Joanna Sim

Deputy Director, Digital Experience and Data Analytics at Science Centre Singapore

Creating Better Business Forecasting and Marketing Efforts at Science Centre Singapore

NOVEMBER 12, 2021 - <u>VIEW ONLINE</u>

It's nearly impossible to properly forecast without the right data. But having data isn't enough. Many organizations have data, but it's stuck in Excel spreadsheets, making cross-company access cumbersome. To properly navigate a complex business environment, data needs to move freely throughout your company.

The Science Centre Singapore is striving towards being a data-driven organisation as part of our digital transformation journey. To this end, I have a two-part role within the organisation. First, it is my responsibility to leverage our various platforms to create targeted digital experiences. Some examples include creating augmented reality learning trails on a mobile app for better management of crowds, and to providing a hybrid learning experience in lieu of the shorter operating sessions at the Science Centre due to the COVID-19 pandemic situation. In addition, I also promote user adoption of data analytics among the staff by elaborating on the benefits of being data-driven.

At first glance, it may appear that these are two completely separate functions. Perhaps in the days of gut-feeling marketing and best-guess customer experiences, that may have been true. However, today, we know that the data we gather about the patronage at the Science Centre can help us to create an experience that extends beyond the physical visit. Imagine being able to craft marketing campaigns, online content, onsite exhibits, and post-visit communications that all use the same themes or interests. In that way, we can transform quick visits into long-term relationships as we are better able to extend the customer journey with us. This effort certainly helps to retain interest in the Science Centre.

Inspiring the Future

Science Centre Singapore expands on the promise of the human mind. We approach our programming based on uncovering the wonders of science, technology, engineering, and

mathematics by making it accessible and engaging. We use a blended mixture of exhibitions, events, and educational programs, both onsite and online, to encourage creativity and curiosity.

Located in Jurong East, Singapore, we have more than 1,000 exhibits. Our facilities are open to the public, and we also receive many school groups on field trips. In total, we have received well over 30 million visitors since our opening in 1977.

To the untrained eye, the idea of making science user-friendly may seem easy enough. But different groups of audiences and ticket permutations create a lot of business complexity—and a large amount of data. Making sense of complex data mapping is crucial to making smart decisions. As such, our organisation is committed to using business intelligence as effectively as possible

Searching the Market for the Right Analytics Solution

In our old setup, every individual officer was responsible for their own data. They would collect, store, analyse, and manually report data like revenue and patronage numbers. But insights were typically siloed within that team. The other departments that needed access to the same data would then have to contact the person in charge, if they even knew that such data was available!

While spreadsheets for data analysis might have their place, we knew we needed to streamline our operations. We also wanted to digitally transform our business to help improve the customer experience and understanding our data would be a key part of that transformation. We looked to the market in search of the right analytics tools.

Customer data can help transform quick customer visits into long-term relationships.

SHARE IT   TWEET IT

We decided on Qlik Sense because we were confident it could handle our complex data needs. Given that the Science Centre has different attractions, workshops, and even ticketing platforms, our ticket permutations may go into the hundreds. This leads to an intricate data environment with a lot of moving pieces. We believed Qlik Sense could manage our complex ticketing structure and enable predictive planning for our organisation.

Unlocking Our Data
It was 2018 when we first started our journey with Qlik Sense. Our ticketing and patronage numbers that were previously locked away in Excel and the source systems were migrated to Qlik Sense.

Qlik Sense allowed us to dive into information with greater insights, for example, into the exhibits visited and demographics. Best of all, the collection process was automated, and the information fed directly into Qlik Sense. That meant it was less work for our team, and the reports could be made available immediately to anyone with access to those dashboards by just logging in to Qlik Sense.

Insights into our ticketing and revenue data allowed us to create better-targeted marketing campaigns to increase the spend of the top 20% of our customers who contributed to 80% of our ticketing revenue. Instead of creating general ads targeted at everyone, Qlik Sense allowed

us to better gauge interest and perspectives pertaining to specific audience segments. These adaptive marketing campaigns are a powerful tool for optimising our reach.

Thus far, the majority of our insights have been related to patronage numbers. We analysed a number of data points regarding hourly visits, corporate sales, travel agent purchases, and more. This has allowed us to make faster and better decisions regarding forecasting and marketing efforts.

Adapting to the Unforeseen

The COVID-19 pandemic has shown us the key benefits of Qlik Sense. We frequently found ourselves needing to make fast decisions or chart a path during periods of ongoing change. For example, if we open on a certain day, how many people could we expect? If restrictions only allow us to open for a half-day, should we focus on morning or afternoon? If for no reason other than the pandemic, having pulled our data together prior to 2020 has been worth the effort.

As for the future, there are several ideas in the pipeline. For starters, we're working toward launching a mobile-first strategy within the Science Centre. From a practical standpoint, it means our various audiences will be able to simply flash an e-card on their mobile phone in order to enter. The e-card will connect to a CRM system to import data that will open new categories of analysis. Far more than simple visitation information, this system will introduce full demographic analysis and further enhance the value of the data received from the ticketing platforms, which will feed into Qlik Sense.

Creating better customer experiences starts with the right data.

SHARE IT   TWEET IT

We have also begun to use the cloud-based Qlik Sense SaaS as a connection to analyse social media data. Through our Google, Facebook, and YouTube content, we both advertise our exhibits and push the conversation around embracing science. It is therefore important that we are better able to match our content in a way that best connects with our audience. At the present time, we have not fully explored the tremendous potential of our social media channels, but we're excited by those capabilities.

Creating better customer experiences starts with the right data. In our work, that helps us to create more interest in STEM and inspire curious minds to the wonders of science as we are able to send the right message to the right audience. Qlik Sense helps Science Centre Singapore take some of the guesswork out of forecasting and making decisions. With data-driven insights and support, we can help pave the way for budding scientists to inquire, investigate, and innovate with and encourage even more to be inspired by the wonders of STEM!