High-performance AWS cloud hosting service deployed for web-based Talent Management Solution

Client Business Description

ForecastHR is a New Jersey-based team of HR and IT professionals turned entrepreneurs with work experience across the globe. The ForecastHR team wanted to build a holistic workforce planning solution and talent management system that could provide insightful analytics for quick decision making by business leaders. They had already researched similar products available in the market but were not satisfied with any.
Background

ForecastHR approached Beyond Key to develop a web application that had a simplified workflow with a clean interface and a highly flexible tool that could be easily used by different levels of employees in the organization. They wanted to help Human Resource managers and senior members of the organization have an Intelligent workforce analytics platform where they could easily identify the resource needs of the company. The platform was required to be hosted on the cloud and have the capability to integrate with any existing HR platforms.

How We Helped

Beyond Key anticipated the need of hosting this “Talent management and workforce planning software” on AWS cloud. There was an evident challenge foreseen by the developers far ahead of launching the software and that was the storage of huge amounts of data with multiple users of the application at all levels. AWS cloud was the clear cut answer.

Our Solution

Beyond Key analyzed all the circumstances and suggested using AWS cloud computing services to help ForecastHR overcome problems related to server hosting and database.

Beyond Key suggested the following key services provided by AWS:

- **Amazon Elastic Compute Cloud - AWS EC2**
- **Relational Database Service - AWS-RDS(MySQL)**
- **SaaS Model - Isolated Databases for advanced security**

Client’s requirements were AWS auto-scaling, Mysql high-performance database, increased concurrent users, and reduction in CPU use. After each season, servers were shut down manually, thereby reducing cost.
**Result**

ForecastHR now has a **successful web solution** implemented for **recruiting employees** within the organization. It provides **opportunities for talent retention and motivation.**

**Faster deployment speed**
Hosting the complete solution on AWS cloud using **Amazon Elastic Compute Cloud** (AWS EC2) eliminated the need to invest in hardware up front, so the client could develop and **deploy the application faster.**

**Ease of Access and control**
Users have complete administrative control over their virtual servers with Amazon EC2. Essentially, it provides the same level of access and **control as a physical server** operated locally in the office.

**Scalability**
**Compute** instances are easily managed through the Amazon EC2 web interface which **allows users to scale up or down, boot instances, and configure processor settings** with a few clicks of a mouse.

**Platform of Your Choice**
When you launch an instance in EC2, you get the ability to run an **operating system of your choice.**

**Security**
EC2 has multiple built-in security features. Users have **complete control** over who can access the instances in the cloud.

**Flexibility**
Amazon EC2 has security groups that act as **virtual firewalls to control traffic** to one or multiple instances. Users can **establish rules** for each security group and modify rules at any time.

**Database solutions**
Complex administration processes like **patching database software, backing up databases, and enabling point-in-time recovery** are managed automatically. Scaling storage and compute resources can be performed by a single API call.

**Multi-AZ deployment**
Multi-AZ deployments aim to provide **enhanced availability and data durability** for MySQL instances.

**Delivery time optimization**
One of the most compelling benefits of Isolated databases was to **increase infrastructure delivery speed by 90x** by using the AWS Infrastructure-as-a-Service (IaaS) platform. Not only did it reduce time to deliver the necessary infrastructure, but it enabled capacity to **handle transient workloads** at a variable cost.

**Cost efficient**
The architecture cost was much less than using native server hosting services by the **pay-as-you-go pricing model of AWS.**
Cloud architecture for ForecastHR