IBM Business Analytics at Cellular South

Increasing efficiency and subscriber profitability with budgeting, planning, reporting and predictive analytics

As wireless regional telecommunications carriers face the challenge of competing with larger, national network operators, the ability to make better business decisions becomes key to retaining existing customers and capturing new ones.

That's why Cellular South chose IBM Cognos software to power its planning and performance.

Cellular South has led the industry with innovative voice and data services and a commitment to providing the same kind of advanced wireless services in rural America that has long been available to those living and working in metropolitan areas.

The company provides premier wireless devices and services to customers through over 80 retail locations, its B2B corporate sales team, its telesales group and online through www.cellularsouth.com.

IBM Cognos® TM1® provided the right tools to perform complete and comprehensive budgeting, while offering an intuitive interface that users were familiar with. The deployment of TM1 at Cellular South:

- Greatly facilitates the company's ability to produce dynamic, detailed budgets quickly and efficiently
- Allows users to drill down to the details of what makes up each account line item
- Frees the accounting department from the burden of having to manually look up invoices and play the role of gatekeepers
- Provides employees with a transparency that gives them up-to-date information at any time and the ability to spot problems in advance
- Offers fast, flexible reporting and ad-hoc analysis

Cellular South is now better able to make timely decisions about product structure, pricing and process, and is able to successfully compete with large, national wireless carriers by offering compelling services and attractive service bundles.
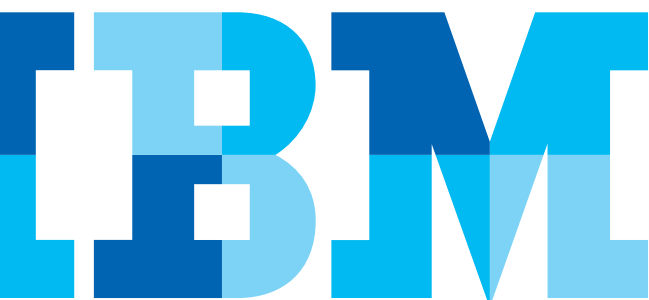
Business background and the case for change

According to Justin Croft, Cellular South's Manager of Financial Analysis and Planning, the rapid growth of the Ridgeland, Mississippi-company not withstanding, his department found itself saddled with an outdated and inefficient budgeting system.

The company was using Excel spreadsheets and an old general ledger system that lacked the functionality to create a comprehensive budget.

"We were using an old general ledger system that flowed into our financial reporting tool," he says. "You could report actuals against budget, but it really had no functionality in the way of creating a budget. This left us with multiple Excel spreadsheets to create an operating budget, capital budget, sales forecast, customer budgets and so on.

"All the data needed to compile our entire company's budget was in disparate spreadsheets, and then we had to try to shove it into a system that was really never designed to do budgeting. Basically, we lacked the infrastructure to complete a comprehensive budget for the company."

"In the wireless industry, you're really crushed by what we call the 'data tsunami' because there's so much information available to you from all your systems, such as your billing, customer care and point of sales systems.

"All of these applications contain information about customer behavior and preferences, and it was the analysis of that information in our data warehouse that was our main challenge. That's multidimensional data—and its vast amounts of data—and we were trying to do it in spreadsheets, and it just did not work."

Implementation

Cellular South began a search for a way to produce dynamic, detailed budgets in a faster and more efficient way. The organization began evaluating what would eventually be 10 to 12 different systems. IBM Cognos TM1, one of the first systems they looked at, quickly stood out as a viable option.

"We had a lot of different needs," Croft explains. "We wanted a software solution that could do more than just one thing, something that was very flexible. We knew we needed software to support budgeting; we had just implemented Oracle's e-Business suite and found that we needed better financial reporting than what came out of that by default.

"So we were looking for a budgeting tool and we needed a financial reporting tool. TM1 offered a great deal of flexibility; it could not only support standard grind-it-out financial reporting but also provide us with a great deal more planning and analysis capabilities."

"TM1 is Excel-based and we wanted something that people here were familiar with," says Croft. "Everyone uses Excel in their daily jobs. We didn't want to bring something in that would result in people hesitating to use a new system, which would be the case with a different looking interface."

Cellular South selected Cognos partner Revelwood as the implementer. "We didn't have a great deal of internal IT resources for the implementation or ongoing support for the new system, so we needed to work with a mature vendor with deep experience in IBM Cognos TM1," comments Croft.

"Revelwood fit the bill perfectly. They have dozens of successful IBM Cognos TM1 implementations under their belt, stellar references and what I like to call their 'bag of tricks' – the pre-built models, templates and reports that dramatically reduced the overall implementation time and quickly improved our reporting efficiency."

The use of Revelwood's BPM Suite Implementation Accelerator and Revelwood Reporter Manager with IBM Cognos TM1 gave Cellular South a powerful business performance management solution that was up and running quickly. It also leveraged the best of the IBM Cognos TM1 real-time OLAP functionality along with Revelwood's best practices.

Business impact

"IBM Cognos TM1 greatly facilitated our data collection for the budget, giving us a central place for departments to input detailed information," says Croft. "Managers throughout the company now have more access to reporting. They can drill down to the details to see who the vendor is or the details of what makes up each account line item.

"This enables us to reference the individual transactions that make up the totals in our financial reports. That's been huge, as it's relieved a great deal of burden from the accounting staff. We no longer have to manually look up invoices. All the information was trapped in the account and we were the gatekeepers – which was not the way we wanted it to work."

IBM Cognos TM1 offers a transparency that allows users to go into their statements anytime during the month to get up-to-date information and spot problems well in advance. It also allows for fast, flexible reporting and ad-hoc analysis.

Cellular South is able to efficiently scrutinize subscriber profitability, and is analyzing profitability across:

- Rate plans
- Devices
- Geographic areas
- Customer segments
- Time periods

Analysts can run reports to understand the impact of product combinations, so that Cellular South can continuously identify and promote its most profitable service bundles.

"We provide financial input at product inception using the best information available," explains Croft. "We review the results of similar products and trends of customer behavior, and this analysis helps us shorten our new product development cycle.

"In our business, usage measured in minutes or megabytes is the main driver of profitability, and products can't be easily changed once they're launched. So we need to carefully analyze existing profitability trends so Cellular South can come to market quickly with attractive services that will quickly succeed in the market."

Cellular South relies on TM1 to analyze service profitability, and the organization has also built models to analyze profitability by geographic service area.

"TM1's main day-to-day role is financial reporting and budgeting and planning, but we've been able to extend that and we've done things like build a detailed customer-level profitability model," says Croft.

"That's our largest undertaking with TM1. So within that model we feed in our revenue data from our billing system, cost data from our general ledger and actually calculate how much we make on every customer every month. So we know to the person, who is the most profitable customer."

The marketing and product management organizations can now make more informed decisions as they develop new services and new pricing strategies. "Traditionally, they came to finance for profitability information and projections, and we were able to perform some level of analysis in spreadsheets," Croft explains.

"We could answer general questions about out how much money we were making on a product or on customers in a geographic area with a little bit of spreadsheet magic and some elbow grease.

"But as the environment became more competitive and as we faced tougher decisions about price changes, price reductions and customer acquisition goals, we needed greater analytical capabilities and TM1 provided us with the capability to answer questions like: Can we create a new service plan with a lower entry point to drive customer acquisition or customer retention? What impact would this have on does that do to profitability or what does that do to margins? We didn't have a graceful way to answer questions like this in the past."

In cellular services, the analysis only gets more complicated as you evaluate the impact of new devices on a new service. For example, when developing new services and new pricing strategies Cellular South can now analyze the impact of new devices within a particular geographic service area to provide marketing and product management organizations with informed analysis to help them hone their product and service introduction strategies to optimize average revenue per user (ARPU) levels and increase market share.

"That multidimensional analysis, you can't do it in Excel," Croft says. "And with the vast amount of data that were talking about, you really need an enterprise level tool. So that was the pain that TM1 addressed. That was the need from the business side, on the marketing and product side, and that pain was shifted to the finance group because we were responsible for delivering actionable information. So that really drove the selection of TM1."

As an innovator in the wireless market, Cellular South also harnesses the power of predictive analytics to help increase customer satisfaction and reduce churn. Cellular South had invested in SPSS Statistics to gather customer feedback at all stages of the customer lifecycle. Recently the company added SPSS Modeler Premium, along with IBM Netezza's data warehouse appliance, to enhance analytics performance by broadening the sources of customer data to include text.

The new system will provide actionable decision support, leveraging SPSS real-time scoring services that integrate directly with Cellular South's CRM system. This integration will allow them to combine both structured and unstructured data, valuable survey data, CRM notes, email notes and more into predictive models. A key outcome will be the ability to provide clearer insights to guide decisions related to customer acquisition, retention and cross-and-up-sell initiatives.

Next steps

"We're living in a very dynamic industry and we're constantly trying to figure out what the rest of the year will look like," states Croft. "Right now, we're looking to leverage IBM Cognos TM1 in that sense.

"Our biggest challenge about forecasting has always been the ability to fluctuate between scenarios. With this system, all you have to do is change the scenario from budget to actual and then it automatically refreshes based on that update. That's the value of having a system that works with an Excel interface. It's easy to use and has made our lives a whole lot easier."

Management can more accurately understand the profitability of its service offerings, and can more nimbly re-price its service in response to market conditions. New services are developed faster, and all new services leverage the profitability model to take into account roaming costs.

As a privately held carrier, Cellular South is more focused on subscriber growth than on profitability.

"One of the major drivers in telecom for a regional carriers is off-network or roaming costs, and so our profitability model now captures the usage characteristics of all of our customers," Croft says. "For example, we know if you live in a certain area, use a certain wireless device and subscribe to a certain wireless plan, you probably costs us a couple of dollars a month in roaming costs we have to pay to other carriers.

"But if you live in a different area we serve, or you have a different subscriber profile, maybe your roaming charges will cost us more and we will lose money on your account. We're now building models that take into account subscriber profitability so we can price our services accurately and increase our profitability over time."

The company is increasing its retail presence, and plans to use TM1 to analyze profitability by device.

"When you buy a cellphone from a carrier, the carrier typically takes a loss on the purchase price of the phone in exchange for a profit on the service contract," Croft explains. "That subsidy is a major cost for us each year, and we need a better way to forecast it so we plan to use TM1 to build a model at the device level to forecast the cost and implications of devices for each of our sales channels."

Cellular South plans to link pro forma product projects into finance models, and plans to apply separate cost drivers for different sales channels. Cellular South also plans to further analyze marketing and customer loyalty plans to reduce churn and increase ARPU levels, and is building a revenue forecasting model at the product level to provide even more granular analysis of service plan and subscriber profitability.

"TM1 provides us with a comprehensive look at profitability across multiple dimensions, and it gives us insight into where we make and where we lose money," says Croft. "We now have a finer threshold on margin analysis, and new product development is now completed in only weeks—and finance has time to analyze new services to enhance profitability.

"With TM1, we've shortened profitability report creation time by 80 percent and improved consistency, allowing managers throughout the company to benefit from timely access to better information that can help Cellular South continuously improve business performance."

About IBM Business Analytics

IBM Business Analytics software delivers complete, consistent and accurate information that decision-makers can trust to improve business performance. A comprehensive portfolio of business intelligence, advanced analytics, financial performance and strategy management and analytic applications gives you clear, immediate and actionable insights into current performance and the ability to predict future outcomes. Combined with rich industry solutions, proven best practices and professional services, organizations of every size can drive the highest IT productivity and deliver better business results.

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Business Analytics software