

Microsoft Data Mining Solution Wins Efficiency and Lowers Costs

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*The Data Mining solution assists **ComputerFleet** predict when leased IT equipment assets are likely to be returned by each client. This predictability allows **ComputerFleet** to reduce internal costs, manage operations and resource appropriately when high volume return months occur. Unlike many traditional data mining applications, this particular solution feeds the data mining output back into the data warehouse where it becomes more readily available for end users to query using existing business intelligence tools.*

Situation

ComputerFleet was the innovator of a Managed Lease and Asset Management offering into the Australian marketplace in 1991. The company has since expanded into New Zealand, Singapore and Europe and currently has over 300,000 *assets* on rental representing an investment of more than AUS\$1 Billion. This successful expansion is largely attributed to having developed a sophisticated database known as AssetXpress and, since 2001, a data warehouse known as InfoXpress. Both have been developed using Microsoft's SQL Server 2000 with the latter making extensive use of the inherent OLAP and data mining technologies. **ComputerFleet** had some idea of what data mining might be able to do for them, but had considered it to be prohibitively expensive. When they learnt that much of the already completed work in the data warehouse could be reused and or extended and that data mining algorithms were already licensed (in SQL Server 2000) they asked Angry Koala, their Business Intelligence partner, to investigate the possibility of extending the data warehouse to incorporate data mining to predict when an asset is likely to be returned based on client historical behaviours.

Company

"ComputerFleet, ... Australia's leading specialist in managed leasing and asset management programs for technology equipment" The Australian, Sept 27, 2002.

Customer Profile

ComputerFleet provides its customers with the option of leasing technology equipment rather than purchasing and owning the equipment. This takes the equipment off the balance sheet, reducing capital employed and freeing up funds for other activities. Customers like the flexibility that leasing provides.

Business Situation

ComputerFleet's operations need to be prepared for the return of assets, which may be on the lease end date, but often at a later date. Planning for asset return enables ComputerFleet to more effectively manage operations for their collection and disposal.

Solution Description

ComputerFleet's solution comprises of a SQL Server data mining model based on historical leasing activity. The data mining model is then queried for outstanding assets and fed back into the data warehouse as predicted asset arrival times.

Benefits

ComputerFleet can more effectively manage operations, which reduce costs. ComputerFleet can accurately value their asset register.

Software and Services

[Angry Koala](#)
[Microsoft Consulting Services](#)
[Microsoft Excel](#)
[Microsoft SQL Server 2000](#)
[Microsoft Data Analyser](#)
[Microsoft Windows 2000 Server](#)

Vertical Industries

Asset Management
Finance

Country/Region

Australia

Solutions

Business Intelligence
Data Mining

Audiences

Business Decision Makers

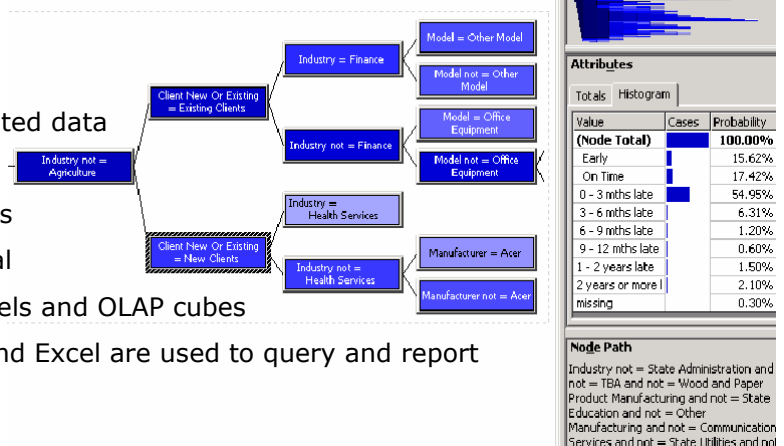
Solution

Angry Koala and Richard Lees of Microsoft Consulting Services assessed that such a prediction should be based upon a number of key attributes such as, the nature of the client (Corporate, Government, SME), the type of asset (PC, laptop, server, communication equipment) and the nature of the lease (term, style). These attributes, in combination with 12 years of accumulated asset return data, provided the foundation for the data mining extension of InfoXpress. Jerry Runyard, **ComputerFleet's** IT Director, was surprised how insightful the data mining predictions were. "It's fascinating to better understand and realise what the drivers are for our client's behaviour in something such as returns – a process that can be quite costly - and so the potential to reduce these costs, for ourselves and for our clients, are obvious" says Runyard.



Architecture

ComputerFleet has a mature and sophisticated data warehouse built on Microsoft's SQLServer 2000 platform. The data warehouse contains all data in relational format with the essential information processed into Data Mining models and OLAP cubes



overnight. Both Microsoft's Data Analyser and Excel are used to query and report from the data warehouse.

Benefits

Easy to Use

Creating data mining models is not a simple task, but **ComputerFleet** have made consumption easy by putting the data mining output back into the data warehouse. Thus, it is made available in their standard reporting vehicles, Microsoft Excel and Microsoft Data Analyser.

Surprisingly Rapid Deployment

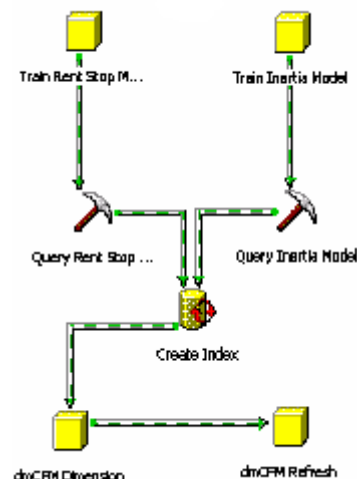
ComputerFleet asked its Business Intelligence partner Angry Koala, in conjunction with Microsoft Consulting Services, to create a prototype. The estimate of 2 weeks to create the prototype was correct and the business benefit potential clearly demonstrated. **ComputerFleet** then commissioned the data mining component to be included into its production data warehouse. This took a further 2 weeks effort. "I am impressed with what Microsoft has been able to achieve with a "version 1" product. We have been able to receive the significant benefits from InfoXpress with only a few weeks developmental effort" said Runyard.

Easy to Support and Maintain

Because the data warehouse and data mining features are both built-in to SQL Server 2000, it was very easy for **ComputerFleet** to incorporate the mining aspect into their existing data warehouse. Furthermore, no **new** client tools (data mining browsers etc.) were required, as the output from the data mining model was fed back into the data warehouse.

Development Partners

ComputerFleet had established a good relationship with their business intelligence partner Angry Koala during the development of the initial data warehouse. In order to guarantee the success of the data mining project, particularly using new and leading edge technology, Angry Koala worked with Microsoft's data mining expert Richard Lees, for the initial prototyping, production deployment and skills transfer. Angry Koala now plan to take data mining to many more of their customers. "When you have a well structured data warehouse it's amazing how easy it is to incorporate data mining, make the output available to all, and to derive significant business advantages from the insights gained" says Grant Paisley of Angry Koala.



For More Information

EasternMining



For more information about EasternMining contact Richard Lees (Richard@EasternMining.com.au) in Australia or visit <http://EasternMining.com.au>.