AUTOMATING THE FINANCIAL CLOSE PROCESS:
How You Can Benefit

By Diane J. Janvrin, CMA, CPA, and Maureen Mascha, CPA, CISA

We live in an era where management and investors want access to the most up-to-date financial information now rather than later. This means management needs to make informed decisions, implement plans, and communicate results to investors as soon as the information is available. One obstacle that could slow accounting staffs down from providing timely reporting to management is the financial close process.

Though most companies have deployed technology to achieve efficiency, quality, repeatability, and uniformity in converting their recurring processes from manual to automated systems, many still rely on a highly manual closing process. Besides the manual labor aspect, financial regulations have caused the financial close to become more time-consuming by imposing additional requirements. And the Securities & Exchange Commission (SEC) has mandated that regulatory filings be transmitted in XBRL format.

Why Is the Financial Close Process So Important Today?

As all management accountants know, they and their organizations need the ability to react quickly to changes triggered by an uncertain economy. Over the last decade, the Sarbanes-Oxley Act (SOX) and new fair value accounting standards have increased the workload for accounting departments, including the need to adjust the accounting books to bring them to market value. Since adjusting entries is often done manually, it attracts the attention of auditors, thereby compounding the work for accountants if they have to answer questions about their work. If the United States adopts International Financial Reporting Standards (IFRS), the financial close process will become more tedious. In addition to the increased need for period-end adjustments, the SEC's adoption of

XBRL as the required reporting format adds another dimension to the close process. Furthermore, increases in regulatory scrutiny have resulted in lower materiality thresholds so that even relatively small errors in financial statements can result in material weaknesses or financial restatements. Finally, recent SEC filings have revealed several control weaknesses related to the financial close process, such as unchecked manual journal entries that were added at the last minute.

No matter the size of your business or the industry you operate in, similar issues with the financial close process exist. The process often involves the use of spreadsheets and PC-based database software where a change in one number requires you to manually rekey the information into several documents, increasing the likelihood of error. In addition, we management accountants and other

Table 1: Financial Close Issues and Software Solutions

FINANCIAL CLOSE PROCESS ISSUE	SOFTWARE SOLUTION
Use of multiple technologies (Word documents, spreadsheets, PC-based database software, etc.)	**Automatic update** ensures that all corresponding references are updated following each change.
"Stop and Wait" workflow approach	**Job scheduling** allows user to assign jobs to specific individuals. **Track report status** allows user to continuously monitor the close process. **Cloud computing** saves documents on a server rather than on individual computers.
Duplicate work within process to verify all documents match and all steps have been completed	**Document sharing** monitors who has updated each section and ensures only one person updates at a time. **Job scheduling** allows user to assign jobs to specific individuals. **Track report status** allows user to continuously monitor the close process. **Document version history** allows user to monitor all changes to a document.
Change in accounts, cost centers, policies, organizational structure, etc.	**Automatic update** ensures that all corresponding references are updated following each change.
Need to incorporate last-minute changes into final documents	**Built-in validation rules** catch errors sooner rather than later. **Ledger/subledger close** posts late entries to the general ledger and verifies entries are reflected in the consolidation system.
Lack of consistency in close process	**Roll-forward templates** offer consistency from period to period.
Need to add XBRL tags to financial statement items	**XBRL capabilities** allow user to save and reuse tags from prior periods.
Due to lower materiality levels and poorly controlled environment, small errors can result in material weaknesses	**Document sharing** monitors who has updated each section and ensures only one person updates at a time. **Management review** enables the company to implement management review and approval procedures. **Job scheduling** allows user to assign jobs to specific individuals. **External auditor review** allows the external auditor to review documents and provide electronic feedback on specific entries.

financial professionals often work under a compressed time frame during the closing period, but the process may involve a "stop and wait" workflow because one task must be completed before the next one is started. Sometimes your team may duplicate work within the process to verify that all documents match and all steps are complete. Furthermore, any changes you make to accounts, cost centers, policies, organization structure, and/or regulations impact the financial close process. Also, it's often not designed to handle last-minute changes, such as managers updating assumptions to reflect the latest economic information, ensure consistency between periods, or apply XBRL tags efficiently to financial values.

Fortunately, several vendors have introduced new software for the financial close process that's generally designed to take information from a company's general ledger system, make any necessary adjustments, and prepare the required reports. These vendors claim that their software will provide processing efficiencies and meet SOX requirements and SEC reporting needs. In addition, several offer XBRL "built-in" functionality that allows automatic XBRL tagging of completed financial statements. Table 1 summarizes the financial close issues and their software solutions.

Factors to Consider When Evaluating the Software

Vendors advertise that their software will reduce the close processing time by up to 50% and increase accuracy. Moreover, several packages automatically schedule jobs, allow document sharing, and track all changes to financial close documents. Some packages include provisions for management review, external auditor review, or both. Finally, several allow you to prepare statutory reports (including IFRS-based) and XBRL-tagged instance documents.

Naturally, the factors that are important to your organization will determine which financial close software package best meets your needs. For example, most packages can:
◆ Download and map financial data from various accounting systems into one program,
◆ Combine multiple general ledgers into one consolidated trial balance, and
◆ Work with multiple business units and divisions, geographic locations, and currencies.

Some software packages include the ability to share documents, schedule jobs/track report status, and save all prior versions and maintain a document history. Other packages allow you to create roll-forward report templates, foot and cross-foot tables, manage footnotes, and

build data validation rules. In addition, you may want to consider whether the financial close software must be stored on company servers or in a cloud computing environment with Web-based authentication.

Here are a brief definition and description of each feature. We also indicate whether ALL, a MAJORITY, or only SOME of the financial close software we've identified offers each feature.

Data Loading and Mapping
Data loading and mapping allows the direct transfer of data from the general ledger to the financial close software with an automatic "match" (posting, for instance) to the correct account. This feature allows electronic downloading of information from general ledger systems to the financial close software, which reduces the need for you or someone else to manually rekey data, thus lessening the likelihood of errors.
Status: MAJORITY

Automatic Update (Data Linking)
Automatic update (also known as data linking) occurs when a change in one value in the software automatically updates all corresponding references. For example, if you change the sales revenue amount to reflect a last-minute adjustment, the software will automatically revise all references to this amount in the financial statements and footnotes.
Status: SOME

Ledger Close/Subledger Close

Ledger close/subledger close refers to the ability to total and close all subledgers to the appropriate ledger account and to close general ledger accounts (revenue, expenses, etc.) at period end. During this process, subledgers are totaled and reconciled to the control account in the general ledger. Similarly, some packages allow you to make late entries to the general ledger and verify that (1) they're reflected in the consolidation system and that (2) the balances net before financial reporting is considered complete.

Status: SOME

Financial Consolidation from Multiple Systems

This feature allows the software to incorporate disaggregated financial results (from various stand-alone systems, for example) into one complete or consolidated trial balance. For larger companies, combining multiple general ledgers into one consolidated trial balance manually may be particularly time-consuming and error prone, whereas financial consolidation from multiple systems provides you with increased efficiency and control.

Status: ALL

Multiple Business Units and Divisions

With this feature, financial data can be segmented by organizational component, allowing management to drill down to specific business areas to help analyze these discrete units. Furthermore, some packages enable you to create customized reports by specifying reporting requirements for multiple business units and/or divisions.

Status: MAJORITY for segmentation of financial data by unit and/or division; SOME allow customized reporting

Multiple Geographic Locations and Currencies

As the name implies, this function allows you to segment financial data by location and/or unit of currency. If your company is international and operates in multiple currencies, many newer financial close packages can consolidate all of this diverse financial information relatively easily.

Status: ALL

Document Sharing

Document sharing allows users to reduce period-end bottlenecks and complete financial statements faster by granting update access to specific sections of the document to specific users. For example, your fixed assets accountant can update the long-term asset section of the balance sheet while the payroll manager adjusts the Withholding Taxes Payable account. Document sharing enhances document control since you can see who's updating each report section and ensure that only one person at a time is working on it.

Status: MAJORITY

Schedule Jobs/Track Report Status

The job scheduling function does precisely as advertised—assigns tasks to specific people—and the "track report" status identifies which jobs are in progress vs. those that have been completed. Compare this to older financial close processes that generally give you little advance warning of bottlenecks or related issues. Moreover, many older systems employ manual tracking with little or no ability to access the close process real-time. Thus users often have a hard time getting detailed updates on job progress.

Status: MAJORITY

Document Versioning and History

Document versioning provides an audit trail of the close process, allowing you to view what changes were made and when, should questions arise concerning authentication. Document versioning also helps auditors when they're testing general and application controls. Several packages maintain a complete history of all changes to each document for a prespecified period of time.

Status: MAJORITY for document versioning; SOME for complete history.

Roll-forward Report Templates

Roll-forward report templates allow you to create a report format once, including setting the underlying references to all accounts that "roll into" or compose a control account (for instance, individual cash accounts that compose "Cash" on the financial statements), and use that template for subsequent periods. This feature increases processing efficiency since a previous repetitive task is now automat-

Table 2a: Features of Financial Close Software

COMPANY/ Software name	URL	DATA LOADING AND MAPPING	AUTOMATIC UPDATE	LEDGER/ SUBLEDGER CLOSE	FINANCIAL CONSOLIDATION FROM MULTIPLE SYSTEMS	MULTIPLE BUSINESS UNITS/ DIVISIONS
BlackLine BlackLine 5.1 Financial Close	www.blackline.com	Yes	Yes	Yes	Yes	Yes
IBM Cognos FSR	www-01.ibm.com/software/ analytics/fsr/cognos-fsr	Yes	Yes	No	Yes	Yes
Compliancy Financial Close Plus! Compliancy Internal Control Management (ICM) software	www.compliancy.com	Yes	No	No	Yes	Yes
NetSuite NetSuite Financials	www.netsuite.com/portal/home.shtml	Yes	Yes	Yes	Yes	Yes
Hyland Software OnBase Accelerated Financial Reporting Management (AFRM)	www.hyland.com/department-solutions/ financial_close.aspx	No	No	No	Yes	Yes
Oracle Hyperion Financial Close Management	www.oracle.com/us/solutions/ent-performance-bi/financial-close-065894.html	Yes	Yes	Yes	Yes	Yes
SAP Financial Closing Cockpit	www.sap.com/solutions/business-suite/ erp/financials/financial-managerial-accounting/index.epx	Yes	Yes	Yes	Yes	Yes
Tagetik Tagetik 4 (Performance Management)	www.tagetik.com	Yes	Yes	Yes	Yes	Yes
Trintech Unity Financial Close	www.trintech.com/unity-suite	Yes	Yes, if you buy all the modules	Yes	Yes	Yes
UNIT4 CODA Coda Financials	www.unit4coda.com	Yes	Yes	Yes	Yes	Yes
WebFilings WebFilings	www.webfilings.com	Yes	Yes	No	Yes	Yes

ed, and it prevents errors that could occur when the same document is recreated over multiple periods.

Status: MAJORITY

Foot and Cross-foot Tables

Foot and cross-foot tables are created when the financial close software automatically totals and cross-foots tables in the financial statement footnotes. This helps prevent errors caused by preparing the totals manually.

Status: SOME

Built-in (Automated) Data Validation Rules

This feature allows you to develop automated data validation rules, such as whether the account balance should be a debit or credit or whether the account entered exists in the chart of accounts. These rules are generally preventive in nature and assist in the consistent application of controls over the close process. Built-in data validation rules can also reduce eleventh-hour troubleshooting.

Status: MAJORITY

Table 2b: Features of Financial Close Software

COMPANY/ Software name	MULTIPLE GEOGRAPHIC LOCATIONS/ CURRENCIES	DOCUMENT SHARING	JOB SCHEDULING	TRACK REPORT STATUS	DOCUMENT VERSIONING	ROLL- FORWARD REPORT TEMPLATE	AUTOMATIC FOOT AND CROSS-FOOT TABLES	BUILT-IN VALIDATION RULES
BlackLine BlackLine 5.1 Financial Close	Yes	Yes	Yes	Yes	Yes	No	No	Yes
IBM Cognos FSR	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Compliancy Financial Close Plus! Compliancy Internal Control Management (ICM) software	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
NetSuite NetSuite Financials	Yes	Yes	Yes	No	No	Yes	No	No
Hyland Software OnBase Accelerated Financial Reporting Management (AFRM)	Yes	Yes	No	No	Yes	No	No	Yes
Oracle Hyperion Financial Close Management	Yes	Yes	Yes	Yes	Yes	Yes	No	No
SAP Financial Closing Cockpit	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tagetik Tagetik 4 (Performance Management)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Trintech Unity Financial Close	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
UNIT4 CODA Coda Financials	Yes	No	Yes	Yes	Yes	No	No	No
WebFilings WebFilings	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Management Review

With this function, the software provides an audit trail of the management review and approval process surrounding the financial close. You can even implement approval rules to ensure that the appropriate individual has reviewed each document section. Auditors often examine the management review process when assessing internal controls over financial statement generation.

Status: MAJORITY

External Auditor Review

Similar to management review, external auditor review allows external auditors access to the financial close process as it's occurring. This enables them to monitor the company's progress through the close process, review changes made (including last-minute postings), and provide electronic feedback.

Status: MAJORITY

<h1 style="text-align:center">Table 2c: Features of Financial Close Software</h1>

COMPANY/ Software name	MANAGEMENT REVIEW	EXTERNAL AUDITOR REVIEW	MANAGE FOOTNOTES	CREATE AND FILE STATUTORY REPORTS	XBRL CAPABILITIES	CLOUD COMPUTING	MULTI- DIMENSIONAL MODULE STRUCTURE	STAND- ALONE (SA) OR INTEGRATED (I)
BlackLine BlackLine 5.1 Financial Close	Yes	Yes	No	No	No	No	Yes	SA
IBM Cognos FSR	Yes	Yes	Yes	Yes	Yes	No	No	SA
Compliancy Financial Close Plus! Compliancy Internal Control Management (ICM) software	Yes	Yes	No	Yes	Yes	Yes	No	SA
NetSuite NetSuite Financials	No	Yes	No	Yes	Yes	Yes	No	I
Hyland Software OnBase Accelerated Financial Reporting Management (AFRM)	Yes	Yes	No	No	No	Yes	No	SA
Oracle Hyperion Financial Close Management	Yes	No	No	Yes	Yes	No	Yes	SA
SAP Financial Closing Cockpit	Yes	No	No	Yes	Yes	No	Yes	I
Tagetik Tagetik 4 (Performance Management)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	SA
Trintech Unity Financial Close	Yes	Yes	Yes	Yes, if you purchase separate module	Yes	No	Yes	SA
UNIT4 CODA Coda Financials	No	Yes	No	Yes	No	No	Yes	I
WebFilings WebFilings	Yes	Yes	Yes	Yes	Yes	Yes	No	SA

Manage Footnotes

Manage footnotes automates the creation, approval, routing, management, and storage of complex footnote disclosures, simplifying the often tedious process of writing footnotes. Specifically, the feature allows management more time to review the footnote content rather than spending time assuring that any numerical changes are updated accurately in the footnotes.

Status: SOME

Create and File Statutory Reports

This feature will certainly make your life easier by allowing you to accurately, efficiently, and electronically prepare and file reports for the SEC and other government agencies in PDF, HTML, XML, and/or XBRL format.

Status: MAJORITY

XBRL Capabilities

XBRL capabilities automate the generation of financial statement data in XBRL format by "tagging" each line item with its unique identifier. The tagging process allows you to compare financial statements from different companies side by side since the different statements share the same tag. This feature makes it easier to meet the SEC's XBRL requirement. Additionally, financial close software may allow companies to "roll forward" (reuse) the same tags for subsequent periods.

Status: MAJORITY

Cloud Computing

You've probably been hearing a lot about "cloud computing" lately. It allows you to store data offsite on a remote server accessed through the Internet rather than using in-house technology. For secure document transmission, most cloud computing applications include SSL (secure sockets layer) and Web-based authentication features. Cloud computing is particularly useful for small- and medium-sized enterprises that may not have the resources to securely store and/or host the financial close process in-house.

Status: SOME

Multidimensional Modules

Multidimensional modules allow you to build your financial close software as your needs change. This is often referred to as a "cafeteria plan." For example, if you don't need the currency translation module now, you can delay purchasing it until your company expands internationally. Multidimensional modules are especially useful as you acquire businesses or divest from current ones.

Status: SOME

Stand-alone vs. Integrated Software

For stand-alone financial close packages, you can use any underlying accounting software system. Integrated financial close packages, on the other hand, can be applied to specific vendor software. For example, you must use SAP software to add its Financial Closing Cockpit.

Status: MAJORITY are stand-alone software packages

What the Packages Have in Common: Variation

Over a period of six months, we examined 11 financial close software packages: BlackLine 5.1 Financial Close, IBM Cognos FSR, Compliancy Financial Close Management Solution and General Ledger Reconciliation, Net-Suite Financials, Hyland OnBase Accelerated Financial Reporting Management, Oracle Hyperion Financial Close Management, SAP Financial Closing Cockpit, Tagetik 4, Trintech Unity Suite Financial Close, UNIT4 Coda Financials, and WebFilings.

As shown in Table 2, most packages met several, but not all, of our evaluation criteria. In short, that's because vendors vary in their definition of "financial close." Some packages, such as WebFilings and Cognos FSR, include in-house SEC reporting capabilities; others, such as BlackLine 5.1 Financial Close, don't include them and assume that customers will use a financial printer for SEC reporting. Furthermore, target company size varied between packages because some concentrate on small to medium-sized companies, and others, such as SAP Financial Closing Cockpit and Oracle Hyperion Financial Close Management, target large companies and are more likely to require you to use their existing underlying accounting software.

Did we find the perfect program? No. All have their strengths and weaknesses, but, on the whole, they were all far superior to manual financial close systems. The best one for your organization will depend on the size of the company, the number of divisions and employees, and global reach, among other factors. What all of these software packages have in common, though, is that they lessen the need for management accountants and other financial professionals to rely on spreadsheets and manual entries. As we've said over and over, manual entries are an invitation to introduce errors into the financial close process.

Our recommendation: If your financial close system isn't automated yet, now's the time to gather together a few key employees and give one or more of these software programs a test drive. Not only will you and your accounting team complete the closing process more quickly and with greater accuracy, but you'll have more time to focus your efforts in other areas where they're sorely needed—a potential win-win for everyone. **SF**

Diane J. Janvrin, CMA, CPA, Ph.D., is an associate professor of accounting and a Mark and Pam Fisher Fellow in Accounting at Iowa State University in Ames, Iowa. You can reach Diane at (515) 294-9450 or djanvrin@iastate.edu.

Maureen Mascha, CPA, CISA, Ph.D., is an assistant professor of accounting at the University of Wisconsin Oshkosh, in Oshkosh, Wis. You can reach Maureen at (920) 424-1395 or mascham@uwosh.edu.