

The Case for Mobile POS Terminals

By Lindsey Danis

This year, 35 percent of restaurant operators plan to implement mobile (often called "handheld") POS terminals, according to the 2022 POS Software Trends Report published by Hospitality Technology, self-described as a "media and predictive intelligence resource exclusively dedicated to helping both hotel and restaurant operators better employ technology to improve the performance of their businesses."

Approximately half of the respondents in its report indicated they plan to add new mobility functionalities or modules to their existing POS, while 32 percent of respondents indicated they will switch to a new POS vendor. The data shows increased interest in rethinking not only the POS, but the role of the server and the workflow of the restaurant. According to the 2022 RestaurantOwner.com Member POS Survey, 32% of respondents indicated their POS system has portable ordering/pay-at-the-table capabilities, but they do not use it. Eighteen percent of respondents indicated their POS system does not have these capabilities and they desire them.

Clearly, operators are not walking in lock-step on this issue. Nevertheless, for reasons explained in this article, independent operators are continually warming up to portable ordering/pay-at-the-table POS terminals in their concepts.

Handheld POS Adoption by the Numbers

The latest data on POS software shows increased interest in going mobile when it comes to order and pay technology. While it seems that many operators are making the switch now, the industry's shift to handheld technology has gradually emerged over time. Sherri Kimes, emeritus professor of operations management at the Cornell University School of Hotel Administration and Joel E. Collier, professor of marketing at Mississippi State University, surveyed 385 restaurant operators in 2013, in a research project partnered with the National Restaurant Association.

Only one-eighth of respondents had implemented "customer facing" payment technology, a category that includes handheld POS devices. Forty-seven percent of respondents said they were thinking of implementing the technology in the next 2 years. Respondents preferred the portable credit card reader, followed by tablets, with self-payment devices the consumer could operate coming in as a distant third choice. This last choice found greater favor among the chains than the independents.

The operators who responded to the 2013 survey believed the benefits these technologies included:

- Happier customers
- Lower wait times
- Faster pace of service
- More secure payments
- Reduced transaction fees

Kimes and Collier noted that independent restaurants were particularly attracted to the idea of reducing credit card transaction fees by changing the way they were processed. Operators of full-service restaurants were excited by the potential to turn more tables and save on labor costs.

Barriers to Adoption, Then and Now

If operators understood the advantages of this technology back in 2013, why does it seem that so many are only now getting around to implementation? There is the cost of adoption, which includes hardware and software integration. Many operators didn't feel the benefits of switching outweighed the financial cost of doing so. At the time, the industry hadn't consolidated to the point where there were leading vendors. Few operators wanted to invest in a new technology that might not last.

Technology aside, operators were concerned about how customers would feel when orders and payment happened tableside. Would a tablet be an unwelcome wheel in the interaction between guests and servers? Would it seem rude or distracting? These factors likely prevented widespread adoption of customer-payment technologies in the 2010s.

Much has changed since then. Chip-enabled credit cards are the norm, and consumers are used to conveniences like tap-to-pay, digital wallets, online and third-party delivery. Customer expectations of greater self-service are pushing restaurants to adapt. Fifty-eight percent of survey respondents in Kimes's study mentioned guest self-service expectations as a factor in the adoption of mobile POS. Restaurants who've made the switch report a range of positive results similar to those mentioned in the 2013 research.



“Are hand-held POS terminals right for your restaurant? Even fine-dining front-of-the-house operations are making the switch, in spite of the challenges related to server hesitancy and negative guest perception. It appears the upsides of this technology outweigh the objections.”

While operators who've switched to a handheld POS system report greater efficiency and happier customers, objections persist. Aesthetics, uncertainty over employee reception, and a changing guest experience top the list of current operator concerns when thinking about handheld POS adoption.

Kimes and Collier reviewed customer perceptions of self-service technologies in a 2015 paper published in MIT Sloan Management Review. There, they cautioned business operators to be prepared for technology anxiety and to be ready to assist when needed.

"Managers saw little need for employee assistance, underestimated the importance of convenience, and ultimately undervalued the speed of transaction. These three areas have a tremendous impact on the implementation of self-service technology and might explain why some self-service applications have received a lukewarm reception," Kimes and Collier wrote.



Not a Slam Dunk

Toby Malbec, managing director of ConStrata Technology Consulting, believes the biggest barrier to adoption by restaurants is the need to change their business model to incorporate the new technology. And many operators haven't thought ahead. "They think it's 'gonna be a slam dunk, I'm gonna go from my existing order at table, pay at table and won't it be easy?' They haven't thought through the business side of it, so it's hard for the technology to support it," he

When orders are input in front of the customer rather than at the terminal, the server now has to balance conversational ordering with correct menu item input, which is more difficult than it seems for two key reasons.

First, handheld devices often have smaller screens and buttons than POS terminals. While younger generations are digital natives, more adept at new tech, an older staff may have trouble with the switch from stationary to handheld POS terminals, he suggests. Factor in the smaller screen size, smaller buttons and navigation issues, and the smaller screens can cause typos, errors and delays in the ordering process.

Second, when errors are made, they're often harder to correct. A server writing in a notepad can scratch out corrections or note substitutions. That process is more difficult when using a handheld device, particularly for those customers who order in a stream-of-consciousness flow.

"If I'm standing there with a handheld, I've got to follow their train of thought and answer all these questions," Malbec explains. The bigger or more complex a concept's menu, the more challenging this becomes. For this reason, handhelds tend to be easier at simpler concepts, such as brewpubs or burger bars, than at full-service restaurants with large menus. "Beer and wings are easier than a full course meal with modifiers," Malbec notes.

Another key difference is that now a server can't ask a buddy how to ring in a modification if they're unsure. They've got to figure it out on the floor, on their own. Without the right forethought and training, the new technology can be a deterrent to service.

The bigger question, Malbec believes, is how the new technology changes the role of the server. Theoretically, a server with a handheld POS never needs to leave the floor because everything is input on the handheld device. Restaurants need to decide if they want servers to run drinks, soups, and other light items, or if they need to use a runner for that. While there are advantages to keeping servers on the floor, the role change means servers won't have the little moments of downtime they've come to expect. If runners bring all the food, there's no more taking breaks in the back or grabbing a quick snack while out of sight of guests. The new technology plus fewer small breaks may add stress to a server's role.



Handheld POS devices have benefits, but they aren't a magic bullet. There are times when it just doesn't make sense to adopt this technology. For shoebox restaurants where the terminal is very close to tables, implementing mobile POS systems might be solving a non-problem, Malbec suggests. He encourages operators to think about whether this technology makes sense for their concept and whether staff are willing to accept changing technologies before making a change to the flow of service.

For concepts that want to move to handheld, Malbec strongly recommends upgrading the wireless and adding repeaters on the dining floor to prevent the server from losing connection to Wi-Fi and bringing service to a halt. For operators considering the order and pay-at-table approach, Malbec warns that tipping is awkward when the server is standing there while the guest assigns a tip. "There has to be a process to handle that tip elegantly and professionally," he says. To reduce awkwardness, he recommends servers say something subtle like "if you wouldn't mind completing this and adding any additional charges" and pre-emptively tip the server while the customer finishes the transaction.

'The Machine Can Do a Better Job'

Shawn Walchef, owner of Cali Comfort BBQ and host of the Digital Hospitality and Restaurant Influencers podcasts, recalls the questions other operators ask him about adopting handheld POS terminals. "So much of it is fear. Fear that people aren't going to like us or want to buy from us because they don't know how to use it," he summarizes. Walchef compares self-ordering technology to self-check-in technology at the airport.

Travelers are reluctant to use the kiosks to check in because they want to check their bags and make sure the whole family sits together. They prefer to visit a desk agent, when the agent is using the same software the self-ordering kiosk offers.

"The machine can actually do a better job," Walchef says. He mentions the mobile-only Super Bowl ticket sales and says, "The world went digital at the largest volume places, yet we're scared in our small restaurants that people don't know how to use their phones."

Walchef adds operators who are nervous about upgrading technology often come back to him after making the switch and say, "It was great. I don't know what I was worried about."

Indeed, data indicates that most customers are interested in self-service options and value the benefits promised by handheld POS terminals. Operators who understand the obstacles and plan for them can enjoy a successful implementation and realize the benefits, less a few growing pains of adaptation.

Server Adoption

Matthew Bettinger is the owner-operator of Hank's Downtown Dive and SideBar, a cocktail bar, in Cary, North Carolina. Bettinger has used handheld POS at the restaurant since it opened one-and-a-half years ago. He doesn't use them at the bar since the flow of service is different, and he didn't want to make

Bettinger knew he wanted to use handhelds at the restaurant, so he designed the flow of service with this in mind. Going into it, he says, "my biggest question was whether servers would adopt it. Would they accept and integrate it or would it be an uphill battle?" He hears the question less these days as handheld devices become more common but notes that it is a top concern for operators.

While he was worried, Bettinger says the training process was "fluid." "We were able to put a terminal in everyone's hand or show them the terminal while watched," he says. In Bettinger's experience, "everyone seems to adapt to it pretty quickly if you don't give them an option." If servers have both a notepad and a handheld, they'll do things the way they've always been done. If servers are given a hand-held and no backup option, they'll figure it out."

While handhelds are touted as a way to reduce errors in ordering, they can lead to scenarios where an order needs to be edited after it's rung in. "We have encouraged our servers to slow down a bit," Bettinger says. "We encourage them to echo the order back to the guest and confirm everything is right before sending." These extra steps limit the number of corrections, he notes.

Why Operators are Going Mobile

When operators think through the necessary changes to the service model, Malbec believes that handheld POS terminals "can make for a very efficient way to provide service." The promise of handheld – happier customers and faster turnover creating more revenue for restaurants – is the same as it was in 2013. Let's look at ways the technology creates positive guest experiences and more profitable restaurants.

As Malbec mentioned, servers can spend more time on the floor when they use handhelds. Servers, who Malbec calls "your best ambassadors," circulate through the restaurant, make small talk, and create that warm welcome that turns guests into regulars.

While the ordering process can be clunky using handhelds, Malbec says "the servers that do it well can blend it into their shtick and it can be almost seamless." In some cases, the new technology provides additional information about menu items, from calorie counts to ingredients or allergens. This can alleviate the need to run back to the kitchen to double-check an ingredient. It encourages faster service and satisfied guests. Guests appreciate it, they appreciate the faster service, and they feel well taken care of.

Despite the learning curve, handhelds reduce the gap between when orders are taken by the server and received by the kitchen. This reduces delays in service, maintains guest satisfaction, and helps turn tables faster, all variables that increase profitability over time.

Bettinger finds that handhelds save time, reduce mistakes, and give servers more ownership over their guests as a whole. While he was initially concerned over staff adoption of the devices, it ultimately wasn't as rough as he feared. He admits that he didn't give his servers a choice about it, which helped. He says it usually only takes a few services with the handheld for someone to ac "Once somebody goes through a busy service of using the handheld, they're pretty much a convert," he adds.



Bettinger believes that the pandemic helped get customers used to cashless transactions and alternative ways of processing payment. He says the guest reaction has been "neutral" and "seamless." He hasn't received any negative feedback about the handheld terminals. Another veteran operator first encountered handheld terminals while traveling in Europe, where they're relatively common. He found them "a bit impersonal" that first time, but has since come to appreciate the ability to pay without losing sight of his credit card.

While Hank's Downtown Dive has two stationary terminals, Bettinger has been able to cut down on the number of screens in view of the dining room. He thinks guests appreciate the fact that they don't have "glowing orbs of terminals sitting in the dining room."

Walchef's restaurant Cali Comfort BBQ uses Toast Order & Pay for a self-service model. Servers are still on the floor, and they carry handhelds. Walchef de young staff as "digital natives", used to a technology-first approach, so there were no issues with adoption. Walchef says the self-service model has resulted in "double-digit" fewer errors in orders, and compares the traditional ordering model to the game Telephone.

When a guest orders for themselves, they get what they want. When a server types in the order, they might forget to mention swaps or allergens. Fixing mistakes doesn't just cost operators ingredients, it costs time and can alter the pace of service on a busy night.

"Efficiency is the most important thing," Walchef says. He is a big believer in the self-service model because it allows guests to place drink orders when they're at the bar, put in their food order when they're ready to eat and – perhaps most importantly – pay when they are ready to pay, rather than wait to catch the eye of a server.

Walchef admits that sometimes guests will react negatively to this because it goes against the traditional expectations of hospitality. But he believes it's a matter of time before a complaining guest is at a restaurant that uses the traditional model, isn't getting prompt service, and wishes that he had the self-service option. Just like there can be a learning curve with staff getting used to handhelds, there can be a learning curve for customers. Not making the change to a self-service model isn't doing anyone any favors.

Convenience and Table Turns

Data and operator anecdotes support the fact that guests by and large enjoy the convenience. When payments are processed tableside, a guest's credit card leaves their side. There's no worry about unauthorized charges or skimming. The guest doesn't need to wait for the server to process the payment and bring them the card. The table turns over faster and the guest gets back the most precious commodity – time.

"It's vital that restaurant operators understand that technology is everywhere and technology doesn't mean you lose hospitality. By investing in learning a new technology and bringing technology to your restaurant you're empowering not only your guest but your community," says Walchef.

Security Issues with Mobile POS System Terminals

In the past several years, handheld terminals have been the target of tech-savvy thieves who have stolen and used them for unauthorized and costly transactions. You are wise to maintain a close watch on your terminals and secure them when not in use. Even if the system has security features to prevent unauthorized transactions, you do not want to have to bear the cost and interruption in operations by having them disappear from the premises. If a unit is stolen, you should contact your provider immediately to ensure it cannot be used for unauthorized transactions.