Panasonic

How the pandemic has transformed Food Services & Food Retail

Panasonic industry survey
November 2020

New urgency creates new opportunities

Necessity is the mother of invention. And for the Food Services & Food Retail industry, the COVID-19 crisis has generated a whole lot of necessity in a few short months.

Has that resulted in a greater degree of invention or reinvention? To find out, we surveyed 150 technology decision makers involved in grocery store, convenience store, restaurant or food service operations across the U.S. and Canada.

> This pandemic has really shown that businesses need to have agility to survive and win.
>
> – VP of Marketing, Grocery

Objectives

Our goal for this study was to learn more about the following:

1. How has COVID-19 broadly impacted the Food Services & Food Retail industry?
2. What business model innovations have become high priorities for the industry?
3. How agile were food providers in responding to changing consumer behavior in the early days of the pandemic? And how important is business agility going forward?
4. Has the urgency and pace of technology adoption accelerated given the need for real-time transformation or slowed down due to financial pressures?
5. Of the new class of technologies that came to market during the pandemic, which have seen the most ongoing interest and investment?
6. How have consumer attitudes toward sharing their personal data evolved during the pandemic, and how does this impact the balance between privacy and personalization?
7. To what extent have all these changes impacted restaurants, food retail stores or both?

Shifting attitudes

As a follow-up to two previous Panasonic studies conducted prior to the pandemic, this study provided an opportunity to see just how much attitudes are changing.

In those two previous studies, we'd already seen perceptions of transformational technologies evolve – from a "nice-to-have" to the "cost of doing business" (and staying in business). But the time horizon for adopting these technologies remained expansive.

For example, our 2018 study, ***Disrupt the Status Quo,*** revealed a sizeable gap between current adoption levels of transformational technologies in Food Services & Food Retail and future adoption plans. This gap foreshadowed strong growth for technologies like artificial intelligence.

Our **January 2020 study**, conducted in partnership with *Harvard Business Review* shortly before the coronavirus outbreak, found that more than half of Food Services & Food Retail executives believed that transformational technologies enabled them to attain a significant competitive advantage. Still, at the time, only 1 in 8 considered their organizations tech-forward early adopters of such technologies.

Key findings

This study, conducted about five months into the pandemic, shows a major change in attitudes toward transformative technologies. Today, 1 in 4 organizations consider themselves tech-forward.

And their approach to adopting technology has changed as well – from studied to opportunistic.

Che Baird, Customer Relationship Manager for Quick Service Restaurants (QSR) for Panasonic Canada, puts it this way: "QSR customers are no longer coming to us in a very directed way with a specific technology in mind. They are asking, 'What technologies do you have that could be the next big thing?' Many of these technologies were on our solution roadmaps prior to the pandemic but, at our customers' request, we've accelerated their development and brought them to market with unprecedented speed."

The rise of agility, innovation and technology

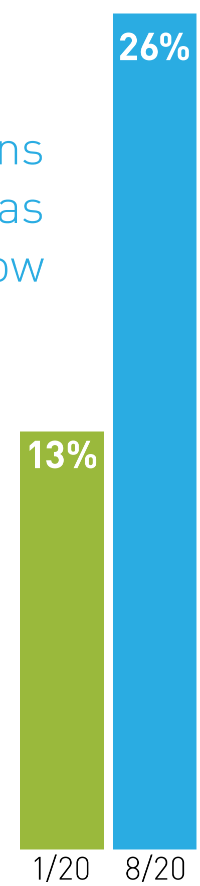
Businesses are feeling an urgent need to rapidly adapt to changing customer behavior and demands. "Overnight, everything is turned on its head," said Francie Jenks, a business development leader at Hussmann, a Panasonic company. "The way we have been doing business for years has completely changed – the way that customers want to shop, what they want to buy."

The pandemic forced many of these behavior shifts, and most will last at least for the next 12 months or more, in the view of our survey respondents.

"Many view this as an opportunity to redefine their model and their value proposition for the consumer in order to survive and thrive over the next couple of years. They are investing heavily in new technology to enable that new business model," said Eric Symon, the Director of the Enterprise Process Innovation Center at Panasonic. "For instance, you might have a buffet-style restaurant knowing they won't be able to operate regularly in that business model going forward, so they're looking to change to a pick-up and delivery model."

Food providers who are successful in fast-tracking adoption of transformational technology will be the winners in the post-COVID era.

More organizations see themselves as tech-forward now



How transformational technology is helping food providers adapt

In the wake of COVID-19, many Food Services & Food Retail organizations are rethinking the way they do business. With consumers motivated by a new set of priorities today – such as safety, self-service and preferred delivery methods – businesses are experimenting with how best to meet changing demands.

In this new world, food providers see great value in increasing their agility so they can pivot quickly and anticipate future needs. Transformative technology – from process automation to contactless solutions to personalization – is allowing them to be more agile, innovative and responsive to new consumer behaviors.

Food providers have been challenged by shifts in consumer behavior.	• Preference for safe, healthy, responsibly-sourced foods • Concerns about personal health/safety • Changing preference around delivery methods • Rising demand for convenience
Over the next 24 months, this will spur business model innovation.	• In-house last-mile delivery • Self-service stores • Dedicated pick-up solutions • Drive-thru only stores • Dedicated fulfilment centers • Ghost kitchens
To successfully adapt, businesses must embrace these drivers of agility.	• Digital transformation • Rapid decision and learning cycles • Empowered teams • Entrepreneurial culture • Shared strategic vision
Transformative technology is enabling change, led by four top strategic priorities.	• Integrate physical, digital and mobile shopping experiences • Address personal health and safety • Increase process automation to drive quality and efficiency • Transform the in-store shopping experience

Business impact

As has been widely reported, the pandemic has had a seismic impact on the industry.

Revenues

At the time of this study, only 7% of businesses surveyed had experienced positive revenue growth since the pandemic started. In the restaurant and food services sector, only 2% had increased revenue.

Almost 2 in 3 restaurants saw revenue decline 10%–30%. Another 1 in 5 saw a drop of 30%–50%.

COVID-19's impact on business (Average rating on a 1-5 scale; 5 = very large impact)	
Health and safety	4.8
Customer shopping behavior	4.5
Store operations and design	4.0
Supply chain	4.0
Business model	3.7
Labor requirements	3.4

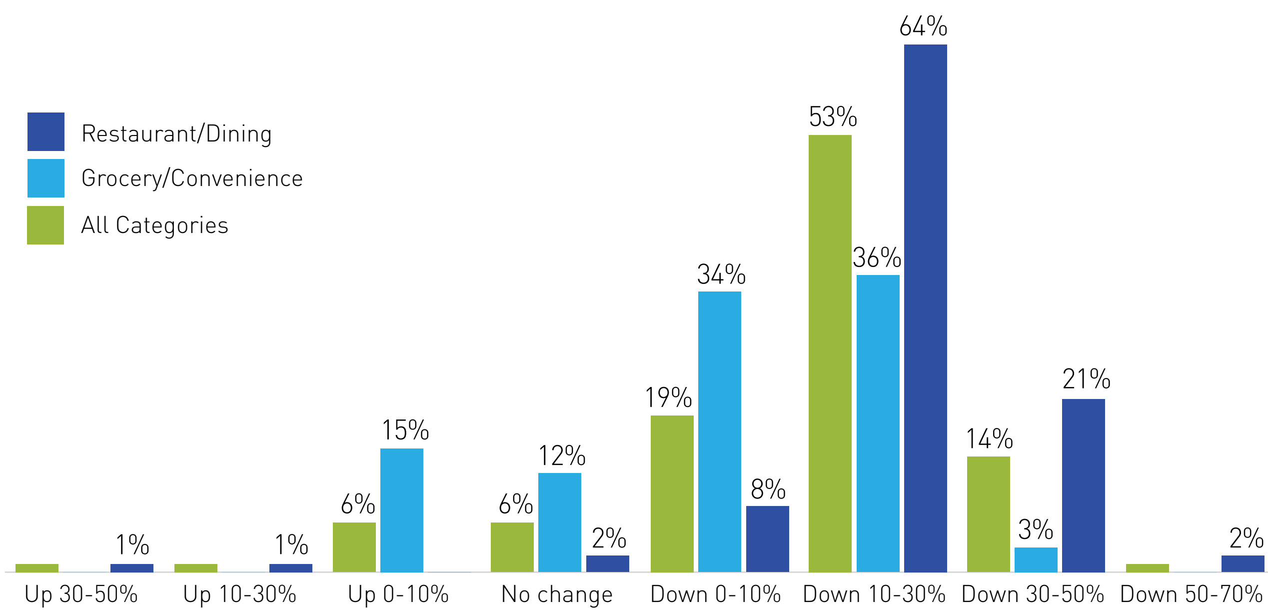
Top-to-bottom effects

It's not just revenue, either. Every aspect of the business is being challenged today. Health and safety concerns top the list, of course. That's followed closely by impacts on customer shopping behavior, rated a 4.5 out of 5 by both grocers/retailers and restaurants. Supply chain and store operations/design have also been impacted in a large way.

Business model

Not surprisingly, most respondents report a large-to-very large impact on their business model.

And both grocers/retailers and restaurants see at least a moderate risk of having to close locations – or even go out of business.



Since COVID-19, most businesses have seen revenue fall

What's the outlook for success now?

With such extreme pressures on their businesses, it's not surprising that only a small minority saw themselves outperforming their peers in responding to the pandemic. Fewer than 1 in 5 see themselves as more successful than their competitors to date. Among grocery/convenience stores, about 1 in 3 do. Among restaurants, fewer than 1 in 14 do.

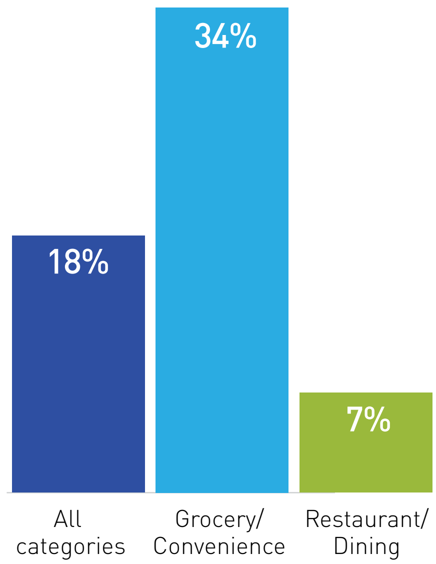
Grocery store respondents were slightly less critical of their pandemic performance compared to convenience store respondents. On the dining side, QSRs held a slightly more positive view of their performance compared to fast casual and full-service restaurants.

Anticipating a turnaround, but not right away

While business impacts from the pandemic are not necessarily permanent, nearly 7 in 10 food providers anticipate they'll be managing these challenges for at least another year.

Most see the pandemic impacting their business for a while	
6–12 months	30%
12 months or more	69%
Largely permanent impact, representing the new normal	1%

Overall, only 18% say they've responded to COVID-19 more successfully than their peers



What if you had seen the pandemic coming?

Hindsight is 20/20. So we asked Food Services & Food Retail businesses what they might have done differently had they been given advance warning of the pandemic.

At the top of their "do-over" list, they wish they had:

- Adopted advanced technologies, including facial recognition systems
- Improved their online shopping and marketing capabilities
- Prepared a last-mile delivery fleet
- Re-engineered their supply-chain warehousing schemes
- Retrained employees with the skill sets to fulfill orders in new ways.

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One change that would have made all the difference is advanced technology. Because of the pandemic, most of the consumers prefer contactless payment and home delivery.

– Director of Supply Chain Operations, Grocery

We could have gathered more customer information for ease of online marketing.

– Director of Sales, QSR

We could have deployed a strong delivery fleet with proper training and precautions.

– VP of Sales, QSR

We could have planned our warehousing model differently in order to avoid any shortage of materials at any store.

– Director of Operations, Grocery

Business model innovation

Food providers are responding to rapid changes in consumer behavior. An example is accelerating e-commerce adoption among grocers. With COVID-19, "we are now about three years ahead of where we thought we'd be [in adoption]," said Marc Carr, a business innovation strategist at Hussmann.

Health and safety

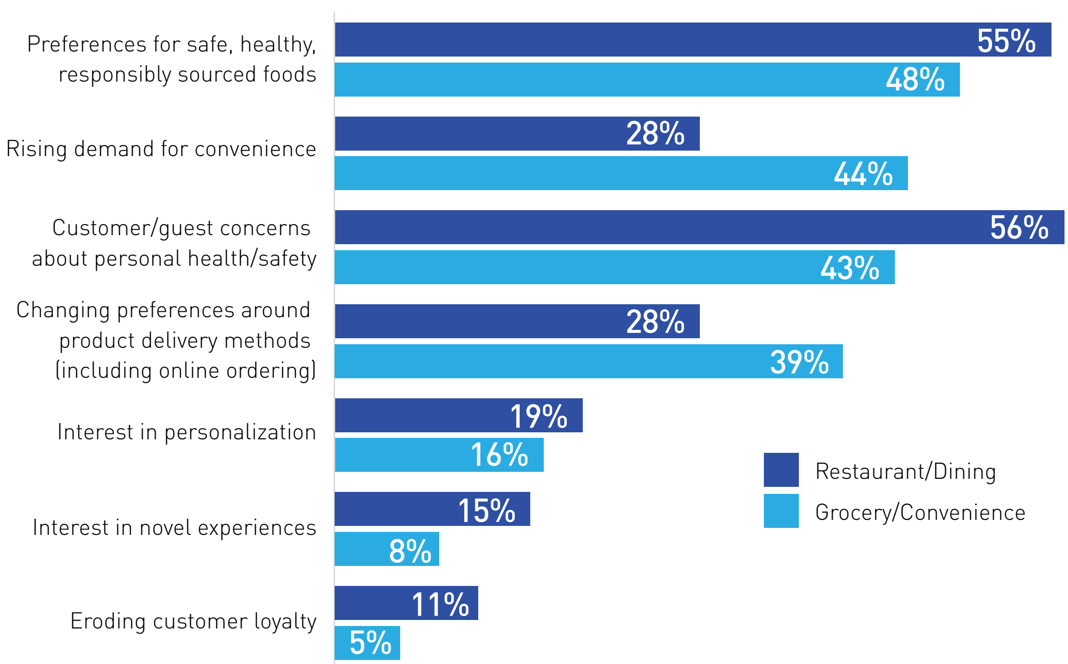
Not surprisingly, concerns for consumer health and safety are having the biggest impact on Food Services & Food Retail these days.

Many of the changes being made today are driven by store concerns about personal health and safety due to COVID-19. But these businesses also have concerns that extend beyond the physical store and restaurant environment, with consumer preferences for safe, healthy, responsibly sourced foods being just as important as personal health and safety.

According to our survey, restaurants are somewhat more likely than grocery and convenience stores to report being challenged by health/safety concerns, scoring 13 points higher for personal health/safety and 7 points higher for food health/safety.

Convenience

After health and safety, the two largest impacts center around the rising demand for convenience and changing preferences for product delivery, including online ordering/pick-up and last-mile delivery. These challenges are particularly acute for store operators, who are not as far down the mobile app and e-commerce path as restaurants.



Businesses were asked which changes in consumer behavior (up to 3) were most challenging. Health/safety concerns were cited the most.

Experimentation with business models

The rapid shifts we're seeing in consumer behavior have led to a high degree of experimentation and business model innovation.

4 major areas of focus

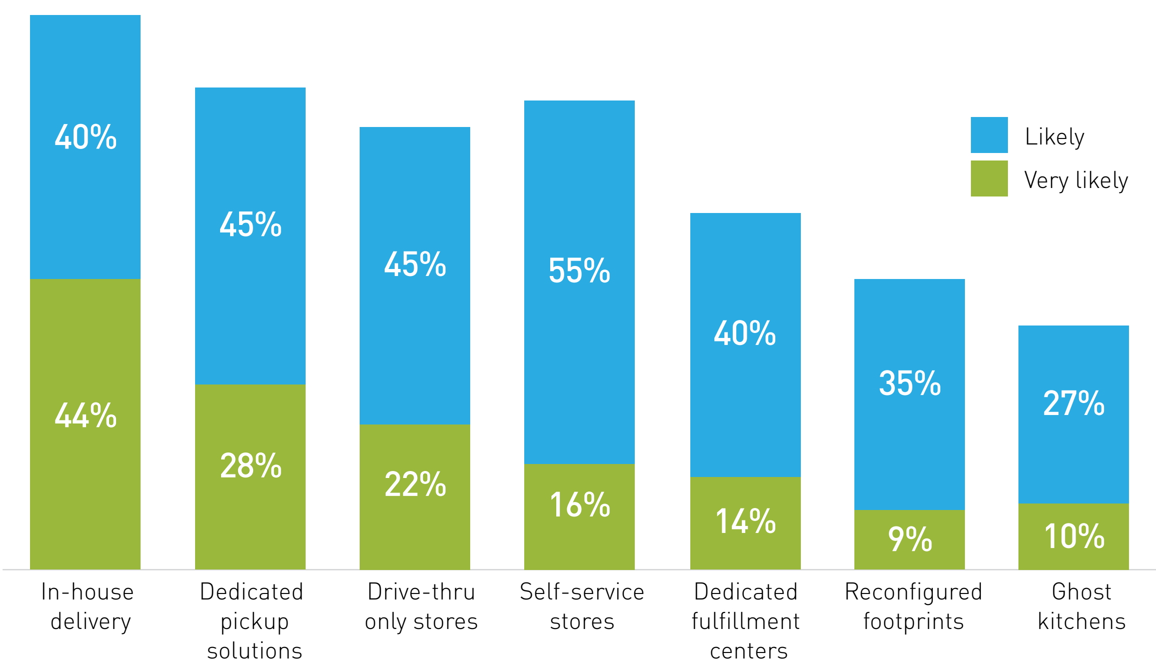
Over half of survey respondents said they're likely to tinker with their business model in four key areas:

1. **In-house, last-mile delivery** – providing the ability to offer delivery without depending on third-party services
2. **Dedicated pick-up solutions** – including food lockers and sites for contactless customer pick-up of prepared foods or grocery items
3. **Drive-thru only stores** – not surprising given that drive-thru accounted for about 70% of QSR store revenue prior to the pandemic[1]
4. **Self-service only stores** – prioritizing mobile orders and interactive kiosks vs. POS orders

Benefits of in-house delivery

With an in-house delivery model, food providers are better able to control their costs. After all, QSRs and fast casual restaurants typically run on 15-20% margins, and third-party delivery services can charge that much or more to deliver orders[2]. Food providers are also better able to control the consumer experience by using their own employees, wearing their own uniforms.

> Third-party deliveries have become the norm today, but will restaurants start pushing back?
>
> – Che Baird,
> Customer Relationship Manager,
> Panasonic Canada



Likelihood to adopt these new business models within two years

[1] QSR magazine
[2] Medium.com

Rethinking the food retail store

Some food providers are now entertaining the idea of a more radical business model shift. This could include deconstructing general-purpose retail outlets into separate, purpose-built facilities where shopping takes place in one venue, fulfillment and delivery of online orders in another, and kitchen food prep in a third.

This idea seems to be gaining some traction, with up to one-half of food retailers likely or very likely to incorporate the following business model innovations:

- **Dedicated fulfillment centers** – converting some stores into fulfillment centers or incorporating a micro-fulfillment center within existing stores
- **Reconfigured footprints** – including creating smaller stores and reducing the center-store footprint in existing stores as business increasingly shifts towards e-commerce
- **Ghost kitchens or commissaries** – sites for preparing food that is delivered directly to the consumer

Innovation and profit

It's critical for food providers to not just meet shifting consumer demand but to do so while making a profit. With Food Services & Food Retail organizations under pressure to adjust to changing consumer behaviors, business model innovation can provide the necessary infrastructure to operate more cost-effectively.

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In the traditional grocery model, the consumer does their own shopping. Now, all of a sudden, grocers are doing all of the work and they can't charge for it. Delivery costs are high and that is another problem. So how do I do that if I don't have that infrastructure in place?

– Marc Carr, Business Innovation Strategist, Hussmann

Agility

Once the pandemic hit, Food Services & Food Retail businesses knew it was critical that they adjust their operations to the new normal with lightning speed. But in reality, only 13% of restaurants and 6% of grocery and convenience stores were able to pivot their operations to address pandemic requirements within four weeks. And it took one in four of them 8-12 weeks to respond.

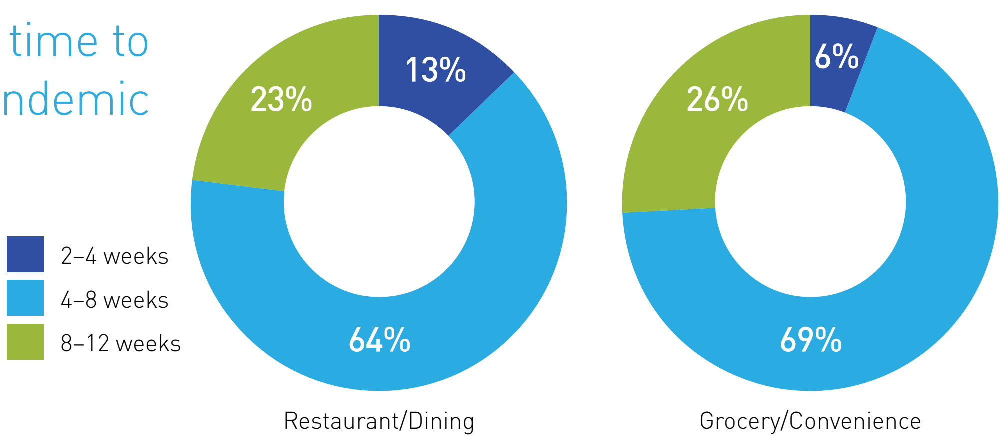
Businesses are all in on agility

In light of their pandemic experience, we asked survey participants whether or not they agreed with the following statement: "True or false: Agility has become the key factor driving business success in the wake of the COVID-19 pandemic." The response was unanimous. 150 of 150 survey participants selected "True."

When we asked them to weigh in on why agility is so essential, they consistently said it makes the changes needed today possible.

> "Businesses now need to be ready, like never before, for any kind of change, and that's possible only with a proper degree of agility embedded in the organizational culture.
>
> – VP of Marketing, Convenience Stores

Many businesses needed considerable time to adjust to the pandemic

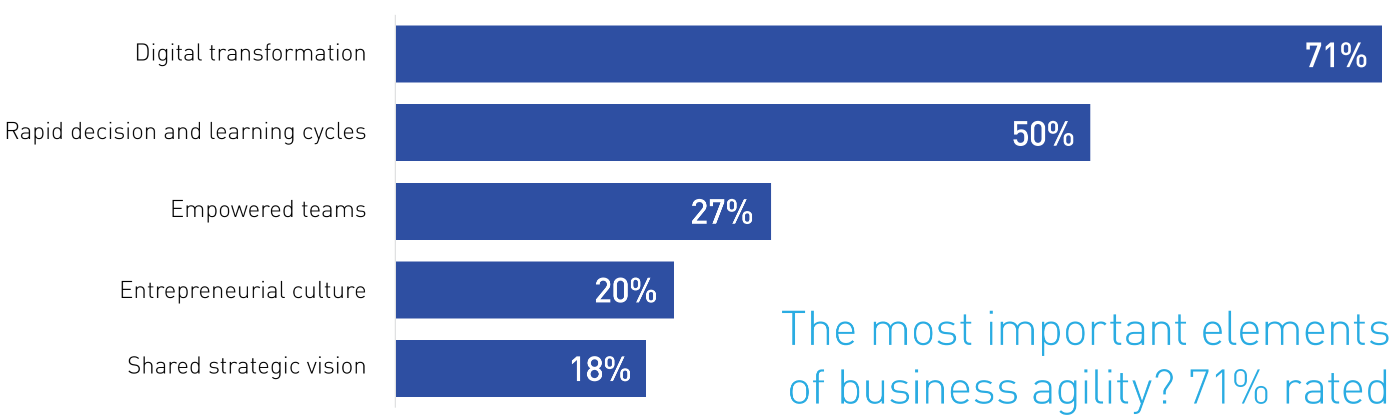


Finding the path to greater agility

Given that agility is so important to Food Services & Food Retail organizations today, how can they markedly improve their agility? While a number of factors were seen as very important – a shared strategic vision, an entrepreneurial culture, empowered teams, and rapid decision and learning cycles – one element stood out above the rest: digital transformation.

Technology and agility go hand in hand

It's been said that every company, no matter the industry, has to become a technology company today. The Food Services & Food Retail leaders we surveyed would appear to agree: they were virtually unanimous in rating digital transformation at least a four on a five-point scale as an important element of business agility. Further, 79% of restaurant respondents and 59% of store respondents rated digital transformation a five out of five.



The most important elements of business agility? 71% rated digital transformation as "very important."

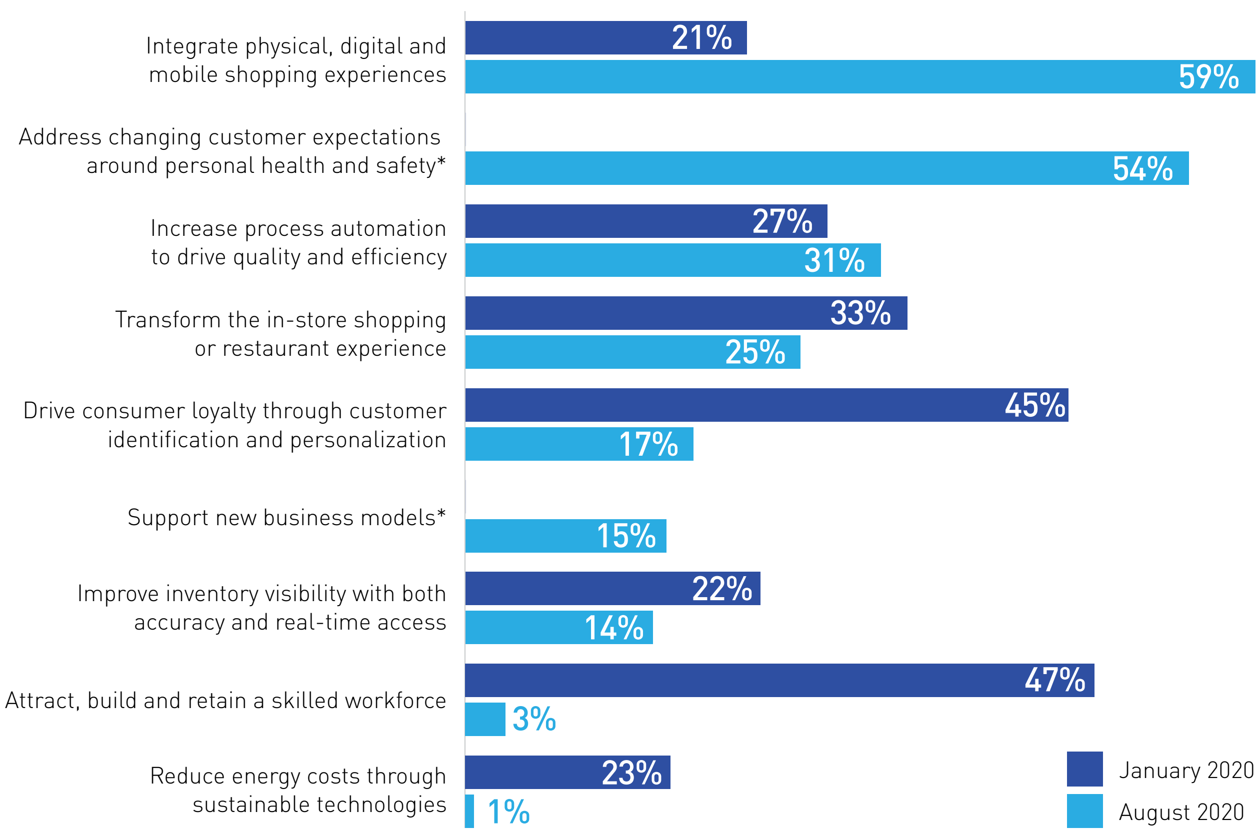
Technology adoption

With food providers seeing business agility as the key to success – and digital transformation as the most important element of business agility – it follows that the urgency around technology adoption should be increasing. And the data from this survey bears that out.

Just as 100% of survey respondents identified business agility as key, 100% also indicated that the urgency for transformative technology adoption has increased in the wake of COVID-19. And over half of all respondents and 62% of store operators indicated that the urgency has increased substantially.

One of the more notable differences between our pre-COVID-19 survey and our current survey is in the strategic priorities around transformative technologies. In the January survey, there was broad support for all seven strategic priorities listed, and a fairly tight distribution between the highest-rated (47%) and the lowest-rated priority (22%). Reflecting a vibrant economy, the top-performing priorities were focused on consumer and employee retention.

Fast forward a few months and we see a very different picture.



In separate surveys, respondents chose their top three strategic priorities for transformative technologies. Priorities have clearly changed.

*New choice added to 8/20 survey

> We've already seen shifts involving ways to change the customer experience through contactless ordering and delivery to make consumers feel safer.
>
> – Eric Symon, Director, Enterprise Process Innovation Center, Panasonic

How transformative technology fits into today's agenda

In terms of technological priorities, what specifically has changed for survey respondents between January and August? First, rather than focusing on a broad set of priorities, we see consolidation around two primary objectives:

1. **Integrate physical, digital and mobile shopping experiences.** The ranking of this priority rose from seventh to first as online and mobile app ordering became much more prevalent.
2. **Address changing customer expectations around personal health and safety.** This is one of two new choices added to the current survey in light of the pandemic.

Two of the more important priorities in the January study continued to rank high in the most recent survey:

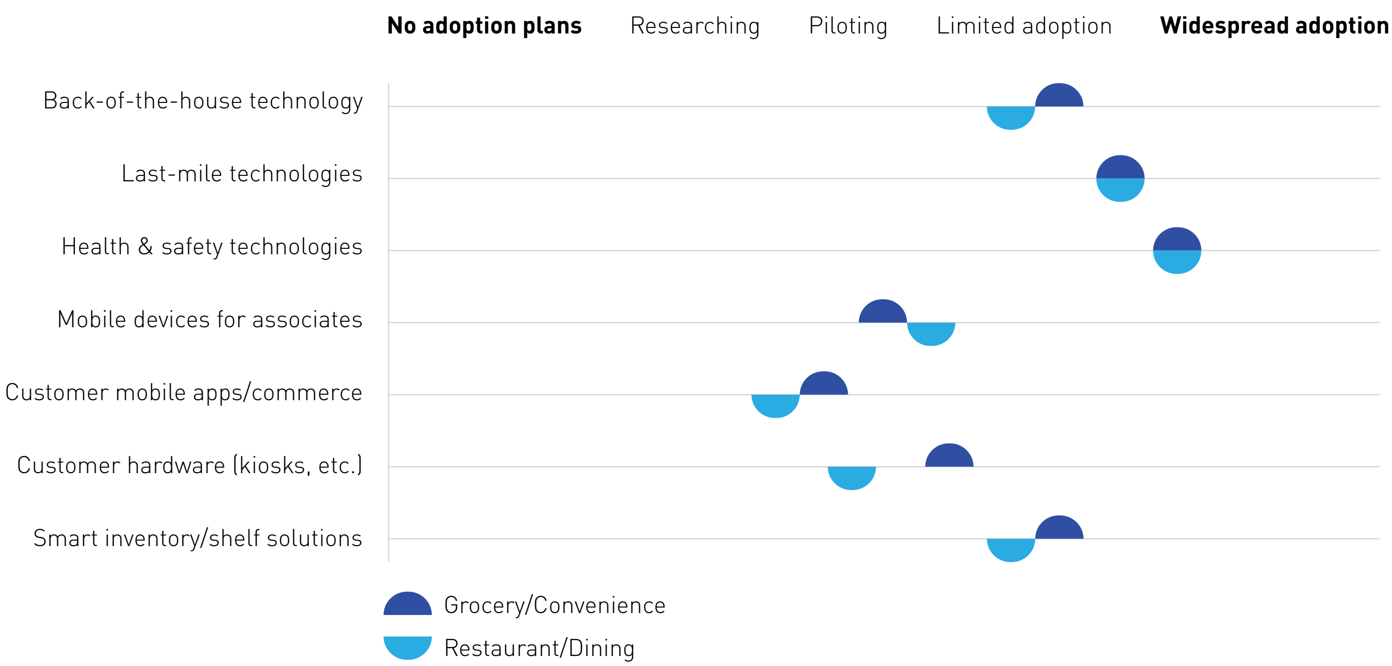
1. **Increase process automation to drive quality and efficiency.** With more complexity in service delivery models, process automation can be a very effective tool to help Food Services & Food Retail businesses streamline operations and improve consumer satisfaction.
2. **Transform the in-store shopping or restaurant experience.** One of the most important ways the store experience has been transformed during the pandemic is through contactless technologies, which protect the health and safety of both customers and employees.

The pace of new technology adoption

In looking at seven different groups of transformative technologies, we see that all are at least being piloted, and many are already in limited or widespread adoption, including technologies for health & safety, last-mile, back-of-house, and smart inventory/shelf solutions.

About 1 in 2 restaurants has widely adopted technologies promoting health and safety.

Status of transformational technologies (ranked by average level of adoption)



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Vehicle recognition and self-checkout are the best innovations we’ve ever made.

VP of Supply Chain – QSR

The adoption of facial recognition in interactive kiosks is the most innovative thing our business has done to respond to the pandemic.

Director of Operations – Grocery

We launched contact-free food lockers for online orders.

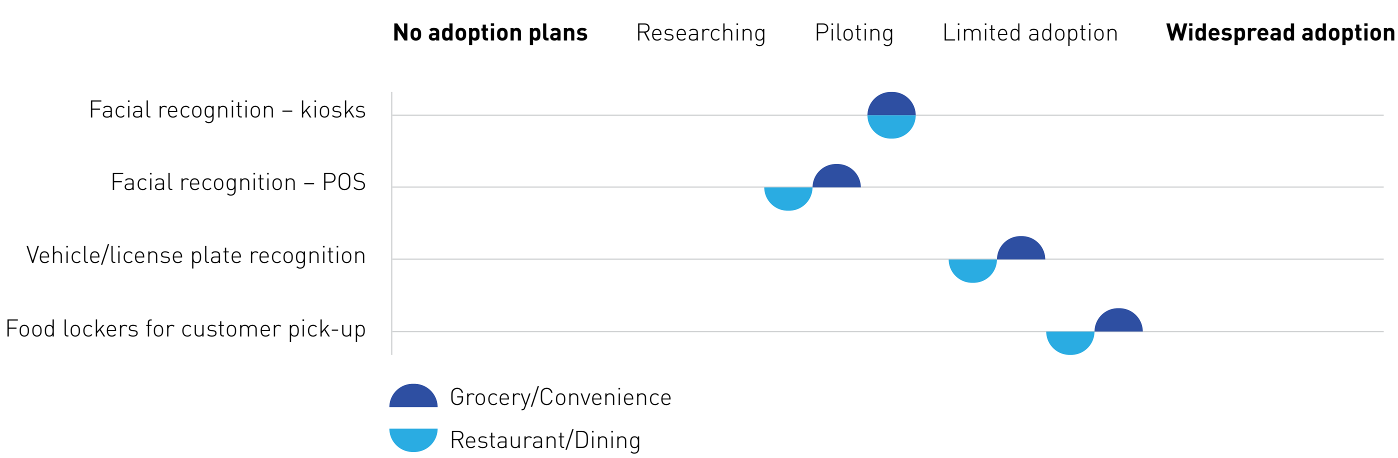
VP of Sales – Full-service restaurant

Contactless technologies

Contactless technologies is one area where there has been tremendous innovation in the last few months. Many survey respondents pointed to the adoption of these technologies as the most innovative thing their organization has done during the pandemic.

A number of these technologies have jumped from the technology roadmaps of solution providers into the market through accelerated solution development. Of these, food lockers for customer pick-up and vehicle/license plate recognition are, on average, in limited adoption while facial recognition in kiosks and POS is generally in the pilot phase.

Status of contactless technologies (ranked by average level of adoption)



Personalization vs. privacy

Many contactless technologies, such as facial or vehicle recognition, are built around collecting personally-identifiable data. For added convenience and safety, these technologies can store credit card information with the associated customer record.

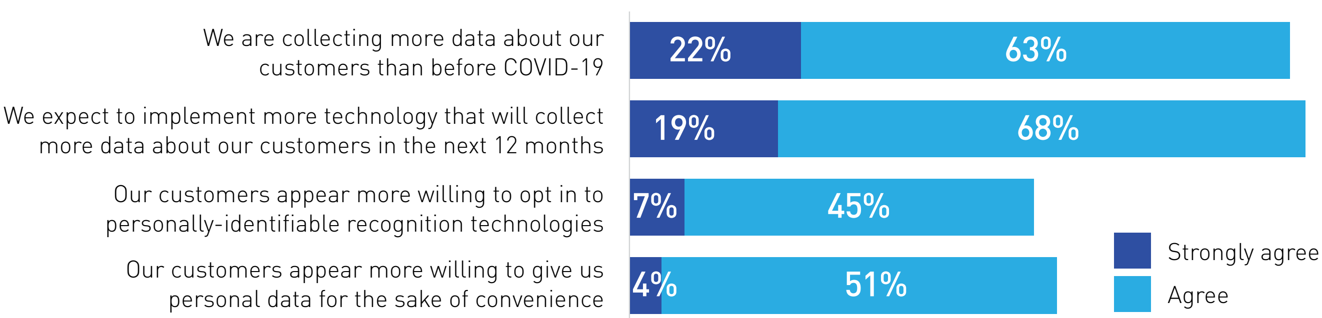
For example, a kiosk with facial recognition technology can allow a customer to essentially pay for their order with their face. The same is true for vehicle recognition technologies at the drive-thru.

Trends are shifting in one direction

For a number of years, Food Service & Food Retail businesses have been trying to strike the right balance between personalization and privacy. And it now looks like the balance is starting to shift toward personalization, due to both the health/safety and convenience benefits.

Seven in eight food providers have been collecting additional data about their customers since the pandemic, and they expect to collect even more over the next year. And more than half agree that consumers are willing to give more personal data – including through the use of personally-identifiable recognition technologies. This perspective makes the prospects of contactless technologies all the more interesting going forward.

Food providers are making greater use of customer data



Conclusion

The COVID-19 pandemic has drastically impacted lives across the globe, changing how many eat and live. Food Services & Food Retail, an industry that's been critical during this time, has seen an overwhelming amount of challenges unlike anything in recent history. Shifts in consumer behavior toward online ordering, pick-up and delivery now require operators to seamlessly integrate digital, mobile and physical shopping experiences. In this environment, agility has become essential to business success, and digital transformation the major enabler. We see more aggressive adoption of transformative technologies, particularly in areas that advance health and safety and consumer convenience.

Methodology

- Online survey in field August 17–31, 2020
- 150 Food Services & Food Retail decision makers
  - 120 in the U.S., 30 in Canada
  - 89 restaurants: 28 QSR, 28 fast casual, 27 full-service, 6 corporate/institutional
  - 61 retailers: 47 grocers, 14 convenience stores
- All respondents at Director level or higher and involved in decisions for either:
  - Operational technology: POS, IOT devices, handheld devices/tablets, interactive kiosks, restaurant automation and operation solutions, drive-thru solutions, mobile apps
  - Food storage and display: refrigeration, display cases, smart shelving

Transforming the Food Services & Food Retail industry

Panasonic and our Hussmann division are transforming the industry to drive greater agility and business success.

Want to learn more or speak to an expert about transformative technologies for Food Services & Food Retail operations?

Visit: www.PanasonicFoodTech.com

Creating the technologies that move us

At Panasonic, we anticipate the future, innovate continuously and integrate transformative technologies into breakthrough solutions for our customers. Our goal? Create technologies that move us toward a better life and a better world.

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