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Attacking a Special Problem in Accounts Receivable

Edward S. Corwin

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ATTACKING A SPECIAL PROBLEM IN ACCOUNTS RECEIVABLE

by Edward S. Corwin
Brach, Gosswein and Lane

MECHANIZATION of billing and accounts receivable systems has become so commonplace in recent years that it is unusual to encounter a problem so unique as to tax one's ingenuity to any great degree. Such a case arose recently, however, with a client, a retail furniture store which desired to change from the installment to the revolving credit method of selling.

For many years this store had been locked into a passbook and ledger card system, using posting machines to enter charges and receipts. Credit charges were computed at the time of sale. If payments were made by mail, the passbook was enclosed in the envelope for proper notation. Temporary receipts were used in cases where the passbook was lost or forgotten.

The old system's problems

Gradually dissatisfaction arose in many areas. First there was the fact that the credit charges were based upon the entirely fallacious assumption that payments would be regular and timely. In fact, the average customer took much longer than anticipated in cleaning up his account. Since the imposition of late charges was impractical and caused ill will, the company was left in a position of earning an insufficient return on its extension of credit. In addition, investigation of competitive practices revealed a general trend toward revolving credit plans, permitting credit charges based upon the balance in the account for as long as the account remains open.

In the second place, the credit department was both too large and overburdened. With over 8,000

ledger cards to survey the work of dunning was a mammoth task. Our client offered weekly payment terms to most of its customers. In addition, it had a somewhat transient type of clientele. These two facts combined meant that an account 10 days "past due" was of some concern; 30 days "past due" became a crisis. All of the ledger cards had to be scanned weekly, hundreds of phone calls made, and form letters typed and mailed.

A third problem area was the cashiers' cage. Weekly installments meant almost four times the volume of transactions involved in monthly installments. Using the posting machines, with ledger cards, the cashiers had to pick up balances and enter transactions for this huge volume, with resultant frequency of errors in account, amount, or transaction type. Errors were detected only on complaint by the customer, often too late from the store's viewpoint to collect the amount erroneously credited.

A basic problem, under the old system, was to devise some method of computing *monthly* credit service charges and of notifying the customers of these charges without creating substantial additional work in the accounting, credit, and cashiering departments, and with minimal error.

These problems defined the task that confronted us.

Our basic approach

We decided quickly that the operation was not large enough to warrant a computer installation of its own. However, because of the large volume of computation, a computer was needed, and the only feasible way of obtaining one was through the use of an outside service bureau.

We next approached the problem of entering the charges and notifying the customers. Savings banks still employ passbooks but they have done away with ledger cards by using terminals connected directly to a computer. In this case, expense aside, we felt that such a system would in no way handle the delinquent customer. The banks do not mind if the depositor does not show up for entry of interest. The store minds very much if the customers are not made aware of the charges. Consequently, our client was reluctantly prevailed upon to abandon his time-honored passbook and ledger card in favor of a monthly statement, with the service bureau maintaining accounts receivable records.

At this point we decided that source information to the service bureau had to be in the form of punch paper tape coming from the cash register as a by-product. We ruled out optical font because of the difficulty in finding service bureaus to handle it.

Packaged systems rejected

Service bureaus offer varied programs for control of accounts receivable. The basic differences are slight and depend mainly on the means of output. Some are geared to punch paper tape from an adding machine or cash register; some start with optical font tape; some key punch the input from copies of source material. But essentially all are systems which require all entries to emanate from the source —charges, receipts, and adjustments —and none is prepared to perform the independent computation to create the service charge and enter it. Essentially we needed a system of programs created to fit our specific situation. Once this fact was accepted, along with the corollary that the programing expense must be borne by the user, we decided to go all out and incorporate every little refinement which our client could possibly want.

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Selection of the service bureau

Selection of a service bureau was one of our most difficult tasks. Fortunately, extensive experience with several bureaus was of help. After soliciting bids from eleven service bureaus, we decided upon the only one which was prepared to offer "real time" capability at present. This means that the bureau has a computer with sufficient capacity to store our customer information in such a way that it, as well as the programs to handle it, are available to the computer at all times. Obviously, this does not mean simply magnetic tape, because tape drives are too expensive and cannot be sufficiently numerous so that our reel, as well as that of other users, can be on at all times. It involves instead a "mass memory" unit, measured in hundreds of millions of characters, which we can share with the other users. It means also a multi-channel computer, one which can converse by telephone with all of the users simultaneously. In New York there are at present very few bureaus offering this capability. (A whole article can be written about criteria involved in satisfactory selection of service bureaus.)

At the start, because of practical and legal considerations, it was decided not to convert existing account balances to the new system, but rather to start with new accounts and then convert "add-to" sales. Consequently, the starting volume of accounts did not warrant the installation of data phone equipment. The programing, however, made allowances for the switchover as soon as practicable, with reliance upon messengers at first.

The system which evolved

The system is best described by starting with the month-end procedures. The service bureau prepares an aged accounts receivable

trial balance. Our client has its own method of aging, customary in its trade but quite different from standard procedure. During this running, accounts are classified as current or delinquent, delinquency being determined through a combination of accumulated arrearages and date of last payment. This classification avoids harrassment of the customer who makes genuine efforts to keep reasonably up to date.

The service bureau then runs the statements in two separate groups, current and delinquent, the latter bearing a red "past due" imprint. Along with the delinquent statements, the service bureau provides four pressure-sensitive name and address labels to be used in follow-up dunning, the store having decided to stick to its very effective collection procedures and forms. Our compromise is for the bureau to provide these labels, eliminating the need for typing.

The statements show current action and credit charges, terms, and accumulated arrears and give clear instructions to bring the statements in when making payments. This is purposeful. Besides containing the account number from which the cashier keys the cash register without the intervening possibility of error from looking up the wrong number, the statements have four stubs attached, one for each week, each bearing the account number on it. When ringing up a payment, the cashier tears off a stub, validates it on the register, and keeps it for office use. This stub then has both the correct account number, printed by computer, and whatever number the cashier keyed right under it. If the service bureau's check-digit-verification procedure indicates a bad number, this stub immediately shows what the correct number should be, thus virtually eliminating mispostings.

Office copies of the current statements are filed in normal course in the customer files. Office copies of delinquent statements go to the credit department to form the basis for action. It is expected that by this presentation of delinquents, avoiding the job of fingering through 8,000 ledger cards each week to locate the 1,200 delinquents, more effective action can be taken more rapidly with less labor.

Daily procedures

Each new account (or converted add-to) is assigned a number with a check digit from a pre-prepared list. All transactions involving that account are rung up on a cash register with punch tape output. The volume is heavy, with about three cash receipts to every sale because of the weekly payments. Since the number of "cash-taken" sales is insignificantly small, the transaction codes on the register are all geared to the installment system —even where layaway and other cash sales are involved. These latter are segregated for accounting purposes but are treated like any other accounts receivable, with credit statements where applicable.

Each day the punch tape is delivered to the service bureau, where it is first proof-listed; the account numbers are checked for validity, with bad ones flagged; and 18 classifications are accumulated, totaled, and checked against controls. Then the transactions are sorted in account number order, and two lists are prepared—those affecting current accounts and a much smaller list of the transactions affecting delinquents. These lists are returned to the store; the bad account numbers are checked against the validated stub from the statement (where both the correct and incorrect numbers appear) and corrected; the current list is filed for possible reference; and the delinquent list goes to the credit department for notation against the statement copies.

Credit department assistance

At this point a discussion of credit referrals is in order. Once the switch to tele-processing is complete, the problem is solved. Any account balance, plus date of last

Office copies of delinquent statements go to the credit department for action. This procedure eliminates the job of fingering through 8,000 ledger cards each week to locate the 1,200 delinquents.

THIS IS YOUR STATEMENT

Royal *Furniture Company*

2936 THIRD AVE. Corner 152nd St., Bronx, N. Y. 10455 635-0910
Open daily 9 AM until 9:30 PM

DATE 10/31/67

Account No. 67-4053-5

SAVE TIME—ALWAYS BRING THIS COMPLETE STATEMENT WHEN BUYING OR PAYING

PLEASE NOTIFY US AT ONCE OF ANY CHANGE OF ADDRESS

PAYMENTS OR OTHER TRANSACTIONS AFTER STATEMENT DATE WILL APPEAR ON NEXT STATEMENT

SAVE ADDITIONAL CREDIT SERVICE CHARGE — MAKE PAYMENTS WHEN DUE

ENTIRE BALANCE MAY BE PAID AT ANY TIME

DATE	ITEM	PURCHASES OR CHARGES	PAYMENTS OR CREDITS
	PREVIOUS BALANCE		
10/06/67	FIRST PAYMT		10.00
10/07/67	FIRST PAYMT		152.98
10/14/67	OFFICE PAYMT		10.00
10/17/67	INSTAL SALE	272.98	
10/21/67	OFFICE PAYMT		10.00
10/28/67	OFFICE PAYMT		10.00
	CREDIT SERVICE CHG.	.50	
	BALANCE →		$80.50

PLEASE PAY PER TERMS WITHIN 5 DAYS

YOUR TERMS ARE $2.00 EACH WEEK

PAYMENT NOW DUE
(INCLUDES PAST DUE PAYMENTS IF ANY)

Royal Furniture Company, Inc.
2936 Third Ave., Bronx, N.Y.
Account No. 67-4053-5

DO NOT DETACH

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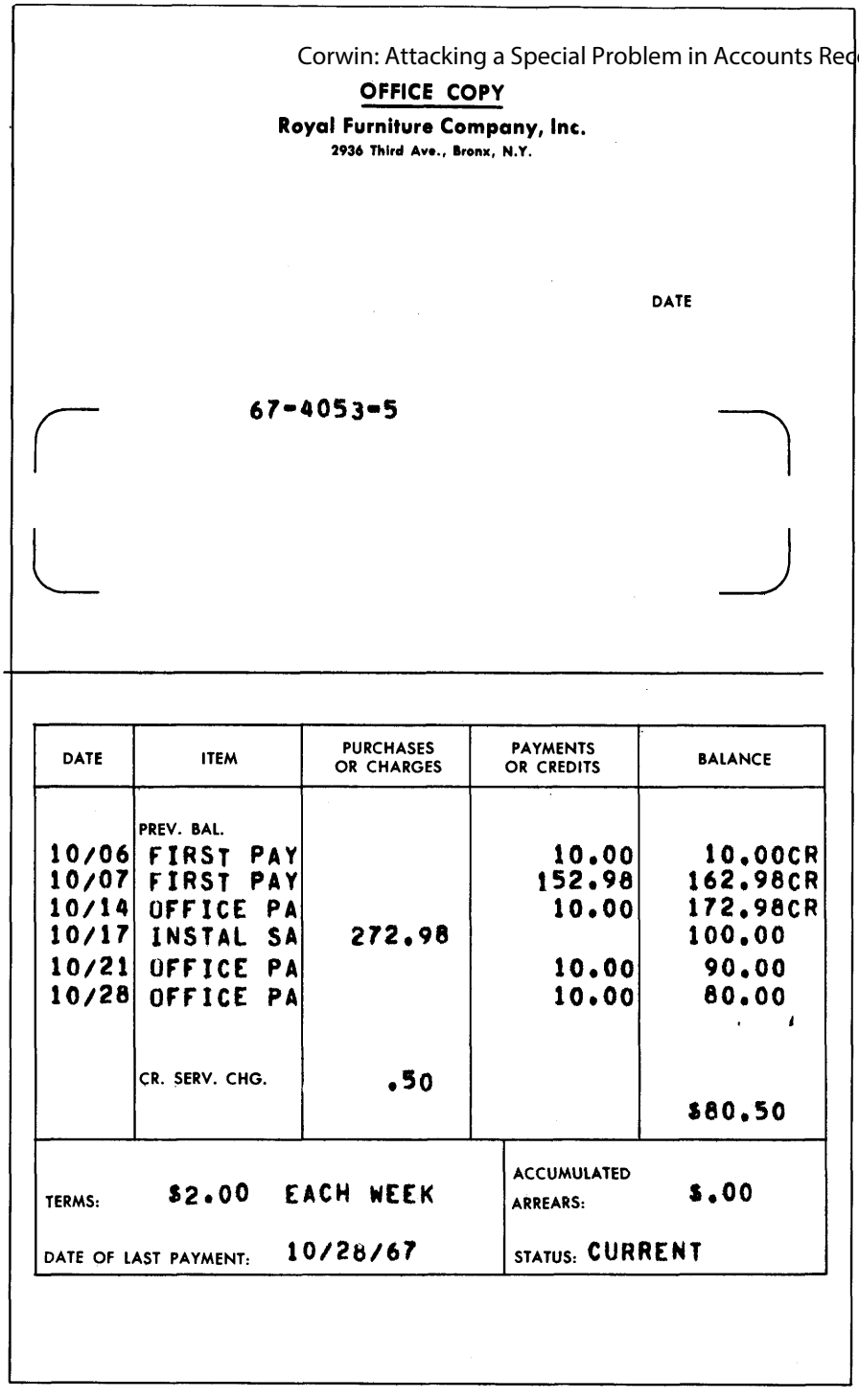

OFFICE COPY

Royal Furniture Company, Inc.

2936 Third Ave., Bronx, N.Y.

DATE

67-4053-5

DATE	ITEM	PURCHASES OR CHARGES	PAYMENTS OR CREDITS	BALANCE
	PREV. BAL.			
10/06	FIRST PAY		10.00	10.00CR
10/07	FIRST PAY		152.98	162.98CR
10/14	OFFICE PA		10.00	172.98CR
10/17	INSTAL SA	272.98		100.00
10/21	OFFICE PA		10.00	90.00
10/28	OFFICE PA		10.00	80.00
	CR. SERV. CHG.	.50		
				$80.50

TERMS: $2.00 EACH WEEK

ACCUMULATED ARREARS: $.00

DATE OF LAST PAYMENT: 10/28/67

STATUS: CURRENT

The statements show current action and credit charges, terms, and accumulated arrears and give clear instructions to bring the statements in when making payments. The attached stubs virtually eliminate mispostings.

payment, terms, and other desired information will be forthcoming instantly upon typing the number on the teletype machine. This information is available at remarkably low additional cost. In the interim, however, we have taken the calculated risk of working without ledger cards. We have the previous month's statement. Where necessary we can scan the current month's transaction lists for more recent events. This is not as hard as it sounds. Early in the month there are few lists. In the later days the customer can help by giving dates from payment receipts or from memory. Since the number of accounts involved during the first six months (spring and summer) is relatively small, we have lived with the problem, knowing that for extra money we could, if necessary, receive a daily or weekly print-out of every balance.

The greatest assistance to the credit department, however, comes from the twice-a-month automatic dunning procedure. The computer scans the *non*-delinquent accounts (the delinquent accounts are presumably being handled manually) for signs of incipient delinquency—accounts with no action for 10 days or more—and prepares dunning or reminder notices which differ according to the length of time and the amount of the balances. These notices are pre-inserted in envelopes and come off the computer ready to mail. This saves much work in the credit and typing departments and helps prevent month-end delinquency.

Security measures

As a precaution against disaster, the service bureau furnishes to the client a magnetic tape at the end of each month's run containing all of the pertinent details of the customer files. From this the file could be reconstructed by updating with the current month's punched paper tape. This would be difficult and costly, but the availability of the tape ensures at least that the information is not lost and can be retrieved if needed. The client has also in its vault a copy of the programs used, to assist in disaster rehabilitation if needed.

Economic considerations

By the time the system is fully converted (an eighteen-month process at the rate we are phasing in) we expect to show sufficient saving to pay about two-thirds of the cost of the new system, plus considerable increased income. We are showing unexpectedly good response to the circulars included in the monthly statement mailing and good customer reaction to the whole system. In addition, we shall have the teletype capability to enable us to attack the next problem, inventory, also on a real time basis.