

# The social determinants to adopting digital grocery retail technology

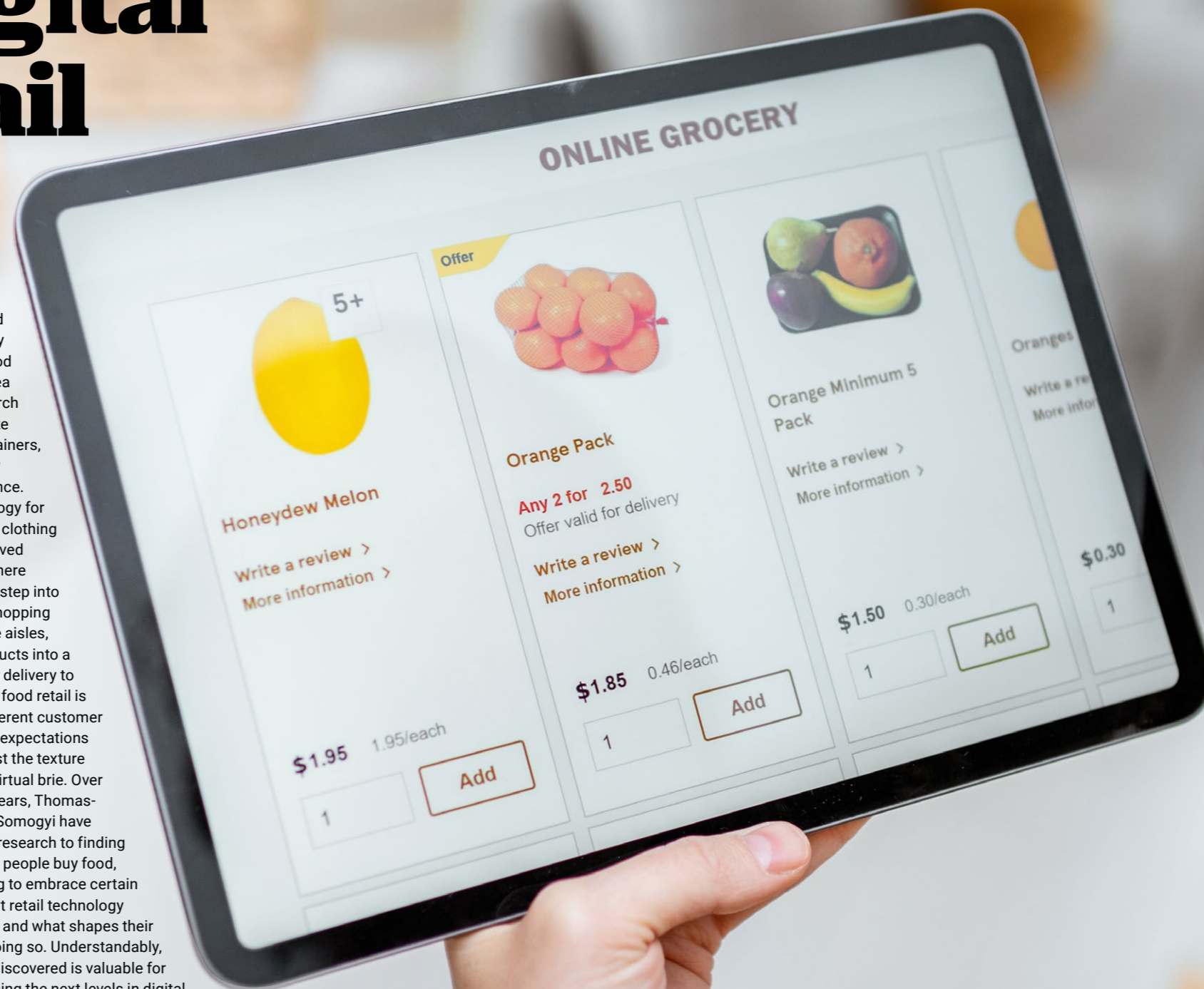
- Digital technology has increasingly shifted the retail experience online.
- Dr Kimberly Thomas-Francois, Thompson Rivers University, Canada, and Professor Simon Somogyi, University of Guelph, Canada, show that food retail is subject to specific customer demands and expectations.
- Adopting new digital grocery shopping technology depends on consumers' willingness to engage with it and their experience.
- Social acceptance makes us more willing to engage, and consumer learning in this regard is mainly informal.

Before supermarkets, smart retail was embodied in the efficient, personal service of the typical neighbourhood grocery stores. Supermarkets squeezed out those stores and introduced the convenience of buying many different products in one location. Today, that location is increasingly digital, the retailer and customer completely separated, and a customer's value lies not in their friendly wave as they enter a store, but in the data displayed in their online behaviour. Digitalising the shopping experience in this way may open the way for what retailers consider smart retail technology, but as two leading researchers in food retail have discovered, that technology is only as effective as the willingness of humans to use it.

Dr Kimberly Thomas-Francois, Thompson Rivers University, Canada, and Professor Simon Somogyi, University of Guelph, Canada, are scholars of consumer behaviour in the food business and are particularly interested in how technology shapes food retailing – a

concept called 'digital grocery shopping'. Food is a crucial area of retail research because, unlike t-shirts and trainers, it is critical for human existence. Retail technology for items such as clothing may have evolved to the point where shoppers can step into a simulated shopping space, browse aisles, and drop products into a virtual cart for delivery to their door, but food retail is subject to different customer demands and expectations – you can't test the texture of a block of virtual brie. Over the past few years, Thomas-Francois and Somogyi have focused their research to finding out why, when people buy food, they are willing to embrace certain forms of smart retail technology but not others and what shapes their reasons for doing so. Understandably, what they've discovered is valuable for retailers planning the next levels in digital grocery shopping.

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## Go, Amazon Go

Digital grocery shopping is a broad term that combines online and smart grocery methods. While online, or virtual, grocery shopping is familiar for anyone who has clicked on a bottle of wine online and had it delivered, smart grocery shopping is relatively new. It refers to purchasing grocery items at a particular store without interacting with store employees, only the multiple technology points throughout the store, such as the self-checkout technology. The ultimate example is the Amazon Go chain of cashierless convenience stores that employ sensors, smart cameras, and artificial intelligence so that customers can select what they want and walk out with it; the smart technology tracks what they take and charges their registered

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debit card when they exit. Thomas-Francois and Somogyi have discovered that the willingness of consumers to embrace such online or smart grocery shopping depends on their relationship with the technology behind it – how ready they are to use it – and the optimisation of their learning once they start using it.

Technological readiness refers to consumers' perceived comfort and familiarity with technology. In a study of consumers using a virtual grocery platform in their native Canada, Thomas-Francois and Somogyi found that consumers who perceived themselves as technologically ready were more likely to have a positive attitude towards virtual grocery shopping and a higher intention to adopt it. However, once they interacted with virtual grocery shopping, the quality – or optimisation – of their learning experience dictated whether they would continue to do so. The study uncovered that

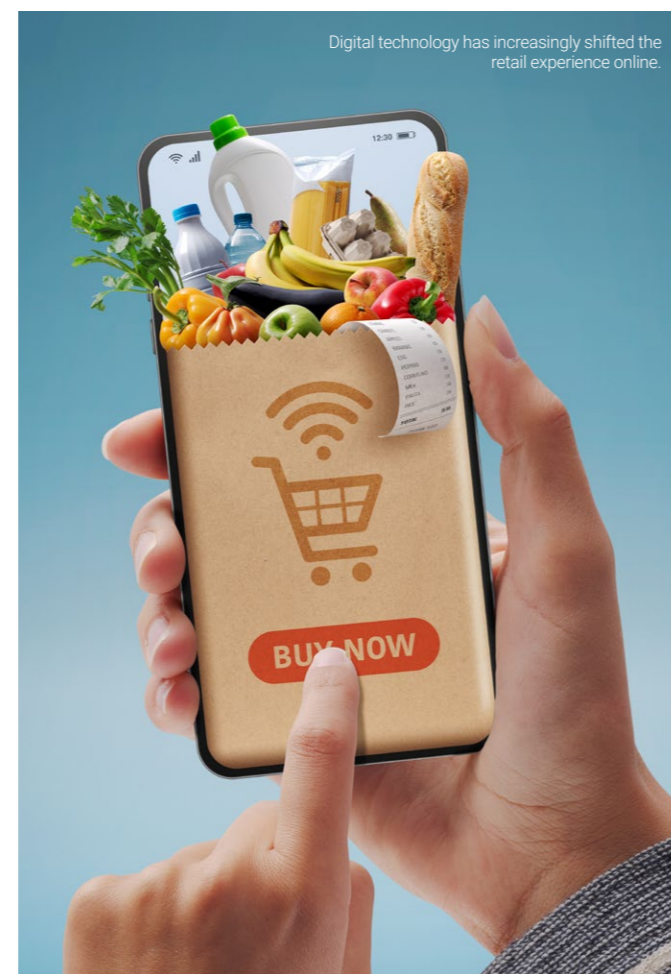
consumers who found a virtual grocery shopping platform that was intuitive and easy to use, provided adequate support and guidance, and offered personalised recommendations, helped them to develop a positive attitude towards virtual grocery shopping and a higher intention to adopt it. Of course, such adoption won't happen if the willingness to use it is not there in the first place, and that's where human nature can be a bit of a bother.

## The informal influencers

As humans, we can be either excited or apprehensive about new technology, and Thomas-Francois and Somogyi have discovered that culture helps determine that. Their research challenges the standard technology acceptance model that our *intention* to use technology is primarily determined by its *perceived* usefulness and ease of use. The researchers point to the rapid adoption of digital grocery shopping in countries like China, which have a culture of embracing technology. Trust in technology plays an integral part in developing such a culture.

That trust is difficult to create if socially influencing factors such as social media cast doubt upon it. Thomas-Francois and Somogyi have shown that developing the necessary social acceptance of any technological innovation, such as that in digital grocery shopping, is vital in integrating it into people's lives. However, consumer learning in this regard is mainly *informal*, based on mimicking the behaviour of others who influence them, and that may not be the retailer hoping to attract their custom, especially those 'potentials' and 'fence sitters' who are undecided.

Thomas-Francois and Somogyi's research suggests grocery retailers hoping to encourage the cultural acceptance of any digital technology – whether smart, virtual, or even simulated – need to make it trendy and appealing. They must also embrace social media and the use of influencers in marketing campaigns to get people excited about it. If the experience is fulfilling, they will be more willing to embrace it. Who knows, one day, we may all be reaching for our VR headsets to buy some brie and a nice bottle of Chianti.



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## Personal response

### What could be the biggest stumbling block in the adoption of new digital grocery shopping technology?

**KT:** Consumers' unwillingness to give up the power of choosing. The personal connection with touching, smelling, sensing, and even tasting certain foods, especially fruits and vegetables before purchasing them. That search for fresh or look-fresh that you can't guarantee that the shelf-picker will do on your behalf. Again, it comes down to trust. **SS:** The complexity of the technology and fear of 'doing something wrong' are factors impacting adoption. Also, the impact of the people that we trust, particularly family and friends, to help us understand and use the technology is so important. Getting consumers out of their comfort zone and trying new ways of shopping is not without its difficulties

### What within a culture encourages an uptake in new technologies such as smart shopping?

**KT:** Cultural acceptance of digital technology, the level of integration of the use of technology in people's lives. How well or comfortable the general population is with using the technology. And the value that it brings to the user. It largely depends on

what different groups of consumers value, whether it's their time and convenience or the power to choose their preferences.

**SS:** A big factor is the interaction with trusted peers. Particularly family and friends. The adoption of technology is also impacted by culture, with certain countries around the world more reticent to a digital life.

### How would you like to see fellow researchers in your field build further on your findings?

**KT:** Good question, the area is evolving, and we expect over time as the GenZs begin to lead the world, adoption will be faster. As the world embraces the novel metaverse and begins to live in virtual spaces, it would be useful to see how this might be able to affect grocery shopping. There is a lot of unknown, therefore much more to study. Also, how much capital investments would retailers be willing to make to digitise grocery shopping would influence how far we can go.

**SS:** Younger consumers are more amenable to using these technologies. Older consumers are less amenable, so future research projects should focus on what model – or even a hybrid traditional/digital shopping model – is needed that provides trust and convenience to older consumers. The advent of completely unstaffed grocery

stores and how they impact consumer use is of interest, too.

### What are the most important characteristics of a new digital grocery technology that would encourage its uptake?

**KT:** Convenience, value in use to the consumer, and digital trust and security are all very important factors necessary to promote digital food retailing.

### How did the COVID-19 pandemic accelerate the development of digital grocery shopping?

**KT:** Due to the lockdown and the fear of the consequences of human contact, many shoppers including the traditionalist consisting mostly of older consumers began to use digital and virtual means of food shopping. It is important to note that certain products, fruits and vegetables still had special in-store demand even during COVID-19 while other packages of foods were purchased in-store.

**SS:** Fear of contagion played a part in the adoption of some digital grocery shopping modes. For example, 'click and collect' became popular as you don't have to go into a store but you also don't have to pay for delivery. But this model is now becoming less popular.

## Details



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## Bio

**Dr Kimberly Thomas-Francois** is an assistant teaching professor at Thompson Rivers University, Canada. Her post-doctoral research work focuses on digital forms of food retailing and her research themes include service management, agri-tourism linkages, consumer engagement, service

leadership, value and supply chains, and digital technology in the food and hospitality business.

**Dr Simon Somogyi** holds the Arrell Chair in the Business of Food and is a professor in the School of Hospitality, Food and Tourism Management, in the Gordon S Lang School of Business and Economics, at the University of Guelph, Canada. He is a teacher and researcher in food and agribusiness sales and distribution management and smart and virtual food retailing.

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## Further reading

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