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Leveraging Legacy Equipment in a Banking Environment

*Delivering preferred services at bank branches
drives the need to affordably connect technology*

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As the new millennium was ushered in, many banking industry pundits predicted that the Internet was going to replace physical buildings and leave personal contact in the cyber dust. The World Wide Web has revolutionized many industries, but it couldn't duplicate the personal service of the bank teller. The banking industry has realized that customers want additional services and information, and are now promising personalized banking that enables customers to handle all of their transactions from one contact point.

To deliver an overall better banking experience, financial institutions are faced with deploying sophisticated software applications that will enable tellers to provide greater levels of service. Historically, the amount of customer information maintained at a teller station was minimal. Today, information draws a differentiation line in the sand for bank brands. If you don't have it, you can't compete. Tellers have become the bank's point of contact with the public, and if empowered, they can increase the institution's market share. To do that, more information and services at that point are needed.

With the need to provide great customer service through improved application software, banking decision-makers need to look at the teller station's computing environment. Does it have the computing capacity to handle new software? In most cases the answer is no, which means that a PC system upgrade is mandated. This upgrade will entail not only purchasing a new computer, but also purchasing new peripherals if the current ones used are incompatible with the interface options available on the new PC. Teller station peripheral requirements vary according to individual service needs, but typically include at a minimum a PIN pad, cash drawer, check reader and card swiper. Usually these peripherals are connected to a PC via a serial connection. However, as most new PCs do not come

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with sufficient serial ports for the teller station—indeed many come with none at all—the upgrade process could require replacing these peripherals with newer versions that use the more common USB interface, at a conservative estimate of \$500 per teller station. (And, that doesn't include additional costs for altering software applications that were designed to work with serial rather than USB interfaces.) Even with a relatively small upgrade project, replacement peripheral costs can easily run into hundreds of thousands of dollars.

However, a more cost-effective alternative does exist. For \$75 to \$100 per teller station, serial boards can be used to provide a station's PC with the number of serial ports required. This is typically accomplished with PCI boards (including Low Profile PCI boards, which are ideal for the Thin Client PCs that are fast becoming the computer of choice for teller stations) or with USB to serial adapters. It is important to choose only high quality serial products for this purpose because a successful implementation requires that the new ports function exactly like standard built-in COM ports in order for the system to function properly with the bank's software applications.

By using serial adapters to enhance the new PC's connectivity capabilities, banks can protect the investment already made in the peripherals. This cost cutting strategy is technologically sound. There have been no major advances in banking peripheral design, meaning that PIN pads, cash drawers, card swipers and check readers all have significantly longer shelf lives than the PCs to which they connect. Indeed, banks maximize their investment in new equipment by allocating it towards more powerful computers and more robust software—places where new technology will yield appreciable business advantages.

Mergers and Acquisitions

Today's banking strategies involve a complex mix of branch expansion and industry consolidation. Banks with aggressive expansion timelines are acquiring other banks that have greater branch coverage in regions where the acquiring

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bank is lacking. For example when a national bank acquires a smaller regional bank, the transition to a single brand must be seamless in order for the new combined company to be successful. The acquired regional bank's customers must be able to procure the same products and services, in the same manner, available to the existing national bank's customers. That customer must also have uninterrupted and unfettered access to all funds in previous regional bank accounts. If the transition experience isn't favorable, the brand promise is broken, and brand value lost. In such cases, attempting to rebuild brand credibility is difficult, further opening the door for other banking entities to exploit the fact that the new bank is not a "neighborhood partner."

Business analysts emphasize the importance of blending the differing institution's cultures, and predict that the acquisition strategy's success will hinge on the two groups' hierarchies ability to work as one. For those in the banking industry, it's apparent that the key to a successful merger is creating a new *technology strategy*. Thus, the first inter-company team that must develop is the team charged with systems integration. A successful overhaul and reconfiguration of the computing environments within the acquired branches is crucial to providing consistent, system-wide service at the point of customer interaction.

Server-side changes, and the implementation of new banking software applications, will result in modifications at the front end of the operation – and a change to the PC at the teller station is the end result. For example, not all teller station PCs at the acquired bank will have the processing, memory, and configuration capacity to run the acquiring bank's applications. If the acquired bank's computers are lacking, they will need to be replaced with newer PCs that may not have the connectivity capacity required by the teller station peripheral devices. The upgrade cost could be enormous if it entails replacing every peripheral device at every teller station. This emphasizes the benefit of using relatively inexpensive serial adapters to mitigate the costs involved in this essential upgrade. To illustrate, for an upgrade involving 2000 branches with 4 teller stations per branch, and an estimated \$500 per teller station cost to replace

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serial-based peripherals with USB-based peripherals, the total upgrade cost would be approximately \$4 million. If serial adapters were used to add additional ports to the systems, the investment would be less than \$1 million – A substantial \$3 million savings for the shareholders.

Reliability

A recent Booz | Allen | Hamilton survey states that out of necessity, companies are increasingly looking to tap the innovation resources and capabilities of suppliers. In fact, the companies surveyed felt that improved supplier integration alone could yield improvements in time, cost, and quality of 15 to 20 percent. For banking entities looking to increase growth and profitability, finding the right partner is paramount.

The right connectivity partner is vital to a successful banking system migration. It is easy to overlook the importance of a \$75 component in a several thousand dollar system, but failing to perform due diligence when selecting a serial connectivity supplier can be a very costly mistake. PIN pads, cash drawers, check readers and card swipers are the banking system front line—if they go down, the entire system goes down. A teller station that can't perform provides no customer service and negatively impacts the brand. It is critical to have the stations consistently online and providing information at the point of sale. Therefore, it is vitally important to select a meticulously designed and manufactured serial port product with a solid track record of flawless field performance. Further, because of the rapid pace required for large-scale system upgrades, it is important to find a value-add partner that can deliver product in the quantities needed and time frames required. Your connectivity source should be more than just a supplier of parts—it must be integrally involved in the process across the entire supply chain from the end user, through the PC manufacturer, the systems integrator and the implementation service company.

This level of integration is particularly essential during the system design and assembly process. Unlike a typical desktop PC, teller stations are pre-configured

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systems that require minimal field set-up time, thereby mitigating integration and configuration issues in the field. To do this, a prototype system is assembled and a master image of that system's hard drive is created. That image is used during the PC build process to create an identical fleet of teller station computers that need only be plugged-in to be up and running.

Clearly it is important that all components of this system function properly and consistently. It is also vitally important that if changes do occur—for example updated drivers—that all parties in the supply chain be aware of the change not only so that it can be implemented throughout the production process, but also so that any potential impacts to the larger system can be assessed and resolved. Therefore, selecting reliable, resourceful, strategic partners should always be of paramount concern, regardless of how small a portion of the total system each partner supplies.

The banking industry is undergoing tremendous change that will serve to reduce the number of competitors in the industry. Responsible actions and generating value for customers and shareholders will separate the strong from the weak. Finding efficiencies with which to leverage existing technology, and selecting partners who can help maximize technology investments, are key first steps to success.

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