



## Overview

**Country:** United States

**Industry:** Retail

### Customer Profile

Virgin Entertainment Group is one of the world's leading entertainment retailers, operating 23 Virgin Megastores in North America, as well as stores throughout Europe, Japan, Australia, and the Middle East.

### Business Situation

Virgin Entertainment Group wanted to cut serious losses due to employee theft and shrinkage by adding real-time point-of-sale data reporting and analysis.

### Solution

The company chose to work with Xavor to implement a solution based on Microsoft® Windows Server System™, including Microsoft BizTalk® Server 2004.

### Benefits

- Real-time alerts boost fraud detection by 50 percent
- Better data analysis leads to informed business decisions
- Integrated business processes will lead to cross-team efficiencies

## Entertainment Retailer Cuts Fraud with Real-Time Data Reporting

“We anticipate that the new loss-prevention solution using BizTalk Server 2004 will detect at least 50 percent more fraud cases starting from the first month, resulting in increased profits.”

John Davis, Director of Loss Prevention, Virgin Entertainment Group

Virgin Entertainment Group wanted to reduce the significant losses that it was experiencing due to employee theft in its music and entertainment stores, but that effort was hampered by long lag times in data reporting. To improve loss prevention, the multichannel entertainment retailer worked with Xavor to deploy a new point-of-sale reporting solution based on Microsoft® Windows Server System™ integrated server infrastructure software, including Microsoft BizTalk® Server 2004, SQL Server™ 2000 Analysis Services, and Windows® SharePoint™ Services. The reporting offers real-time data monitoring, suspicious activity alerts, and long-term trend analysis to help the Loss Prevention team at Virgin Entertainment Group identify and prevent employee theft. The improved reporting capabilities have boosted fraud detection by 50 percent.



“Microsoft does a great job of making everything work together. We were especially impressed with how seamlessly BizTalk Server worked with the SQL Server tools and the SharePoint site interface.”

Paul Duchouquette, Director of Information

## Situation

The retail industry has always had to contend with losses due to employee theft, shrinkage, and mismanaged inventory. In many cases, these losses can seriously erode profits. Virgin Entertainment Group, which operates 23 Virgin Megastores in North America as well as stores throughout the world, was suffering significant losses due to employee thefts. With the uncertainty in consumer confidence, shrinking revenues in the music industry, and increasing competition, Virgin Entertainment Group needed to increase and protect its profits. Tracking and preventing employee-related losses became key business challenges.

Virgin Entertainment Group's first solution was to assign Loss Prevention managers to each of the stores, contract with an outsourced service provider to report on point-of-sale transactions, place security cameras throughout the stores, and encourage store managers to report suspicious activities. In spite of these measures, only 15 to 20 percent of the total losses were being tracked and recovered.

Management identified poor information analysis as the major obstacle to greater loss prevention. The outsourced approach had severe limitations, most notably a 10- to 15-day delay from the time a purchase took place in the store to the time it was grouped, categorized, filtered, analyzed, and made available in weekly reports and online queries. This significant delay rendered much of the reported information useless in controlling losses.

In addition, Virgin Entertainment Group had no effective way of mapping the information obtained from the reports to products and inventories without manually accessing multiple systems. The existing infrastructure consisted of many different repositories and systems for tracking and storing different

kinds of data. Virgin Entertainment Group needed one centralized point of access to all the disparate repositories.

Another problem arose because the company's outsourced business tracking had no built-in intelligence. Because of this, it was impossible to filter out ongoing promotions or ongoing campaign transactions. With as many as 20,000 transactions a day in some stores, it was difficult to detect relevant trends such as a specific sales associate performing multiple suspicious transactions (post voids, refunds, discounts, etc.), or the use of a specific stolen credit card number.

The incumbent tracking system also required constant additional human intervention, which made it difficult to create consistent, error-free reports. To further compound the problem, information was only stored up to 90 days, making it difficult to predict long-term trends and access histories of employees' transactions.

In short, the system offered limited reporting and analysis, created a delay in receiving point-of-sale data, and relied heavily on store managers and Loss Prevention managers to manually analyze the information from various systems. Unrecovered losses were adding up to hundreds of thousands of dollars every year, and Virgin Entertainment Group managers knew that they had to implement a better solution.

## Solution

Virgin wanted to significantly improve loss recovery due to employee thefts by implementing real-time monitoring mechanisms at the point of sale.

Virgin Entertainment Group, in collaboration with Xavor, a Microsoft® Certified Partner, implemented a loss-prevention solution based on the Microsoft Windows Server System™ integrated server infrastructure

“The tool has provided the ability for my team to analyze information much more effectively and in a lot less time.”

John Davis, Director of Loss Prevention for Virgin Entertainment Group

software. “It was a pleasure working with the Xavor team. Virgin Entertainment Group chose Xavor due to its in-depth knowledge and experience with Microsoft development projects. By staying abreast of Microsoft’s cutting-edge technologies, Xavor was instrumental in our success,” says Paul Duchouquette, Director of Information Technology for Virgin Entertainment Group.

Virgin Entertainment Group’s solution used Microsoft BizTalk® Server 2004, SQL Server™ 2000 Analysis Services, and Windows® SharePoint™ Services, which are part of Microsoft Windows Server System. Windows Server System is integrated server

infrastructure software that incorporates software innovations to help companies do more with less. The new loss-prevention solution will make it possible for Virgin’s loss-prevention team to detect suspicious patterns, manage security, and prevent fraud, all in real time.

“We chose Microsoft products partly because we knew we needed a solution that was interoperable, that could talk to our heterogeneous mix of systems,” says Duchouquette. “It was crucial that we had access to all our different data sources, and Microsoft provided that.”



Virgin Entertainment Group uses Microsoft BizTalk Server as the foundation for their Loss Prevention solution architecture.

## Benefits

The new solution is giving Loss Prevention managers faster, more meaningful access to information. By opening up data to real-time inspection, the system has fostered a proactive theft-prevention culture among the loss-prevention team.

### Real-Time Loss Reporting

The solution monitors all transactions across the stores in real time, at the point of sale, and alerts Loss Prevention managers by e-mail and pager when suspicious patterns occur in the data. In addition, it maps relevant product and inventory information from Virgin's back-end AS/400 systems for effective analysis and trending. The real-time tracking ability of BizTalk Server helps avoid the delay in providing data that had been associated with the outsourced provider.

John Davis, Director of Loss Prevention for Virgin Entertainment Group, explains, "We anticipate that the new loss-prevention solution using BizTalk Server 2004 will detect at least 50 percent more fraud cases starting from the first month, resulting in increased profits for Virgin Entertainment Group. The tool has provided the ability for my team to analyze information much more effectively and in a lot less time. We are alerted almost immediately when a suspicious activity occurs, allowing us to get to the source of the problem immediately and focus on the recovery. In the past, detecting such activities in real time was inconceivable for us, and getting to the problem took days and weeks. Now it takes minutes and hours."

### Better Trend Reporting to Help Reduce Fraud

The BizTalk Server capabilities for business activity monitoring, in conjunction with SQL Server 2000 Analysis Services, improve trend analysis. BizTalk Server works with the Analysis Services data-warehousing abilities to generate reports on business activity. Those reports help managers identify

patterns in the sales transaction data to provide fast answers to complex analytical queries. In addition, newly improved archiving capabilities allow users to track suspicious patterns over time.

BizTalk Server also offers significant improvements in defining and managing business rules and filters. Business users now have a user-friendly interface that helps them to modify business rules as business needs demand.

The business rules capabilities are used in two areas: real-time monitoring of transactions and trend analysis.

In real-time monitoring, the transaction data is saved in SQL Server and then analyzed by the BizTalk Server Rules Framework. The rules have been segregated to monitor transactions for discount percentages, stolen credit cards, high dollar amounts, and so on. The Loss Prevention managers can define criteria in the transaction monitor, such as the range of transaction amounts that may be determined suspicious. They can also specify the personnel who will receive alerts about these suspicious transactions.

In trend analysis, OLAP (online analytical processing) capabilities are applied on the transaction data to provide an aggregated view to the managers. For instance, a manager may specify a credit card number in order to review its transaction history with the stores, or view a particular cashier's activities over a specified time period.

The new solution gives Loss Prevention managers the ability to query, filter, view, and analyze information easily and quickly. The access to filtered data is simpler, making it easier for managers to perform analysis. The solution provides easy-to-use charting templates for long-term trend watching. The

Loss Prevention team can also print reports in a user-friendly format.

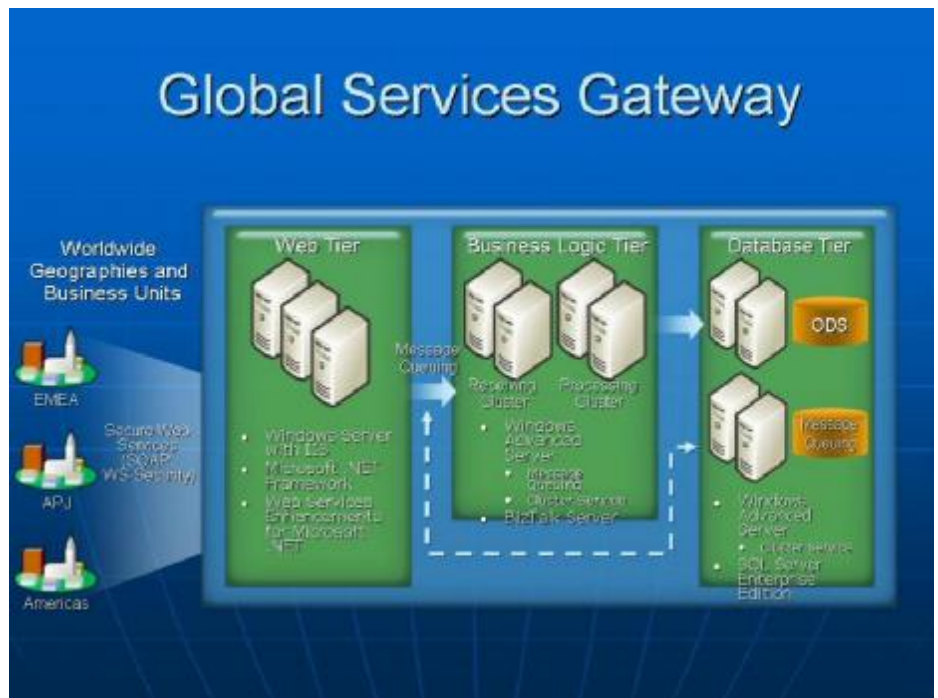
Windows SharePoint Services, a component of the Microsoft Windows Server™ 2003 operating system, provides a portal through which Loss Prevention managers gain easy access to BizTalk Server. The SharePoint site makes information readily available and helps the managers predict trends and define priorities for their investigations more easily. The site also uses Microsoft Office Excel 2003 and Office Web Components, part of the Microsoft Office System, to provide the users with analytical abilities through charts and PivotTable® dynamic views.

“Microsoft does a great job of making everything work together. We were especially impressed with how seamlessly BizTalk Server worked with the SQL Server tools and the SharePoint site interface,” says

Duchouquette.

#### Integration for Future Streamlining

Because the solution gives users a single place through which they can drill down into and analyze information quickly and accurately, it has laid the foundation for future business process integration as well. By tying together disparate Virgin Entertainment Group systems, the solution will eventually help sales, marketing, product, and operations teams work together to create efficiencies within the organization.



Microsoft technologies operate at every level of Virgin Entertainment Group's information services system, helping ensure integrated data reporting.

## For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to: <http://www.microsoft.com/>

For more information about Xavor Corporation products and services, call (949) 250-4390, or visit the website at: <http://www.xavor.com/>

For more information about Virgin Entertainment Group products and services, call (323) 935-1500, or visit the website at: <http://www.virginmega.com/>

## Microsoft Windows Server System

Microsoft Windows Server System is a comprehensive, integrated, and interoperable server infrastructure that helps reduce the complexity and costs of building, deploying, connecting, and operating agile business solutions. Windows Server System helps customers create new value for their business through the strategic use of their IT assets. With the Windows Server operating system as its foundation, Windows Server System delivers a dependable infrastructure for data management and analysis; enterprise integration; customer, partner, and employee portals; business process automation; communications and collaboration; and core IT operations including security, deployment, and systems management. For more information about Windows Server System, go to: <http://www.microsoft.com/windowsserversystem/>

### Software and Services

- n Microsoft Office System:
  - Office Professional Edition 2003
  - Office Excel 2003
- n Microsoft Windows Server System:
  - Windows Server 2003, with Windows SharePoint Services
  - BizTalk Server 2004
  - SQL Server 2000

### Partners

- n Xavor

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