John Griffith

PRODUCT PLANNING & MARKET ANALYSIS DIVISION

BM

MEETING OR CONTACT REPORT

70-6076-0

Project:	Magnetic Tape Systems	Date of Report: 11-19-56		
Purpose of Meeting or Contact:		Date of Meeting or Contact:		
	To define the need for input to a computer without requiring the use of punched cards in relation to the	Reported by:	P. R. Mort	
development of a typewriter to magnetic tape device	Dept.:	749		
Place of Meeting or Contact:		Follow-up Date:		
WHQ Phone Other: Lever House		ASAP		

List Personnel Participating
Give Report (including next action)
Indicate Distribution

Mr. I. S. Homans, Jr. - Manager, Life Insurance Dept. Mr. S. S. Closman - Data Processing Systems Planning Mr. P. R. Mort - Data Processing Systems Planning

The need in processing for life insurance.

- 1. 5 to 10% of the input in a life insurance application can be classified as new business or changes to old business. This portion of the application constitutes the problem.
- 2. Present techniques require the punching of five 80 column cards for each new policy. Each of the five cards contains 10 to 12 columns of identifying information which after the first card serves only to identify the card. Hence, cards are a disadvantage because they require extra keypunching and handling.
- 3. The utilization of cards to any degree of efficiency requires job lot batching techniques. Mr. Homans believes that more efficient operation could be attained by using a more flexible module than the 80 column card since every new policy requires multiple cards.
- 4. The Remington Rand Unityper has had considerable success at the Franklin Life Insurance Company and the whole industry seems to feel that eliminating the punched card for the input of new business is a step forward.

Overall Problem and Solution.

The overall problem is obtaining a means for entering information to a system on an in-line basis. In this instance the need is aggravated by the fact that the 80 column card is not large enough to contain the records necessary in connection with one insurance policy.

The solution to the problem must have the following:

- 1. A truly flexible machine such as magnetic tape or paper tape or both must be used to allow processing each policy as a block rather than a number of cards.
- 2. The ability to verify the information and eliminate human error is essential.
- 3. The device or devices must have reliability in the absolute sense.

If reliability cannot be obtained by original design plus proper preventative maintenance procedures, checking facilities must be made available in the equipment.

4. Cost is always a consideration.

A specific solution:

The solution to the problem discussed in this meeting would be the development of a device similar to the Remington Rand Unityper which would permit direct typewriter to magnetic tape operation.

A typewriter to magnetic tape device should have the following general characteristics:

- 1. The magnetic tape created will be usable in a 727 drive for input to the computer system. OR
- 2. The magnetic tape will advance one character for each key stroke. The density on tape should approach 200 characters per inch. It may be less. ok
- 3. The device should produce check bits both vertical and longitudinal on tape for use when the tape is entered into the computer.
- 4. A control key must be provided to produce an interrecord gap on tape.
- 5. Single character correction is almost essential. 6k
- 6. The most desirable verification device would be one in which the tape is compared character by character by an operator rekeying the information.
- 7. There are a number of detailed specifications which would have to be set up when the basic development proposal is made.

Paper Tape (not specifically covered by this meeting)

A possible alternative solution to the problem lies in the use of an operation first requiring the creation of a paper tape, direct entry of paper tape to the computer, or conversion of the paper tape to magnetic tape.

The chief advantages of this operation would be:

- A device for conversion of paper tape to magnetic tape is already being planned and should constitute a simpler development program.
- 2. Since the components of this system are being developed for other purposes, they should eventually be available to the insurance industry

The disadvantages of this system appear to be:

- 1. Perhaps an unnecessary step is being introduced in the utilization of paper tape for this application. The result of introducing such a step will tend to create:
 - a. greater customer cost in handling and rental.
 - b. increase the probability of error.
 - c. increase the batch processing steps.

These disadvantages may be negligable in comparison to the advantages in attaining a good overall development program and less product diversification.

Future Action:

A thorough investigation must be made by Product Planning to establish the development necessary and to determine the characteristics of a typewriter magnetic tape device.

Since the areas overlap in many aspects, coordination must be maintained with Product Planning activity in paper tape to magnetic tape conversion.

There is certainly a solution which represents a good planning goal which will at the same time be an excellent answer to the basic problem in the insurance field which is particularly urgent due to competitive activity.

PRM:pw

Paul R. Mort

cc: Mr. S. S. Closman, WHQ

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