



**Managing Knowledge through
Business Interfaces and Dynamic Reporting**

Data, Information and Knowledge Management

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Jeff Scott
Chief Compliance Enforcement Officer
Jeff_Scott@kdor.state.ks.us

Raf Lorie
Chief Information Officer
Raf_Lorie@kdor.state.ks.us

Aron Montaini
Business Intelligence Manager
Aron_Montaini@kdor.state.ks.us

Executive Summary: The Business Community must work in partnership with the Information Technology Community to gain superior results and return on investment. Recovering delinquent state tax debts requires ever-changing business methodologies. Debt referrals must be continually reviewed to most efficiently manage agent case loads. Traditionally, case management of delinquent debt was based on static weekly and monthly reports, which provided managers with inventories and debt balances. Process improvement research involved digging through months', or even years' worth of paper stacks to find information for a specific time frame. A business need arose where management needed a platform which provided dynamic reports with user assigned criteria, as well as portal for desktop research in addition to traditional reports.

From early on in its existence, Kansas' Compliance Enforcement Department realized that the key to successful case management is being able to understand and use the large amount of case informational data our systems house. Part of being able to understand the data is having it presented to the users in a user friendly format. Kansas is unique in the fact that it created a Business Intelligence (BI) Team devoted to Compliance Enforcement within the Department of Revenue. Business Intelligence refers to skills, technologies, applications and practices used to help a business acquire a better understanding of its data context. Business intelligence may also refer to the collected information itself.

BI methodologies provide historical, current, and predictive views of business operations. Common functions of business intelligence technologies are reporting, OLAP, analytics, data mining, business performance management, benchmarks, text mining, and predictive analytics.

The KDOR BI Team serves as a critical path link between the business community and the Information Technology community. It is this team which must understand the data KDOR houses and its many relationships. The team is responsible for presenting data in understandable formats, recognizing the needs for process improvement changes, research projects, and application design.

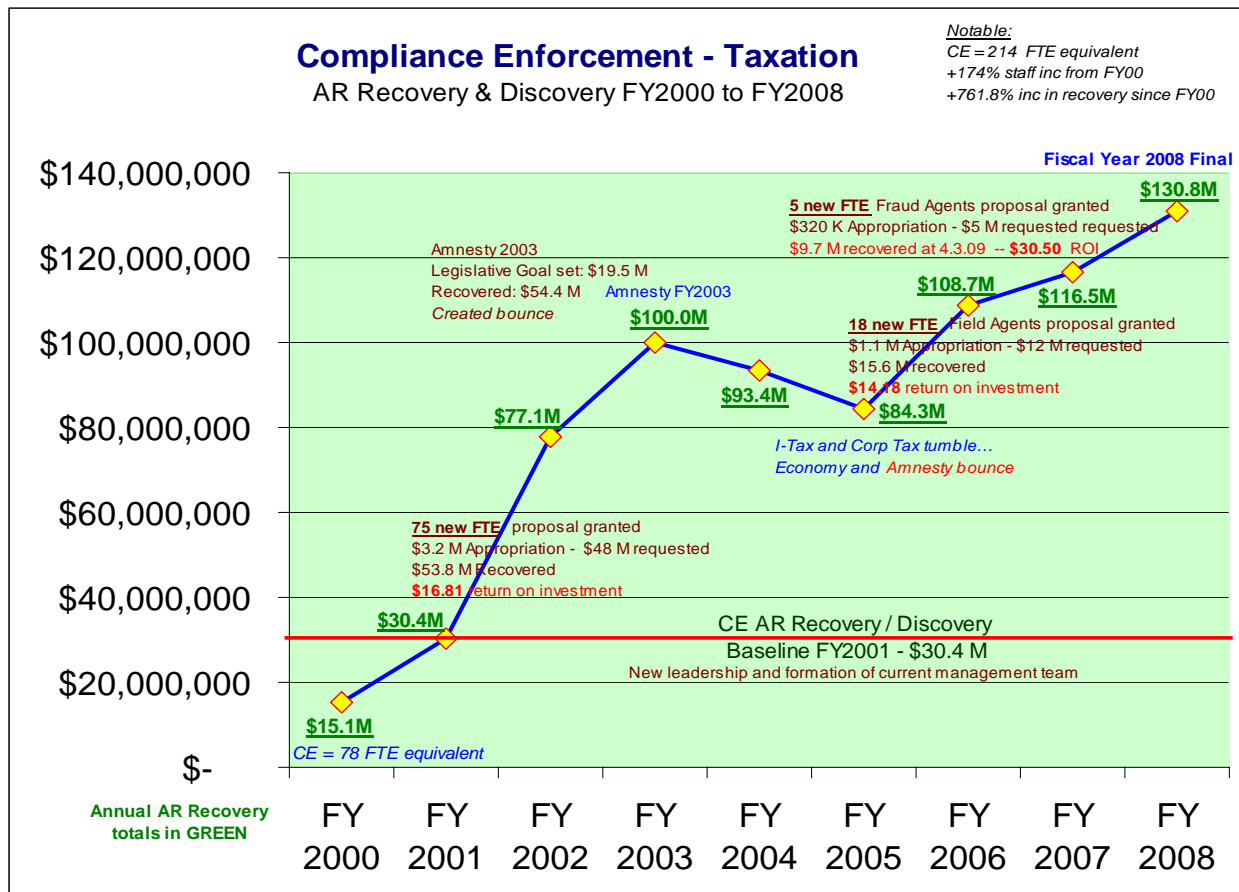
Description of the business problem and solution: For effective case management and prioritization, collections managers required a method to produce dynamic, user defined reports from their desktop, as well as have a centralized research platform in which they could obtain a massive amount of debtor information such as demographics, assets, labor and wage information, and business relationships. The solution needed to allow multiple users, and house daily updatable information, allowing the users to define parameters for reports for themselves. Customized dynamic reporting now exists by submitting a request with all defined parameters to the Business Intelligence team, however, management desired a product where simple parameters (date ranges, employee names, etc) could be entered, with near instant results to manage the business. The solution to this need was the development of a specialized Intranet Resource Page for collections staff and management. Multiple users querying “live” data causes system slowness issues, therefore databases are used to house, query, and report on system data, creating a localized data-mart outside of the production data environment. The product developed is referred to in-house at KDOR as “**MainPage**”.

When creating the data-mart/intranet application, several factors needed to be considered additional to the user requests; available software and PC limitations being the largest. For these reasons, developers chose Microsoft Access. Though limited in its capabilities, the software is compatible with all user PCs as well as KDOR data systems. In 2007 when MainPage was first introduced, many of the potential users had never been exposed to a data-mart dynamic use environment, and nothing like this had been developed or utilized by KDOR before. Because of this, the BI Team creating the application approached design and testing in a manner different from the traditional test to production environment. **MainPage** was introduced in parts, giving users time to familiarize themselves with the environment before all applications were included. The first to be introduced were reports with very simple user defined criteria, for example reports that require a date range. As users familiarized themselves with the environment, more features were added, culminating in this design.



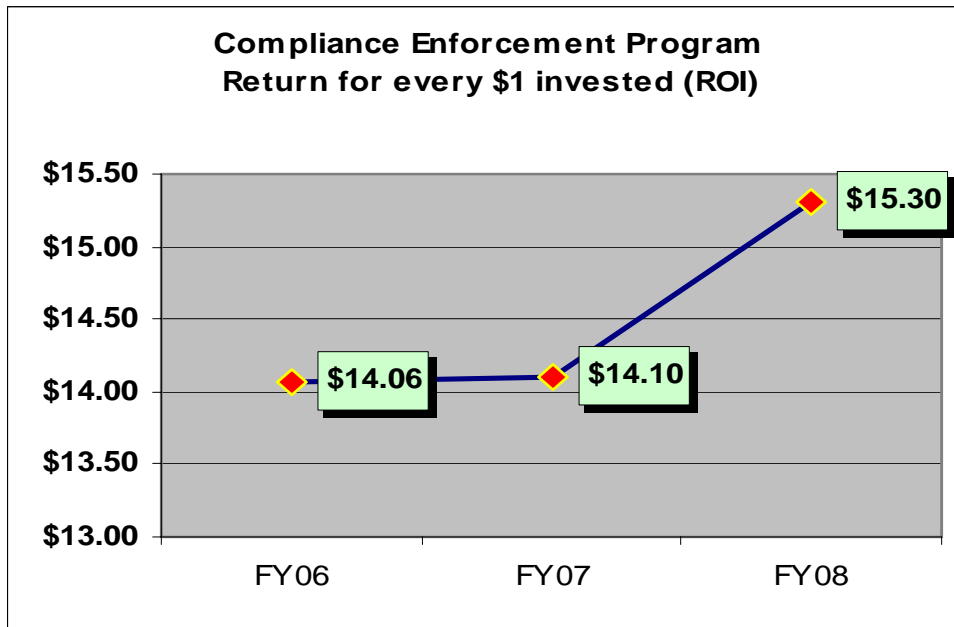
Significance: For the Kansas Department of Revenue, user defined, user interactive dynamic reporting is an innovative approach to fulfilling the ever-changing business needs. Traditional report requests involved filling out forms, submission signatures, testing phases, acceptance signatures, and a report being designed and presented by an individual unfamiliar with the specific business process. Nobody understands the business need more than the user requesting information. Having a group that directly works with users (Business Intelligence) that understands the business processes and can apply them to technology is a winning team. Drastically decreasing research and reporting times, significantly improves the ability to manage and prioritize delinquent tax cases.

Increased case management, resulting with streamlined debt recovery processes developed in partnership with Compliance Enforcement and Information Technology Teams can clearly be visualized by the following collections graph.



The Kansas Department of Revenue's Agency philosophy states, "We will collect taxes and fees, fairly, cheerfully, accurately and efficiently". The **MainPage** desktop application contributes greatly to these efficiencies.

Project Benefit: Revenues collected through Compliance Enforcement are directly deposited into the State General Fund. With recent economic developments, there has been a push to do more with less staff and less resources. Providing more resources with virtually no cost is what defines efficiency. The Kansas Department of Revenue's Compliance Enforcement division has, for the last several years, calculated ROI of its activities. The following graph illustrates an increase in ROI. For every \$1.00 of tax money invested to operate the recovery programs we've developed and implemented, we've been to return \$15.30 in recovered taxes ... *exceptional results.*



Although other process improvement strategies were implemented during this time contributing to increased ROI, the efficiencies created from desktop available research and reporting were a significant factor.

In addition to the financial ROI, other intangible benefits have resulted from the recovery program development. Examples include reduced case resolution time, a much more advanced understanding of case dynamics, inventory control, and team and individual staff performance measurement.

The time invested for the Business Intelligence Team to develop MainPage has been, and continues to be internal normal business activity; there was no capital outlay to create these programs and processes. No additional software was required, and no training expense was incurred. The **MainPage Data mart** was and continues to be a successful project venture greatly enhancing Compliance Enforcement's intelligence to more efficiently recover taxes due.