

IT-Based Decision Tools For Item Processing Operations Management in Retail Banking

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EXECUTIVE SUMMARY

Merit Bank is a multi-line financial services company with \$75 billion in assets and approximately 1,000 retail branches distributed across 20 geographic divisions in 16 states. In 1999, Merit's retail banking operations generated \$2.1 billion of revenues and \$1 billion in net income. Over the past decade, Merit's aggressive acquisition and consolidation strategy in its retail and commercial banking divisions has significantly increased check processing volumes and motivated major investments in automated imaging technology and branch operations reporting systems. When these investments failed to reduce overall check processing costs, a consulting team was formed to define the breakthrough opportunities and best-in-class management practices needed to restructure under performing operations. By using updated scheduling criteria reflecting current business conditions and more fully exploiting imaging and branch reporting software, the consulting team successfully developed and implemented interfacing tools responsible for significant cost savings in check processing operations.

BACKGROUND

Technology and business conditions in the retail banking industry are changing more rapidly today than at any time in recent history. Consolidations of independent financial institutions are occurring at an unprecedented rate. Some analysts predict that fewer than half of the financial institutions operating today will exist as independent enterprises by the end of this decade (Malmborg, 1999). Merit Bank is a 50-year-old financial institution with a history of innovation and successful adaptation to change. During the past five years, multi-line financial services institutions (MFSIs) such as Merit have been vying to become top players in a select group of high-growth regional markets as well as market share leaders in geographic areas where they have an established presence. Following a "build and buy" strategy of acquisitions and regional asset exchanges, Merit is seeking to develop profitable niches in various areas of consumer finance and investment services as well as in its

traditional fields of retail and commercial banking. Among these multiple business lines, retail operations have retained their importance to Merit by serving as an inexpensive source of operating funds (deposits) and a significant source of revenues. In the retail segment of the banking industry, Merit follows a strategy of building broad-based client relationships through continuous pursuit of best-in-class services.

In a number of regional markets, inroads made by Merit in the retail area are pressuring smaller independent banks to reduce costs and re-focus on the specialized financial services for which they are best positioned. Many of these smaller institutions have been forced to follow Merit's lead in rapidly introducing new products and services, improving customer access to funds and reducing operating costs while maintaining the "personal banking" relationships on which their businesses were founded.

Following a merger with a major investment firm in the late 1990s, Merit accelerated the acquisition-based growth strategy that had been its hallmark since the early 1980s. By 1999, Merit transitioned into a leading MFSI with over \$75 billion in assets and approximately 1,000 retail branches in 20 geographic divisions spread over 16 states. Throughout the period of rapid expansion, retail operations remained a priority responsible for over \$2.1 billion of revenues (almost 40% of total revenues), and over \$1 billion in net income during 1999 alone. Under pressure to maintain annual growth in retail operations in the 10% range, Merit launched a productivity improvement program during 1999 that targeted cost reductions of over \$80 million. A significant portion of this was focused on leveraging investments in new information technology to achieve economies of scale in item processing operations to enable closings and consolidations of acquired item processing facilities.

Item processing (IP) operations involve the retrieval of paper checks from retail points of transaction and associated processing, distribution and funds transfers to and from correspondent banks. Despite explosive growth in paperless financial transactions over the past two decades, strong consumer resistance has frustrated efforts by Merit and other MFSI's to drastically reduce consumer dependence on paper checks. Subsequently, IP operations have remained a major back-room operation for Merit and most other full service financial institutions. Moreover, IP processing volumes have expanded rapidly at Merit as formerly independent local and regional banks have been acquired and Merit has sought to grow into a provider of IP services for smaller institutions.

Merit's IP operating policies in retail and commercial banking involve the coordinated management of document retrieval courier operations, check encoding and cash lettering. Like many financial institutions, Merit outsources courier services to vendors that provide contracts to financial institutions for a fixed number of vehicles and drivers to be directly scheduled by the management of the bank's local IP operations centers. A predominant management objective in courier operations is to determine the routings and departure times for vehicles to retrieve checks and other paper transit that accumulate at retail branch locations during business hours. After pickup, the material is transported to the local IP operations center. As Merit expanded rapidly in the 1990s, its role as a vendor of IP services for smaller institutions grew substantially in many of its regional markets. This usually took the form of Merit's local IP facilities taking in transit for various levels of processing from smaller banks, utilities, cable television companies, insurance companies and other businesses with high check volumes. The addition of external transit to Merit's IP work stream significantly increased the variability of check processing volumes and has complicated the forecasting of workloads at IP operations centers. Since the large majority of check volumes through the early 1990s had been from Merit-operated retail branches, IP workloads had been considerably more forecastable based on historical business patterns in Merit's retail branch networks. During most of this period, monthly transactions reports from retail branches were a useful guide in developing courier, encoder and cash letter schedules based on standard personnel scheduling models for minimizing operator idle time (Fitzsimmons and Fitzsimmons 1998; Starr 1996).

The processing sequence at most of Merit's IP operations centers is essentially the same. Transit dropped off by couriers is encoded, batched for proofing, sorted by destination bank and cash lettered

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