

**CONTINUED SUCCESS**

**IN FOOD RETAIL**

**Disruptive Technologies  
Are Key**

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## SPONSOR PERSPECTIVE

Shifting consumer habits are fueling changes across numerous industries—and the food retail and food service sectors are no exception. Today's consumers expect higher-quality food, on-demand convenience, greater variety, and more personalized shopping experiences. Pair these trends with eroding customer loyalty, and it's no wonder that many businesses are struggling to remain competitive.

Business leaders in food retail and food service understand that having the right technology in place is key to addressing these challenges. At Panasonic, we've seen firsthand how disruptive technologies can transform the way these companies do business, helping them lower costs, improve operational efficiencies, and better serve their customers.

Yet too many companies are lagging behind others in adopting the very technologies that they believe could give them an edge over competitors. In the following pulse report, which surveyed 150 business leaders across the food retail and food service sectors, nearly seven in 10 respondents (71%) indicated that their organizations hold off on adopting disruptive technologies until they've gone mainstream.

We partnered with Harvard Business Review Analytic Services to better understand the current state of disruptive technology adoption among food retail and food service organizations. This report explores the results of our pulse survey, including:

- Which disruptive technologies show the most promise over both the short and long term.
- Where decision makers are currently investing their resources—and where they plan to invest next.
- How disruptive technologies are benefiting food retail and food service organizations.
- What challenges these organizations face on the path to new tech adoption.

At Panasonic, we believe in the power and promise of technology to move us forward and create a better world for all. We help food retail and food service companies of all sizes transform their operations with market-leading solutions encompassing everything from sustainable refrigeration and mass merchandising to data analytics and connected restaurant technology.

The data in this report suggest that there is ample opportunity for businesses looking to stay ahead of the curve. By investing in the right technologies at the right time, forward-thinking food retail and food service companies can create a better experience for their customers—and stand out among their competitors.

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Update: Digital transformation has become increasingly critical for businesses as a result of Covid-19. To learn more about how the food service and food retail sectors have had to make immediate shifts in their technology ecosystems—and how businesses are responding to this challenge—

Visit [na.panasonic.com/us/food-tech-survey](https://na.panasonic.com/us/food-tech-survey) for our free supplemental report.

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# CONTINUED SUCCESS IN FOOD RETAIL

## Disruptive Technologies Are Key

Fast-changing technology is rapidly transforming customer expectations about purchasing food. Until recently, the idea of employing a personal digital assistant, a smartphone, and a mobile wallet to order takeout was more “Matrix” than mundane.

But that’s the new normal. In an increasingly tech-fueled marketplace, organizations quick to embrace new, transformational technologies have quickly become market leaders while those slower to act have experienced stagnant growth. For those selling food in the 2020s, the ability to identify, adapt, and implement the right disruptive technologies is fast becoming a requirement to remain relevant.

Senior leadership at food retail and food service organizations acknowledge this new reality. In a recent survey by Harvard Business Review Analytic Services, executives attributed a wide range of benefits to the successful adoption of disruptive technologies by food retail/service companies. These benefits include winning market share (63%), developing successful product and service offerings (61%), and the ability to reshape consumer expectations (60%). More than half of respondents (55%) believe disruptive technologies enable them to attain a significant competitive advantage, and 54% say they reduce costs and streamline operations.

“Disruptive technology is going to continue to be the baseline expectation for guests,” says Cindy Syracuse, vice president of marketing at TGI Fridays. “I think you’ll see that disruption is taking a larger share of focus and resources in companies that are looking to break through the clutter.”

Despite these beliefs, however, many food retail/service companies lag in adoption of the very technologies they see as poised to transform the marketplace. A clear majority (71%) of respondents describe their own organizations as neither leaders nor laggards in disruptive technology adoption. Just 13% currently describe their organizations as tech-forward early adopters.

The need to become more agile and proactive in embracing disruptive technology is clear. By creating tech-aware, agile cultures, food retail and food service organizations can transform into tech powerhouses that can compete on their ability to discern—and respond to—rapidly changing customer tastes and preferences.

With these trends continuously reshaping the market, “the only way to get in front of things is to keep reinventing yourself,” says Syracuse.

### HIGHLIGHTS

- More than half of survey respondents (55%) believe disruptive technologies enable them to attain a significant competitive advantage.
- Respondents say artificial intelligence (41%) and the internet of things (34%) will be the most disruptive to their industries over the next two years.
- Top adoption strategies include setting clear and measurable goals (60%), choosing the right vendor partner (49%), and tasking specific people with the responsibility of identifying disruptive technologies and driving adoption (49%).



**“DISRUPTIVE TECHNOLOGY IS GOING TO CONTINUE TO BE THE BASELINE EXPECTATION FOR GUESTS.”**  
CINDY SYRACUSE, VICE PRESIDENT OF MARKETING AT TGI FRIDAYS

### Tracking a Changing Customer

Disruptive technologies are key to an organization’s success because of the way these consumer trends are upending traditional ways of doing business. Respondents report that the most difficult challenges for their food retail/service organizations are in adapting to consumers’ preferences for customization and personalization (39%); safe, healthy, responsibly sourced foods (35%); convenience (33%); and fresh, novel experiences (27%).

“The rapidly changing set of consumer expectations around their dining experience is a major challenge—and equally large opportunity—for retailers,” says Perry Kramer, managing partner at Retail Consulting Partners, an IT consulting firm for retail companies. “Attention to these details [customization, personalization, health, convenience, and so on] are important but will not carry the day by themselves. Now you’ve got to move on to leveraging technology to be able to deliver the things consumers expect with lower costs. And you have to continue to innovate to be successful.”

Respondents are confident that they will be able to leverage disruptive technologies such as artificial intelligence (AI) and the internet of things (IoT) to transform the customer experience (CX). Respondents anticipate that the top benefits customers will reap from disruptive technologies include increased convenience (61%), quicker delivery of information to customers (56%), and more product/service choices (55%). Respondents also give high marks to the ability of disruptive technologies to enable food organizations to deliver richer information about products (54%) and increased personalization (53%) to their customers.

As a tech-forward organization—the firm was the first to integrate Amazon Pay as an Alexa skill, for example—TGI Fridays is among those relying on new technologies for CX benefits. “These guest trends shape a great deal of the technology and the experiences we expect to continue supporting at Fridays,” says Syracuse.

“Personalization and customization will allow us to speak directly to the guest on a one-to-one basis. Knowing our guests is very important in driving true success.”

### Top Disruptive Technologies

Disruptive technologies are getting a lot of buzz in the food retail and food service industries. Not surprisingly, respondents put AI (41%) and IoT (34%) at the top of the list of technologies that will be most disruptive to their industries over the next two years. [FIGURE 1](#)

Several high-profile brands are leading the way in embracing AI. These leaders are “seeking to overlay the current disruptive technologies with tools to enable personalization using artificial intelligence and advanced analytics,” says Retail Consulting Partners’ Kramer. “We have seen McDonald’s, Dunkin’ Donuts, and others already heavily investing in these areas, and we should expect to see mainstream impacts from these investments in the next year or two.”

Food industry consultants and researchers see a longer timeline for IoT than food retail and food service respondents do. While there are many devices with IP addresses on store floors and in kitchens, as well as in the supply chains that support them, it will take time to get the supporting infrastructure in place to make truly disruptive operational and marketing changes, they say. “I think IoT will take a big step forward once 5G is around,” says Greg Buzek, founder and president of IHL Group, a global research and advisory firm for the retail and hospitality industries.

AI and IoT aren’t the only disruptive technologies commanding attention. Others that respondents see breaking out over the next two years include back-of-the-house technology (30%), customer-facing hardware (26%), smart inventory/shelf solutions (25%), and customer-facing mobile apps and mobile commerce (25%).

Despite strong confidence that these technologies will be successful in the marketplace in the next two

years, however, respondents have not yet widely adopted many of them. For example, just 24% report widespread adoption of back-of-the-house technologies, such as inventory reporting or workforce scheduling; 43% have only achieved limited adoption; another 25% say they are conducting pilot programs; and 7% are still conducting research. [FIGURE 2](#)

Food retail and food service companies may be grappling with adopting the top disruptive technologies—AI, IoT, and back-office solutions—but they are keeping their eye on several other technologies as well. While respondents are less likely to see them as being impactful in the next two years, a sizable percentage are eyeing developments in renewable energy (46%), energy storage (45%), and robotics (41% researching, 40% piloting).

### Goals and Expectations for New Technologies

Respondents set high expectations for the technologies they adopt. The most highly ranked strategic goal is attracting, building, and retaining a skilled workforce (47%). [FIGURE 3](#)

While robotics technology grabs headlines for its labor-saving potential—San Francisco’s Creator recently became the first fast casual restaurant to automate a fully composed dish from start to finish, for example—companies like TGI Fridays are looking to technologies such as advanced scheduling tools to attract quality workers in a tight labor market. “We’re interested in addressing the labor force and making sure that we’re an employer of choice—that people want to be there and embrace the Fridays culture,” says Syracuse.

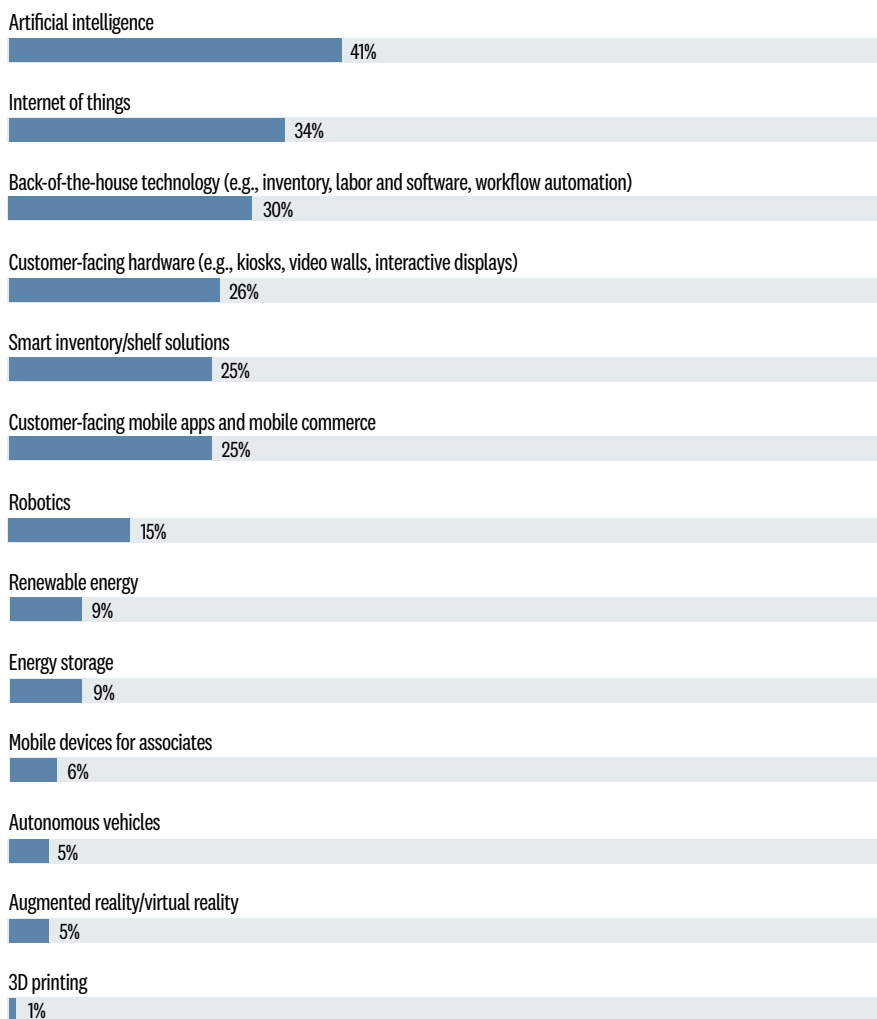
Respondents are also looking to disruptive technologies to drive consumer loyalty through customer identification and personalization (45%). Thirty-three percent hope these technologies will transform the in-store shopping or restaurant experience.

In terms of measurable impacts, respondents expect increases in everything from restaurant visits to

FIGURE 1

## AI AND IOT TOP THE CHARTS

Respondents rank these technologies as being the most disruptive over the next two years



SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JANUARY 2020

revenues to operating costs. Nearly two-thirds (65%) anticipate an increase in repeat visits/loyalty, 62% foresee revenue increases, and 61% expect higher workforce productivity. However, 63% also predict a rise in store operating costs, and 51% expect a headcount rise.

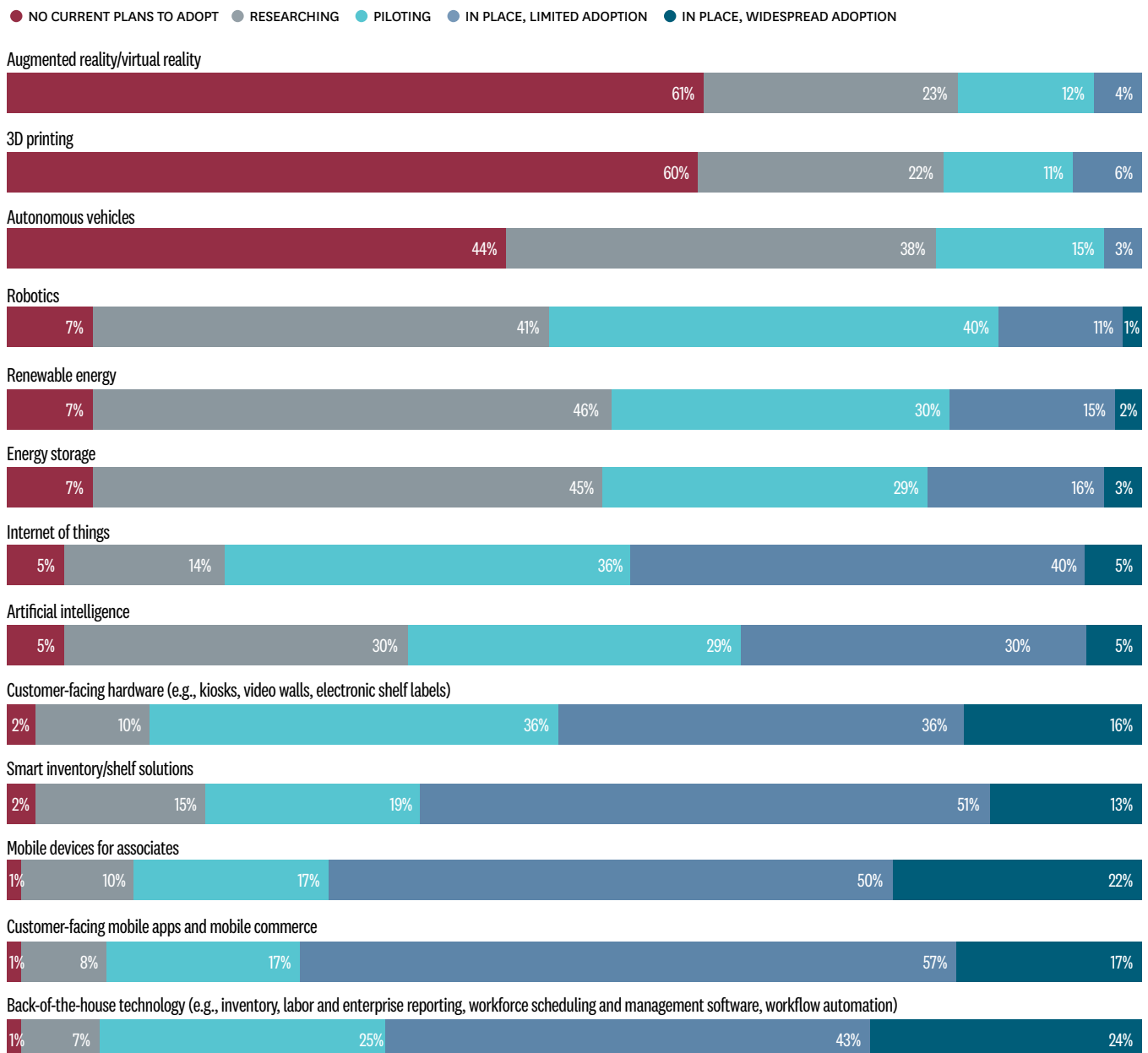
Respondents hope that actual results outpace these expectations. Fully 61% hope for higher margins, even though just 47% actually expect margins to increase. Respondents also hope to realize increased foot traffic (50%) and

**Pivoting the culture can be difficult.** So, not surprisingly, nearly two-thirds (65%) of respondents cite change management as the biggest challenge to adopting disruptive technologies.

FIGURE 2

## ADOPTION LAGS ON IMPORTANT DISRUPTIVE TECHNOLOGIES

Current usage levels are limited at best



SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JANUARY 2020

larger average market baskets (49%).

TGI Fridays, for example, knows that loyalty club members come in three times as often as other customers. So the company is aiming its investments at disruptive technologies that drive those more frequent visits. “Personalization and AI will be the most productive at engaging our customers, at least for our company. That’s where we’re putting our resources,” says Syracuse.

### A Food Technology Arms Race

It’s increasingly clear that in the 2020s, the ability to quickly evaluate, test, and implement new disruptive technologies will become an essential skill for food retail and food service organizations. It’s important to approach adoption strategically and develop streamlined and expedient processes.

This adaptive skill set “is mission critical,” says Kramer. “But these things take two or three years to get right. So if you’re going to wait to start until after ROI is attractive, you’re going to fail. You need to be experimenting and doing proofs of concept. You don’t have to be bleeding edge, but you can’t wait till the majority of your competition has got it in place, or they’re going to have your lunch.”

Unfortunately, that’s easier said than done. The food retail and food service sectors historically have been slow to adopt new technology, and pivoting the culture so rapidly can be difficult. So, not surprisingly, nearly two-thirds (65%) of respondents cite change management as the biggest challenge to adopting disruptive technologies.

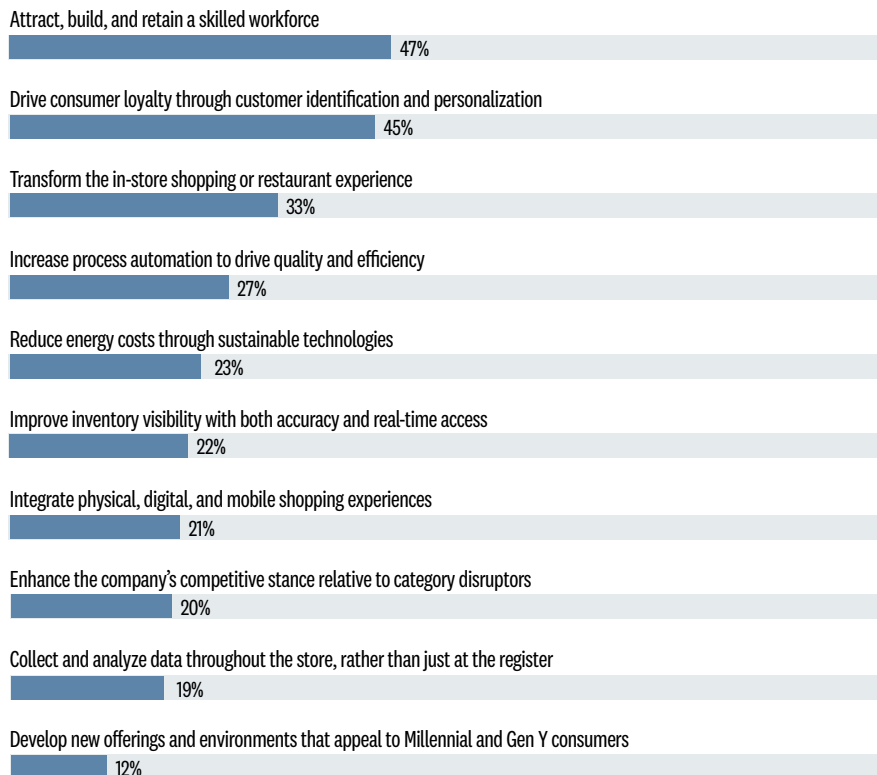
Other significant obstacles include budget limitations (42%), an unclear return on investment (40%), and overcoming cultural resistance (30%).

Food retailers and food service companies must realize “that they’re in a technology arms race,” says IHL’s Buzek. “When Amazon turned profitable in the fourth quarter of 2015, the game changed. Some retailers understood the new reality—that IT investment is key to success—and others didn’t.” Those who did

FIGURE 3

## STRATEGIC GOALS FOR EMBRACING DISRUPTIVE TECH ARE WIDE-RANGING

Objectives span operations, marketing, back office, and supply chain



SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JANUARY 2020

understand let go of old formulas dictating that IT budget should be 1% to 1.5% of revenue and increased their IT spending to transform their businesses, Buzek says. “Those chains have a huge advantage right now.”

### Best Practice Playbook for Embracing Disruptive Technologies

The good news is that many of these hurdles can be overcome by adopting proven best practices.

According to respondents, the most successful strategies for adopting disruptive technologies include setting clear and measurable goals (60%), choosing the right vendor partner (49%), and tasking specific people with the responsibility of identifying

“Choosing the right partner and **maintaining that partner in a win-win relationship is challenging** but probably one of the most important things a retailer can do,” says Perry Kramer, managing partner at Retail Consulting Partners.

disruptive technologies and driving adoption (49%). **FIGURE 4**

Here’s a closer look at how these best practices help food retail and food service organizations become more agile in approaching a potential new technology:

**Setting clear and measurable goals.**

“The majority of food retailers have been very good at introducing new offerings—testing markets, measuring, adapting, modifying, and measuring again,” says Kramer. “They need to take this same philosophy with technology and customer experience innovations.” Starting with both a clear goal and a

way to measure it helps food retail and food service operators reach a quick consensus on whether to proceed with or abandon a new initiative.

**Choosing the right vendor partner.**

Consumer trends change, and technology is advancing faster than ever. Because of this, food retailers and food service organizations are more likely to leverage third-party expertise to drive successful tech adoption than in the past. Most often, they buy solutions from a vendor and integrate them using in-house resources (58%), but other common approaches include outsourcing much of the integration and adoption work to a third party (31%) and finding a partner to work with on the adoption process (24%). Just 21% have successfully handled the entire process in house.

“Choosing the right partner and maintaining that partner in a win-win relationship is challenging but probably one of the most important things a retailer can do,” says Kramer. “It’s important to pick a partner that understands your business terms and drivers. However, it is equally important to pick a vendor which aligns with a retailer’s organization culturally and technically.”

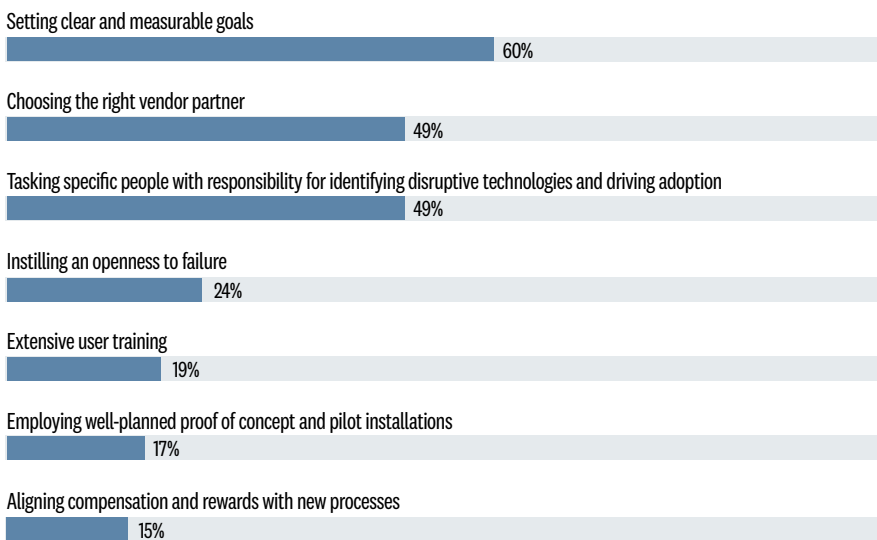
**Tasking specific people with the responsibility of identifying disruptive technologies and driving adoption.**

While the culture needs to embrace innovation, a streamlined team can be the most efficient way to execute a technology adoption plan. Several leading retailers maintain a one-person innovation team and pull in people from other teams as needed, according to Kramer. “They can react much quicker and don’t have to get a ton of consensus.”

FIGURE 4

**SUCCESSFUL TECH ADOPTION REQUIRES CLEARLY DEFINING GOALS**

Choosing the right team is also critical to embracing innovation



SOURCE: HARVARD BUSINESS REVIEW ANALYTIC SERVICES SURVEY, JANUARY 2020



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TGI Fridays restaurants also employ organizational tools to foster innovation. IT is part of the marketing department to ensure alignment, and new initiatives are managed by cross-functional teams using recently adopted collaboration tools. “At first, there was resistance to it because it was new. But as people have embraced it, that has really allowed us to collaborate and move much faster,” says Syracuse. One current focus for TGI Fridays is using virtual reality to enhance the guest experience.

#### **Instilling an openness to failure.**

Organizations must not only learn to accept failure, but also fail fast—test new concepts and make rapid decisions on whether or not they are working, based on those clear goals and metrics. TGI Fridays uses this approach as part of its innovation process; projects that get green-lit do so if they can be proven out with a strong business case and support the five pillars that underlie its business model, according to Syracuse.

Food retail “is a very tactical industry; it’s not strategic,” says David Marcotte, senior vice president, Cross-Border Retail for Kantar Consulting. “If somebody is doing something right, I’m going to do it myself in my own stores to see how it works. And then if I understand how it works, I’m going to decide whether to do it or not.”

**Extensive user training.** Successful adoption requires gaining full buy-in from users. Thorough training also maximizes the opportunity to create a satisfying customer experience, so the investment can bear fruit.

**Employing well-planned proof-of-concept and pilot installations.** Five Below, a chain of discount stores, rolled out self-checkout systems, which is a great example of a successful pilot installation, says Kramer. “They did a proof of concept, modified it, did more proofs of concept, modified it again, and got their final product rolled out. All that evolution took only about four or five months, and their savings were tremendous.”

“Probably the biggest change I’ve seen in the last few years is that experiments that used to be held across the entire

chain are now held in select stores,” says Marcotte. This allows retailers to test and iterate on new technologies before a full rollout.

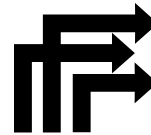
**Aligning compensation and rewards with new processes.** Compensation should be aligned with new technology adoption rather than standing in its way.

Another critical step is to start a disruptive technology initiative with a measurable end goal in mind. “For merchants to be successful, they must agree internally on the customer experience they want to deliver, how it differentiates itself from that of other retailers, and then focus on the tools to deliver that experience,” says Kramer. “These initiatives then must be blended with the tools that enable operational efficiencies.”

#### **Conclusion**

Senior executives in the food retail and food service sectors need no convincing that disruptive technologies are critical to the future of their businesses. Many are well aware of the importance of AI, IoT, and other emerging technologies, and they are confident that successfully adopting them will deliver benefits to their organizations, particularly in enhancing the customer experience.

But many organizations are still hesitant to adopt aggressively and are not moving as quickly as their sense of market urgency would suggest. Experts warn such delays could be costly; customer trends are morphing too quickly, and technology moving too fast, to stick with wait-and-see models. By infusing their organizations with proven technology adoption best practices, food retail and food service organizations can learn to identify, adapt, and implement those disruptive technologies most likely to help them remain relevant and competitive.



**WHILE THE CULTURE NEEDS TO EMBRACE INNOVATION, A STREAMLINED TEAM CAN BE THE MOST EFFICIENT WAY TO EXECUTE A TECHNOLOGY ADOPTION PLAN.**

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## METHODOLOGY AND PARTICIPANT PROFILE

A total of 150 respondents drawn from the HBR audience of readers (magazine/ newsletter readers, customers, HBR.org users) completed the survey.

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### SIZE OF ORGANIZATION

<b>18%</b> 10,000 OR MORE EMPLOYEES	<b>13%</b> 5,000–9,999 EMPLOYEES	<b>27%</b> 1,000–4,999 EMPLOYEES	<b>42%</b> FEWER THAN 1,000 EMPLOYEES
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### SENIORITY

<b>55%</b> EXECUTIVE MANAGEMENT	<b>45%</b> SENIOR MANAGEMENT
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### KEY INDUSTRY SECTORS

**100%**  
FOOD RETAIL/  
FOOD SERVICE

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### JOB FUNCTION

<b>19%</b> FINANCE/RISK	<b>15%</b> ADVERTISING/ MARKETING	<b>13%</b> STORE OPERATIONS	<b>10%</b> STRATEGIC PLANNING	<b>9%</b> BUYING/ MERCHANTISING	<b>8%</b> E-COMMERCE	ALL OTHER FUNCTIONS LESS THAN 8% EACH
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### REGIONS

**100%**  
NORTH AMERICA

Figures may not add up to 100% due to rounding.





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