



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

DATA PROCESSING ALTERNATIVES FOR INDEPENDENT GROCERS

by

Bob L. Gowens
Senior Vice President
Randall's Food Markets Inc.

When examining data processing alternatives, the retail grocer has at least five alternatives:

1. Do all data processing with pencil and paper.
2. Have his wholesaler's retail accounting department handle it.
3. Use an independent data processing service bureau.
4. Purchase or lease his own or time on data processing equipment.
5. He may choose a combination approach.

The question, as in so many things, is: What is the proper mix?, because a combination of the approaches above is usually in order. The purpose of this paper is to examine the selection process as it relates to these alternatives. Further, this discussion will be directed toward how one Company - Randall's Food Markets of Houston, Texas - is satisfying its data processing needs.

The choice of a data processing method is a difficult one. Some of the factors that must be considered are:

1. The actual direct cost to perform each function needed.

2. Timing requirements for data processing reporting.

3. The personal preference of the retail grocer toward independence.

The direct cost issue includes the following items:

1. What is the cost of equipment to be used? Pencil and paper or a mega computer?
2. What is the cost of personnel required to operate the equipment?
3. What is the cost of maintaining the system - people and employee benefits vs. the maintenance contract?
4. What is the cost of setting up each phase of data processing procedure - training of employees vs. programming a computer?
5. What is the cost to turn back or when will the equipment be out of date?

For many years business consultants and accountants have known the principles of cost justification of computers. While these principles have not changed, the facts have changed dramatically in the past few years. Mini and micro computers have made the computer available

to anyone who wants one. These small computers have operating cores with more capacity than even the largest computers of twenty years ago. They are easier to program and operate than the monsters of previous years. The problem is I/O (Input/Output) capacity. The larger mini computers have expanded data storage capacities but many still are bound by relatively slow input methods or slow printers. I believe that the small retail grocer can easily purchase and use a small mini computer today with few problems; but, let him beware he must be sure the volume capacity of his computer is adequate. How many hours will the computer take to print the payroll checks, for example? The problem I have always had with mini computers at Randall's is that by the time the mini is "beefed up" to be adequate for my volume of data processing needs, the hardware cost alone was greater than some other alternatives.

A very good aspect of the modern computer is ease of programming. I wrote my first program in 1965 and things were a lot different then. Today almost anyone can learn to program and operate a computer. My secretary of a few years back now runs our Data Processing Department, for example.

One aspect of data processing cost which must be remembered is the cost of program development. This is the most difficult to estimate because sometimes "bugs" will not go away without a fight. The thing to remember is that the program is not free. Some people say, "I programmed my computer myself and it didn't cost me anything." Yes it did have a cost - it took a lot of valuable time! What is the cost of management's time?

The final thing I want to say about costing is don't forget to examine the cost of turning back or stepping up. Sometimes it's a big step.

In times past, the direct cost issue was the one which received the most attention because the cost was so large. Mini and micro processors now allow us to turn our attention to other less quantifiable questions. What is the value of receiving a financial statement five to seven working days after the end of an accounting period instead of waiting four to six weeks for outsiders to do the work? I think we can all agree prompt reports have value. Wholesale grocers' retail accounting departments have many quarterly statements to put out basically at the same time; therefore, the process takes several weeks.

Usually when all hard costs are examined, the retail accounting approach is considerably less expensive than any other alternative, especially the one- or two-store operation. Even so, a one- or two-store operation may choose a mini computer because he feels the need for faster reporting or possibly more independence.

Randall's has selected a mixed approach to data processing using some handwritten reporting, some reporting from an inhouse mini computer, with the balance of reporting and data processing done by an independent service bureau. Inhouse Randall's has selected a mini computer system for data entry and minor job processing that has a 600 line-per-minute printer and will support 16 key stations. We are presently using eight key stations.

The following applications are run by our service bureau:

1. Payroll and employment records.
2. Accounts payable - this is a pay-by-invoice accounts payable system.
3. General ledger posting and financial statement preparation.

4. Hosting Randall's seven scanning systems.
5. Consolidation of product transfer, cash receipts, cash disbursements standard journal entries.

Minor applications performed on the inhouse mini computer are:

1. Group insurance premium calculation for 650 employees.
2. Analysis of payroll records for employees paid above or below the scale.
3. Analysis of payroll records to determine those employees eligible for a rate of pay increment.
4. Calculation of our monthly Workmen's Compensation insurance premium.
5. Complete index of the corporate files. All files are indexed numerically.

6. New item input for the scanning system.
7. A Direct Store Delivery price book sorted by vendor. This book has about 8,000 items in it.
8. Analysis of payroll records to determine persons eligible for Randall's retirement plan.
9. Automatic ad input into scanning system.

This list includes most of the applications we have on computer now. The applications which can be done are limited only by one's imagination. The usefulness of applications are determined by economics.
