

CASE STUDY : Biryani by Kilo's

High Performance, Increased ROI, And Incredible Customer Experience Was Achieved With Biryani by Kilo's Migration To AWS Cloud.



Introduction

Gurugram-based food-tech start-up, Biryani by Kilo (BBK), launched in 2015, has today expanded its reach across 30 cities in India with around 70 outlets and continues to grow exponentially. It offers Biryani to the masses and uses the best ingredients including expensive branded rice, spices handpicked from Kerala, and stringently selected meats and vegetables for its Biryani and Kebabs. This cloud-kitchen start-up aims to grow to 200 plus outlets across India in the next two years and expand to international destinations as well, with an estimate of Rs. 500 crore annual revenue by then.

Business Needs

BBK's fast growth is driven by the increasing number of customers and its expanding footprint. Although the organisation had migrated to AWS Cloud from running on a Private Cloud, it was facing several challenges with the operations and customer service. In addition, due to the inaccurate configuration of the AWS Cloud architecture BBK's business-critical infrastructure was impacted.

- Customers' orders from food aggregators such as Zomato and Swiggy were getting missed at the outlets due to erratic server outages, thereby leading to the loss of crucial business and spoiling the customer's experience.
- This challenge worsened when there was a significant spike in order volume during weekends, holidays, and special days, such as Christmas Eve and New Year's Eve.
- Database optimization was another area that had to be addressed.

Cloud Security was another area that needed to be addressed as the organisation was using payment gateways for food orders.

- High availability and scaling of cloud infrastructure were required, without which the business functions could suffer.



Implementation

The client was unhappy with their AWS partner and was looking for a more experienced partner who could help them derive the proper benefits of AWS and help solve their issues. Rapyder Cloud Solutions, an Advanced AWS Consulting partner with expertise and experience in successful cloud migration services, proposed a new solution that would address all the above challenges. Rapyder's team of Cloud Architects had several discovery sessions with the client to understand the latter's requirement for the implementation of AWS Cloud. Then, they conceptualized and stitched a powerful, robust, and customized solution around AWS services for the task. Rapyder implemented the following proposed solution for a successful implementation of AWS Cloud.

- Rapyder re-configured the cloud architecture and ensured successful migration to the re-architected AWS cloud environment to suit the growing requirements of the organisation.
- Being content heavy with videos and pictures of the dishes, these files were stored and continuously running across the network and could be accessed by mobile phones even in Tier 2 cities from a 2G network too. AWS CloudFront was leveraged to deliver content continuously across all networks and geographies.
- Addressed downtime challenges to contain business and customer losses, with all orders to the organisation across touchpoints getting executed.
- Overall security of the infrastructure, covering payment gateways and all other security parameters, such as information and data security, was achieved.
- CloudWatch was leveraged for monitoring of the infrastructure, and proactive measures were taken to address issues.
- Database optimization was established with all DB layer parameters put in place.
- Availability and Scalability aspects were established in this new-architected infrastructure.
- All Applications and Databases were migrated to AWS cloud during non-peak hours with minimum downtime not affecting business operations.
- The entire solution that was stitched and implemented met the criteria of Security best practices.



Reaping Rewards

With the significant reduction in downtime, the high volume of food orders placed was attended to and served, increasing business and ROI.

Content delivery through videos was achieved, leading to smooth business transactions across all outlets, in both Tier I and Tier 2 cities and from 2G, 3G, or 4G networks as well, thereby enhancing customer experience.

- Cloud Infrastructure performance improved as a highly available and scalable architecture was provided at all the layers with the deployment.
- By employing AWS services such as self-managed EC2 instances and leveraging auto-scaling, observed significant cost savings.
- Ease of management of applications and optimal performance were achieved with the migration.
- Completed the entire migration of applications and databases with negligible downtime with no impact on the business.