ROI CASE STUDY
IBM COGNOS TM1
ENVISION CREDIT UNION

THE BOTTOM LINE

By deploying IBM Cognos TM1, Envision Credit Union was able to improve productivity, reduce labor costs, and increase the amount of cash available for overnight investments. Envision also improved the quality and granularity of information available for making operational and financial decisions.

ROI: 178%

Payback: 7 months

THE COMPANY

Envision is a 31,500 member not-for-profit credit union that operates eight branches and 13 ATMs in and around Tallahassee Florida. The institution's membership is open to residents of a 6-county area, and most if its members are teachers. The credit union's services include deposit, ATM, and lending services.

THE CHALLENGE

In 2006, Envision hired a new CFO with a directive to modernize the accounting and finance functions. Upon his arrival, the new CFO examined Envision's reports and reporting workflows, and found that areas where improvements could be made included:

- Visibility. The existing finance and accounting reports were generated by an aging, mainframe-based system that was character based and therefore had little flexibility. As a result, the reporting was rigid and could not provide the granularity of detail or the flexibility of analysis that Envision's managers required.
- Efficiency. Because of the rigidity of the existing reporting system, most of the organization's reports were Excel-based derivatives of mainframe reports that required labor-intensive rekeying of data by accountants and administrators.
- Accuracy. Because the Excel-based reports were based on the manual rekeying of data, they frequently required error rework and because of data diversity problems, made it difficult for people to collaborate.

THE STRATEGY

In September 2007, Envision's CFO purchased IBM Cognos TM1, which at the time was owned by Applix (formerly Applix TM1). IBM Cognos TM1 was selected for a number of reasons, including:

- Experience. Envision's CFO had used the application for eight years in his position prior to Envision, and was skilled with its features and functionality.
- Cost. IBM Cognos TM1 was far less expensive to purchase than other well-known vendors, but still had all the functionality that Envision required. Additionally, Envision believed deploying another business intelligence or performance management application would have required specialized consultants, which would have added time, complexity, and cost to the deployment.
- Real time. Envision's CFO preferred the TM1's capacity to generate reports based on real-time data, rather than batch data, which could be up to a day old.

Envision's CFO used his prior experience with IBM Cognos TM1 to independently deploy the application. Over a 9-month period, the CFO dedicated about 15 percent of his time to the deployment, which included:

- Needs assessment. Report users with responsibilities in accounting, finance, operations, and regulatory compliance were all interviewed to determine what their reporting needs were.
- Datacube construction. Based on the needs of the audiences within Envision, two multi-dimensional cubes were initially built to house trial balance data enabling the production of income statements and balance sheets. Over the course of the deployment, 45 more cubes were built in order to allow both financial and operational data to be analyzed and reported on from the common TM1 storage environment.
- User testing. The CFO found that because Envision's reporting had been so rigid for so long, the report consumers couldn't always anticipate what they would want from IBM Cognos TM1. As these employees became more familiar with the functionality in the program and the granularity which reporting could be done, their business requirements changed during the deployment. As a result, the CFO applied an iterative approach to user acceptance, which resulted in reporting that was better than most users initially expected.

IBM Cognos TM1 was fully operational in October 2007 and is now used by 41 employees. Eight are daily users and the rest are occasional, ad-hoc users.
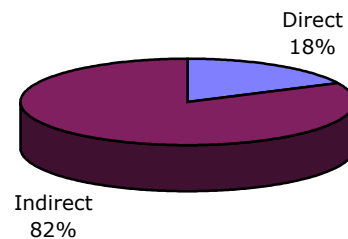
KEY BENEFIT AREAS

Deploying IBM Cognos TM1 has enabled Envision to reduce administrative costs, increase the average amount of overnight cash investments, and dramatically improve operational visibility without adding staff. Key benefits from the deployment include:

- Reduced currency balances. Envision used IBM Cognos TM1 to reduce its levels of cash and currency — which are non-interest bearing assets — at its branches. By using IBM Cognos TM1 to analyze trends in branch operations and determine the optimal amounts of cash and currency at each branch, Envision was able to reduce this balance sheet item by 7 percent and increase interest income.
- Avoided headcount. Envision has used IBM Cognos TM1 to rapidly and easily create new reports that are used to analyze factors such as asset-liability management, cost of capital, and cash and currency balances at branches. If

the accounting department had not deployed IBM Cognos TM1, Envision would have had to hire three new senior level business analysts in order to achieve this level of reporting from the previous reporting system.

- Improved productivity. Envision used IBM Cognos TM1 to create both standardized and customized reports that replaced reports that were previously hand coded into spreadsheets based on hard-copy printouts from the organization's mainframe. In fact, nine of the new reports have automated so many workflows previously required for periodic reports, that people in the accounting department are now 15 percent more productive.

- Reduced accounting costs. Before the deployment, Envision had a part-time employee who spent 20 hours a week manually transcribing general ledger entries based on a mainframe-driven report. Because this process has been automated within IBM Cognos TM1, this payroll cost has been eliminated.
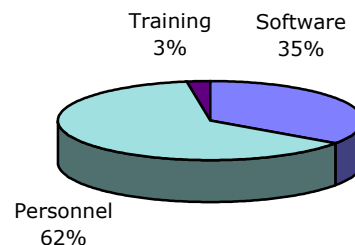
BENEFITS

Direct
18%

Indirect
82%

TOTAL: $559,112

KEY COST AREAS

Key cost areas for the deployment included personnel, software and training. Envision's CFO had a hands-on role in the adoption of IBM Cognos TM1, and spent 15 percent of his time setting up the credit union's data cubes, formatting the data, and creating new reports from the application. Envision purchased 40 concurrent seats for IBM Cognos TM1; both the application and supporting data cubes and reports were deployed on available server space.

COSTS

Training   Software
3%   35%

Personnel
62%

TOTAL: $107,794

BEST PRACTICES

A critical factor in the success of the deployment is the careful attention that was paid to the structuring of the data cubes at the outset of the deployment. Early in the deployment, Envision's CFO carefully examined the requirements of all of Envision's reporting audiences. On one hand, he wanted to limit the number, size, and complexity of the datacubes. On the other hand, the cubes needed to be properly constructed so that reports would meet the business requirements of Envision's regulators, accountants, CEO, finance department, operations managers, and branch managers. As the result of carefully examining the needs of these audiences, the CFO was able to properly structure the data fields and metadata for each, so that reports were properly built, and that there was sufficient flexibility to meet future reporting needs.

CALCULATING THE ROI

Nucleus calculated the costs of personnel, software, and training over a 3-year period to quantify Envision's total investment in IBM Cognos TM1.

Direct benefits calculated included returns on the increased level of overnight invested funds and the elimination of part-time labor costs associated with manual general ledger entry input. The benefit from increased overnight invested funds was based on both the reduction to Envision's average nightly balance of cash and currency, as well as the average available rate for overnight funds investment.

Indirect benefits calculated included the avoided costs of personnel which would have been required for Envision to have the current level of visibility, but without the TM1 deployment. Also included as indirect benefits was the value of improved productivity, which was calculated based on employees' average fully loaded annual cost, and multiplied by a correction factor to account for the inefficient transfer of time between time saved and time spent on new tasks.

DETAILED FINANCIAL ANALYSIS
ENVISION CREDIT UNION

SUMMARY

Project:	**IBM Cognos TM1**
Annual return on investment (ROI)	**178%**
Payback period (years)	**0.56**
Net present value (NPV)	**154,054**
Average yearly cost of ownership	**35,931**

ANNUAL BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	33,371	33,371	33,371
Indirect	0	153,000	153,000	153,000
Total Benefits Per Period	0	186,371	186,371	186,371

DEPRECIATED ASSETS	Pre-start	Year 1	Year 2	Year 3
Software	37,500	0	0	0
Hardware	0	0	0	0
Total Per Period	37,500	0	0	0

DEPRECIATION SCHEDULE	Pre-start	Year 1	Year 2	Year 3
Software	0	7,500	7,500	7,500
Hardware	0	0	0	0
Total Per Period	0	7,500	7,500	7,500

EXPENSED COSTS	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Consulting	0	0	0	0
Personnel	22,500	15,000	15,000	15,000
Training	2,794	0	0	0
Other	0	0	0	0
Total Per Period	25,294	15,000	15,000	15,000

FINANCIAL ANALYSIS	Pre-start	Year 1	Year 2	Year 3
Net cash flow before taxes	(62,794)	171,371	171,371	171,371
Net cash flow after taxes	(50,147)	89,435	89,435	89,435
Annual ROI - direct and indirect benefits				**178%**
Annual ROI - direct benefits only				26%
Net present value (NPV)				154,054
Payback (years)				**0.56**
Average annual cost of ownership				35,931
3-year IRR				169%

FINANCIAL ASSUMPTIONS

All government taxes	50%
Discount rate	15%