

Business Valuation

Accelerating Performance by Calculating Results™

AT&T Mobility: Increasing Customer Retention, Billing Accuracy and Revenue Assurance via Analytical Solutions

AT&T INC (NYSE: ATT)

AT&T Mobility, a subsidiary of AT&T, with annual revenues of \$42.7 billion provides wireless data and voice services to customers in North America

Teradata (NYSE: TDC)

<http://www.teradata.com/>

provides customer management, performance management, business intelligence, & data warehouse software solutions to multiple industries.

Business Approach

- ✓ Reduce customer churn
- ✓ Optimize annual customer value & share of wallet
- ✓ Manage profit margins via cost management & revenue assurance processes

Strategy

Consolidate customer and financial data into one database and CPM platform to enable better analysis of the purchasing patterns, profitability, and churn rates of different customer segments.

Value Achieved

- ✓ Average service revenue per customer grew 2.2%
- ✓ Reduced customer churn rate from 2.2% to 1.7%.
- ✓ Ability to reduce costs and improve billing accuracy through better data analysis

Customer Intelligence Business Valuation

Business Challenge:

AT&T Mobility, a subsidiary of AT&T created by the 2004 merger of Cingular Wireless and AT&T Wireless, provides wireless voice and data network services to corporate and residential customers across the U.S. The company has grown considerably in the past four years, and now has over 71 million subscribers. In the past year, 10 million new subscribers have signed on with AT&T Mobility.

Despite robust growth, AT&T Mobility faces an increasingly competitive market, in which new customers are increasingly scarce. Wireless services are much more ubiquitous now than four years ago, and most organizations and retail consumers already have some type of wireless account. Signing new subscribers is becoming a greater challenge for AT&T Mobility as well as other wireless service providers.

According to Dave Whittington, director of EDW development, the market has nearly reached its saturation point for new wireless voice and data accounts. "There aren't as many new customers coming in. So we are shifting resources to focus more on revenue per subscriber."

About four years ago, the management at the newly merged AT&T Mobility foresaw this trend and began taking steps to enhance its ability to retain existing customers, with the goal of increasing the number of products and services purchased by those customers.

Strategy Approach

AT&T's main goals are to continue acquiring new customers—increasingly through acquisitions from competing firms—and to encourage its existing customers to stay with AT&T. The company's plan includes increasing its use of BI tools to learn more about its various customer segments, specifically in regards to customers':

- ✓ Spending patterns,
- ✓ Product/Service preferences, and
- ✓ Social community
- ✓ Transactional behaviors

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AT&T also determined to focus on corporate performance using standard key performance indicators (KPIs) that aligned with its customer-centric culture:

- ✓ Subscriber churn rate
- ✓ New lead generation
- ✓ Network quality (eg, calls dropped)
- ✓ Revenue per unit
- ✓ Sales per subscriber

While different departments had, in the past, attempted to track such metrics, it was done on an ad hoc basis, limited to a single department or market segment. Departments also used numerous database and performance management products, primarily those from Oracle, Teradata and Netezza. Prior to its acquiring AT&T Wireless in 2004, Cingular had standardized on Teradata for business analytics and data warehouse solutions.

In short, AT&T Mobility recognized that it needed a single, centralized corporate performance management platform.

Transformation

Selecting a technology provider: A high priority was selecting a solution capable of processing, analyzing and storing the huge volumes, velocity and complexity of data generated by AT&T Mobility.—a data warehouse holding 132 terabytes of information. That data provides business intelligence for virtually every department, from the call center and finance departments to marketing, legal and sales departments.

High volumes of data increase the complexity of data modeling and analysis. AT&T needed a CPM solution robust and scalable enough to analyze and process high volumes without requiring extensive programming and administrative management.

Netezza, Oracle and Teradata were all considered. Teradata won out based largely on its user-friendly management features and expandability. Another factor in favor of Teradata was its ability to support multiple sources of data – ERP and billing systems, marketing applications, and different databases – and be capable of integrating many different data models.

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--Dave Whittington
Director of EDW
AT&T Mobile

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Hypatia of Alexandria (c.370-415 AD), invented several scientific devices--the astrolabe, plane sphere, and hydroscope (hydrometer). These instruments were used to calculate the distance between planets, the position of visible stars at any time of the year, and the gravity of liquids respectively. Hypatia was the first woman to make substantial contributions to the development of mathematics, astronomy & philosophy.

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Technology deployment: The roll-out has been done department by department. Currently, the entire company has standardized on Teradata. Since Cingular employees had previous experience with Teradata, AT&T Mobility already possessed internal expertise that aided the migration process.

The company also uses Business Objects as a BI front end for its business analysts. Sales, marketing and financial managers access data via an Oracle Hyperion dashboard displaying key metrics. Sales is a particularly heavy user of dashboard metrics, with updated sales data and performance metrics pushed out every morning to each of the 2,000-plus AT&T Mobility retail stores.

Next on the agenda are plans to implement a Relational Online Analytical Processing (ROLAP) database and the Teradata Active Warehouse product.

The New Operating State:

AT&T Mobility has been able to make incremental improvements in its key metrics – especially churn and new sales leads – and to introduce new products and services aimed at appealing to existing clientele, including new media bundles, smart phone connectivity and enterprise packages tailored for specific vertical industries. Wireless data growth is particular strong and has been boosted by AT&T's 3G UMTS/HSDPA network.

IT is also using the data and business intelligence tools to reduce costs. For example, Whittington notes that it is able to save itself and customers on the federal Universal Sales Tax by calculating the exact tax payment—a number that is almost always lower than the Safe Harbor percentage of 30%. To earn the lower rate, telecoms must report its data and analysis to the FTC each quarter. “We couldn't do that without Teradata,” says Whittington. “It's a game changer.”

To better ensure accuracy in customer billing, the company has launched a revenue assurance program aimed at spot-testing data samples for accuracy. The company examines every aspect of the sample customer's usage and billing data.

Lessons Learned

For AT&T Mobility, the key reason for selecting Teradata was data volume. It was limited in its product choices by its sheer requirement for robust capacity to handle huge volumes, velocity and complexity of information—both

“Teradata was really the only platform that would allow us to apply those metrics to such a large customer base,” says Whittington. “If we tried to do it with Oracle, we'd have to write so much code to get the RDBMS engine to handle the volume.”

--Dave Whittington
AT&T Mobile

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transactional as well as interactional. Its multiple data sources and applications also demanded a product that had wide support for many products.

Performance Metrics & Results

In 2004, AT&T Mobility had just over 49 million subscribers. Just prior to the merger of Cingular Wireless and AT&T Wireless in that year, AT&T Wireless had also suffered a massive subscriber defection due to problems implementing a new CRM system and an inability to meet a federally mandated deadline for wireless phone number portability.

AT&T Wireless lost thousands of subscribers due to the porting problem, which left many customers without phone service, and to the call center's inability to help customers fix problems without a working CRM system. But despite that very difficult beginning, the newly merged company quickly rebounded and today it tops 71 million subscribers, putting it neck-and-neck with Verizon.

Other key successes:

- ✓ Improved ability to analyze customer trends using consistent data & metrics across multiple departments such as sales, marketing, corporate analyst & finance
- ✓ Increased average service revenue per customer by more than 2% in 2007
- ✓ Reduced churn rate from 2.2% in 2005 to 1.7% in 2008
- ✓ Enhanced wireless operating income margin from 25.5% in Q1 2007 to 29.8% in Q1 2008
- ✓ Improved service margins by 2.8% in Q1 2008

“The less consolidated your data is, the more you need a big box like Teradata,”

--Dave Whittington
AT&T Mobile

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