Cyber Group | Success Story

DATA ANALYTICS AND REPORTING ENGINE DEVELOPMENT

As corporate business IT data centers become more complex, it can help to centralize assets by creating a customized IT hub where all data can be analyzed and processed for easy viewing and strategic planning.

We were working with our client, an energy retailer, on a project associated with data warehouses and analytics. There were a myriad of data center and database technologies: SQL, SSIS, SSAS, SSRS, etc. Our client was working with close to 20 different markets, and they had 5 different billing engines for these 20 different markets. They had an army of analysts as well in their marketing and finance departments to get to a single source of truth. We were asked to create one centralized data repository. We had to build a data integration architecture across all five of these different billing engines and turn that into a data warehouse. We were also asked to build analytical cubes so that some of the sophisticated users could use the "what if" analysis, or a scenario analysis while slicing and dicing different dimensions of their customer data.

The executive driving this project was the Chief Marketing Officer, who wanted to get some insight from the data to drive marketing programs, growth strategies, or a retention strategy. The CFO team also wanted the data so that they could build their financial reports with confidence for whatever operational reason or regulatory requirement. One of the biggest challenges we faced was that there were five different billing systems - one proprietary/custom system and four commercially off-the-shelf billing systems - it was incredibly difficult to build a common metadata definition and establish a scalable and maintainable data hub.

At that point, we took a step back. We asked ourselves how we could try to automate and integrate these different components, composed of five different systems, and create alerts and notifications for the system, with exceptions. For example, if one system has changed their data scheme, instead of engaging support people to find that out, we decided to create an alert and notification system so that it's optimized for human intervention.

For the power users and the analytical cubes, their motivation for such a system was that they wanted to know the retention rates by different markets, along with customer acquisition rates by different markets, and sales channel efficiency. They needed a system of visualization. For instance, they wanted to ascertain the many insights around the GPM generated by different patterns, by different brokers.

In order to complete the initial project, it took 20 weeks. We had four personnel in our New Delhi office and one person here in Dallas. After the initial 20 weeks, we were able to reduce that to one person here and one person in our New Delhi office because we kept building new cubes and there were new data sources. After 28 weeks, we were in production mode.

Cyber Group

You've Got IT Questions, We've Got The Solution.

We were asked to create one centralized data repository. We had to build a data integration architecture across all five of these different billing engines and turn that into a data warehouse.

In order to complete the initial project, it took 20 weeks. We had four personnel in our New Delhi office and one person here in Dallas.

We built a data repository and data feeds from all those initial systems into that **centralized repository while providing a cube architecture that power users could use to search the datasets.**

Analytics Project production is difficult to scope at the front end because once the customer starts seeing the possibilities in the data, they start coming up with new ideas. However, when they start chasing the value of it, it's very clear in the backend. Typically a project like this has a definitive start and a definitive finish. So during the course of the project, the client sees the possibilities, thinks about the possibilities like being able to run almost 15-16 productive hours in a day as opposed to 7 or 8 productive hours and this often leads to project acceleration. The other aspect is that the client realizes that now they have all of these specialists that are extremely familiar with the system, their business and how they want to be served, so they don't want to lose that efficiency. Typically, in 90 percent of these projects, it turns into ongoing production support in the Data Analytics Space.

Even when we do production support, we still put somebody on-site. The on-site value to the customer is incredible. We all speak English, though some of us may speak English a little differently. The value is that you can look into someone's eyes and write some information on a whiteboard at 2:00 PM, 3:00 PM, or 4:00 PM, and request "can you ask your guy to build this?" and in that context, it gets transferred through body language. It has been said that 70% of our communication is nonverbal. And people don't realize that if you write something and throw it over the fence, you only communicate with 30% efficiency. It's very ineffective. Having this person on-site, and seeing their productivity throughout the day here stateside gives them time to discuss some new concepts. Additionally, with the ability to turn things around using our value engine and have them ready the next morning, this system can be incredibly powerful.

To summarize, our client had multiple systems. We built a data repository and data feeds from all those initial systems into that centralized repository while providing a cube architecture that power users could use to search the datasets. Then, we transitioned into production support with a person here in Dallas and a person in New Delhi, which allows them to improve and expand on the day-to-day workflows continuously. We're looking at trend analysis since, as with most data projects, issues arise, leading to more solutions, so it is an ongoing cycle.

Consolidating data systems into a central repository can help with data analytics, Big Data analysis, and the production of Business Intelligence. Let the experts at the Cyber Group customize your IT infrastructure to allow your different IT teams to have a central hub to access all critical data rapidly and efficiently.