steps into the future

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**W**hether it's providing custom-made DVDs, high-school basketball tickets, automated bill-payment opportunities or simply directions to the men's suits department, kiosks bring tremendous opportunities to the world of retail and can greatly improve the customer experience. They provide convenience, interaction and focused information that enlightens the customer.

Just as importantly, kiosks can be a godsend for the retailer. As is evident with self-checkout applications in grocery stores, self-service tends to curb the time spent in lines. Labor costs are trimmed. Employees are transformed from salespeople into consultants —

consequently, they're able to avoid mundane tasks and concentrate more on the activities related to their actual job description.

Customer satisfaction increases, and consequently, sales improve.

Much has happened in the past 20 years. The self-service industry has come a long way from snack machines and soda dispensers. It's become a new way of doing business — a means of empowering the consumer and liberating the retailer. New applications are being discovered every day, and we're only on the verge of knowing the extent of its abilities. What can it do for your business?

### Nine tips for a user-friendly interface

By Travis K. Kircher  
Contributing editor

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The globe is covered with three types of people — those who are willing to use self-service technology, those who aren't, and the undecided consumers. Undecideds view kiosk technology with an air of skepticism, but aren't quite willing to discount the idea of walking up to a mechanical box and swiping a credit card.

At a time when most political analysts are debating how to sway undecideds in a presidential election, several experts in the self-service industry spoke with SelfService.org about designing user interfaces that draw — rather than repel — the uninitiated to a kiosk display. They shared the following tips:

#### Keep text and button sizes large

People don't like to squint, but that's exactly what happens when they're confronted with tiny buttons and hard-to-read text. One rule of thumb: The smaller the buttons, the more complicated and unusable the consumer will perceive the kiosk to be.

"It's interesting that you should say 'rule of thumb,' because that's exactly what

we use," said Cam Stewart, director of Phosphor Essence Ltd., a kiosk software provider based in Auckland, New Zealand. "I have quite big fingers, so when I design something for a touchscreen, I actually use my thumb. If I can use it with my thumb, I reckon everybody will be able to use it."

Experts agree that there's no hard-and-fast rule about exactly how large the button has to be, but it should be "finger friendly."

"You can't even say that it has to be 'x' millimeters," said Francie Mendelsohn, president and founder of Summit Research Associates. "It's one of those things where you'll know it when you see it."

Bob Ventresca, director of marketing for Netkey, agreed that bigger is better.

"The larger the button, the more impactful the image that really helps somebody understand that this is what you need to do to move on to the next step," he said.

#### Space buttons out

Mendelsohn says she recently examined voting machines in West Virginia where users were asked to press a button next to the name of the presidential candidate for whom they wanted to vote. The problem was that the buttons were so close together that users had trouble understanding who they were choosing.

“It was appallingly close,” she said. “There was almost no space between one button and the next. There was plenty of room on the page, because you’ve only got five candidates, so it’s not like you’ve got to cram everything in there.”

Mendelsohn says she witnessed an elderly man become extremely frustrated because every time he attempted to push the button to vote for one candidate, it would register a vote for the candidate on the opposing ticket. The moral of the story: Use good judgment when spacing buttons on the touchscreen.

### **Make the ‘sweet spot’ larger than the button**

When kiosk designers refer to a ‘sweet spot,’ they’re speaking of the area in or around a button on a touchscreen that will react to human touch. Mendelsohn said that — as long as there is ample space between buttons — it’s a smart idea to make the sweet spot slightly larger than the button to accommodate users who may have a hard time hitting the exact area of the touchscreen.

“The button may appear to be the size of an M&M, but if the area around the button is active also, you can touch on the edge or just beyond the edge of the button and you’ll still activate it,” Mendelsohn said.

At Netkey, there are engineers whose only job is to test the kiosk user interface for usability and functionality.

### **One choice at a time, please**

The user interface should appear as simple as possible. Stewart says it’s better to have a dozen screens containing one choice each, rather than one or two screens chock full of questions and buttons.

“The older generation certainly gets very quickly turned off by a large amount of choice and a big number of buttons on a screen, especially on a touchscreen,” Stewart said.

### **Keep the easy decisions at the beginning**

In order to keep the interactive process as unintimidating as possible, difficult or complicated questions should be saved for the end. If the first thing the user sees is a question he doesn’t know how to complete, he probably won’t even begin the interactive process. On the other hand, consumers who already have completed 95 percent of the process have too much invested to abandon the kiosk when they see a relatively difficult procedure near the end.

“We try to lead people into it,” Stewart said. “We do a system of what we call decision trees. We try and keep those decisions at the front end extremely simple like ‘left or right’ or ‘one or two.’ That actually gives people the confidence so they can read one question and answer ‘yes or no’ or whatever the

option is. Then you've already got them engaged."

### Minimize the amount of text

When it comes to the amount of text on a screen, experts agree that the fewer words, the more likely the user is to engage the kiosk.

"Short and concise is better," Stewart said. "We tend to be pretty brutal about the language that we use."

Mendelsohn said that kiosk screens that are mounted vertically, as opposed to horizontally, can get away with more text because it's more pleasing to the eye. At the same time, she said typical consumers — as a general rule — are less willing to plow through text than they were a decade ago.

"People just don't read," she said. "They want that instant gratification. They want to be able to just drill down immediately to whatever it is that they're going to be doing at the kiosk."

### Give the interface a mechanical feel

It may only be a digital representation of a button, but Stewart says the consumer wants to think they're pushing a 'real,' physical button. To give them that perception, buttons should have an 'up' and 'down' state — when they're down, they might visibly sink into a socket.

When they're up, they might cast a slight shadow. The same goes for any type of control device on a digital touchscreen.

"You can't give a tactile response on a touchscreen, but you can give the visual representation of a tactile response, and we think that's really important," he said.

Mendelsohn, who coined this concept visual feedback, said it assures the user that they're actually completing a task and that the kiosk is functioning properly.

### Be declarative: Tell, don't ask

When it comes to voice or text prompts, Stewart said it pays for kiosks to be straightforward. Be declarative about what the user should do to engage in the process. If he needs to push a button, say, "Please push the button next to your preferred choice." Don't ask, "Would you like to push the button next to your preferred choice?"

"People want these to be command-driven, so you need to tell them what to do, not ask them if they would like to touch one of these options," Stewart said.

### Sound can be your friend — or your enemy

All the experts agreed that, when it comes to incorporating sound into the user interface, deployers should proceed with caution. On the one hand,

some sound can be a necessary ingredient for assuring the user that they're moving through the process correctly.

“From a user interface standpoint, having the ability to put things like clicks or beeps or some other type of mechanism to validate that, yes, you've touched that button and it's going to move on to the next activity, can be very helpful,” Ventresca said.

Conversely, having too much sound — especially too much repetitive sound — can become an annoyance to employees at the deployment location.

“If that loop repeats itself over and over and over, people who work nearby — it's like water torture for them,” Mendelsohn said. “That's when kiosks get vandalized. By vandalized, I don't mean they take an axe to it, but they'll come when nobody is looking and they'll pull the plug.”

## New self-checkout options

By Kevin Kerfoot  
Contributing editor

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Grocery self-checkout systems please consumers by providing the ability to manage purchases and control the experience quickly, but some shoppers still prefer cashier-supported systems for scanning, bag packing or taking payment.

Retailers like the systems because they are reliable, cost-effective and user-friendly — benefits that, for many, outweigh the deployment expense.

Several New self-checkout systems now combine the best of full- and self-service options.

### Fujitsu U-scan Genesis

Fujitsu Transaction Solutions recently added cashier support to its Hypermarket U-Scan Genesis Payment Station. The concept joins the payment station with the company's iPad handheld mobile computer and any standard check-out conveyor belt.

This capability allows customers to unload items from their carts onto the cashier-operated conveyor. The cashier then scans items using an iPad or an inte-

grated Metrologic scanner/scale, and the items are passed to a collection area for bagging. The customer tenders payment at the payment station. Highlights of the payment station include three levels of security against theft and human error: overhead video cameras, a bagging station with weigh scale, and an attendant.

Company sources said the move to add a cashier support option was fueled by customer demand.

“This really was a customer-driven solution coming from one of our larger European customers who wanted a large basket solution that could move customers forward faster,” said Paul Burel, U-Scan marketing manager for Fujitsu Transaction Solutions. “They already had U-Scan lanes and wanted to find a way to use automation to improve customer service via reducing queues at their staffed registers.”

By splitting transactions into two steps — itemization and tendering — customers are pulled forward in the queue 40 percent to 50 percent faster and spend less time waiting in line.

Cashiers can focus exclusively on the customer and their items. The payment process takes place at a separate payment station, so there is never an issue with cashier balancing, till counting, or till audits.

“When customers unload their cart onto

the belt, they can then move forward to the payment station,” Burel said. “Since the customer moves down beyond the end of the belt to begin bagging, the space is free for the next customer. In addition, the customer can tender while the cashier bags the customer’s items, overlapping tasks and times to shorten the overall transaction time.”

### **Pan Oston Utopia**

Pan Oston has developed the Utopia self-service checkout solution with a cashier-assist option to offer the desired services for all stages of efficient self-checkout implementation.

The Utopia Hybrid Technology Unit is a cashier-assisted checkout system that also transforms into a regular self-checkout option. The unit allows all lanes to be open all the time and offers self-checkout integration into an existing lane configuration. Other high points include low capital expenditure and integration into existing store layout without impacting established merchandising or store décor.

Utopia’s features include soft programming, delayed mediation, VPN access and biometric security. It also includes a banknote recycler, which combines the functions of a traditional bill acceptor and dispenser in one device.

### **NCR FastLane**

NCR Corp. has also added a cashier-

supported option. FastLane systems combine barcode scanning and cashier assistance. The system also offers a variety of unload and bagging options to accommodate any retail environment including a one, two or three-and-a-half bag station or a take-away belt with a collection area.

“An attendant-mode option allows the cashier to scan items, provide intervention immediately for restricted items and complete the transaction at the self-checkout,” said Carrie Smola, FastLane product marketing manager. “This feature can also allow the consumer to tender the transaction after the cashier completes scanning.”

Smola says this feature was requested by retailers to help increase their front-end throughput during peak periods and is currently featured as a software option on all current NCR FastLane configurations.

### **Wincor Nixdorf iCASH**

Wincor Nixdorf International has added a cash-and-coin recycling solution called iCASH to its product line.

“It can be cashier-facing and assist with transactions with self-service features, or it can be totally customer-facing where the cashier never touches cash, or it can be a combination of both,” said Chad Wagner, Wincor Nixdorf’s director of marketing.

## APPENDIX Related articles from Kiosk Marketplace

The iCASH 15 is a closed-coin recycling system with attended self-service in-payments and out-payments. It features automatic coin handling instead of a cash drawer. The iCASH 10 features automatic note handling at the point of sale, and the iCASH 50 and iCASH 100 are both closed-note recycling systems at the point of sale or cash office. With cash recycling, cash that is deposited in a POS system can be made available for dispensing after it has been authenticated by the system. This drastically reduces expenses associated with counting, sorting and transporting cash, and stores are able to cut the volume of change held in storage, thereby reducing waiting times at the checkout, and providing greater customer satisfaction and considerable operational savings.

“With iCASH cash solutions, a customer can enter coins and notes without a cashier touching the money,” said Mark Vanvoorden, vice president of Wincor Nixdorf USA’s retail division. “The cashier doesn’t have to go to the back office to count money, but can drop the money into a machine and in seconds will see how much money has been entered into the iCASH machine, which saves a lot of time and frustration.”

The system has been deployed in Europe in the last few years and in April 2008 it was officially introduced to the U.S. market.

Not everyone is sure about how this

technology is changing the role of the cashier. Vanvoorden pointed out a successful pilot project Wincor has with a large c-store industry leader — Wincor’s Shell convenience stores in Germany — that is using iCASH. Customers can insert coins as part of their transaction and receive coin change directly to them with the cashier handling only the note part of the transaction.

“We have connected each store with a POS system and an iCASH 15-coin recycler and iCASH 50-note recycler,” Vanvoorden said. “The customer pays for gasoline and buys some other items, scans the items and is told the amount to pay. The customer enters payment notes into the recycler and is automatically accepted and verified because he is using real money. The cashier creates a higher customer satisfaction by providing better customer service and is also able to sell and promote more, and shrinkage is eliminated to the maximum because everything is driven via the machine.”

Fujitsu’s Burel offered up a few points about the changing role of the cashier as well.

“There are now so many metrics, reports, write-ups, complex processes and stress in the cashiering job that it’s really a pressure cooker of a job,” he said. “At the end of the day, they do more than their share of the ‘heavy lifting’ in retail. On the other side of the counter, that

‘personal interaction’ may be far less valued than it once was.”

In recent years, studies have pointed out that customers simply want to get out of the store and if automation is the faster path, so be it.

“Cashier friendliness is still a primary-customer service metric, but it’s not at the top of the list,” Burel said. “Speed of checkout and accuracy are interchangeably ranked No. 1 and No. 2 in most studies. Basically, time has literally become a form of currency and customers are telling us that they expect us to be more cognizant and respectful of their time, or they’ll shop somewhere else.”

## Bill-pay deployments increase

By Kevin Kerfoot  
Contributing editor

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TIO Networks Corp. recently surpassed the \$1 billion mark for total value of processed payments. The company's CEO, Hamed Shahbazi, says the milestone reflects growing consumer interest in real-time bill-payment.

"The reality is that there is a real need out there for fast posting transactions," he said.

A number of factors are at play, but the downturn in the U.S. economy is the primary culprit. In fact, several of states where TIO has a presence have shown that utility shutoffs are significantly higher this year than last year. Gas prices, the credit crisis and the housing meltdown have all have all played a role in pushing consumers toward more expedited paying channels — they are holding on to their money as long as they possibly can.

Since spring 2002, TIO has processed approximately 14.5 million transactions and has a presence in more than 3,600 retail locations, mainly in the United States. The company also owns the

largest national network of cash-accepting ATMs for bill payment and prepaid services and just saw its 10,000th location activation, which more than tripled its bill-pay network. And TIO recently placed its 6,000th OEM Express location and launched its NEXXO Financial Money Transfer Program at more than 80 kiosks in four U.S. markets.

That's good news for deployers of bill-payment kiosks, which allow consumers to make real-time payments, said Francie Mendelsohn, president and founder of Summit Research Associates, an international consulting firm devoted to kiosks.

"For millions of people, bill-pay is a great way to get those bills paid on time," Mendelsohn said.

Everybody wins because of the potential additional revenue the retailer can generate from aggregated bill-pay, she said.

"With a lot of stores, once you're in there and pay the bill, you often will purchase other items, so there's incremental revenue that can be generated at that location," Mendelsohn said. "There's also revenue generated by the companies that put it in, and it provides a true service for the customer — especially those nearly 40 million unbanked."

The challenge, said Source Technologies' vice president of strategic develop-

## APPENDIX Related articles from Kiosk Marketplace

ment, Bill Lynch, is to place bill-payment kiosks in markets where the demand for aggregated bill-pay is great.

“The challenge is to put the kiosk out there and get enough market demand and get people to remember that they can go in to SuperAmerica to pay their bill,” Lynch said. “Then the challenge is convincing corporate, regional and store managers and employees that there is a bill-payment device in the store, so if someone comes in to ask about bill-payment, they will be pointed toward the machine.”

Even TIO is feeling a bit of the retail pinch.

While the company’s transactions climbed during the third quarter of 2008 — up 27 percent from last year — revenue and profit were down, falling three percent and nine percent, respectively. The weak U.S. dollar, whose value is down 14 percent from last year, is to blame, Shahbazi says. The company is working to cut expenses and deliver growth in locations and transactions.

“You’re going to see TIO continue to position itself as a high-value processor,” Shahbazi said. “You will also start to see TIO’s bill-pay capabilities be leveraged for Web payments. We think that we can leverage those billing relationships way beyond self-service.”

### Immediate benefits

For Source Technologies, a Charlotte,

N.C.-based provider of integrated solutions for financial and informational transactions, aggregated, self-service bill-pay is big business.

Verizon, Alltel, Sprint, AT&T, Singular and T-Mobile all have self-service kiosks in the majority of their stores, and Lynch said the No. 1 reason people walk into a wireless store today is to pay a bill.

“What that kiosk has done for them is take a competitive administrative task off the staff of the office and push it onto a device,” Lynch said.

Lynch said self-service bill-payment is most popular in the wireless industry, and in the wireless/cell-phone top-up business, where users walk up to a kiosk and pay for additional minutes. The service is getting great acceptance in Europe. In the United States, adoption has been relatively slow, but with economic changes influencing every aspect of consumer buying patterns, self-service bill-pay adoptions are expected to see an uptick.

“Where I see the potential in that marketplace is at the Wal-Marts of the world,” Lynch said. “You have enough foot traffic coming in to a store, and you could get to a level where you have enough demand for that product just by walk-in traffic.”

Getting all of the payment options on one platform is key, Shahbazi said. And

as the economy continues to tighten, the types of transactions consumers will perform at self-service devices are expected to grow.

“You’ve got different people that do bill-pay and different people that do money transfers and different people that do wireless top-up,” he said. “One of the special things we’ve done is bring those functions together on one platform. That’s one of the things that has helped us be successful.”

### Slow adoption rates

Despite the continued growth and success bill-pay companies enjoy, the adoption pace has slowed.

“What we’re faced with in the U.S. is business factors and cultural factors that are prohibiting areas,” Lynch said. “And until those get addressed and either the cost of the hardware or software gets down to a low enough level that you can live with smaller transactions or the vol-

ume of transactions increases to a level that it can sustain that equipment, you’re going to have a slow adoption rate.”

Shahbazi agreed, but also is optimistic about the technologies future.

“Every marketplace can be explained in the context of an S curve and I think that what you’re seeing is that we’re getting to the steep part of the curve as it relates to kiosk bill-pay,” Shahbazi said. “I think there’s been a lot of time and effort put into kiosk bill-pay, but I think it’s really starting to emerge. I think that retailers want it. The only way to really break through this is to evolve the industry from a one-trick pony dispensing cash and getting paid in convenience fees and interchange to doing more — whether that be money transfer or bill-pay or wireless top-up or advertising. There’s no doubt that most of the real viable opportunities to break through and add new revenue streams have something to do with innovating and adding new functionality.”