transcosmos helps customers transform e-commerce data into insights with Microsoft Power BI

Challenge: transcosmos' client opened six online stores, but were quickly overwhelmed with data

The client was facing mountains of disparate e-commerce data with no way of unifying it to inform decisions.

Solution: A holistic digital solution designed and implemented by transcosmos

transcosmos built a solution to help their client collect, unify, and transform their data into insights with Power BI.

Results: Saving the client over 500 hours of labor per year and greatly improving agility

Power BI eliminates significant busy work for the client and enables them to make quicker, smarter decisions.

In the digital age, it's no surprise that e-commerce is thriving. Most retailers are either already doing business online or have plans to enter the fray soon. In some locations, it's relatively straightforward to break into the e-commerce space, but in China, there are many regulations that sellers must meet if they want to do business online. Additionally, for a business that is just entering the e-commerce arena, it's easy to get overwhelmed by the mountains of data generated through these websites.

Thankfully, Microsoft partner transcosmos is here to help. Offering customers a wide range of services including contact center management, e-commerce facilitation, and advanced data analytics, transcosmos serves as a one-stop shop for businesses aiming to sell their goods online in China. transcosmos' solutions and services span across a number of industries, working with customers in home appliances, financial services, retail, automobile, healthcare, and more.

Helping a key customer overcome e-commerce challenges

Recently, transcosmos was engaged by a well-known Japanese brand in the baby and maternity industry that was looking to do business online in China. After opening six online stores on four different e-commerce platforms, the company quickly ran into some challenges.

The first was managing the overwhelming amount of data being generated by their six stores. In addition to all the raw transactional data, transcosmos' customer was also managing CRM, marketing, and logistical data, putting immense strain on their infrastructure.

The second challenge they faced was an inability to unify their data onto one platform, preventing them from assessing the performance of their various channels side-by-side and reallocating their resources accordingly. Because the data coming from each channel was unique and siloed, it was nearly impossible to aggregate it all into one, helpful view.

The third challenge was responding quickly to market trends. The e-commerce industry in China moves fast, and if sellers want to stay competitive, they need to use yesterday's data to make decisions today. Prior to working with transcosmos, the company was generating reports manually, but this took their analysts days to finish, and because the work was done by hand, it was hard to guarantee report quality.

After identifying these three challenges, the company came to transcosmos looking for help. They wanted to implement a solution that would allow them to better manage their data, unify that data into one dashboard, and autogenerate reports in real-time so they could respond quicker to e-commerce activity, all without interrupting their booming e-commerce operation.

Designing and implementing a custom solution

With these challenges in mind, transcosmos got to work. Leveraging their extensive e-commerce and data analytics experience, transcosmos designed a custom solution to fit the customer's needs.

The solution is composed of three parts to address the three key challenges identified by the customer.

The first is a data acquisition layer. Here, transcosmos adopted a Robotic Process Automation (RPA) program to automatically collect data from all six of the customer's stores. This automation meant that the customer no longer had to follow tedious, manual processes to collect data from their various channels, freeing up their data scientists to add value elsewhere.

The second layer is data management, designed to solve the data quantity problem. The customer already had some infrastructure in the cloud, so transcosmos expanded that footprint and implemented MySQL database to collect, store, and manage the customer's vast amounts of data. By using the cloud, transcosmos helped the customer unlock unprecedented scale for their database, enabling their infrastructure to scale right alongside their data needs with ease.
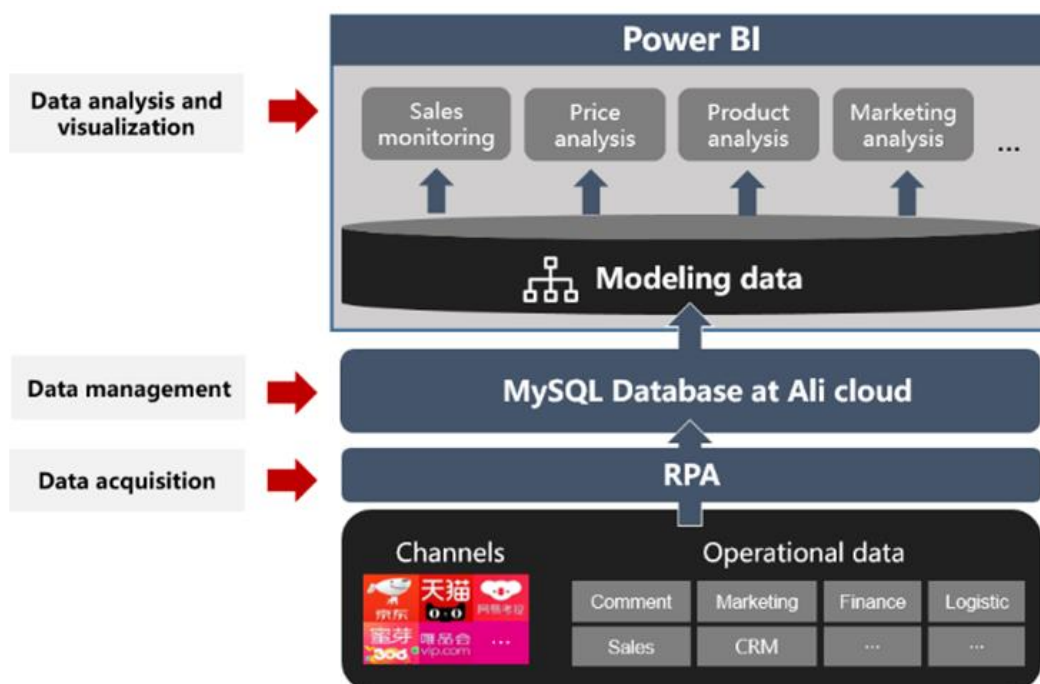
A visual representation of transcosmos' solution (photo courtesy of transcosmos)

The third layer is data analysis and visualization, designed to help the customer respond quicker to their e-commerce activity. For this, transcosmos implemented Microsoft Power BI, an industry-leading visualization platform designed to help users derive insights from their data and make better business decisions.

"For our customer, building that first Power BI dashboard was a bit of a milestone," explains Judy Li, Data Analyst at transcosmos. "Before implementing Power BI, our customer had a whole team of people doing repetitive jobs to produce reports every day, week, and month. It was costly, inefficient, and often inaccurate. With Power BI, we were able to automate all of that work, freeing up those analysts to add value in other places."

As noted by Li, transcosmos didn't stop at one Power BI dashboard for their customer. To maximize impact and provide specific views requested by the customer, transcosmos has already built nine different dashboards for their client, including two recently added text analysis dashboards featuring chat and comment text analysis, and they have plans to add more. "Our client needed one all-up view of the business, so we designed an overarching dashboard to give them that general information regarding key performance indicators (KPI), but they wanted to see some other things too like the performance of specific promotions," adds Li. "For that, we built a dashboard that shows sales performance across all six of their stores, color coded by promotion level to help the shop managers monitor sale prices and promotion efficacy."

Another key dashboard delivered by transcosmos is the omnichannel sales report. This view allows executives at the business to monitor sales across all their stores at once and easily determine if they are on track to reach their KPIs. If they aren't on track, the user can quickly drill down into the data and see which channels are underperforming and why. Additionally, transcosmos also delivered an advertising report

dashboard that reveals where the customer's marketing money is going and the estimated return on investment (ROI) for each campaign. This enables the company to swiftly evaluate the performance of each advertising effort and make quick changes based on historical data and forecasted trends.

Secure dashboards, available on the go

Data security was top of mind for transcosmos during every stage of this engagement. To protect their customer's data, transcosmos helped them set up key governance practices such as rotating passwords every month, only granting people access to the data they need to do their job, and exclusively utilizing secure gateways to transfer data.
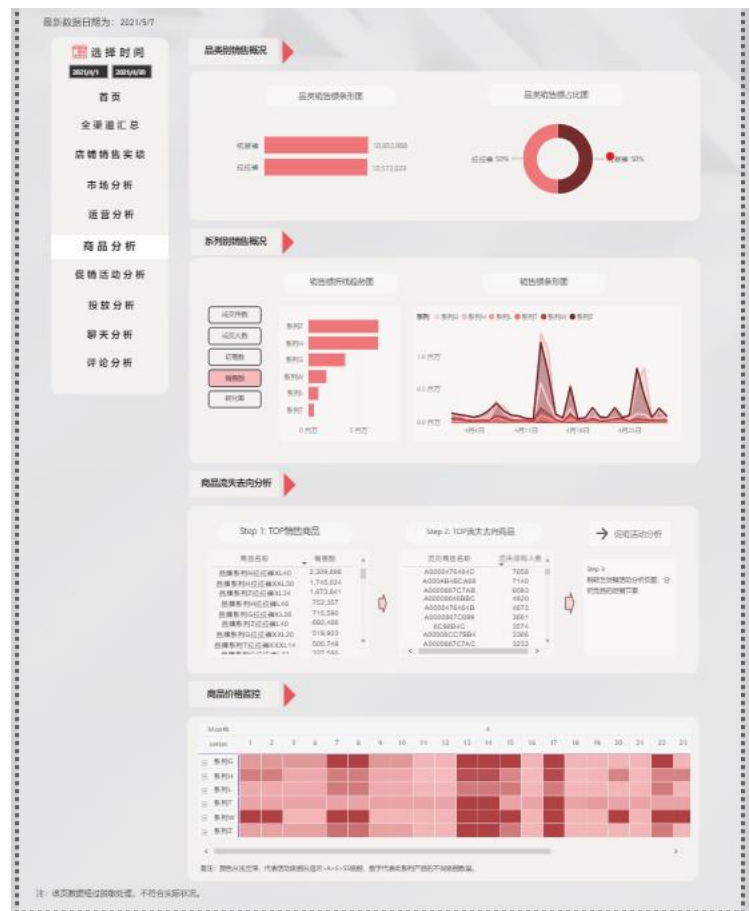
The product report dashboard that shows sales data combined with promotion efficacy (photo courtesy of transcosmos)

Also, because transcosmos' dashboards are built on Power BI, their customer can access them on any secure device from any location via the Power BI app, so long as they have the proper level of clearance. Going forward, transcosmos has plans to help their customer enhance security further, potentially utilizing Microsoft security products such multifactor authentication with Azure Active Directory.

A bright future, powered by analytics

While this is not transcosmos' first project utilizing Power BI, it is one of the largest. "This successful engagement at scale is a great proof of concept for us," explains Li. "With this completed project in hand, we can take it to other potential clients and show them the tangible impact that we can unlock for them with Power BI."

As China's e-commerce industry continues to grow, so does the need for support from companies like transcosmos. The demand for data visualization is already incredibly high, and it's only going to grow. "Sometimes it can be hard to prove ROI for data visualization projects like this because often they are centered around making better decisions—this can be hard to quantify," Li continues. "But in this case, it was actually pretty straightforward. With the automated solution and Power BI dashboards we put in place, we saved our client over 500 hours of analyst work per year, and that's just the time they used to spend generating reports. Now, they can spend less time crunching numbers by hand, and more time managing their successful business." Going forward, transcosmos plans on continuing to use Microsoft Power BI to help customers glean insights from their data and successfully compete in an increasingly digital world.

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