

Automated Financial Reporting (AFR) Version 4.0 Highlights

Why Do 65% of North American CAT Dealers Use AFR?

“Without formal training, our CFO conducted quarterly statement reviews with all of our operating managers, executive management and the dealer principals using AFR. At the outset, most thought they were seeing a demo. When they realized it was the real deal, they were very happy to see the speed and ease of navigation.

...Advanced Computing is one of the best consulting companies we’ve worked with.”

Greg Feenstra – IT General Manager, Foley Inc.

From Financial Statements to Enterprise Analysis

Managers who use static reports to view sales and expense numbers typically request additional reports to analyze detail about the numbers. AFR replaces that cumbersome and time-consuming process with comprehensive multidimensional analysis of sales and expense numbers. AFR uses Excel and other intuitive tools that allow users to manipulate their data through a variety of filters such as store, department, cost center, product, salesperson, customer, etc. In addition, the results can be sorted and users can effortlessly drill to multiple years of transaction detail for needed information in a timely fashion.

Microsoft Commoditized Licensing Cost of Viewers

Before Microsoft entered the Business Intelligence space, CAT dealers used Cognos PowerPlay to build and view AFR cubes. Now, SQL Server and Office are all that is required to deploy AFR on commodity Windows servers. SharePoint can also be used to provide the most elegant scorecard and dashboard solutions.

Eleven dealers now view AFR with Microsoft Excel and/or SharePoint:

- Cashman
- Foley Equipment
- Foley Inc.
- Gregory Poole
- Hewitt
- J.A. Riggs
- Patten Industries
- Walker Machinery
- Western States
- Whayne Supply
- Ziegler

Prepare for New ERP

The scalability of SQL Server allows AFR to have more dimensions and perform more comprehensive analysis. When leveraging AFR’s new features, dealers may find that a few DBS processes must be modified to support some of the latest dimensional hierarchies made possible with SQL Server. Dealers often justify those process changes based on the return from AFR’s enhanced ability to manage profitability. Those process changes often become a blueprint for new ERP solutions, minimize the turmoil associated with an ERP conversion, and eliminate much of the retraining that is inherent if AFR is not leveraged before deploying a new ERP.

AFR is compatible with all major ERP solutions and typically lowers the cost of ERP conversion because AFR identifies areas in need of process improvement and provides “before” and “after” conversion analysis to measure effectiveness in one easy-to-use tool.

Latest Features

This document explains some of the key features requested by CAT dealers that contributed to AFR's evolution from a financial statement tool used primarily by the finance department to a robust enterprise analysis platform used by the entire organization to quickly and accurately access both financial and operational information in a format that is familiar and easy to use.

Operational Scorecards and Dashboards

Financial and operational metrics are conveniently presented in a single safe source of accurate and timely information. Metrics from all areas are available such as Executive, Finance, Sales, Parts, Service, Warranty, Engine, Rental, etc.

Gross Profit by Customer, Salesperson, Product, or Other General Ledger Data

AFR analyzes GP by any data included on a General Ledger transaction. The inclusion of a Customer dimension for the Operating Statement is a popular feature which enables comprehensive GP analysis by Customer to:

- Evaluate discounting and pricing for a particular customer
- Compare TOP customers YTD vs. TOP customers PYTD
- Identify outliers (those that are significantly higher or lower than most other customers)
- Identify areas for process improvement
 - Transactions not associated with a customer (i.e., accrued costs on large equipment deals).
 - If some customers' GP does not look accurate AFR can often identify transaction processing issues. The ability to drill down to detail can help identify specific transactions to pursue.

Similar capabilities are possible with dimensions for Salesperson, Product, Source of Supply, etc.

Salesperson, customer, and product may not be dimensions in an AFR cube but are typically on a GL transaction. If those dimensions are not available, AFR can provide a list of transactions that can be sorted and summarized by salesperson, customer, and product after drilling through to GP transaction detail.

Reporting Ratios

Income, Expense, and Balance Sheet accounts are all available in AFR, which enables the creation of reporting ratios that use combinations of information from all three account types. These ratios are often needed for bank reporting and can be time consuming to compile. AFR makes them available easily and frequently. It is usually more effective to evaluate such ratios as trends over time and AFR provides multiple years of data for comprehensive trend analysis.

Specific accounts can be included or excluded as needed by the customer; for example, some customers include Rental Fleet Book Value in Current Assets and exclude Interdepartmental Sales from Sales.

Popular ratios include, but are not limited to the following:

- Current Ratio
- Days Sales Outstanding
- Debt to Equity
- Interest Coverage
- Return on Assets
- Return on Equity
- Inventory Turnover

Customer Statements

AFR sources real-time statements of open documents from CODA with the ability to specify "As of" date to view documents open as of a particular point in time.

Drill Through to Detail

Technology typically limited earlier versions of AFR to a maximum of three months of detail data for only Income / Expense accounts. AFR now drills all the way through to multiple years of GL document details for all Balance Sheet and Income Statement accounts! Users can quickly go from a high level analysis all the way to the underlying transactions. AFR can limit the amount of detail to any combination of dimensions available in the cube to quickly obtain information about the underlying transactions. This provides fast response for more detail without switching to another system.

- Transaction detail can include any data in your GL including customer, vendor, product, salesperson, etc.
 - AFR will filter and sort any of the GL detail data even if the data is not in a cube dimension.
 - Additional data can be included if it can be linked to the GL transaction.
- Drill through result layouts can be formatted to provide information that is specific to the type of GL account that was drilled from. In other words, different data columns can be shown in the drill through report for analyzing different types of accounts. For example:
 - Gross Profit account drill through results might include salesperson name and number.
 - Accounts Receivable account drill through results might include aging columns or credit manager.
 - Inventory account drill through results might include a machine ID.
- Gross Profit Drill Through
 - Previously, AFR could only analyze Gross Profit by the information from the Operating Statement, typically down to the profit center.
 - Now, AFR can drill all the way down to see Gross Profit information from a GL transaction document by creating Gross Profit records from the sale and cost of sale transaction detail.
 - This provides the ability to measure true profitability by “Deal” and identify specific transactions with GP margins that stand out as unusually high or low.
 - Sale, COS, & GP \$ can be analyzed along with corresponding Gross Margin.
 - Results can be sliced by any dimensionality available at the Sale & COS level.
- Drill-through to Balance Sheet (BS) transaction detail is a new feature available in the Microsoft version of AFR.
 - AFR identifies the GL transactions that occurred in balance sheet accounts for any period in the time dimension.
 - Cash Flow statements are now provided based on changes in balance sheet accounts from one time period to the next.
 - Accounts receivable aging can be done on an ad hoc basis. One dealer uses it as follows:
 - Select an accounts receivable GL account in the BS cube and drill to detail.
 - A list of all open receivable documents as of the cube refresh date is displayed. This can include columns for any data that is in the GL such as customer, product, document number, date, salesperson, etc.
 - The list of transactions can be filtered and sorted by any of the columns (such as customer and date) and you can create an ad hoc receivables aging report.
 - The presence of balance sheet detail transactions lays the basis for creating a more comprehensive multidimensional Accounts Receivable Aging application with history.
 - Dimensions such as Credit Manager provide additional filters and can be nested in reports.
 - Historical information provides trend analysis (i.e., snapshots of aging over time to see if AR is getting older).
 - Accounts Payable analysis is possible if Vendor is available on the GL transactions detail.

Dimensions

Dimensions are used to group data in hierarchical levels to facilitate filtering by one or more members within the hierarchies.

Typical AFR dimensions include:

- Accounts (GL)
- Division
- Department
- Time
- Store
- Profit or Cost Center

Other dimensions can be provided based on specific needs.

- Additional dimensions are often used for detail evaluation of sales and gross profit.
- Hierarchies in dimensions can be used to summarize data by important groups. For example, Customers might be grouped by Internal, Dealer and Revenue for a better understanding of internal versus external sales and profitability.

Additional dimensions include, but are not limited to:

- Salesperson
- Product
- Vendor
- Source of Supply
- Customer
- Document Type

Relative Time Dimension

- Relative Time refers to time-based aggregation of data where the time periods are determined relative to a particular date (often the current date or current accounting period). This includes groupings such as:
 - Year to Date
 - Quarter to Date
 - Prior Month
 - Prior Quarter
 - Prior Year (all periods in prior year)
 - Prior Year to Date (year to date total for the current month as of last year)
 - Rolling 12 Months
 - Seasonality Analysis (by Month and Cumulative)
- AFR uses a data driven approach to relative time. This provides several advantages over the use of MDX or the Business Intelligence Time Wizard in Analysis Services:
 - AFR provides relative time members with full drill down capability that Cognos users are familiar with but can be very difficult, if not impossible, using MDX and / or the Business Intelligence Time Wizard. For example, with MDX it might be fairly simple to create a YTD relative time member, but MDX does not allow drill down to underlying quarters, months, etc. as AFR does.
 - Reporting Tool Neutral - MDX can sometimes be interpreted differently by different reporting tools. AFR's data driven approach removes this variability.
 - AFR is less complex than MDX and does not require modification if additional dimensions are added to the cube.
 - AFR has more relative time groups than the Business Intelligence Time Wizard which allows any type of relative time group to be custom designed.
- AFR provides comparable relative time capabilities to PowerPlay, but with the following advantages:
 - Cognos PowerPlay cubes are limited to filtering on a single category (without using custom subsets). With SQL Server Analysis Services cubes, AFR can select multiple members from a standard cube through easy-to-use Excel functionality.
 - If more than one relative time category is desired on a PowerPlay report, IT administration must create a relative time category that includes the combination of desired categories. For example, if "Quarter to Date" and "Year to Date" are wanted side by side on a report, an administrator must create a group like "QTD and YTD" in Transformer. With AFR's SQL Server approach, end users simply add QTD and YTD side by side to a report without bothering IT administration.

Additional Measures

In addition to typical financial measures such as actual and budget dollars, AFR now provides more useful measures if needed data is available. Some examples are:

- Annualized Actual is used in budget planning as a basis for making estimates for the next year
 - Provides an estimate for the total current year by projecting actual to date for the remaining periods of the year.
- Conditional % of Sales can accommodate different calculations depending on the type of the GL Account dimension member. For example:
 - Sales and Cost of Sales members
 - Calculated as % of parent (i.e., Used Parts Sales as % of Total Parts Sales; Total Parts Sales as % of Total Sales)
 - Gross Profit members calculated as % of department sales
 - All other account members calculated as % of total sales

Budget Planning and Review

- Create budget data in Excel with bottom-up write-back at lowest level of reporting hierarchy which is typically GL account, department, store, etc.
- Review budget by drilling and slicing SQL Server cubes in Excel pivot table reports with familiar AFR multidimensional hierarchies
- Preload budget data from existing files
- Compare to multiple prior years and current data
- Audit reporting of changes
- Low cost – fully deployed for \$20K - \$30K when adding to AFR

AFR Benefits

- Perform most financial analysis from one tool in a timely fashion
- Automate retrieval and presentation of data that without AFR must be compiled manually
- Users get information they need without access to financial system
- Provides data that has traditionally not been available because of difficulty in identifying data relationships and disparate sources
- Users no longer burden IT staff for queries against transaction system
- AFR is deployed using many packaged and custom financial systems including CODA v4, v10, v11, and SAP.
- AFR has helped many dealers migrate from one general ledger to another. The migration is seamless to end users despite significant changes to underlying processes and source data. Cubes, reports and functionality remain the same, so additional training costs are minimized.
- AFR's open architecture is proven on the DBS, DBSi and DBSi 5.0 platforms providing peace of mind for deployment with solutions from all major ERP vendors as well as custom ERP solutions.

Advanced Computing Expertise

- You can leverage the experience Advanced Computing gained from developing and/or supporting the following solutions for Caterpillar and CAT dealers:
 - Automated Financial Reporting
 - Aged Receivables/Payables
 - Customer Service Agreement Cube
 - Customer Value Survey Program
 - Dealer Excellence
 - Dealer Transaction Reporting
 - Financial Management Reporting Guide
 - Parts KPIs
 - Profitability Analysis
 - Product Tracking Opportunity System
 - Rental Inventory Barometer
 - Segment Profitability Analysis & Reporting Cube
 - Service KPIs
 - Warranty KPIs
- Senior CAT Dealer Business Analysts with ERP Flexibility
 - Advanced Computing will partner with you to gather requirements and recommend methodologies and best practices for AFR deployment against any ERP system. Advanced Computing guarantees the results of their recommendations.
- Proven expertise in data analysis and modeling
 - Determine data availability
 - Identify possible data issues (cleanliness, relationships, etc.) and determine feasibility.
 - Identify dimensional hierarchies for optimal analysis and effectiveness.
 - Identify data relationships and bring data together from multiple systems and data sources (i.e. CODA, DBS, Lawson, MS Dynamics, SAP, etc.) to achieve desired objectives.

AFR Runs on Microsoft BI Stack

- SQL Server 2005 / 2008 and 2008 R2
 - SQL Server Relational Database
 - Analysis Services Multidimensional Database
 - Integration Services ETL
 - Reporting Services
- Office 2007 / 2010
- SharePoint 2007 / 2010

Advantages of Microsoft BI Stack

- Low Cost of Ownership – The cost of Microsoft licenses, support, training, and operations is typically lower and many dealers already own Office and SQL Server for other applications.
- Familiar End User Interface - Tools such as Office minimize training costs.
- One Microsoft AFR cube replaces three Cognos AFR cubes - Scalability of SQL Server allows combination of Operating Statement, Transaction Detail, and Balance Sheet in one cube with only one set of hierarchies to maintain.
- High Performance and Scalability – Microsoft has engineered and tested their products to perform well at high data volumes in the multi-terabyte range.
- Faster Cube Builds – Typically 1 to 1.5 hours for refresh with 2 years of detail.
- Open Architecture – Any component of the Microsoft BI system could be swapped out for other products.
- Easy to Find Resources - to support Microsoft solutions.
- Completeness – An entire BI system (from operating system, database, and development environment to end user reporting) can be created using only Microsoft tools. This provides an extra margin of confidence that the tools work together.
- Flexible Reporting Platform - to support wide range of simple to complex reporting needs.
 - Excel Desktop – Good for power users to perform ad hoc analysis.
 - SharePoint with PerformancePoint and Excel Services – Good for leveraging the collaboration features of SharePoint. Enables design and deployment of sophisticated scorecards, dashboards and reports via SharePoint web portal. Allows management to deploy reporting strategy across enterprise, while maintaining central control over design and development of scorecards, dashboards, etc.
 - Reporting Services – Enables deployment of reports and dashboards via Reporting Services web site. Provides alternative for organizations in need of dashboards and reports, but are not ready to implement SharePoint.
 - Microsoft tools can be mixed to address different needs of power users and casual users.
- Microsoft Investment in BI – clearly demonstrates Microsoft's commitment to compete with the best of BI breeds.

More Information

For answers to your questions or to schedule a live demonstration, contact Carl Salerno at 847-650-2275 or salernoc@advci.com.

