

CASE STUDY-

# Slate Data Transforms its Business Model with Prefect Cloud

\$2 million

"MAKING [THE DATA AGGREGATION + ANALYSIS PROCESS] 1% BETTER WAS WORTH \$2 MILLION." 99%

"WHAT USED TO TAKE A FULL TEAM 2 WEEKS NOW TAKES ONE PERSON 12 MINUTES."

#### COMPANY

Slate Data + Design

#### INDUSTRY

Information Technology + Services

HEADQUARTERS

Chicago, IL

PRODUCTS USED

- **PREFECT**CORE
- ♠ PREFECTCLOUD

## **Synopsis**



#### INTRODUCTION

Slate Data provides data engineering services to drive data-driven business decisions by modernizing data tech stacks and empowering industry-specific data scientists.



#### CHALLENGE

Provide business guidance as an Analytics Consultancy to enterprise clients with antiquated data systems, in a variety of industries, with unique market challenges.



## SOLUTION

Slate Data adjusts its business model to provide modern data infrastructure and scalable data practices to clients powered by Prefect Cloud.



#### RESULTS

A wide expansion of markets to provide data architecture services and the empowerment of data scientists across those industries to apply market knowledge, deliver specialized reports, and truly drive business analytics.

## Introduction

Slate Data, a software engineering-focused consultant firm, once provided business analytics to clients to drive new initiatives. However the company quickly adapted its business model after recognizing a dire reality amongst enterprise clients: data teams with the right skills and information are flattened by the wrong data systems and burdened with accumulating technical debt.

## Challenge

To achieve data-driven insights for its clients, Slate Data's original mission was to provide analytics consultant services to drive business decisions by identifying, connecting, and visualizing data through Looker dash-boards. With focus on the gaming and agriculture industries, the Slate Data team aggregated a client's existing network of data to provide strategies for deeper market penetration and business insights. However, as the firm grew to accommodate more clients, the team was confronted with an eerily similar obstacle despite the wide range of patron industries – accommodating antiquated tech stacks with inadequate internal data infrastructure.

This became an increasingly familiar sight for the Slate Data team, spanning industry-specific data science and business analytics teams: deeply-rooted data systems that accumulate high technical debt, unsuitable for the modern data age. Despite possessing reliable data sources and market expertise, these data teams were often

hampered by their disjointed data networks incapable of supporting contemporary business campaigns.

## 66 Slate wouldn't have the business model it has without Prefect." -Anthony Head, CEO at Slate Data

The Slate Data team, faced with clients that possessed the right skills and information but failing data systems, knew their company objective needed to be adjusted to provide sustainable, long-term business solutions. Rather than only offer business analytics with data-driven Looker dashboards, the team decided to institute a modern data architecture for centralized data management critical to strategic initiatives. Prefect Cloud provided the perfect solution for Slate Data's needs: a standardized set of workflow semantics to build critical infrastructure and to centralize data processes for all internal stakeholders, using the latest technologies available to data engineers.

Prefect's accessibility, ease of management, and speed of implementation allowed Slate Data's engineering team to implement repeatable, scalable data practices to a wide range of clients. Slate Data's clients could be provided their own Prefect Cloud tenant and fully realize their own data teams' potential, while preserving all data and code completely inside their own secure infrastructure.

"We call Prefect our secret sauce. We can now enter other industries at an unlimited capacity"

GEORGE COYNE, HEAD OF ENGINEERING

## Solution

To best serve their clients in a growing range of industries, the Slate Data team adapted their company objective, to empower data teams with industry-specific knowledge and ultimately drive business insights by reducing negative engineering. This resulted in a major shift in their consultation services: delivering data architecture solutions to modernize enterprise tech stacks and lay the foundation for data-driven business analytics.

For their latest client, a prominent casino in the gaming industry, several key infrastructure measures were put in place to support a new targeted marketing campaign. The Slate Data team began by centralizing their client's dataflow from existing servers to a cloud warehouse, automated with Prefect flows by using AWS Lambda to trigger flow runs upon AWS S3 upload events. Built-in integrations with Slack allowed seamless monitoring connectivity within the team's operations and Prefect Secrets provided a simple solution for storing sensitive information. The Slate Data team also introduced a Kubernetes cluster to manage horizontal scaling and high availability across separate business units, requiring minimal management by the casino's analysts.

Prefect's Hybrid Execution Model also proved invaluable during the implementation process, assuring the security of sensitive data, the command of computational resources, and seamless compliance process. Additionally, the client's eagerness to overhaul their data network with Prefect Cloud greatly reduced the gap between aging enterprise solutions and the current data tooling landscape, gaining a critical edge in the competitive gaming market.

With fully realized data pipelines as part of the client's cloud transformation, analysts previously occupied juggling a variety of tools to sew together reports, could freely build upon Slate Data's infrastructure to build and configure their own Prefect flows. This groundwork enabled analysts to build their own pipelines, create custom analysis dashboards, and bolster business initiatives with the freedom to apply their market-specific knowledge.

#### Results

Slate Data shifts their consultation services to orchestrated data architecture implementations with Prefect Cloud, to meet the needs of many outdated tech stacks in a variety of industries.

Providing data infrastructure services as a primary objective tackles a recurring issue across multiple industries: obsolete data systems incapable of modern analysis.

Prefect, for us, has changed how we position our company and our roadmap. We shifted hard from a dash-board company (with a relentless cycle of never being done) to a modern, clean engineering company."

-Anthony Head, CEO at Slate Data

The Slate Data team stays lean, but can scale at a rapid pace with additional Data Engineers and standard practices to provide consultation to other industries.

66 Prefect Cloud is worth 3 full time engineers" –Anthony Head, CEO at Slate Data

Prefect Core's workflow semantics reduces data pipeline implementation time for the Slate Data team, providing first-class tools to define data processing.

Slate Data's gaming client enters the modern era of data–driven analytics with Prefect Cloud infrastructure, empowering market–specific data scientists to drive business initiatives.

Prefect Cloud empowers industry specific data analysts by reducing the minutia of tedious data infrastructure management (negative engineering), bestowing the freedom to apply market-specific analysis and reinforce data-driven reporting.

"To our client, making [the data aggregation and analysis process] 1% better was worth \$2 million. We transformed their process so that what used to take a full team 2 weeks now takes one person 12 minutes."

GEORGE COYNE, HEAD OF ENGINEERING

Prefect's Hybrid Execution Model facilitates a swift security and compliance process upon review with ISO officers, Prefect's integrated HIPPA compliance expedited security reviews and auditing.

We were able to pull ahead of our competition in the gaming industry by leveraging Prefect's hybrid model to adhere to compliance and audit regulations while realizing the benefits of cloud warehousing and tooling." -Casino Representative, Head of Technology

Slate Data's client takes the lead among market competitors with aging enterprise data systems by jump-starting targeted marketing campaigns and business analytics with modern technology.