

# Technology convergence

## A new world of opportunities for retailers

I had the good fortune, thanks in part to sponsorship by Microsoft Africa Transformation Office, to exhibit at GITEX this year. It's the world's largest start-up event with over 100 000 visitors which is held in Dubai. It was absolutely awe-inspiring, a space something like 10 times the size of the Sandton Convention Centre jam-packed with the latest and greatest technology of all kinds, from a flying car (demonstrated by Huawei) to fintech to gaming. I came away with a good sense of what the trends driving technology are, and specifically what the implications for retailers are.

The overriding trend is convergence – of technologies and of worlds. This trend will have widespread significance. It can be traced back to the development of gaming, which has seen the creation of increasingly realistic environments in which players could immerse themselves. Originally, such games were largely solitary, and then came the technology for multiple players to participate in one game at the same time thanks to cheaper, more plentiful bandwidth. 5G will exacerbate this trend further and gaming will continue to lead the digital physical convergence.

Very nice for the gamers, but the significance is much broader. What has essentially been created is an increasingly realistic world in which multiple people can participate in progressively

“ Are retailers alive to the implications – and opportunities – of profoundly disruptive technology trends? ”

Ajay Lulu, CEO of Q-HOP  
reflecting on GITEX



sophisticated ways. This is the beginning of the metaverse, The metaverse is (or will be) an interactive environment build on blockchain and internet technology like Web3.0.



Many argue that this increasingly convincing virtual reality is becoming more and more attractive, especially to young people. Many of today's young people are finding the world a somewhat hostile place: it's often impossible to imagine becoming a homeowner, and many cannot tolerate coming into context with opinions they find distasteful, or simply outpriced from the market. Many others have become completely traumatised by the imminent collapse of the global ecosystem as predicted by many institutions and people.

Whatever one's views, one must concede that there are reasons why spending more time in an alternative reality could be attractive to some.

From the retailer's point of view, the ability to create a much more realistic virtual world means endless opportunities.

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The most obvious of these would be the opportunity to replicate the in-store experience digitally.

“ Despite improvements, today’s e-commerce sites are not much more advanced than they originally were – more reviews maybe, sometimes better photographs, but it is just catalogue shopping on steroids. The in-store experience remains the real deal, where you could be given a 360-degree customer experience and, at the very least, touch and feel the product. ”

### In-store everywhere

But what if one could replicate the in-store experience online? Not only would that super-charge your existing business, but it would also genuinely open up new markets. Imagine you are a wealthy individual in, say, Kinshasa and you want to buy a Louis Vuitton handbag, something that’s not available in any store in town. You could look at a picture on the e-commerce site, but it’s a pricy item and, anyway, it’s a rather flat experience compared to going into a luxury goods emporium and spending some time browsing and being dotted on by sales assistants.

One option is to jump on a plane and go to Lagos or Johannesburg or Paris, but that’s not realistic for most of us. So, a realistic experience of the Louis Vuitton shop in the Place Vendôme at home would open up a global market for many products.

The same scenario would play out across retail



But what if one could replicate the in-store experience online?



– a consumer in Durban could experience a craft market in Cape Town and order a unique item to be shipped to her.

Importantly, this is a two-way street. A craftsman or – woman can also gain customers across a country (or the globe for that matter) without incurring the expense of finding agents and so on. He or she could allow potential customers to see how the creative process unfolds or track

the creation of the specific item they have ordered. Africa can shop the world, but perhaps more importantly the world can shop Africa.

One sector of retail that could obviously be transformed is clothing. Selling clothing online has always entailed a lot of returns because human bodies are not standard, and variables like the cut of a garment cannot really be properly shown on a photograph.

But imagine if your avatar with your actual body measurements could try on a garment in the metaverse before ordering it. The next step, clearly, would be to have a garment manufactured to your measurements which heralds an era of hyper personalisation.

Another way that technology could open up new markets for retailers now is the ability to sell product on any social media platform. Here's how: the manufacturer of a distinctive garment – say a shirt – could find all instances of people wearing that product across multiple social media platforms (using AI), and then tag that item so that visitors to that page could order the same product.

You like the shirt I'm wearing on my latest Facebook or LinkedIn profile picture? Click on the tag and go straight to the site of my shirtmaker or retailer to order one just like it but in your size.

### Let's get phygital

One of the golden threads that runs through these technologies and their use cases is the convergence between the physical and the digital. We see that in many of the examples I have already noted.

And brick-and-mortar retailers could harness this kind of technology to enhance the in-store experience too – a mobile device could be used to scan an item and immediately obtain reviews, specifications and the like. Other information like how sustainably the product is produced or its impact on the environment could also be provided.

In this vein, I was particularly impressed by Microsoft's Hololens, which was demonstrated



at GITEX. It has numerous applications already in healthcare and manufacturing, for example, but it could be used by savvy retailers as well. The Hololens now looks just like a pair of stylish spectacles, but its lenses actually act as a screen to bring the virtual world into the real world.

The Hololens or similar technology would provide an enhanced version of the in-store experience in the convenience of your home or office any time of the day.

The future, including the future of retail, means processing large amounts of data and using the resulting insights in real time on mobile devices. The cloud for processing and 5G for enabling data-driven mobility are central here. This convergence is going to be vital also in the emerging use of drones for delivery, especially in remote areas, and also in the larger drones that act effectively as flying cars – Huawei demonstrated one very successfully at the expo.

I have given just a taste of how technology and its convergence can disrupt retail, and I want to leave you with one closing thought. These

technologies are here or coming down the track rapidly – Microsoft's stand was aptly themed "Believe the hype, it's real" – but I wonder how many retailers are applying their minds to how they are going to use them, and how they are going to cope with the inevitable disruptions that they will introduce.

Think of it as exciting or scary, but the future is upon us.



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## Are you ready?

**Ajay Lalu, co-founder and director of Consumption Information Real Time (CIRT) and Q-HOP.**



Ajay Lalu is a serial entrepreneur who has founded several successful companies including the Black Lite Group. He has showcased CIRT's innovative solutions at the world's largest IoT Conference, IoT Solutions World Congress – Barcelona, 2019. He is a guest lecturer at the Gordon School of Business (GIBS) on digital innovation and strategy. Ajay is greatly involved in initiatives aimed at developing SMMEs and tech start-ups.

