Adventure Works BI Project

Initial Interviews

# Executives

I’m really excited about this initiative. I’ve felt for a long time that there’s valuable business information buried in our IT systems, but whenever I ask my senior management for specific details, I either get inconsistent answers or no answers at all!

The main areas of the business I want to benefit from this project will be the sales, and marketing teams. In the long term, it would be good to try to improve efficiencies in manufacturing as well, but for now I want to focus on driving sales growth, particularly in our reseller channel.

The main thing I’d personally like to achieve is a consistent view of how the business is performing in terms of sales revenue and profitability. For both our reseller sales and our Internet sales, I need to be able to see at a glance the revenue and profit for the year to date, and how our profit margin compares to our target – which is an average of 30 to 40%. I don’t want to have to spend hours analyzing and reconciling the data, and I don’t want to have to learn how to use a whole new system – I’ve only just got used to SharePoint! I’d just like to be able to see key business metrics at a glance. However, I want my management team to be able to drill into the details if I see anything that might be a cause for concern.



Keith Sanchez

Chief Executive Officer



We have two sales channels; direct sales through our Internet site, and an international network of resellers. The channels are managed independently because of the distinct differences in the two sales models. On the reseller side, we have a number of sales representatives who manage reseller sales accounts. Each sales representative is responsible for reseller sales in a particular sales region, which is in turn broken down into territories. My key priority is maximizing sales revenue across both of our sales channels, and to do that I need to be able to see monthly sales performance figures and identify areas where we need to improve. For Internet sales, I need to be able to sales revenue by the country where the customer lives. For reseller sales, I want to see sales by regional sales manager and their sales representatives.

As well as the sales representatives, the marketing team compile annual sales reports in Excel PivotTables that break down the sales by quarter and month, product category, and geographical location. These are extremely useful and I’d like them more regularly, but it takes a long time to compile the data. Additionally, to be honest I’m more of a visual person – I’d like to be able to explore the data visually and try to spot key trends and opportunities.

Brian Welcker

Vice President of Sales



The marketing team is primarily responsible for driving Internet sales. We typically run between six and eight marketing campaigns per year. To help us plan these campaigns, we need to analyze past sales to try to find trends or correlations between take-up of previous promotions (such as vouchers or discounts), customer demographics, and sales. We can do this to a limited extent by connecting to the Internet sales data in Excel and creating PivotTables, but the marketing specialists in my team tell me could do more sophisticated analysis if they were able to build their own analytical models from the sales data.

The Internet site tracks promotions associated each order, and our first priority is to measure the effectiveness of each promotion and try to spot characteristics of customers that will help us target our marketing campaigns more effectively. In the longer term, I’d also like us to be able to analyze campaign costs and compare them with budgets. Getting a better handle on marketing costs would greatly benefit the company, but right now we don’t have any data. A member of my team has started working on a campaign tracking solution, but it will be a year or so before it will provide any useful information.

Each part of the business has its own applications and databases – for example, the finance department has an accounting system, the e-commerce sales team has a database for direct sales through our e-commerce site, and our reseller sales team has an order processing system for our reseller channel. There’s quite a lot of unmanaged reporting going on – particularly in the marketing department, where a number of people are Excel power-users.

We’ve standardized on using SharePoint Server for all document-based collaboration, and many of the Spreadsheet-based reports get distributed that way – so most of our users are used to consuming information through SharePoint. Additionally, the finance assistant sends standard financial management reports to senior managers by email.

Jean Trenary

Information Services Manager

David Bradley

Marketing Manager

In the finance department, we’re responsible for maintaining the company’s financial accounts. I work closely with the CEO and Sales VP to ensure that we’re maximizing revenue and profitability across both our direct and reseller sales channels.

We use a financial accounting software package to maintain the company’s accounts, and this provides us with most of the reporting capabilities we currently need. My assistant David exports management reports from the accounts system to Excel each month, which he sends to senior managers by email. At the moment, this is not too great a burden, but if the company grows significantly in the future we may want to find a way to automate these reports.

We’ve talked in the past about doing some predicative financial modeling based on our historical financial data, but at the moment there’s probably not enough data to be useful. Maybe in a year’s time the BI solution you’re creating could be extended to include financial accounting data, but for now it’s not essential.

Laura Norman

Chief Financial Officer

# Finance



I currently create financial reports each month using Excel, and send them to the senior management team. I also upload the reports to SharePoint because some managers prefer to view them that way.

To be honest, the reports are pretty easy to generate from our accounts system and don’t take up too much of my time.

David Barber

Assistant to the CFO



In terms of financial reporting and analysis, the finance team includes a number of professional accountants and analysts who are proficient with Excel, and regularly create PivotTables from data in the accounts system so that we can see how the business is performing across a number of areas.

One important point is that our company fiscal year runs from July to June, and some reporting is based on calendar year but most is based on the fiscal year.

We have a few people on the team with OLAP modeling experience in SQL Server 2008, so if we need to do more detailed analysis we have the necessary skills. However, the accounts package gives us what we need right now.

Wendy Khan

Finance Manager

# Sales

I’m one of three regional sales managers, and I manage a team of sales representatives for the North America region. Our Sales VP has tasked me with increasing sales revenue in all sales territories, and my job mostly involves reviewing the performance of my team members and trying to identify ways to help them make more sales. Each region is broken down into countries, which are then further broken down into sales territories. A sales representative is then assigned to each territory.

For each region, the sales manager will need to be able to see sales revenue for each country and territory. They’ll also need to separately see sales for each salesperson. In most cases, this will actually be the same as viewing by territory, but sales people come and go, and sometimes we switch them between territories.

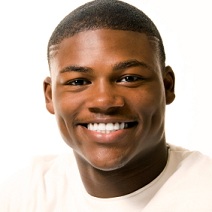
I’m old fashioned, and I like printed reports. Ideally, I’d like my sales results emailed to me each month as a Word document that I can print; but I can also deal with printing it directly from a web site if necessary.



Stephen Jiang

Sales Manager for North America

# Marketing



Each year, we pull sales data from the Internet Sales systems into Excel and create PivotTables. It takes a long time to write the Transact-SQL queries we need to get to the right data, and Excel doesn’t seem to be able to cope with the volume of data and gets very slow. There’s plenty of memory in my workstation, so I’m not sure what the problem is. If we could reduce the time it takes, we could do this kind of analysis more regularly.

However, after we’ve imported the data, we can break down sales by quarter and month. Our products are grouped into categories and subcategories, so we also slice the data that way. We analyze sales by customer country, state or province, and city, but there are also some other demographic information in customer profiles, such as the number cars owned, commute distance, and so on – it would be good to be able to include those factors in our analysis too.

When we analyze sales results, I’ve noticed that the data can sometimes be inconsistent. Sometimes the details of a particular product from the Internet sales database don’t match the information for the same product in the reseller sales database. This isn’t a problem when we’re analyzing promotions that are specific to only one channel, but it can cause confusion when we have a cross-channel promotion.

I’ve also noticed that customer details can often be misspelt or simply inconsistent because each customer enters their own details and they might use different terms for the same thing. For example, some customers might enter their country as “United States” and others might enter “USA” – they both mean the same thing, but it makes it difficult to break down sales by country correctly.

# IT

Sariya Harnpadoungsataya

Marketing Specialist

We’ve standardized our database servers on SQL Server 2012, apart from the accounting system which stores its data in proprietary data store. The accounts data can be automatically exported in comma-delimited text format, which is how the finance team are currently getting the data into Excel.

Generally, the finance team is self-sufficient when it comes to using data for analysis and reporting. The marketing specialists can manage basic data import activities, such as importing data from views in a SQL Server database into Excel and creating PivotTables and charts, but they need help with reports that require even complex Transact-SQL queries. Fortunately, consolidating our database servers and standardizing on SQL Server 2012 has made us more efficient, so we have spare capacity within the Database Management team to support this.

François Ajenstat

Database Administrator



We’ve invested in an enterprise-wide SharePoint infrastructure, which we’re in the process of upgrading to SharePoint Server 2013. We’re also rolling out Office 2013 on Windows 8 as a refresh to our standard information worker desktop. Our users are used to finding what they need in SharePoint, so I’d really like to avoid any reporting solution that requires its own Web interface; that will introduce a new set of security requirements and likely cause an increase in IT support calls.

The marketing team currently shares Excel workbooks containing analytical data in SharePoint, and users view these workbooks using Excel Services. This works well, but occasionally a particular workbook will become extremely popular and it becomes difficult to manage the performance and security aspects. On the one hand, I want users to see SharePoint as a single source of shared information, but on the other hand I’d like the database management team to be able to take some of the more heavily used spreadsheets under centralized control.

Peter Connelly

Network Administrator