Virtual Close:
Prospects And Problems

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Abstract

The Internet and web enabled technologies have affected numerous accounting processes. Closing of the books at the end of the period, especially fiscal year, is one such accounting process. Closing of the books used to take weeks and months before the advent of the Internet. The accelerated process of closing of the books using the web based technologies is called virtual close. Virtual close is considered to be the ability to close company's books quickly and generate financial statements. Virtual close can also be viewed as a minimum distance between business activity and reporting of such an activity. However, the quickness or distance has not been defined precisely. The idea of virtual close pioneered by Cisco gained currency in the late 1990s. However, later the rush to accelerate the closing process has slowed down considerably. This paper initially explores the history of virtual close. Next, the lessons learned in virtual close and costs and benefits associated with virtual close are analyzed and evaluated.

Introduction

*T*he nature of accounting cycles has changed profoundly due to advances in networking technologies and the Internet. For example, the new developments such as EBPP (Electronic Bill Presentment and Payment), CRM (Customer Relationship Management) and SRM (Supplier Relationship Management) have affected revenue and expenditure cycles and accounting transaction processing in those areas (Deshmukh and Romine, 2002). This paper explores the one such accounting process – closing of the books – affected by the Internet technologies. The idea of virtual close, which refers to rapid closing of the books of a company, gained currency in the late 1990s (Hallett, 2002). Many corporations have strived to implement virtual close. The purpose of this paper is to explore the history of virtual close, and analyze and evaluate the lessons learned in implementing virtual close.

Closing of the accounting books refers to a process that starts with posting entries to general ledger and results in a post-closing trial balance. The process begins with posting of the entries to the general ledger, preparing a trial balance, making adjusting entries, preparing an adjusted trial balance, preparing financial statements, preparing closing entries, and finally preparing a post-closing trial balance. The prior year's books are closed or computerized accounts are sealed and cannot be altered. Such close is sometimes referred to as *hard close* (Jablonsky, 2001). The organization carries balances from the post-closing trial balance to the next year and the process begins all over again. The books are also closed for quarterly reporting and issuance of quarterly financial statements. This close is sometimes called *soft close* since accounting records are not sealed and can be altered.

What is the significance of the closing process? The primary issue in the closing process is getting handle on the financial results. Unless the closing process is complete, a clear understanding of the financial results is not possible (Roth, 2000). The financial results are then matched with management forecasts and corrective actions, if required, are undertaken. The initial push for faster closing of the books came in the 1990s as markets criticized companies who did not have visibility into their financial statements. Cisco achieved closing of the books in less than 24 hours and became a symbol of new economy financial management (Berinato, 2001). Cisco partnered with KPMG Consulting to reengineer their accounting systems. KPMG Consulting (now Bearing Point) later developed and marketed a Virtual Close solution based on this experience (KPMG Consulting, 2001). The intervening years saw decline of the importance of virtual close since formidable difficulties were encountered in this endeavor.

However, now the days of pro-forma financial reporting are over and GAPP based reporting is valued again. The new SEC requirements specify that 10-Ks must be filed within 60 days (instead of 90 days) after the close of fiscal year and 10-Qs must be filed within 35 days (instead of 45 days). The virtual close and its variations are beginning to receive attention again.

What is the status of the closing process in business and does that pose a problem? The surveys done in the US and Europe indicate that the range to close the books spans from 4 to 75 days (Hallett, 2002). The organizations in the US are more efficient with the average closing and reporting process being close to 12 days (Hallett, 2002). The closing process is closely tied with the quality of information. However, the length of the closing process is not always associated with the quality of information. For example, if the books are closed over a longer period then the management may expect better quality financial information. However, the longer process of closing of the books may indicate chaotic state of the accounting systems. The underlying causes can be fragmented legacy systems or sloppy financial procedures. On the other hand, mere existence of quick close does not guarantee the quality of information either. Cisco, a poster company for virtual close, claimed that it possessed a godlike ability to peer into every nook and cranny of the business, which enabled pro-active measures to control and steer the company. However, in the third quarter of 2001 sales declined 30%, 2 billion dollars worth of inventory was written off, and approximately 8,000 people laid off (Berinato, 2001). Many analysts commented that Cisco's financial systems contributed to the management's inability to make correct decisions (Cope, 2001). As always, technology and web enabled virtual or fast close is merely a tool and not a substitute for managerial thinking.
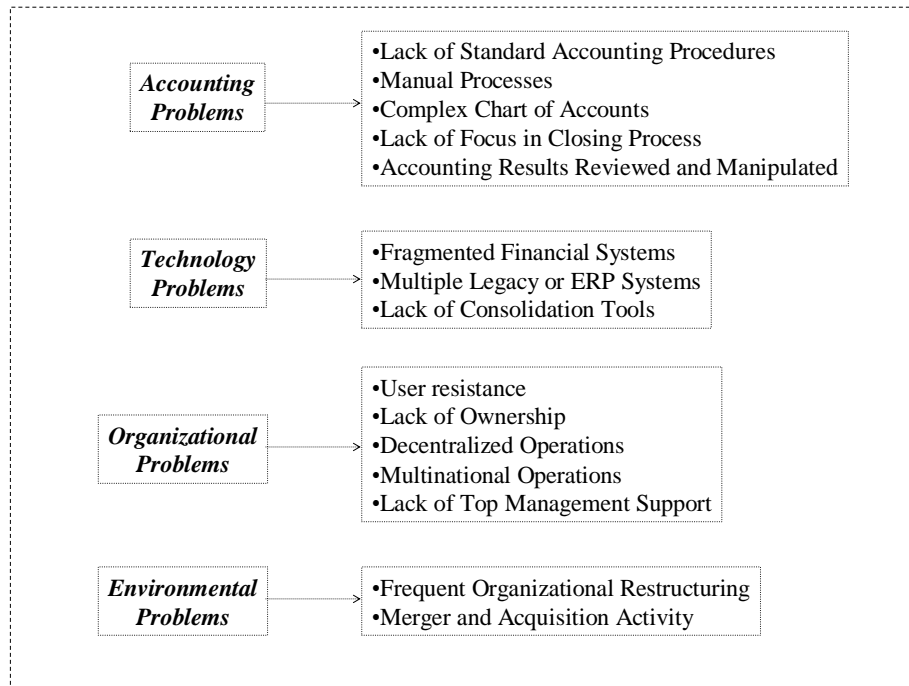
Virtual Close

Virtual close is considered to be the ability to close company's books quickly and generate financial statements. Virtual close can also be viewed as a minimum distance between business activity and reporting of such an activity. The quickness or distance has not been defined precisely. According to various analysts, closing of the books in less than five days can generally be considered a virtual close; however, John Chambers, CEO of Cisco, may disagree since he has defined virtual close as the ability to close the financial books with one hour's notice (Caplan, 2001). The time elapsed in closing of the books is often times considered a symptom of underlying problems. Many organizations have undertaken the virtual close process as a way to streamline the financial reporting process. This effort involves a number of important decisions concerning relevance and reliability of the accounting information.

The closing of the books though tidy on paper can be a nightmare in the real world. The problems in closing of the books can be classified into four broad categories: accounting problems, technology problems, organizational problems, and environmental problems. This classification is helpful in conceptualizing the problems though the classifications are not entirely independent. The list in Exhibit 1 is an illustrative list and each organization faces a set of unique problems in the closing process.

The primary accounting problem is the lack of standard accounting procedures across the organization for data collection, recording, and reporting (Hallett, 2002). The data collection processes can be a mélange of automated processes, manual processes, and spreadsheet based processes. The adjustments, reclassifications, and reconciliations can also be a mix of manual/spreadsheet/automated functions and can be time consuming. The organization can have more than one chart of accounts. This problem is more acute with the multinational organizations that must comply with the local and head office accounting requirements. Closing of the books can be also used to generate managerial reports or correcting immaterial errors causing distractions from the core process. These problems generally go hand in hand with the complex charts of accounts. The detailed accounting codes need additional validation during the closing since these fields need to be verified before the books are closed, though all of them are not required for financial reporting (Decker et al., 2002). In many organizations, once the financial statements are prepared these are reviewed by some sort of financial planning group. If the results are not acceptable then the statements might come back and additional processing may take place to achieve the desired results. Such obvious manipulation of results adds to the closing process.

Exhibit 1
Problems in Closing of the Books

Accounting Problems	•Lack of Standard Accounting Procedures •Manual Processes •Complex Chart of Accounts •Lack of Focus in Closing Process •Accounting Results Reviewed and Manipulated
Technology Problems	•Fragmented Financial Systems •Multiple Legacy or ERP Systems •Lack of Consolidation Tools
Organizational Problems	•User resistance •Lack of Ownership •Decentralized Operations •Multinational Operations •Lack of Top Management Support
Environmental Problems	•Frequent Organizational Restructuring •Merger and Acquisition Activity

The fragmented accounting or financial systems cause a major problem in the closing process. Data from disparate systems needs to be collected, which may be in the form of paper entries, spreadsheets, or databases. Such data have to be validated and entered into the main accounting system. Data for consolidation purposes may also include budget data, human resource data, inventories, and shipments. The collected data needs to be normalized to conform to a common set of definitions and entered into the accounting systems. The consolidation of financial statements also requires currency translation, elimination of intercompany transactions, accrual adjustments, and minority ownership calculations, which if not automated can consume a large block of time (O'Rourke, 2002). The consolidation process is iterative and the calculations may need to be repeated, overall such requirements are not conducive to virtual close.

The organizational problems start if the top management is not committed to the process. If the top management is not committed then the problems such as user resistance and decentralized operations become even more acute. The closing process should also have a clear ownership for accountability. The decentralized and multinational organizations may have a variety of ERP or accounting systems in operation and can face consolidation problems. Finally, even if the closing process is efficiently organized it may have to undergo revisions, if there is a continuing mergers and acquisitions activity. The existing closing process also needs to be revised as the organization grows and expands, adds markets and products, restructures businesses and segments, or contracts by shedding markets and products (Decker et al., 2002). As such, the closing process is always a work in progress.

The initial rush to reengineer the closing process has slowed down considerably. The organizations have encountered formidable barriers in such an effort. Now the focus is not merely on time required to close the books but also on the quality of financial reporting, process improvements, and proper use of the technical infrastructure. There have been some successes in this area, notably in the technology sector. For example, Microsoft's financial reporting system consolidates 340 statutory companies in four days, handles 3,000 queries per month from 1,200 users, and has an uptime of 99.25% (Dougherty, 2003). The reengineering efforts led by Cisco, Motorola, Dell, and
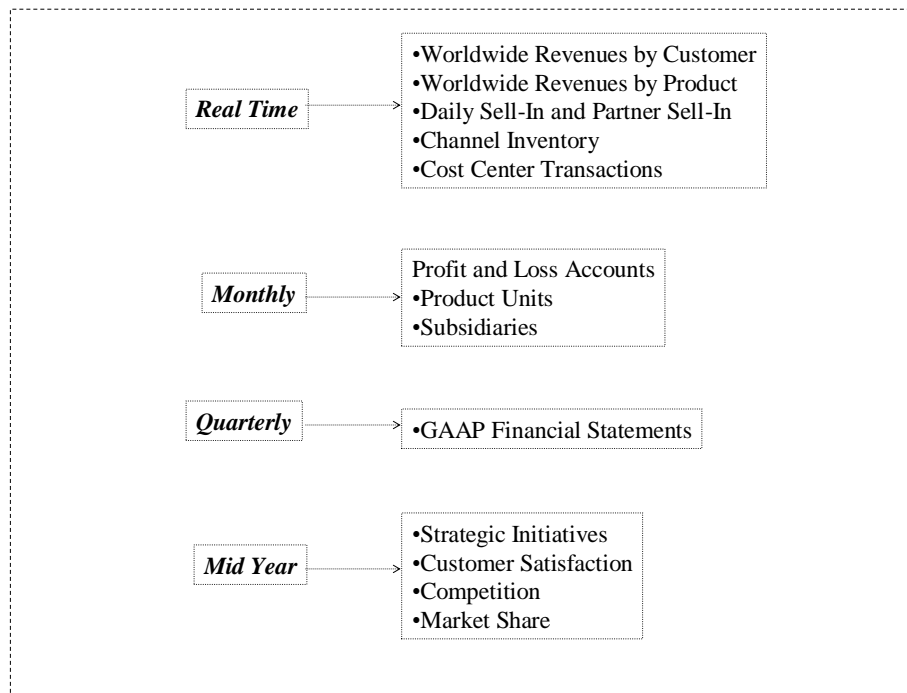
Microsoft have led to development of the guidelines in these areas. The main lessons learned are summarized below.

- *Standardize Accounting Procedures*: The first step in standardizing accounting procedures is to have a common chart of accounts. This chart should be detailed enough at the unit level and should allow quick consolidation at the higher corporate level. The organization should have a standard method of collecting, presenting, and measuring transaction data. The cutoff dates for subsidiary ledgers should be clearly specified and closing calendar should be synchronized. The other helpful activities are as follows

  o Regularly close the subsidiary ledgers and journals that feed data into the general ledger.
  o The reconciliations whether subsidiary ledger to general ledger or intercompany transactions should be continuous or at frequent intervals, not at the end of the quarter or the end of the year.
  o Make sure that a powerful consolidation system exists for consolidation purposes. Use web based applications or interfaces in consolidation, which have been found to be cost-effective. At the minimum, the consolidation package should offer submission and consolidation workflow management, multicurrency management, intercompany and allocation processing, and journal entry processing.
  o Have a clear and coordinated closing schedule and make sure that it is communicated clearly across the organization. Establish clear checkpoints for the closing process.
  o Simplify the chart of accounts.
  o Focus on material items such as sales, accounts receivable, and inventory; and reduce judgments in the entry process.
  o Beware of the problems in standardizing transactional data. The definitions of *order*, *raw material*, and *finished good* can vary per each user. Janelle Hill of META Group says – *Winning semantic agreement over transactional data is even harder than gaining semantic agreement over data for the data warehouse* (Decker et al., 2002).

- *Integrate and Automate Financial Systems*: The organization should be standardized on a particular ERP system. Unless the ERP system is in place the process of virtual close is next to impossible. Data should be captured at source and should be entered only once. The adjustments, reclassifications, and reconciliations should be standardized and automated. The manual entries should be minimized.
- *Tie in the Operational Systems*: The operational systems should be closed before the financial systems or at least the results should be available to the financial system in real time. The operational data such as shop floor data needs to be integrated into the financial system, if possible.
- *Use the Internet*: Enable self-service features using the web to reduce administrative overhead in accounting. Distribute reports via the web, use XBRL (eXtensible Markup Language) to transmit reports to the external stakeholders, send flash alerts to line managers using the intranet to enable exception-based management, and publish key performance measures on the web for immediate access.

The end users should be trained in OLAP (Online Analytical Processing Tools) or Enterprise Portals so that they can acquire needed information. Such education reduces the administrative overhead on the Finance and IT departments.

- *Automate Workflows*: Routing of entries for approval, the approval process, and posting should be automated. Business rules should be developed to deal with formula based accruals, standardized month-end entries, and standard transactions. Any deviation from the rules should result in an alert to the appropriate manager.
- *Key Performance Measures*: The key performance indicators should be standardized and distributed to the line managers in real time. Such performance measures can provide alternate information to the managers in the absence of full-blown financial statements.

Exhibit 2
Microsoft Key Performance Measures

Real Time →	•Worldwide Revenues by Customer •Worldwide Revenues by Product •Daily Sell-In and Partner Sell-In •Channel Inventory •Cost Center Transactions
Monthly →	Profit and Loss Accounts •Product Units •Subsidiaries
Quarterly →	•GAAP Financial Statements
Mid Year →	•Strategic Initiatives •Customer Satisfaction •Competition •Market Share

A complete reengineering of the closing process is supposed to take approximately five years (Hallett, 2002). Even after five years, the target may be elusive due to the changes in the business and accounting systems. The benefits of virtual close primarily accrue due to the improvements in the underlying accounting systems and not only by faster closing. For example, Microsoft lists following benefits of the virtual close (Dougherty, 2003).

- Batch processing of transactions is significantly decreased
- Estimates and accruals have been reduced
- The accounting process is aligned with the accounting systems
- The users find the system useful and use it more
- Finance is a value added partner and not a transaction processing machine

The virtual close is not pursued by many corporations and for good reasons. First, the cost benefit analysis may indicate that costs of virtual close outweigh benefits. Costs such as disruption of work, new workflows, new systems, and standardized accounting procedures may be more than benefits due to the real time access to the financial statements. Second, the quality of accounting information may suffer due to the virtual close. Many organizations have pursued virtual close at the cost of detailed verifications and controls and the resulting financial information has followed the ancient law of information technology – garbage in garbage out. Due to the recent accounting scandals, many CEOs and CFOs are not interested in accelerating the closing process if there is even a slightest doubt that the quality of information might suffer. Finally, the added business value of such an effort may not be significant.

Conclusion

As the accounting systems were computerized and web enabled, the accounting processes underwent a metamorphosis. The closing of the books that used to take weeks or months in the real world has been reengineered. The closing process and preparation of financial statements give a real picture of business. The managers who

wanted to view this picture and make course corrections demanded virtual close. The closing process has been shortened via standardized accounting procedures, integrated and automated financial systems, real time connections with the operational systems, use of the Internet, and automation of workflows. The shortening of the closing process highlights the inefficiencies in the financial system and is useful even if the closing time is not reduced significantly.

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