
SUMMARY

There will not be a revolution in military affairs unless there is a revolution in logistics. This means putting our faith in concepts like *velocity management* and total asset visibility, giving up the comfort of stockpiling supplies on an iron mountain.¹

INTRODUCTION

In 1992, the Department of Defense began requiring the services to procure and repair all depot-level reparable (DLRs) through their stock funds. As a result, customers of the Army stock fund began paying for DLRs, which were previously financed through procurement appropriations and issued free to customers, based on their stated need. Customers also began receiving credits for DLRs returned to the stock fund. On a DoD-wide basis, implementing the requirement that DLRs be stock funded reduced the demand for DLRs and increased the return of unserviceable assets for repair. From the DoD/Army perspective, working capital funding has resulted in significant reductions in materiel costs and civilian personnel. While expenditures by logistics customers have been reduced, senior Army logistics managers have become concerned that the current implementation may not be cost-effective when evaluated from an Army-wide perspective. A wide range of behaviors have changed as a result of the incentives created by the implementation policies. As a

¹GEN Dennis Reimer, Army Chief of Staff, *Army Magazine*, October 1998. Emphasis added.

result, there is a need to examine logistics financial management in a more rigorous, analytical manner.

To this end, the Army decided to apply its Velocity Management (VM) approach to the logistics financial management system. Begun in 1995, VM has achieved impressive success in improving the performance of key Army logistics processes. As a result, the Army established a Financial Management Process Improvement Team (FM PIT). The initial focus of the FM PIT has been on financial management processes that occur on the Army's active-component installations, from the company level through the interface between the operating units or activities, which are funded by Operations and Maintenance Army (OMA) appropriations and the supporting installation's Retail Stock Fund (RSF) component of the Army Working Capital Fund (AWCF).²

DEFINING THE FINANCIAL MANAGEMENT PROCESS

Following the VM Define-Measure-Improve (D-M-I) process improvement method, the financial management PIT began by developing a detailed common understanding of the financial management process at the installation level, focusing on detailed "walkthroughs" that mapped the financial management process from the perspective of the unit commander as customer. The mapping process identified three interrelated components: (1) the logistics information system; (2) the financial information system; and (3) the system of financial checks that are imposed on logistics purchases.

In addition to the series of maps capturing the overall retail-level financial management process associated with supply transactions, the FM PIT also produced a set of more specific maps of other financial management processes, including the following: the process for using the Integrated Logistics Analysis Program (ILAP) tool for integrating logistics and financial information; the end-of-year financial process—a period in which financial managers operate under even tighter fiscal control; the credit flow process; and the

²In future work, the D-M-I methodology should be applied to financial management processes in the AWCF's Supply Management and Depot Maintenance activities.

Army's monthly process for producing and distributing the logistics supply catalog.³

A review of all the process maps made it very clear that financial and logistical reconciliation of both prices and credits is a time-consuming, manual process. Funds availability requires units and the division comptroller to reconcile logistical and financial transactions periodically. It is often difficult for the unit to track its commitments, obligations, and credits. Therefore, units must maintain an informal ledger to estimate the availability of funds and to exercise decentralized fund control—a problem that suggests clear areas for process measurement.

MEASURING THE FINANCIAL MANAGEMENT PROCESS

Under the D-M-I method, after a process has been defined and understood, the next step is to measure the performance of the existing process—how it actually functions. VM emphasizes measurement along three dimensions: time, quality, and cost. Based on the analysis from the define stage and on data availability, the FM PIT identified three initial metrics to monitor: (1) the quality of price information; (2) the quality of credit information; and (3) the financial wait time (FWT), defined as the time it takes for a supply transaction to be closed out in the financial system.

Quality of Price Information

During the FM PIT's process walks at Fort Campbell and other Army installations, PIT members noted that clerks needed to go through an elaborate manual process to reconcile the prices in their supply records with those in their financial records. Because price is not part of the requisition information passed through the logistics and financial processes (and because of the very long process flow times), prices can differ at the time of obligation, receipt, and interfund billing. Analysis of various sources of data and information revealed that price changes occur throughout the year, although financial

³This catalog is called the Federal Logistics Catalog (FEDLOG). It contains separate catalogs for each of the services. The Army portion of the catalog is called the Army Master Data File (AMDF).

policies indicate that they should change only once a year. Thus, the price the customer ultimately paid could be significantly different from what he expected to pay. There are a number of reasons for these price changes, but collectively they suggest a deficit in the quality of price information.

Quality of Credit Information

Examining the quality of credit information revealed two problems, one having to do with the variability in funds received for turn-ins of items and one having to do with the nature—or demographics—of what items are being turned in for credit. Analysis of the first problem showed that Army retail credit policies create substantial financial uncertainty for units, because a unit can never be certain of how much credit it will receive when it returns an item. Much of the uncertainty centers around the Army's policy of basing credit on the installation's net asset position (NAP) at the time the item is turned in.

Although our data analysis of the second problem does not further indict the quality of credit information, it is an issue worth addressing. Our analysis showed that the units were turning in vast numbers of low-value consumables for credit and that most returned parts were inexpensive—90 percent of the returns at Fort Campbell and 84 percent at Fort Hood had an original purchase price of less than \$50. The value of these items to the Army may be less than the value of the time spent returning and restocking them.

Financial Wait Time (FWT)

This metric focused on the time it takes for a unit to see the effect of a supply transaction—either a requisition or a return—on its ledger. (Because prices can change, long FWT can exacerbate problems with the quality of price information.) Our analysis showed that there is a great deal of variability as well in FWT. We measured the time for each transaction from the date it was entered into the supply system to the date of the last record in the financial system. While the mean time of one aviation company at Fort Campbell was 29 days, the unit waited more than 111 days for the financial information for 5 percent of the requisitions and returns to appear in its financial records. Such

variability makes accurate tracking of ledger balances virtually impossible.

IMPROVING THE FINANCIAL MANAGEMENT PROCESS

Once the financial management process has been defined and measured, the next step is to identify and implement process changes or enablers to improve the process. Unfortunately, many financial management problems are the result of Army financial management policies that a single installation cannot change. Thus, recommended policy changes focus on those the Army can make, using examples from Fort Campbell to illustrate key points when appropriate.

In terms of improving the quality of price information, we recommend two policy changes that could help stabilize prices and reduce the amount of time unit personnel spend on their manual financial reconciliation process:

- Lock in the price at the time of request so that the price the customer pays is the price in the catalog at the time of request.
- Improve the catalog distribution process, changing Army supply systems so that all customers and suppliers access the same catalog for all transactions.

As for improving the quality of credit information, we recommend three actions:

- Link credit rates to Army-wide net asset position (NAP) to enable units to better monitor and forecast their spending relative to budget, to allow them to better adjust stockage levels of items on authorized stockage lists (ASLs) and prescribed load lists (PLLs), and to give them less incentive to delay turn-ins in the hope of receiving higher credit at a later time;
- Set dollar thresholds to improve the turn-in process for low-value items. This action would allow these items to be retained for future use or discarded at lower levels rather than turned in to the supply system—workload would be reduced throughout the retrograde process, and units would have fewer transactions to monitor in their financial ledgers.

- Use an exchange pricing system—much like what the Navy and Air Force already use for their DLRs—to stabilize credits and allow credits to reflect the costs of transportation, repair, and restocking at the wholesale level on an NSN-by-NSN basis.

Finally, to deal with problems identified with FWT, we recommend two actions:

- Reduce delays by setting dollar parameters to allow for review of very high dollar values while allowing most requisitions to be processed without delay.
- Encourage financial management personnel to use available financial management tools—like ILAP—to reconcile logistics system data with financial management data. In addition, locking in prices and stabilizing credits will reduce the uncertainty associated with financial delays, since units will know the financial impact of a requisition or a return at the time it occurs.

Many of the foregoing recommendations can be summarized in a basic principle that the Army should adopt: **The prices and credits in place when a transaction is first undertaken should be the prices and credits used for the transaction.**

FUTURE INVESTIGATION

As the Army and DoD move forward to modernize their legacy systems, they would do well to look to the leaders in industry for examples of successes and failures. The young soldier of today is accustomed to ordering books, music, computers, etc., quickly over the Internet. Up-to-the-minute financial information is available with the click of a mouse or the punch of a phone button. Stocks and bonds are traded electronically. The gap between corporate America's automation and the Army's is widening daily. The Army should move rapidly to commercial products that would revitalize its current logistics financial management systems.