An Amazon web services Case Study with Turkey's largest Publicly Trading Retail Group

About Boyner

Boyner Group is the largest publicly traded non-food and non-electronic retail group; including 7 group companies (Altınyıldız, A&Y Marka Magazacılık, Beymen, Boyner Büyük Magazacılık, BR Magazacılık, Hopi, Morhipo), hundreds of represented brands, 10.000 employees, over 20 million registered customers and over 500 stores. It serves in different retail formats ranging from luxury fashion brand stores, multi-story retailing, e-commerce to mobile trading. The Boyner Group, which leads the sector by offering a unique shopping experience to its millions of customers had a total turnover of $ 1,5 billion in the year 2016.

The Challenge

In 2014, a multichannel digital conversion program was initiated by the group. Because electronic commerce was growing rapidly, e-commerce infrastructures were chosen to ensure that stores were keeping pace with their customers. The project, launched at the end of 2014, turns every retail business into a next-generation retailing concept where both web and mobile devices are actively used. In-Store sales support applications and the inclusion of Click and Collect services were among the goals of quickly deploying the entire e-commerce infrastructure without distinction of offline, web or mobile customers. They gave this strategy the name of "All-line retail". While making the decision to reach this goal with NGI Commerce Suite solutions (a Runibex Technology Group company), the most important factor that stood out independently from the product was the entire infrastructure. This had 7 different domains and the app attached to them including; in-store sales support applications, warehousing, in-store operations and product collection. Each had to be scalable. Other goals besides scalability were stability at a top level, sustainability, security, and flexibility in DR scenarios.

Why Amazon Web Services

NGI Information Technologies, the owner of NGI Commerce Suite product selected for e-commerce infrastructures, is part of the Runibex Technology Group. Runibex recommended AWS for the Boyner Group project which was one of Turkey's largest digital

transformation projects and is one of the most comprehensive projects using the cloud. One of the factors in this decision was the high API loads of the front-end and in-store and mobile apps. Elastic Beanstalk and Elastic Cache services are key services used in many e-commerce projects around the world to meet heavy loads in a scalable and seamless manner.Providing uninterrupted database access was important for systems running 24/7 and under constant load, and it was decided that using Amazon RDS services including Multi-AZ would provide a much more stable environment overcoming issues with previous cloud experiences.

The Elastic Load Balancer service integrated well with the S3 Storage Service in order to ensure that the load distribution was healthy and lossless, and the S3 Storage Service quickly and reliably accesses images close to 5TB. It had to meet high loads such as "order management with 170,000 active product variants for only one domain; in-store work orders; order management; product collecting operations; 4 different back-office systems; and over 30 near-real-time integrations including 3rd party stakeholders". Amazon RDS, EC2, S3 and Amazon Elastic Beanstalk and Elastic Cache Services were also configured. After completion of the project rollout, the Boyner Group needed unique but best practice solutions to manage 7 Domains within one team. For this reason, we used the Lambda and Cloud Formation services for automatic opening and closing of the test and staging systems when needed.

Monitoring of the systems and of the alerts received is an important requirement for all these solutions for which we used both AWS partner Runibex's managed service solutions and the AWS Cloud Watch service. Being a long-term project, the need for infrastructure to grow with the adoption of each domain, scalability in case of aggressive growth in the business and meeting all afore named needs completely but cost efficiently weret he factors for choosing AWS.

<p style="text-align:center">The Benefits</p>

For the Boyner Group, the AWS infrastructure has different levels of value in terms of technology, sustainability and cost advantages. In this sense, it was only possible with AWS to meet the goal of managing 7 different domains centrally within one team and with many different technologies and integrations. All of their systems are scalable according to the load and sources can be increased manually if necessary. With the support of Runibex Managed Service and AWS Technical Support, the Boyner Group gained a business environment and a solution where they could achieve their aggressive growth goals. They were able to rapidly roll out one of Turkey's biggest digital conversion projects, including 7 different domains. In the whole group, in only 2 years, and even in the first transitional years, aggressive business goals of the group were achieved thanks to AWS.

"We've needed infrastructures to handle potentially large amount of business growth. All e-commerce Projects of ours, which we go live with Runibex and its affiliates, are in the cloud and it completely meets all our demands. We utilise more then one cloud service and infrastructure and we were able to achieve these with AWS and Runibex Technology Group"

<p style="text-align:right">Sedat Yıldırım, Omnichannel Retail & Technology Director</p>

Boyner's technical teams' experience of cloud technologies throughout the project and through the partnership of Runibex Technology gave the Boyner Group significant experience, confidence and

motivation for the future use of cloud in IT investments. Boyner Holding Omni Channel Director Sedat Yıldırım said: "In the frame of the project, our goal was to provide benefit for both the group and the customers we touch. For this reason; unlike the well-known methods, we use the method of the best examples in the world that applied for the first time in Turkey. So it was very important for us to work with business partners who will be with us in all processes, flexible and working with us and supporting us with their products and services in the sense of new technologies. We needed the infrastructure that can handle very fast growth potentials. With Runibex and group companies, all our e-commerce projects we have been dealing with are in the cloud environments and meet these needs. We use multiple cloud services and infrastructure, and we manage them all thanks to Runibex Group and AWS"