

## CASE STUDY:

# AutoDesk

## PRESIDIO HELPS AUTODESK OPTIMIZE ITS CLOUD SPEND FOR LAUNCH OF NEW SAAS MODEL

### Situation

Autodesk is the developer of the revolutionary AutoCAD® design software, which empowers architecture, engineering, construction, manufacturing, media, and entertainment industries to “imagine, design, and create a better world.” In order to provide customers with more flexibility in how they use AutoCAD, the company decided to introduce a cloud-based, software-as-a-service (SaaS) subscription model with Amazon Web Services (AWS) as their platform.

### Challenge

Autodesk's new SaaS delivery model would result in a considerable uptick in their cloud usage. In addition to the standard pay-as-you-go pricing model, AWS offers the option to pre-pay for “reserved instances” which provide increased resources and capacity within a certain region

at a reduced hourly rate. Autodesk wished to analyze and forecast usage to take optimum advantage of Amazon's rate structure and pricing options. While several commercial off-the-shelf analysis tools exist, their algorithms are proprietary and Autodesk would not have complete visibility into how the calculations were performed. Autodesk wanted a tool to help them evaluate on-demand against reserved capacity purchasing options with transparency that would allow them to fully understand the deciding factors.

### Solution

As an Advanced Consulting Partner with over 50 AWS certifications and deep expertise in data analysis and software development, Autodesk was confident in Presidio's ability to create a custom application that would help them optimize their cloud spend. Presidio first curated, normalized, and examined multiple gigabytes of usage data over a one-year time period. Using Jupyter Notebook, Presidio compared server sizes, geographical locations, and pricing models, then ran test scenarios through Databricks to identify break-even and advantage points. Using this information, Presidio was able to propose scenarios that would maximize Autodesk's purchasing dollars, taking into account consumption and cost of capital.



### Results

In just eight weeks, Presidio created and delivered a transparent and informative tool to analyze Autodesk's annual AWS spend. Based on the tool's optimization algorithms, Presidio demonstrated how Autodesk could save over 20 percent by strategically purchasing reserved instances. While the custom application developed by Presidio focused on server consumption and reserve instance analyses for this particular initiative, it can be reused to analyze other areas, for example network bandwidth and data consumption. This will help Autodesk further optimize their cloud spend as they scale their SaaS operation while providing an ever-increasing return on their investment in Presidio's solution.

**Learn more about Presidio's unique understanding of all-things-cloud and its distinctive brand of application development on its website, Twitter or LinkedIn pages. Then contact us to find out what Presidio can do for you.**

