

Case Study: How Amcor Used BI to Increase Its Profit Margin

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This case study of Amcor illustrates how business intelligence (BI) helped business leaders get more detailed information about their business. Amcor built a data warehouse and deployed an easy-to-use analytic application to identify which areas of the business to invest in and which ones to exit.

Key Findings

- Amcor focused on the "pocket margin" of its products — that is, the amount of profit for a given item based on the actual price paid by the customer minus the total cost to produce and sell it.
- Amcor already had a number of different reporting tools, as well as 32 source systems for data. Each business unit had its own definition of revenue and profits, so Amcor focused on standards and definitions.
- Amcor's BI team used webMethods to integrate these systems. The data warehouse cost \$1 million to build and took one year to complete.
- Amcor reports that its gross profit margin increased from 32% in 2H07, the last period before the new system went into production, to 33% in 2H08, despite a severe economic downturn in this period.

Recommendations

- Create a business-led council to prioritize BI projects and ensure they advance enterprise goals.
- Choose BI tools that are easy to deploy and use. Ease of use will make training fast and lead to rapid adoption.
- Give users the right incentives. Amcor, for example, now measures and rewards sales staff by the profit margin of what they sell, as well as by the traditional metric of sales volume.
- Build a data warehouse if you want to roll out reporting and analysis tools across your enterprise. Otherwise, partial and conflicting information from unintegrated systems will reduce the tools' value.

WHAT YOU NEED TO KNOW

A global packaging company, Amcor, has used BI to discover the actual profit margin on products down to the invoice level. The system enables the company to identify which areas of the business it should invest more in and which ones to exit. The system helped Amcor to shift from focusing on driving down costs to increasing profit margins. This alignment of Amcor's IT strategy with its business strategy contributed to the project's success. In addition, the BI team spent a year collecting and standardizing data from 32 feeder systems in a data warehouse, and implemented an easy-to-use front-end application. These steps helped the system achieve a high adoption rate of 500 users in three months.

CASE STUDY

Introduction

In today's severe economic downturn, cost cutting alone may not be enough to keep an enterprise profitable. In fact, cost cutting may make the problem worse if the enterprise unwittingly trims programs that contribute to revenue and profit. However, most enterprises do not know how much each process or department supports the business; they can't connect daily operations to business results. Amcor, an Australian packaging company, had engaged in rounds of cost cutting, yet still wasn't as competitive as it wished. Amcor undertook a BI project that identified the profitability of its activities down to the level of individual invoices. It could then identify which parts of the business to invest more in and which ones to cut. Business leaders that need detailed insight into the business impact of their operations can learn from Amcor's experience.

The Challenge

Amcor makes packaging for food, consumer goods, healthcare supplies and industrial products. It operates in Asia/Pacific, Europe and the Americas, with 21,000 employees. It generated revenue of A\$9.3 billion (\$6.8 billion) in fiscal 2008 (ending 30 June). When Ken MacKenzie became CEO in 2005 he wanted the company to focus more on customers and markets, and pushed Amcor to pursue excellence in sales and marketing. In particular, he asked Amcor to improve revenue and profits by identifying commercial opportunities. This "Value Plus" approach required giving decision makers better reporting and analysis tools to gauge the "pocket margin" of its products — that is, the amount of profit for a given item based on the actual price paid by the customer minus the total cost to produce and sell it. Amcor already had a number of different reporting tools, as well as 32 source systems for data. Each business unit had its own definition of revenue and profits, so Amcor's BI team set out to provide a standard set of data and applications for the whole enterprise.

Approach

Amcor's BI team developed a plan with two phases. In phase I, which began in November 2006, the team built a data warehouse to consolidate information from the 32 feeder systems. The team used webMethods to integrate these systems and SAP Business Information Warehouse as the data warehouse. Phase I cost \$1 million and took one year to complete. One person from SAP and one person from Plaut, a German consulting firm, helped. Cleansing and consolidating the data presented the biggest challenge.

In phase II, Amcor deployed QlikTech's QlikView to present and analyze pocket margin data. This phase took four weeks and targeted 100 users initially. Amcor spent A\$380,000 on the software

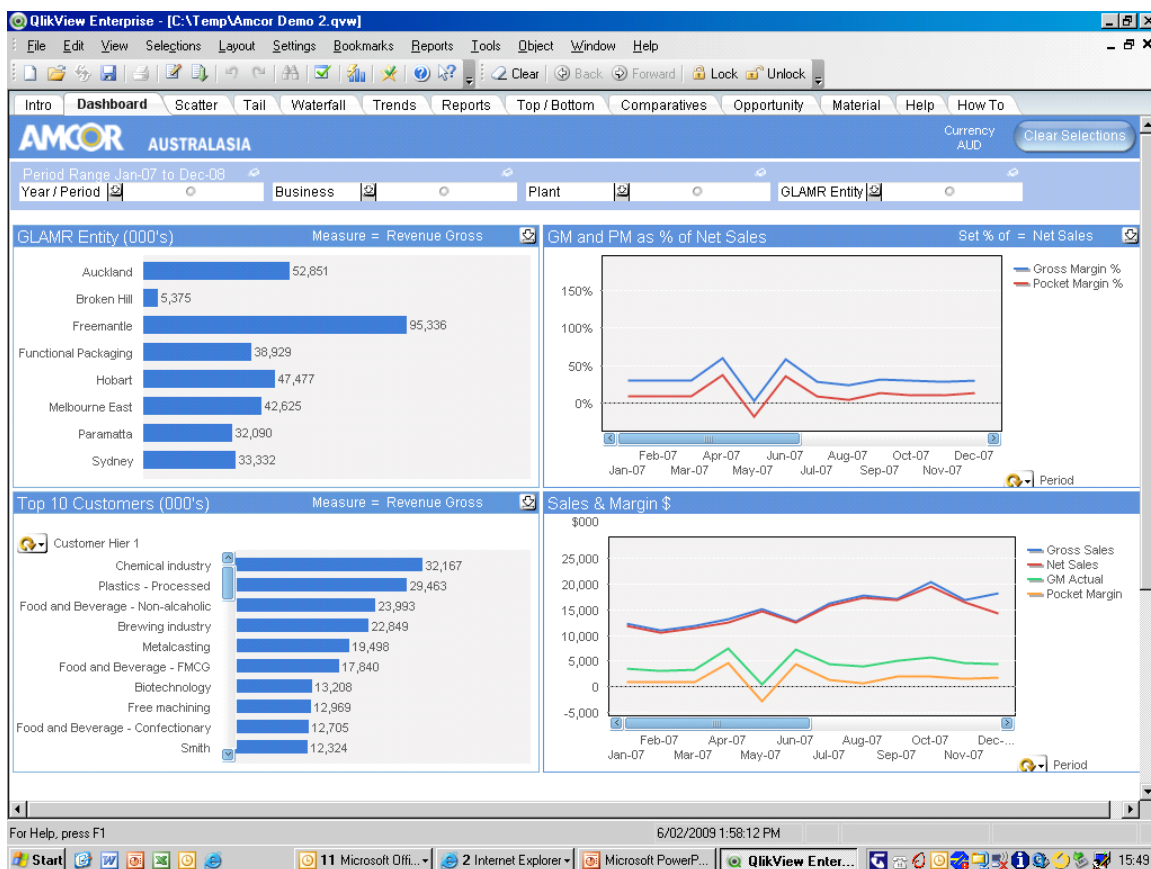
and A\$55,000 on consulting; ongoing costs total A\$90,000 a year. A developer from Inside Information helped customize the QlikView application. People from the business side with knowledge of processes and financial systems helped fit QlikView into Amcor's processes. The BI team rolled out QlikView in four stages, each focusing on a different part of the business:

- Fiber packaging.
- The balance of the fiber business.
- Flexible packaging.
- Rigid packaging and glass.

Before deploying QlikView for each stage, the BI team conducted tests to determine whether users liked it. A dedicated team led the training, but it consisted of people from the business side — for example, sales managers trained the sales staff.

The QlikView application went into production at the end of 2007. It consists of a small browser plug-in, or users can install the full client if they need to work offline. As an example of how the application presents information, Figure 1 shows a dashboard view, with data for various measures displayed in line and bar graphs.

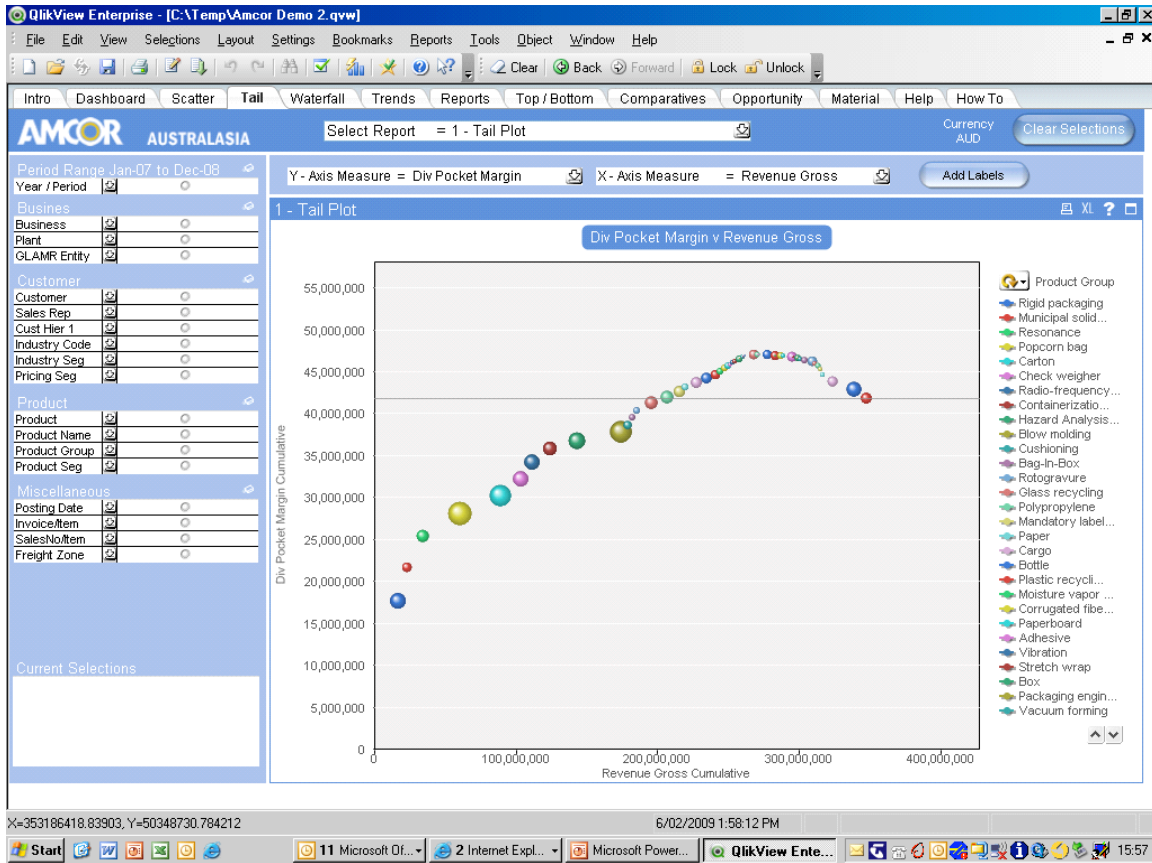
Figure 1. Dashboard View of Amcor's QlikView Application



Source: Amcor

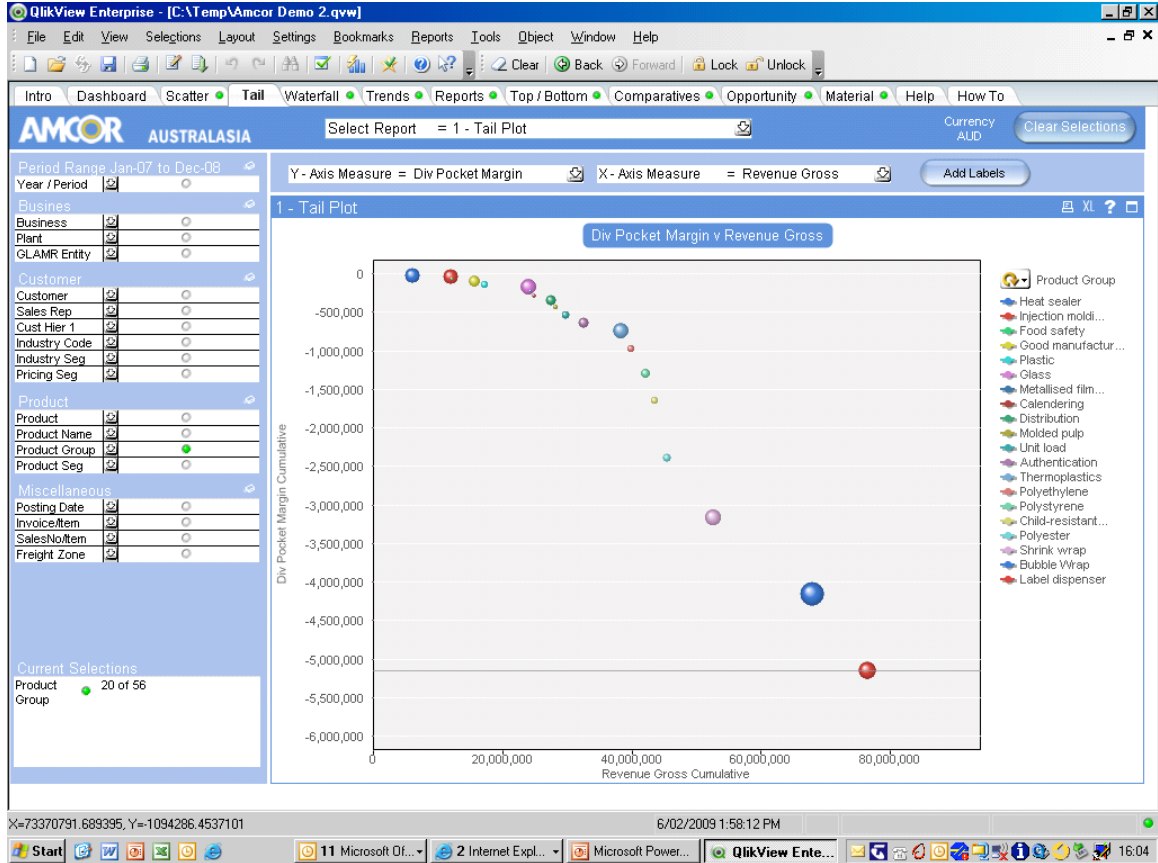
Figure 2 shows a tail chart of the pocket margins for a series of products. In this example, the pocket margin rises as the amount of revenue that the products generate increases, and then tails off. Here, the user has highlighted the part of the graph where the pocket margin tails off, and can drill down for more information (see Figure 3). Figure 3 shows these products alone, and the user can use the menus on the left side to get details about individual products, individual customers and so on. In this way, the user can dig down to find the causes of the overall decline in pocket margin.

Figure 2. Tail Chart of Pocket Margins for Various Products



Source: Amcor

Figure 3. Tail Graph of Pocket Margins With More Detail



Source: Amcor

Results

A series of initiatives allowed Amcor to build business-supported data warehouses, with QlikView becoming the catalyst of user adoption.

The BI team has never seen as much user demand as for the QlikView application — 500 users adopted it in less than three months. The users come from all business units, and the whole enterprise shares a single view of pocket margin information. QlikView tracks 300 measures and allocates company costs down to the invoice level for 1 million stock-keeping units and products. The operations staff in each Amcor factory use QlikView every morning to get information on what orders are coming, so that they can do production planning. Amcor's executives use the system for financial reporting and analysis.

Users have much more visibility into the profitability of customers and products. The information provided through QlikView has allowed Amcor to spot unprofitable areas and to leave them, and to identify where new investments make sense. As a result, Amcor reports that its gross profit margin increased from 32% in 2H07 (fiscal 1H08), the last period before the new system went into production, to 33% in 2H08 (fiscal 1H09), despite a severe economic downturn in this period.

Amcor's small BI team now faces the challenge of having more requests for help than it can fulfill. To set priorities for future projects, Amcor created a BI governance council, which includes IT staff but is led by the business. The council plans projects in the following areas:

- Sales analysis.
- Purchasing analysis.
- Sales force.

Critical Success Factors

Amcor managed the project effectively with the help of the business. The BI team did not develop reporting and analytic tools in isolation but specifically to support the enterprise's Value Plus business strategy. This alignment of the business and IT strategies made it easy to win the support of senior management. And Amcor created the business council to govern future BI projects and ensure that they continue to advance enterprise goals.

The BI team chose a tool (QlikView) that is easy to deploy and use. A rapid one-month deployment helped keep the project focused. Ease of use led to rapid adoption by business users. The clear graphs, pull-down menus and highlight/drill-down features allow users to navigate data without learning a complicated new application. The simplicity of the tool also eliminated the need for professional teachers and extensive training programs, so that users could train under business people, who know the way users work and can present the tool in the context of their daily activities.

The BI team implemented QlikView within business processes. The team brought in business resources to determine where and how the application would be used by people executing steps in a process. A lack of sensitivity to process often causes BI projects to fail.

Amcor supported Value Plus, and consequently this BI project, with the right incentives. For example, the company now measures and rewards sales staff by the profit margin of what they sell — the new BI system allows Amcor to track this— as well as the traditional metric of sales volume.

Lessons Learned

This BI project did not start with a vague idea that it could improve reporting and analysis. Rather, the CEO's new strategy provided a compelling need for change throughout the organization. The BI project furnished just one part of a much larger shift in Amcor's culture. The business led this shift, and the BI team merely supported it.

The BI team benefited from the time it allocated to build a data warehouse. Without taking time upfront to consolidate the 32 data feeds, problems with data quality would have hindered adoption of the QlikView tool. Since the QlikView application itself took a mere four weeks to deploy, the BI team could have chosen to provide the new tool quickly without integrating the 32 feeder systems. However, the partial and conflicting information that users would have received would have drastically reduced the tool's value, and the project could not have supported the Value Plus initiative. Projects meant to extend across an organization need to give users a single version of the data, merged from source systems using enterprisewide standards.

Small BI teams need to manage demand for their services carefully. A team needs to work on the projects that will provide the most value for the enterprise. Only the business can determine what those projects are, so BI teams need to set up business-led governance councils like Amcor's to set priorities.

RECOMMENDED READING

"Succeed With Business Intelligence by Avoiding Nine Fatal Flaws"

"Toolkit Case Study: Richmond Police Department Uses Analysis to Reduce Crime"

"Case Study: Absa's BI Center of Excellence Creates 'Single Version of the Truth'"

"Data Warehouse Justification vs. Tactical Uses of Unintegrated Information"

"Vendor Rating: QlikTech"

"SWOT: QlikTech, Business Intelligence Platforms, Worldwide"

"Unlocking the Value of SAP BW by Layering a Third-Party BI Platform"

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