Yoox Net-a-Porter: Luxury retailing at its core

Alex Alexander, CIO, Yoox Net-a-Porter Group, spoke to *Emma Herrod* about the luxury group's platform, its new London Tech Hub and how innovation fits its plans to grow the business.

IT IS only two years since the merger of Yoox and Net-a-Porter but since then much has been done to integrate these two fashion retailers, which sell luxury in-season fashion and out-of-season discounted goods as well as developing flagship ecommerce sites for luxury brands. Listed on the Milan stock exchange, the Yoox Net-a-Porter Group (YNAP) has headquarters in Bologna, Italy – where Yoox is based – as well as in London, where Net-a-Porter has its roots. Commercial and tech teams are based in both locations. The Group has a turnover of almost £2bn and set its sights on double-digit growth through to 2020.

The annual increase in its share of the luxury fashion market is currently outpacing the predicted 15% with revenue set to grow by 17-20% per year between 2015 and 2020. Mobile and personalisation are seen as key to increasing customer engagement and retention with new categories, product lines and international expansion the priorities in its 5-year plan to increase sales. It also plans a full in-country launch in the Middle East in 2018.

As well as boosting sales through its multi-brand in-season Net-a-Porter and Mr Porter sites the Group aims to increase sales of multi-brand off-season luxury fashion from its original Italy-run Yoox.com and the Net-a-Porter launched site, The Outnet.

Its expertise in luxury content and customer service will further be brought to the fore through partnerships with luxury brands for which it designs and operates flagship ecommerce stores. It currently operates 40 flagship stores for brands including Armani and Chloe using technology from the Yoox arm of the business. It plans to deepen the

digital opportunity for these brands through development of omnichannel capabilities, native apps services, editorial content, tailored customer service, and further creative and digital projects.

CORE PLATFORM

Since the merger, the Group has been reorganising its operations around three distinct parts of the business – in season, off season and flagship stores. A core cloud-based platform has been developed with IBM using Yoox's proprietary software and IBM WebSphere Commerce. This will provide a robust and scalable foundation for the different ecommerce sites within the business as well helping to ease post-merger systems integration.

Running all of the businesses on one platform also provides a single focal point for in-house technology development. In addition, working with IBM gives YNAP access to the IBM Innovation Lab and the Fashion & Luxury Innovation Committee.

The core commerce platform is underpinned by product information management, IBM Sterling Order Management and back-end systems including ERP and warehouse management systems.

"Decoupling the front end from the platform means we can create the differentiators and maintain the DNA of the brands while we focus on the platform to just expose the services, so if you look at Net-a-Porter or Moncler they are pixel perfect but they are all different, but that is all experience, UI and UX," says Alex Alexander, CIO, Yoox Net-a-Porter Group.

He adds: "They all use the same sort of capability but not all brands want the same features, certain payment methods or checkout features." Aspects such as these are determined at the brand level, based on the features they want to enable for customers, along with regional aspects such as payment methods. UI and UX can further localise the experience.

The idea is to build only once with a set of APIs enabling the core functionality and features to be used many times in different ways across the various brands. This enables brands to differentiate and provide the desired experience for their own customer base, whether it is via a mobile app, m-web, smart watch or in-car device. In addition, the front-end customer experience can be differentiated by country or even by customer.

The new Tech Hub brings the 500 London-based developers together in one place

> "Shoppers in luxury retailing see fashion as something that is disposable, a commodity that they want now"

One core global platform also means that the tech teams can develop solutions for specific brands with functionality added into the core platform and then made available to all.

Funding this five-year growth plan is an investment of more than £462m (€500m) in technology and logistics across the Group, including a new Tech Hub in London which opened at the end of June.

TECH HUB

The Tech Hub, in London's White City, brings together 500 developers from two separate offices in the capital, with space for a further 100 recruits, Alexander explains. It works closely with the Group's other tech hub in Bologna, which also has 500 developers. They work on projects across the business but each has its own areas of expertise: Bologna is a centre of excellence for fulfilment optimisation, warehouse management tools ▶

INNOVATING WITH AI

"AI is one of the technologies which will transform our business. Every decade there is a game-changing technology which comes to the landscape and I see AI as one of those game changers which will help us give our customers a personalised experience and not look at customers as a segment but as an individual," says Alexander.

YNAP plans to use AI in areas such as returns optimisation, pricing optimisation and targeted marketing enhancement and its focus this year is natural language search.

Net-a-Porter sells multi-brand in-season designer fashion

and techniques, and omnichannel, order management and ERP, while London focuses on mobile, content, visual merchandising and artificial intelligence (AI).

Each area of functionality has a lead, such as the owner of payments functionality, but the team working on it may be spread across both locations. Data is a global team effort, for example, but some of the niche smart data elements are being worked on in London. AI's initial base was in the capital, but Alexander believes that within 2 years it will be applied across every part of the business as niche technology uses are matured in one centre and then migrated to the rest of the organisation.

For the past two years, the two Tech Hubs have been working closely together on a number of projects and co-locating project teams between Bologna and London. Alexander explains: "We tried to encourage face-to-face working in the early days of 2015/16. It was essential to building a global team you have to know people and interact with them."

He adds that some projects were deliberately chosen in 2016 to ensure people from both locations had to work together. A mobile initiative, for example, was set up in a simalar way to a start-up so the team had to work out their own co-location arrangements and complete the product development at the earliest possible time.

The Group has invested heavily in video and conferencing tools at the London hub, as well as in collaboration apps and unified communications tools, to enable continued close working across project teams wherever they are located. "We tried to encourage face-to-face in the early days but now the teams are effectively working as a global team so we can use collaboration tools and video tools to maintain that collaboration," says Alexander

"The notion of one team is so important to me," he adds. "Because as a global team, unless we think and act as one team, we won't be effective to support a global business, and that is one of my key priorities, to continue to reinforce this one team mindset."

Alexander aims to put YNAP at the forefront of technology innovation in luxury retailing and to create a team that's able to develop in a sustainable way wherever particular project teams are based – and that may extend to further tech hubs in different locations in the future.

He comments: "I want to have more technology hubs because of the diversity of the talent and the speciality we can get from different locations is key. We have cracked the notion of creating a global technology team and the next focus is execution."

> "YNAP is generating highly differentiated and innovative brand and customer experiences enabled by one shared, scalable platform"

THREE PILLARS

The tech hubs are concentrating on three pillars for the business growth: personalisation, omnichannel and mobile. Underlying much of this is machine learning and AI.

"Personalisation is key to creating inspiration for the customer," says Alexander explaining how the Group plans to enable one-to-one personalisation of every aspect of customer interaction, be it on web, mobile, apps or other touchpoints. He believes that true personalisation means understanding each customer, their location and their mission. His stated goal is to enable one-to-one personalisation in terms of assortment, outfit curation, experience, content and pricing.

"The way we are trying to achieve our personalisation objective is through AI and machine learning and key to that is smart data," he adds. The Group has view of lots of data on customers from its own sites, in the form of how they behave and their searches, as well as from external sources, including the images they viewed on Instagram. However, as Alexander points out: "Only AI and machine learning can actually process all kinds of data because that data is partly structured. But the majority of it is unstructured data and putting all of that together is what our AI and

personalisation strategy is all about. That is the key game changer for us in being able to create the personalised experience for our customers."

Further external data, such as the weather, the customer's current location and the location of the occasion for which they are buying attire can be combined with this data to give a fully personalised outfit recommendation experience. He comments that there is no point sending someone an offer for a fur coat when they are spending Christmas in Australia.

YNAP is using IBM Watson to build, train and test a natural language engine which will allow customers to speak or type into a mobile app without having to adhere to specific rules. Alexander gives examples of a customer wanting to buy a skiing outfit from a specific brand or someone saying they want to buy a gift for their husband. "We're building the engine and testing it and this can then be exposed to the front end," he says. How the different sites utilise the technology will be up to them.

Another feature being developed with AI is an outfit builder which uses personalisation data held by the company, such as the customer's clothes size and preferred brands. The outfit builder can be triggered by a retailer, personal shopper or by the customer themselves with different forms of interaction added at the front end. Visual search is also being investigated. This enables a shopper to upload an image of someone and say that they want to purchase a similar outfit. The engine will then build them an outfit based on that photograph offering garments sold by the retailer or the brand.

> "Personalisation forms one of three technology pillars for the company's growth – mobile and omnichannel being the other two"

OMNICHANNEL

Omnichannel development is providing opportunities for the flagship stores to fulfil customers' need for speedy omnichannel solutions and enabling them to pick up items from anywhere in the world and return them either to the same store or to another one in a different country. Customers will also be able to order certain brands from Net-a-Porter and pick up their purchase from the brands' own shops.

This 'omni-stock programme' uses IBM Sterling Order Management to provide the Group with a single, global view of stock across the distribution centres of Yoox, Net-a-Porter and the brands' own stores. Distribution centres across the Group are being repurposed in line with the in-season and off-season businesses, and a hub and spoke model implemented so stock efficiencies can be increased as well as growing the level of full-price sell-through. The model also future proofs the movement of goods against possible post-Brexit customs duties.

The omnichannel functionality will in addition enable more flexible fulfilment options and services, including same-day delivery in New York, London, Milan, Dubai, Shanghai and Tokyo. It will also enable the flagship stores to have a better view of customers and link their online and offline behaviour.

Yoox and the flagship stores have already migrated to IBM Sterling Order Management with Valentino becoming the first brand to go live with the first phase of omnichannel functionality in September.

Net-a-Porter and Mr Porter have moved across to the Yoox Group's ERP and will migrate to the new OMS in 2018, when they also move to the full commerce platform. The Outnet will migrate to the full platform at the end of this year.

Italian brand Moncler was the first of the flagship stores to run on the commerce and content part of the platform when it went live this July.

MOBILE

Mobile apps are becoming increasingly important for YNAP. The number of brands selling via apps is growing every financial quarter and now accounts for 50% of all sales, ▶

Yoox has already migrated to IBM Sterling Order Management

INTEGRATING YOOX & NET-A-PORTER

The Yoox Net-a-Porter Group was formed from the merger in 2015 of Italian fashion retailer Yoox and British luxury pureplay Net-a-Porter with its Net-a-Porter, Mr Porter and The Outnet brands. All four distinctive brands in the Anglo-Italian group cater for the luxury designer fashion market. The global organisation now operates through three business lines: in season, off season and online flagship stores. These all operate from one shared, global, scalable platform, sharing common corporate functions and deploying best practice and cross-fertilisation.

The multi-brand in-season business line includes Net-a-Porter and Mr Porter, while the multi-brand off-season business is made up of Yoox and The Outnet. Before the merger, Yoox designed, set up and managed online flagship stores for some of the leading global luxury fashion brands, including Armani.com and Chloe.com. This part of the business will continue with brands operating off a single core platform which is being developed for all areas of the business.

compared with last year's 40%. The company is investing in iOS and Android apps to meet the varying demands of customers in all the countries in which it does business.

"We can really deliver an inspirational experience through mobile," says Alexander. The company has recently added messaging via mobile apps and screen sharing, whereby a personal shopper can share information with a customer.

YNAP has ambitious plans for the future as it moves towards becoming a mobile-only company, investing in mobile frameworks – to enable speedier deployment and faster apps as well as new services for existing apps – and developing AI and natural language capabilities. For example, customers when travelling will be able to ask what's trending and what the weather is like at their destination and then collect their order from the closest store.

The Group's Tech Hubs need to balance innovation and the core platform with the needs of each individual company as well as having an understanding of the end customers. If a number of sites are experiencing similar issues, a single functionality can be developed for the core platform but deployed in different ways to match customer behaviour on the individual sites. The level of cart abandonment, for example, was lowered through subtle messaging which showed the shopper the items that had been left in the basket the next time they visited the app. "The tone of the message was such that it was not seen as a random message," Alexander says.

An R&D team is looking further ahead to explore technologies which have yet to be commercially proven, such as augmented reality and shopping from physical shop windows when the store is closed. It is also investigating new use cases for proven technology such as visual recognition in warehouses. "It's a fail-fast approach," Alexander comments.

As new technologies and business uses are developed, refined, tested and proven, they are added to the core platform and so made available to all of the retailers and brands.

Integration plans and cross-group working certainly seem to be working for the business. In the first half of its financial year its net revenues hit £923m (€1bn) for the first time, an increase of 19.5% on an organic basis compared with £828m (€897m) in the first half of 2016. YNAP has successfully launched Moncler as the first online flagship store on the new front-end platform as well as signing a multi-year global agreement for the new Ferrari online flagship store.

Over the same period it recorded 400 million site visits, compared with 342.7 million in the first half of 2016, and 4.5 million orders (3.9 million) with the average order value increasing by €10. Active customers are on the rise, too, hitting the 3 million mark in the first half of 2017 (2.6 million).

With more parts of the business migrating onto the new platform and the synergies that brings, along with optimisation, innovation and engagement, the Group is set to further establish itself in the minds of its customers worldwide, while new markets and the rise of personalised experience on mobile devices ensure its sites remain close at hand.

YNAP will launch Ferrari's online flagship store in 2018