

Digitization – will we all be inter-connected?

Clients who had the opportunity to listen (in person or via Zoom) to our year-end presentation by Michael would have heard him discussing a few themes which we believe will present themselves and drive markets over the next 3 to 5 years - and most likely beyond that. In the presentation, he highlighted a few charts around the theme of the supported consumer and infrastructure. He mentioned that we will from time to time explore the other themes he briefly touched on in the presentation. In this note I will touch briefly on the topic to try and bring some understanding to the world of digitization – a world about the Internet-of-Things, Artificial Intelligence, Virtual Reality and the Smart Fridge – for example. The days are gone of this humble appliance just keeping your food and drinks cold. It can (or will) be an integral part of your household that can make your life faster, easier, and smoother.



Willie Pelser

The initial definition of digitization refers to creating a digital representation of physical objects or attributes. For instance, we scan a paper document and save it as a digital document. However, the fast-changing world of computers and technology has developed past this definition. The new digitization world and concepts like the "Internet-of-things" will need more than this article to explain and understand. This article will provide

a glimpse into this fast-changing world.

Digitization and all its derivatives, like Artificial intelligence (AI) and Internet-ofthings (IoT) simply mean that we will be more and more connected "inside" the internet and not just have an experience when opening an internet page. Already a key business trend that scenario planners and futurists are talking about for 2022 is improving

customer experience (CX). CX is a concept that involves everything from the level of service to how well products will fit into business and personal lives. Over the next year, brands will build on their successes (and learn from the failures), leveraging technology-driven solutions to the challenges of building deeper connections and relationships with their customers.

AI and IoT platforms have been enthusiastically adopted

SPEED READ

- Digitization is a theme we consider to be a driver for investment markets for many years to come.
- Client Experience (CX) is already a key driver for business in the metaverse world in 2022.
- How well will you know your fridge in the digital world? The Smart Fridge will amaze you.

in marketing, product design, and customer services, primarily because they enable businesses to improve the experiences we have when engaging with brands or using their products or services. Thankfully, the days are longgone when sporadic focus-group testing and customer

satisfaction surveys were the only way of getting feedback on how well they are meeting our needs as consumers. We still get some of those annoying phone calls, but less frequently.

Technology and our datadriven, always-online world mean deeper, sometimes real-

time, connections to their customers. However, before that happens, brands know they need to earn our trust and show that they can provide us with value. This will be the strongest trend driving customer experience throughout 2022, and here are a few ways we will see this happen. We highlight just 3 here:

1. An immersive, hybrid experience. This might mean marketing-oriented experiences designed to help

"Technology and our datadriven, always-online world mean deeper, sometimes real-time, connections to customers."



companies communicate their message in new ways and connect with new audiences. The term "metaverse" has emerged as a key trend, promoted by companies including Meta (the renamed Facebook), Nvidia, and Microsoft, and describes persistent, online environments where we can connect, communicate, and collaborate in increasingly immersive ways. (Already, a digital model of a Gucci bag, which can only be used in the metaverse, can cost more than the physical version. The reason; because people are now spending more time online than interacting in physical spaces.) The Metaverse will allow brands to deliver new and interesting customer experiences over virtual platforms and is likely to be a key reason why that concept will be attractive to businesses, particularly as integration with virtual and augmented reality (VR/AR) will be a core feature of the metaverse.

- 2. Smarter products and services. Thanks to the IoT and the wearables revolution, devices we carry and interact with are increasingly capable of collecting data from us and the world in which we live. In fact, it is estimated that in 2022, the value of the global wearables market will hit \$81.5 billion. The additional free time many of us are enjoying thanks to switching to remote and from-home working is a driver of this, as well as an increasing interest in personal health.
- Automation in customer service. The level and quality
 of service that customers receive from companies is
 a key feature of the experience it provides. Contact
 centres play a big role in this. If customers know they



The metaverse and its virtual digital worlds are coming, whether we are ready or not.

will spend a long time "on hold," be passed between multiple departments, or end up speaking to poorly trained advisors who can't help them solve their problems, they are unlikely to rate their experiences with that company highly. Automated call handling systems were initially introduced to tackle some of these issues but unfortunately didn't always have the desired effect, as callers experienced increasing frustration while navigating menus or interacting with hit-and-miss voice recognition systems. Businesses are now counting on their ability to augment these systems with AI - customer service chatbots employing natural language processing (NLP), for example - to alleviate these issues. This should mean chatbots that get increasingly better at understanding our input and predicting the response we require. My first-hand experience of the chatbot is my vehicle insurance. Monthly I type my latest kilometres travelled on the WhatsApp-based Insurance chatbot. It asks you to take a photo of the dashboard and to type the actual km's. A verification takes place in the background, then tells you how far you have travelled in the month. Based on a certain algorithm the insurance premium gets adjusted. There is no human intervention during this process.

The paragraphs above on how businesses will interact around customers only focused on a very small part of this digitized world. We haven't even touched on the technology side of things, ie the hardware. I believe the example below of the "Smart Fridge" will make the reality of what is coming and of what is already out there more easily understood.

The Smart Fridge

Refrigerators have become far smarter and interactive in the past few years, and at this point, they can practically prepare dinner for you! So, the question is: What's next for this once-humble kitchen appliance?

The days are gone of this humble appliance just keeping your food and drinks cold. It can (or will) be an integral part of your household that can make your life faster, easier, and smoother. A smart fridge is an appliance that has all the cooling and freezing properties of your current regular fridge but is also connected to the internet and to other features like ice monitors, cameras, and communication devices. Its programmable capability allows it to connect to the IoT to provide you with additional features, and yes this is what it can already do:

- Keep track of items in the fridge with cameras and barcode scanners.
- Suggest recipes based on available ingredients and leftovers, using interactive front-touch screens.
- Automatically manage grocery items using online subscription services.



- Compile a digital list of items you need to pick up at the grocery store and send that list to your computer or smartphone.
- Let you control your fridge remotely, or from somewhere else in the kitchen, without opening the door, using your smartphone or computer.

And the fridge also thinks about the environment! Arçelik Global is developing an AI-enabled fridge that will limit temperature fluctuation and optimize energy use. It goes further than that. "Each year, 1.6 billion tons of

food, worth approximately \$1.2 trillion, goes to waste – about one-third of the food produced globally," says Özgür Özkan, Senior Design Engineer of Arçelik Global. "In the average refrigerator, the temperature oscillates by +/-0.5° Celsius. By limiting this fluctuation to less than +/-0.2°Celsius, our AI-enabled fridge keeps food fresher for around 10% longer."

The United Nations' Food and Agriculture Organization comments that if food waste was a country, it would be the third-highest emitter of greenhouse gases after the United States and China. Therefore, if citizens of the world could stop wasting food it would eliminate 8% of total global emissions. Today's refrigerators have already evolved

from just a simple appliance to a critical part of your smart home. And now it looks like the world's most cutting-edge newest refrigerators might be able to help drive down earth's emissions as well!

"...your smart driverless electric car gets a call from the Fridge that tells you that you are low on beer.."

Before you put this article down - sorry you can't.. it is digital - imagine ... your smart electric car (driverless) gets a call from the Fridge that you are low on beer. The car tells the garage door to open, then soundlessly drives to the local liquor store where a preorder from the fridge has already set in motion a robot who waits at

the drive-through. A sensor on the car recognises the order, opens the boot and in pops the six-pack. A few minutes later your fridge announces: Cold beer! And by the way, the payment did go off your digital credit card. Nothing is for free, just like in the "real" world. Does this sound too far far-fetched or "only in the movies"? Perhaps not!

The beneficiaries of such a connected world are not just the Facebooks, Googles and Teslas of this world but also the companies that supply hardware to connect devices to the internet, the fibre networks that power the speed of transmission, the data centres that store all the data being created and so on and so on. It promises to be a fascinating, if at times scary, journey, and we're only just beginning.



Samsung's smart fridge with its large built in screen, connected to the Internet, ready to order on your behalf.





Our seminar schedule for 2022 will be published shortly Watch this space

Topic: To be confirmed

Natal Midlands	
Date:	TBC
Venue:	Oasis Conference Centre, 72 Main Road, Howick
Morning Time:	10am for 10.30am
Evening Time:	5.30pm for 6pm

Johannesburg

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Date:	TBC
Venue:	Rosebank Union Church, Cnr William Nichol and St Andrews Road, Hurlingham
Time:	7am for 7.30am

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