



Over recent years, there has been a trend in retail banking to replace the traditional “closed” branches with “open” branches.

The most significant factor which has brought about this change has been the need to reposition the role of branches. Rather than branches being locations where customers withdraw and deposit cash, the emphasis now is on branches offering services for which the customer can come and “shop.”

However, customers still expect to be able to use open branches for traditional deposit/withdrawal functions. In fact, there is an argument for maintaining these facilities since they give customers a reason to enter the open branches. A pure branch “shop” would have far less “passing trade” than a branch which offered both cashing and sales functions.

### **The Problem Of Cash**

An open branch which offers both sales and cashing facilities must be secure. This means that all of the cash available to the cashiers must be held in secure cash drawers, so that theft is as difficult as within a closed branch.

One partial solution to this problem is the use of Teller Assist Units (TAUs). TAUs are basically automated safes that dispense cash

under software control. Ironically, while TAUs assist in the provision of open branches, they create their own unique problem of cash-holding costs. One of the typical security features of a TAU prevents it being opened during the business day.

Once a branch has been converted to an open environment, the TAUs become the primary source of cash for customers. In order to avoid the stigma of becoming “the bank that ran out of money,” banks which use TAUs must load them up fully at the start of each business day – just in case there is a heavy demand for cash that day.

This means that branches which use TAUs often have a significantly higher cash-holding than before the TAUs were introduced.

### **The Recycling Solution**

The solution to this dilemma of how to create open branches with secure cash drawers, while at the same time providing tight control over cash-holdings seems obvious: produce a TAU which can easily be loaded and unloaded in an open branch.

Ideally, such a TAU would allow notes which are used in a customer deposit to be used for withdrawals.



In fact, the ultimate requirement is for a TAU which recycles cash. In other words, a TAU is needed which will dispense the money that was last deposited, thereby recycling one customer's deposit as another customer's withdrawal.

Now, real life is never so neat as theory. There will be days when some branches receive considerably more cash than is dispensed. Similarly, there will be days when some branches dispense considerably more cash than is received.

For a recycling TAU, however, both of these scenarios present no problem. After an excessive amount of cash has been deposited, a large withdrawal can be made to transfer the excess cash to the vault. Similarly, after an unusual amount of cash has been withdrawn, more cash can be retrieved from the vault and loaded into the TAU as a "batch deposit."

In both cases, the control of when the recycling TAU is loaded/unloaded (and by how much) is entirely under branch control. In fact, part of the "art" of maintaining recycling TAUs is to balance the cash-holding within the unit against the number of times when it must be loaded/unloaded.

So, a recycling TAU provides all of the security needed to allow open branches to be created, while at the same time allowing branches to keep a very tight rein on their cash-holdings.

### **The Ascom Twin Safe**

Working on the "last-in, first-out" principle, the Ascom Twin Safe is currently the only TAU which offers this recycling capability – when money is deposited into the Twin Safe, it becomes immediately available to be dispensed. This means that the last notes deposited will be the first notes withdrawn.

Different mixes of denominations may be deposited into a Twin Safe at the same time. When a bundle of notes is deposited, the Twin Safe recognises each note and transfers it to the appropriate Roll Storage Module (RSM). Each RSM can hold a different denomination of

note. When a withdrawal is made, notes are selected from the appropriate RSMs in order to dispense the total value of the withdrawal in a single operation.

### **A Re-Think**

Now that the possibility of a recycling TAU is available in the form of the Ascom Twin Safe, banks can take a new look at the way that branch business is conducted.

Requirements which previously were impractical (because recycling technology did not exist) become quite realistic.

This means that in order to make best use of the Twin Safe, banks will want to re-visit their branch concept and reconsider how branch business is to be conducted.

While the Twin Safe may allow banks to plan a different long-term strategy for their branch networks, it is unrealistic to expect dramatic changes to occur overnight.

Retail branches, often very large and complex structures, do not lend themselves to rapid change. This inertia results from many factors which are outside of the technology infrastructure, such as the large numbers of staff members who may need to be retrained and the constraints imposed by the number of buildings which may need to be redesigned.

### **The Evolutionary Approach**

Even though the Twin Safe may be the key to achieving a bank's vision of the "branch of the future," common sense dictates that such change must be evolutionary rather than revolutionary.

The question then arises. How to begin the evolutionary process within the constraints of today's branches, while putting in place the structure of the "branch of the future?"

The answer is systems integration, providing a software framework which can accommodate the present branch infrastructure while providing the bridge to a new architecture.

Network Controls International Ltd (NCI) has developed such an architecture. The NCI Twin Safe Server supports the Twin Safe and facilitates its integration into both present and future branch environments.

### **Resource Sharing**

In a typical branch today, there are tellers who provide a cashiering function and counsellors who provide a sales and advisory function. In a typical "branch of the future," the two types of staff are merged into one.

When a Twin Safe is utilised within the present branch structure, it must be primarily available for the use of the tellers, but it should also be available for occasional use by counsellors.

This means that although the branch processes remain the same, the immediate benefit of the Twin Safe as a central cash repository may be achieved.

Without any dramatic change to current branch structures, technology and staff, a bank may begin to eliminate the use of protective screens and avoid customers having to queue for a teller after having had a consultation with a counsellor.

In a "branch of the future," where the roles of cashier and counsellor have been merged, the Twin Safe must still be available as a central cash repository. All cashiers/counsellors must have access to the Twin Safe to be able to maximise their time with customers and offer a combination of services.

The Twin Safe is a resource which should be sharable between all branch staff both now and in the future.

### **"Island" And "Integrated"**

The NCI Twin Safe Server regards the Twin Safe as a resource available for use by any branch workstation. However, depending on a bank's current branch environment and its future direction, the demands of staff at different workstations will vary.

When providing high-volume tellers with the necessary speed of transaction processing for deposit and withdrawal, it will be necessary to immediately action these tellers' requests.

In other words, a deposit or withdrawal from a cashier workstation requires that even though the Twin Safe is a shared resource, no unnecessary delays are imposed when the teller initiates a transaction.

NCI terms such workstations to be "integrated." The only delay that can affect a transaction performed at an "integrated" workstation occurs when another transaction is already in progress.

Since the Twin Safe is a shared resource, such conflicts are bound to happen. However, a bank can eliminate or minimise the number of such conflicts by determining the number of workstations which share a Twin Safe.

Hence, the allocation of Twin Safes within a branch becomes a business decision and is not dictated by the limitations of technology.

Counsellors will require less frequent access to a Twin Safe than cashiering tellers. In fact, counsellor workstations may even be somewhat "remote" from the Twin Safe.

For example, in contemporary branches, the Twin Safe may be located next to the tellers' "integrated" workstations and the counsellor may have to walk over to it to perform a customer's deposit or withdrawal.

In the future, when the roles of counsellor and teller have merged, the layout of the branch may dictate that one or more Twin Safes are located at convenient points within the branch, since the aim is to provide a comfortable environment for the customer, not to have the branch layout dictated by technology.

NCI terms such workstations to be "island" workstations. The nature of the business conducted from an "island" workstation is that a transaction may be initiated at the workstation, but the counsellor may not immediately access

the Twin Safe to complete the transaction – the objective is to maintain the customer's interest and provide the best service.

This potential delay, which results from a transaction being initiated and some time later executed, is accommodated by transactions which are initiated at an "island" workstation being queued by an Interface PC which is located next to the Twin Safe.

Once the counsellor wishes to complete the Twin Safe transaction, he or she then provides identification at the Interface PC (usually by swiping a magnetic card, although keyboard identification is possible) and only then is the transaction processed.

What is fundamental to the NCI Twin Safe Server is that a Twin Safe may be shared (as a common resource) between "integrated" and "island" workstations. This means that questions of how both current and future branch requirements may be satisfied become a business decision, not a technology one.

### **Application**

The NCI Twin Safe Server is structured to accommodate various different "clients" and "servers." A "client" is typically a workstation which is used by a teller or counsellor. A "server" is typically a PC (the Interface PC) which is directly connected to a Twin Safe.

In a simple configuration, both "clients" and "servers" might utilise the same operating

Platform. For example, both "clients" and "servers" might utilise OS/2, or both "clients" and "servers" might utilise Windows NT.

However, there is frequently a requirement for a mixed approach. Hence, the NCI Twin Safe Server for OS/2 supports OS/2 "servers" with OS/2, Windows 3.11 and DOS "clients." Similarly, the NCI Twin Safe Server for Windows NT supports Windows NT "servers" with Windows NT, Windows 3.11 and DOS "clients."

The NCI Twin Safe Server products can even accommodate "dumb" terminals as workstations, hence there is no reason why the terminals of an IBM 4700 controller or AS/400 mini are not the "clients" for the OS/2 "server" of the NCI Twin Safe Server for OS/2 product.

### **Conclusion**

The Twin Safe provides a solution to the problem of how to build "open" branches which are secure, while at the same time avoiding the classic Teller Assist Unit problem of uncontrolled cash-handling.

The NCI Twin Safe Server products complement the Twin Safe by offering the ability to configure branches according to business requirements.

Together, the Twin Safe and the NCI Twin Safe Server enable banks to design branches in accordance with their business objectives in the most efficient and cost-effective manner.



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