

# MODERN EPoS ANALYTICS

---

for Retail & Hospitality





## Industry pressures

The COVID-19 pandemic has only accelerated the need for in-house analytics for physical retailers. They have had to adapt to the 'new normal', making data from years prior to the pandemic irrelevant. It is no longer feasible to use the same methods for predicting footfall, staff allocation, stock requirements, etc. Organisations now need to be able to react much quicker and make decisions using much more immediate and recent historical data, in very narrow windows of time.

### Understanding the Value of Data in the Retail Sector

Restaurants, shops and other physical retail locations need to better understand and optimise their operations. They need to know how to optimise their labour force, recognise patterns in sales, and maximise opportunities. They need to use transactional data and external data (e.g. CGA, consumer market research, weather data, Google Analytics, etc.) to anticipate and respond to market trends to maximising revenues and minimising costs.

### A Competitive Landscape

A highly competitive landscape is driving companies to use data to outperform their competitors. Outsourcing data management for analysis can be a constraint. It requires companies to use the tools and reporting provided by a third party. Bringing data in-house allows companies to control that data, reduce the risk of IP leakage and develop an individual approach to understanding their data and making decisions, providing true competitiveness.

# Datalytx Modern EPoS Analytics

In a normal environment, the need to understand and respond to data to drive profitable decision-making has always been crucial to driving growth. In the 'new normal', it's a matter of survival.

The Datalytx Snowflake-based Modern EPoS Analytics service gives businesses the tools and skills they need to make those crucial decisions now that the 'old normal' way of doing things is no longer valid.

There are three broad steps we use to provide our Modern EPoS Analytics solution...

1. Migrate data from current systems to the Snowflake Data Cloud
2. With industry-leading tooling for Snowflake, build robust but agile ingestion and transformation of EPoS data in near real-time
3. Replicate, then enhance, your existing reporting using Snowflake and your choice of visualisation software

Our team will work with yours to understand your reporting requirements, where the data is coming from, and how best to design the processes that serve data to your reports efficiently.

Our teams maximise the value you get from your investment in Snowflake by optimising your development processes, increasing both governance and agility, and producing efficient solutions that consume only the minimum Snowflake credits necessary.







### In summary

The Datalytx Modern EPoS Analytics solution comes with our industry knowledge, skills, tried-and-tested agile best practices and tooling. We work with you to deliver real business benefits in a few weeks, not months and months.

What's more, we train and upskill your team to be self-sufficient afterwards, providing only the on-going support you consider you need – anything from occasional advice to use of our off-shore 24x7 operational monitoring and a full break/fix service.

## Benefits

### Flexibility

Bringing data management in-house provides companies with the agility to choose the tools they want, process their data the way they want, and respond to business demands faster.

Using Snowflake to store EPoS system data, along with other data such as HR system data, weather data and financial system data, makes routine management information reports robust and reliable.

Snowflake also provides for ad hoc querying, to explore new data insights. It provides 'compute elasticity' for complex querying on millions or even billions of rows. Compute resources (and the cost of them) are scaled up and down only as and when needed. The cost of storing your data is kept separate, at commodity cloud storage prices.

## Benefits cont'd

### New Insights

With the ability to amend your reports, incorporate new internal or external data, and visualise data faster than ever before, insights become available that will guide how your business responds to changing market conditions.

Understand local promotions and how they're performing. View the footfall and profitability of locations by the hour. Make decisions about which locations to open, promote, dispose of or close.

### Proactivity

With new-found flexibility, speed, and control of your data, your company will be able to look at your business in a wider context to address market trends and identify new opportunities. In uncertain times, it is more valuable than ever to have control over your own information and use it to guide you through the difficulties towards success.

Datalytyx Modern EPoS Analytics also includes Datadog monitoring. With Datadog you're able to monitor and investigate the health of your infrastructure with real-time interactive dashboards and receive targeted alerts on critical issues such as performance problems, availability issues and anomalies. With Datadog, it's easy to see health metrics from all of the components of your data infrastructure in one place.



# Stonegate Group

## Case Study

### About the Company

Stonegate Pub Company operates more than 1,200 managed pubs and bars across the UK, with a range of formats including community and high street pubs, bars, country inns and late-night venues. Previously, a managed pubs company, its £1.27bn acquisition of Ei Group in March 2020 added a large estate of leased and tenanted sites (c.3,200). Its well-known brands include Slug & Lettuce, Yates, Walkabout, Be At One, and Popworld.

### Challenge

Stonegate wanted to better understand and optimise operations, driving high performance from a diverse estate. "Our job is to work with Operations and Commercial teams to surface opportunities," says Baz Javanshiri, Director of Financial Planning and Analysis. "For example, how to best manage our labour force, understanding patterns in product sales, maximising events, and so on. This is a multi-format, multi-faceted business with different brands appealing to different markets. It's particularly important to understand our position compared to the rest of the landscape. Using transactional data and external data are central to anticipate and respond to market trends, to help maximize revenues and minimize costs." This includes data from external sources such as CGA consumer market research, weather data and Google Analytics.

Three years ago, FP&A was largely a reactive support function. Baz says the two main drivers for change were a highly competitive pub landscape and an internal factor: "We didn't manage our transactional data in-house; it was outsourced to a SaaS BI provider. We were constrained by having to use their tools and reporting. We wanted control of our data and to develop a more bespoke approach. We needed the capability to transition to that proactive stance."

## Solution: Talend, Datalytx, Snowflake and BI

The company embarked on a project to build a Microsoft Power BI analytics centre of excellence: using data to drive new insight from every venue. “We were initially led by the technology,” Baz says. “We considered tools for the data integration ‘extract, transform and load’ piece and chose Talend. We wanted a degree of customization while other tools were far too complex for our needs. Talend was the more flexible solution for our data scientists.” Talend recommended its Platinum Partner Datalytx to support implementation. “We felt the approach suggested by Datalytx was exactly what we wanted, and Datalytx had the competence to deliver.” The project has three main strands: transition to the new platform and migrate data inhouse; replicate some existing automated reporting using the new platform and Power BI interface; and train and upskill Stonegate’s FP&A team to be self-sufficient.

## Delivering new business insights

Datalytx worked with Stonegate to build a proof of value prototype. The Datalytx team used Talend data integration to ingest data from a Zonal EPoS system, Fourth hospitality system and Coda Financials, making the data available in Snowflake to create daily sales reports, providing ‘compute elasticity’ for deep complex querying on billions of rows of data. The prototype was completed in 18 elapsed business days. The next challenge was to complete a viable solution to enable the transition to Power BI and close the subscription with the incumbent provider. However, 2020 did not turn out as planned.

Baz says: “Datalytx helped us to move at pace and largely focused on bringing our data inhouse, which was crucial to land, and worked on some reporting, and particularly the data query tool. The ability to draw out insights from the data was crucial and Datalytx played a key role in that, including work on the prototype for our daily sales report.” Then lockdown happened. “While most employees were placed on furlough, the importance of this project meant we kept it running. While we had fewer resources, they were all concentrated on what was termed the ‘Control Tower’ project to transition to the new solution ahead of pubs reopening in July. The focus from Datalytx was extremely useful.” In this unprecedented situation, Datalytx re-prioritized tasks to help ensure the data ingestion and transformations necessary to deliver essential sales reports worked reliably.

## Outcomes

"We built the solution in three months," Baz says. "Datalytx worked very hard to help make sure we were ready for the pubs reopening. There was a huge amount of activity in the three weeks prior, including working out which pubs should reopen first. When they did open, we had to move very fast to understand what was happening, learning as quickly as we could, adapting to this changed environment, including changing the requirements of some data views." Stonegate analysts successfully queried the first weekend's trading data using the new system.

"We had to go to a granular level fast: what's the profitability of our pubs by hour? We had to pivot to that position incredibly fast, and my team and Datalytx worked very hard. All this effort enabled us to fast-forward the project to where it should have been in a few months' time." Stonegate data scientists now have access to three years' daily sales transactions, stock and inventory data and labour force data comprising more than 3.5 billion rows of data, growing by 500,000 rows per day. Datalytx has now transitioned the solution to a managed service, helping evolve the system to add new reports and maintain Talend integration as new data sources are added.

Baz adds: "This solution means we can be more flexible in how we use our data to generate new insights, to address market trends and support better decision making. We can be more proactive in how we support the business, looking at operations in a wider context to identify new opportunities. And we can do it all inhouse. The combination of Datalytx and Talend meant we could move further faster. I'm keen to see how the managed service will develop. We're at the start of our journey but can already see the huge potential for Stonegate; a huge positive during extremely challenging times."



This solution means we can be more flexible in how we use our data to generate new insights, to address market trends and support better decision making.



Baz Javanshiri  
Director of Financial Planning & Analysis  
Stonegate Pub Company