

What's in store for Alibaba?

Following the launch of Alibaba's FashionAI concept store, we hear from those spearheading this exciting venture and discuss the potential implications for Alibaba's e-commerce empire and the wider fashion industry. **Chris Remington** reports.

In early July, Chinese multinational, the Alibaba Group, broke the news that it would open a concept fashion store on Hong Kong Polytechnic University's campus that would make use of radio-frequency identification (RFID) tags, sensors and smart mirrors. News of this project bears closer resemblance to an episode of British science-fiction show *Black Mirror* – which depicts the effects of futuristic technologies on our everyday lives – than anything we'd expect on the high street.

Yet Alibaba has seemingly bridged this gap, with an immersive in-store experience that integrates advanced technologies along the customer's shopping journey.

Each garment in the concept store has an RFID tag that, when scanned, shows all of the data relating to a product. These tags also correspond with the second technology implemented in store: the smart mirror.

The smart mirror concept has captured the imaginations of shoppers around the world. Not only is it

equipped with a reader that can scan the product-specific RFID tags, but it then brings the product up on screen – as seen online – and is able to suggest mix and match recommendations based on the chosen product.

Furthermore, the system is available to staff in-store who are able to track and react to the decisions that customers make, whether that be trying on different garments, or swapping sizes.

Transforming Taobao

The platform that has made all of this possible is Alibaba's Taobao shopping website. Acclaimed as the world's biggest e-commerce platform and the ninth most visited website in the world, Taobao Marketplace facilitates consumer-to-consumer (C2C) retail by providing a platform for small businesses and individual entrepreneurs to open online stores that mainly cater to consumers in Chinese-speaking regions including mainland China, Hong Kong and Taiwan.

With an estimated 580 million monthly users, Taobao's e-commerce platform has

grown exponentially at a time when shoppers are ditching brick-and-mortar stores for the convenience of browsing on a smart phone.

Perhaps this is why Alibaba is looking to use its online influence to incentivise shoppers to revisit stores, which will now leverage the Taobao platform to build up an in-store database of the garments tried on and purchased.

Upon entry, each customer will either log in or sign up to Taobao using facial recognition technology. Therefore, when a customer interacts with the in-store technology, it is fed into the Taobao system that builds up a comprehensive database of preferred styles and sizes each time the store is visited. This, over time, will allow the smart mirror technology to recommend items that closely reflect an individual's sense of style.

Change in China

According to market research firm Mintel, China is amidst a 'new retail experience' which has seen consumers



The FashionAI concept store.

adopt an omnichannel approach. Figures from the company state that more than 70 per cent of shoppers opt to go in-store for food shopping, whilst 60 per cent of shoppers prefer e-commerce platforms when buying clothes, toys, games and accessories.

“The growth in mobile online shopping across all sectors this year illustrates how mobile is driving the convergence of online and offline shopping into ‘new retail’. Meanwhile, online shopping penetration is high across most sectors,” explains Matthew Crabbe, research director, APAC, Mintel.

“The issue is that consumers are already adapting to ‘new retail’; they are embracing greater integration between online and in-store shopping. This will mean much tougher competition between retailers. It will also likely mean more pressure for further consolidation in the market, resulting in more mergers, acquisitions and strategic partnerships,” he adds.

Online retail sales, reports Mintel, have grown at a compound annual growth

rate (CAGR) of 37.9 per cent since 2012 – growing nearly fivefold in the past half a decade. As such, Alibaba has adapted its popular multi-channel approach into one seamless stream of business.

Customers now have the opportunity to leverage the best aspects of online shopping in-store. What’s more, the connectivity between the store and the Taobao account allows shoppers to add garments to their virtual basket in-store, which they can later purchase online to be delivered to their home.

The backbone

The concept is simple, but this is only because the technologies in play have been fine-tuned over a number of years. Speaking exclusively to *T.EVO*, Calvin Wong, Professor in Fashion and the interim head of the Institute of Textiles and Clothing at Hong Kong Polytechnic University, he tells us that the technology his team has developed was created years ago and it has always been a case of partnering in order to facilitate its implementation.

The key ingredient for Wong and his team to successfully integrate its technologies within the FashionAI store has been its image dataset. This, Wong says, is the backbone of this project. Essentially, in order for the smart mirror to be able to recommend products, the AI must learn from an extensive dataset of garments from which it is able to categorise subsets based on product shape, size, materials and attributes. For example, the smart mirror can only recommend similar shirts to a customer once it has learnt the fundamental characteristics of them; a collar, the buttons, and so on.

“The current systems (used in industry) are not very promising,” Wong says. “Most AI technologies are able to recommend products, but they rely on searching based on the whole image. In fashion you have different colours, shapes and sizes, there are so many attributes that AI technologies do not understand.

“We recently hosted the FashionAI Global Challenge with Alibaba where

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we opened up our FashionAI dataset. We labelled 400,000 images based on product-specific attributes and invited all of the AI technology companies and researchers in the university to develop an algorithm for the machine to learn. They then competed based on the accuracy of their systems," he added.

What has held the Hong Kong research team back for some time now has been the unattainable support from a company of Alibaba's stature. According to Wong, correctly labelling products based on attributes is an arduous task, particularly when you encompass the sheer volume of apparel retailers manufactures.

What's more, the task at hand is truly put into perspective when you realise that the current dataset is only the base layer of a technology that Wong and his team aspires to build upon.

"The FashionAI dataset is just the foundation. Now we have that, we can build in new functionalities and we can be more accurate with the mix and match recommendations. The top layer is creativity. Just one or two companies have started to create new collections and some are exploring print patterns based on what the systems have learnt and then they can create new patterns," Wong says.

"It would be difficult to replace human beings because creativity involves emotion, so I think these machines would serve better as design assistants," he admits.

Future fashion

The advanced technologies developed by the Hong Kong Polytechnic

team are confined to the FashionAI store at the moment. But that isn't to say that Alibaba doesn't hold ambitions for its wider implementation. Addressing the audience at this year's FashionTech Berlin, Karl Wehner, managing director of Alibaba Group, Turkey and Eastern Europe, revealed: "We're expanding our technologies across all regions including fashion."

Just one aspect of the multinational's 'new retail' ambition is to merge the online and offline shopping experiences. As such, Wehner hinted in his presentation in Germany that stores of the future could utilise technologies to develop interactive advertising displays and may even offer delivery services from the store to a customer's home.

One area in which Alibaba has placed focus over the last year has been the luxury markets. Global consultancy firm KPMG estimates that by 2020, 50 per cent of luxury item sales in China will be made online. In anticipation of this market trajectory, Alibaba has reacted accordingly with the launch of a new e-commerce platform that is says will leverage the best of online and offline shopping.

"About a year ago we addressed the luxury space and launched the Luxury Pavilion. We have around 40 luxury brands on board including Versaci, Hugo Boss and Burberry," Wehner said.

Launched on Alibaba's Tmall, its B2C shopping site, the Luxury Pavilion aims to bring the same brand exclusivity and tailored shopping experience that consumers would get in a brick-and-mortar store to the world of e-commerce.

"So within our customer base we have hundreds of millions of potential shoppers, among them we have more than 100,000 'A+' members who spend at least US\$45,000 per year on our platform. We came up with the idea to build an environment within our application that serves these luxury consumers exclusively," noted Wehner.

"If you spend a certain amount with Alibaba, that is what store we will present to you," he added.

Whilst still in its formative stages, the implementation of tailored shopping experiences offers a glimpse into the future of fashion. Whether that future entails high street stores dominated by embedded technologies, or simply personalised online platforms for customers – the overriding motivation is to create a truly unique experience that will be both lucrative for the retailers and convenient for the shopper. What form this takes remains to be seen. **T.EVO**

