



# AWS COST OPTIMIZATION

## ABSTRACT

iOPEX is the new age technology partner for organizations looking to grow their business with our innovative, consistent and quality IT services. We enhance speed and quality of operations by bringing a balanced mix of process standardization, quality assurance and automation.

Increasing spend in maintaining cloud infrastructure made our client to lookout for a robust cloud optimization solution to improve processes and reduce the cost.

iOPEX helped the customer optimize their AWS spending by continually auditing, reporting and implementing an optimized solution that helped reduce their infrastructure spend considerably.



## The Client

The Client is one of the biggest players in Digital Ad Marketing company in USA with operations in 8 different locations around the globe with more than 35000 clients.



## The Challenge

Some of the challenges faced with respect to cost optimization prior to our engagement include:

- ▶ Day to day increase of data consumption which in turn increased the expenses on storage & database services
- ▶ Globally diverse teams with huge requirements for testing & development of applications with highly unused / underutilized resources
- ▶ Process streamlining, implementing best practices posed a big challenge due to dynamic infrastructure & growing application requirements

As the development teams are more focused on product delivery & the DevOps team had provisioning, security, performance, tool testing as their main priorities they were looking out for a technical partner, an operations team that has experience & capability to work on cost optimization without compromising on the performance, productivity & product delivery.



## The iOPEX Solution

iOPEX conducted a thorough audit of the infrastructure by gathering information on:

- ▶ Core applications & other computing needs
- ▶ Team-wise Spend
- ▶ Service-wise Spend

And we narrowed down the majority (71%) of infra spending was from the below services:

- ▶ **EC2:** Some of the optimization solutions included:
  - ▶ Proper Tagging: Improved resource tagging, automated instance termination and detachments.
  - ▶ Right Instance Choices: Tracking sheet to nominate applications for reserved instances, application right sizing and best practices guide for choosing appropriate choice
  - ▶ Identification of Unused Resources: Identified unused resources, notification to the right people and removal after grace period

## The iOPEX Solution (continued)

- ▶ Low Usage Instances: Flagging instances with low usage, swapping them to smaller instances, process for terminating test instances and implemented ECS shared clusters to be run as a container
- ▶ Effective Usage of Cloudwatch & Elasticity: Evaluated & identified applications into ASG to ensure proper scaling and included custom metrics to Cloudwatch for better elasticity
- ▶ **Simple Storage Services (S3):** Implemented Lifecycle Rules to all buckets based on its time to live – where data more than 6 months is invalid
- ▶ **DynamoDB:** Service to ensure the speed of data read is at milliseconds latency which is heart of the business model. Auto-scaling was set up to maintain an optimized capacity that is slightly higher than the consumed capacity to avoid performance issues and to provision capacity cost effectively.

## Engagement Outcome

The AWS cost optimization solution was implemented successfully and achieved the desired targets within set timelines by following the rigorous iOPEX optimization framework. The cost optimization approach helped with an overall 22% cost savings.



**24%**

Cost savings in  
EC2 Instances



**23%**

Cost savings in  
Simple Services  
Storage (S3)



**19%**

Cost savings in  
DynamoDB



## ABOUT IOPEX TECHNOLOGIES

iOPEX is a new-generation business services provider offering optimized IT management services. We are process innovators focused on extracting the best out of the investments you have already made. At iOPEX, we help you realize that golden ratio where your technology and business are in complete synergy, making your company greater than the sum of its parts. Founded in 2009, the demand for our specialized optimization services has helped us grow to over 1,600 employees in eight years.



## CONTACT US



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