

A Case Study

THE "HANDS-FREE", \$0 INFRASTRUCTURE CLOUD BI PROJECT



Blueprint Intelligence built an entirely **'hands free' \$0 infrastructure, cloud-based BI** platform that could adequately reflect the **dynamic** of the client's products and services.



LEAN & LOW INVOLVEMENT BI DEPLOYMENT

At a Glance

INDUSTRY:

Customer Services Tech.
MobileQubes deploy vending machines or kiosks with cell phone charging and battery devices for rent or purchase at high-traffic venues like train stations or casinos.

PROBLEM:

Many different customer (venues) and end-user profiles generate a lot of complex data for reporting.

Excel data dumps being taken from individual kiosks and devices were used for reporting. This wasn't scalable with growth

of the business. And reports were error-prone and outdated.

SOLUTION:

Blueprint Intelligence end-to-end agile, cloud based BI deployment

SYSTEMS:

Microsoft Azure SQL Server & Microsoft Power BI integrate data from devices, kiosks and custom accounts.

RESULTS:

More accuracy, greater clarity on the most profitable venue type, sites, services and customers. Includes monthly performance metrics per venue for customers.



The Background

MobileQubes is a forward-thinking customer services company that wants to invest in the best locations for their product, and the most profitable sales and customer retention strategies.

For this, they need accurate real-time, easy-to-understand insights collected from hundreds of kiosks, customers and individual devices.

The Problem

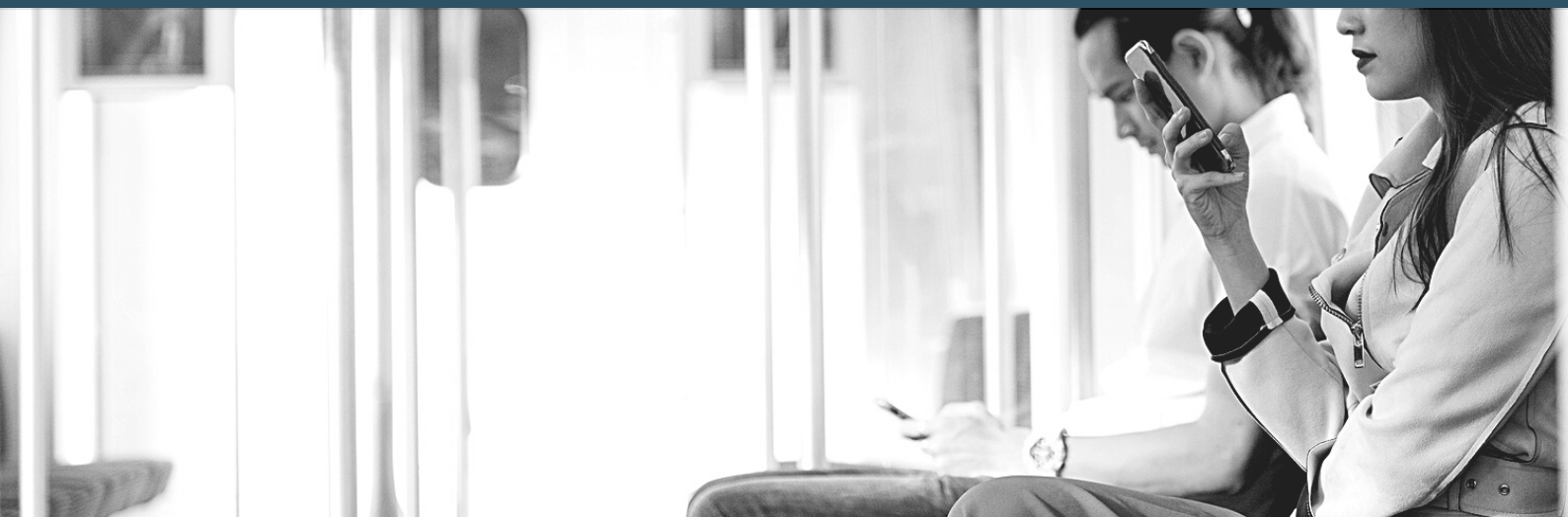
However, reporting was not that simple. The sales model – that being rentals or the outright purchase of cell phone chargers, all dispensed via a vending machine or kiosk at high traffic areas like transport hubs or shopping malls - makes this a particularly complex task for those responsible for business performance.

In fact, if you're in the US and you haven't yet picked up a MobileQubes phone charger for yourself, you've certainly passed one. There are hundreds of active kiosks across the US. Devices can be loaned until you return your charger to the original kiosk or another MobileQubes location.

Alternatively, you could also either hang onto the charger and use it again, or lose it. In which case the outright purchase price is charged to the credit card you've provided via MobileQubes smartphone app. The varied consumer types (renter, purchaser, lost device, or return customer) on top of the multitude of different types of 'shop-fronts' makes customer behaviour analysis.... complex.

This demanded some fairly heavy reporting from MobileQubes' executive team, on top of the usual investor and executive reports each month on revenue, customer retention, sales pipeline, marketing and more.

In an attempt to perform reporting and performance analysis, data dumps were taken from the individual mobile chargers or kiosks. Excel was used for reporting. The process was complicated further by some older devices being the source of usage data, and newer systems capturing data at the device and the kiosk level.



Building the BI Cloud Solution

Blueprint Intelligence built an entirely 'hands free' \$0 infrastructure, cloud-based BI platform that could adequately reflect the dynamic of MobileQubes products and services.

By skipping on the time or money traditionally spent on setting up servers, organizing software licensing or paying for ongoing maintenance, this made the solution very cost efficient and extremely fast to deploy.

Blueprint Intelligence used a SaaS Microsoft Azure license to build a data warehouse that integrated data from every single MobileQubes device and kiosk into a central, cloud-based repository of data.

The structural design captures business processes end-to-end, enriching data quality with different types of location (casino/airport/mall), sales tiers, and service type (rental or purchase).

Applying a semantic layer with the Microsoft Power BI tool standardised technical terms and data so that it was possible to ask 'human like' questions and understand complex transactional data from the BI solution. This combination, powered by Microsoft SQL Server made complex queries and analysis – right down to a transactional level - faster and easier to understand.



The Results

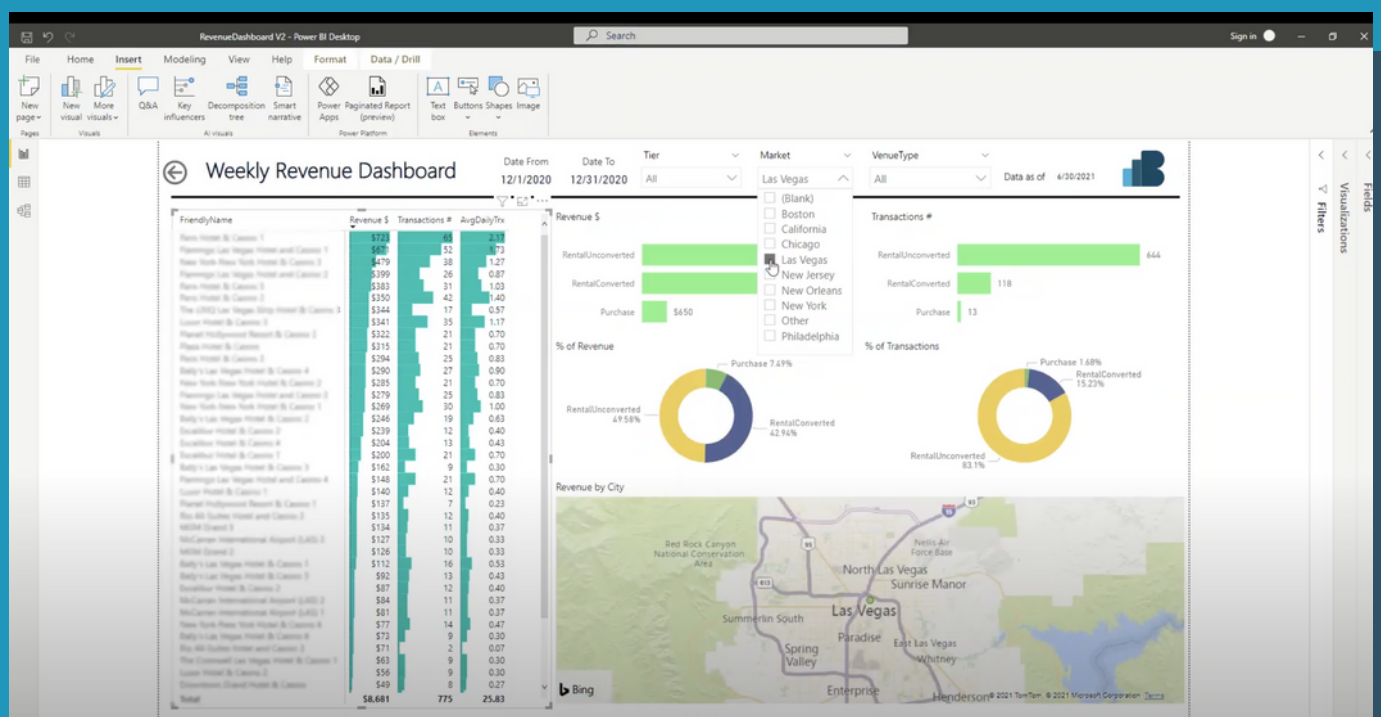
Where MobileQubes has successfully built a self-service business, Blueprint Intelligence's agile, cloud-based BI solution similarly, achieved an amazing dynamic for the business.

The entirely cloud-based 'hands free' BI solution made the MobileQubes BI project extremely lean. The data warehouse was built in days not weeks, and the first stage of this project was completed in just one month.

MobileQubes also continues to save time and money paying hosting, computing of data loads and queries and licensing costs on a consumption basis (they could also opt for a flat-rate subscription fee, if desired). For instance, the subscription to Power BI is only \$10USD per month – and for companies with a Microsoft 365 Enterprise Licence, they have Power BI for free.

Phase one deliverables includes real-time dashboards of revenue and sales performance at different venues and different location categories. The company now has a new lens into their business, with the ability to strip away noisy data, to group, drill down and segment queries to inform decision-making.

Weekly Revenue Dashboard: Built by Blueprint Intelligence in Power BI, all deployed in the cloud.

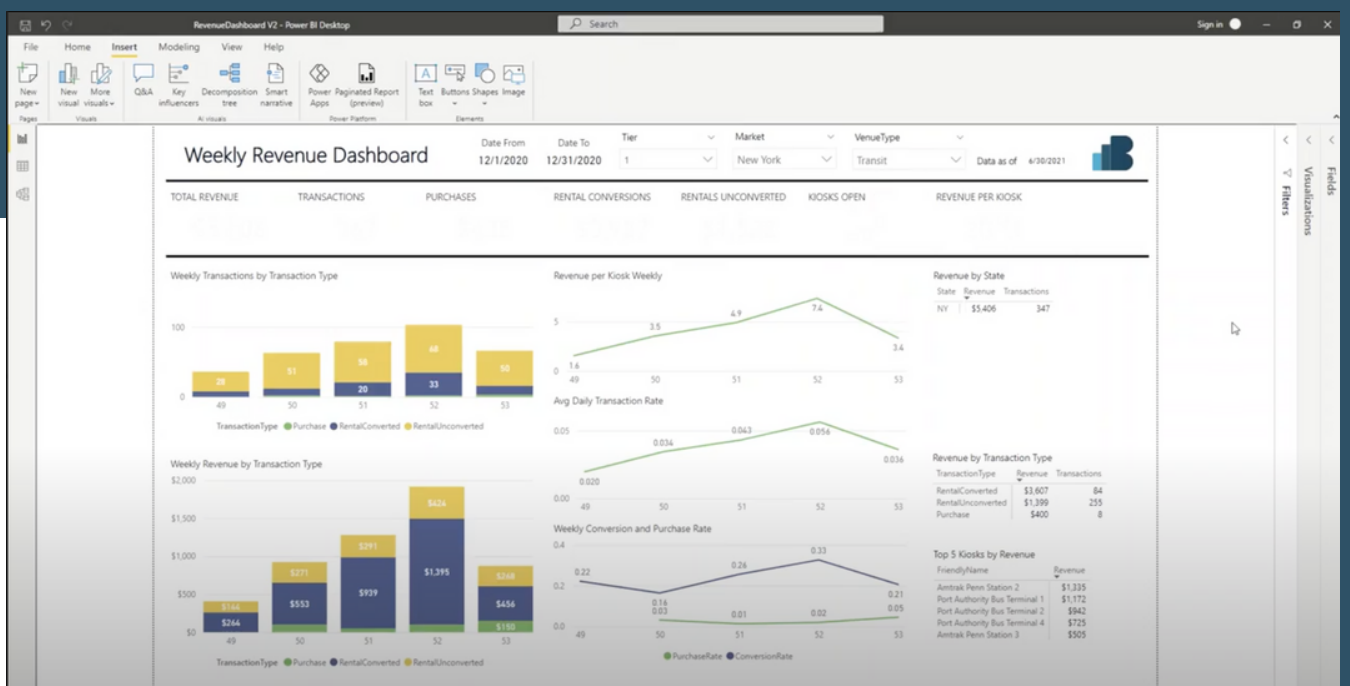


Mobile Qubes Customers (venues or sites) also receive individual monthly snapshot of performance from their kiosk(s).

As a result of Stage One, the firm has discovered some surprises, one being just how error-prone the old process of managing data dumps in Excel.

Stage Two of this BI project will include data extracted from GooglePlay and Apple's App Store, which will assist with understanding consumer behaviour much deeper to inform customer retention strategies. This will align with the installation of next-generation range of kiosks and new mobile app experience called MQ Blue.

This is a perfect example where the teachings of Ralph Kimball are appropriate and still make sense today. MobileQubes' success is based on their ability to make access to their products 24-7 quick and easy for consumers. The task for Blueprint Intelligence here was to capture and enrich data for the business, so that deep analysis was possible for ongoing business improvement.



For more information on Blueprint Intelligence Data & Analytics capabilities, click here or [contact us](#).



ABOUT US

The Blueprint Intelligence team is team experienced in all major analytics applications and business process improvement.

Our services include end-to-end implementations, specialized projects and managed services.

We're different to alternative contractors because we build a solution that solves your immediate issues, and meanwhile improves systems so you gain a sustained continuous improvement.

This strategic approach delivers a solid return on your investment in analytics. Meanwhile, you enjoy the flexibility of our service, and accessibility of our fees.

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