

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.

UNIFORM COMMUNICATIONS SYSTEM: AN UPDATE

by

James Muenz, Corporate Director Management Information Systems Kraft Corporation Chicago, Illinois

Uniform Communications System: Launching a major industry effort--

- -- Six industry trade groups are involved!
- -- There's a role for every company.
- -- Computerized food orders may save industry \$300 MM!

Those headlines began to hit the news media in 1981...with more headlines to follow:

- -- UCS promises industry-wide gains!
- -- Pilot firms to start testing
 system;
- -- Most in UCS pilot program starting to exchange data!

UCS for buyers, brokers and manufacturers--

- -- Computer-to-computer system to replace manual and paper based information between grocery manufacturers, distributors and brokers.
- -- Convinced of soundness of UCS, the Joint Industry Committee devised a strategy to develop and implement a system.

Now with all this publicity over the past two years, you may have been wondering just what is UCS and how does it work. This morning, I'll fill you in on a brief history of the project, how it works in an operating environment, potential benefits and its current status.

UCS is more formally identified as the Uniform Communications Standards for the Grocery Industry. Its purpose is to apply the latest computer and communications technology to assist in the administrative process of order handling, invoicing, and related tasks.

Although discussed for many years, UCS actually began in 1976 with the official formation of a Joint Industry Committee representing six trade associations. These associations include:

- NAWGA The National Wholesale Grocers Association
- NFBA The National Food Brokers
 Association
- GMA The Grocery Manufacturers of America
- FMI The Food Marketing Institute
 and
- CFDA and NARGUS, which subsequently merged to form
- NGA The National Grocers Association.

This Joint Committee began with a relatively simple objective—"To examine the most suitable and economical means of improving routine business transactions between grocery manufacturers,

distributors, and brokers." The details of these objectives were reviewed for legal and public policy issues; they were then refined and used to obtain proposals from various consulting firms to perform a feasibility study.

In October of 1978, the consulting firm of Arthur D. Little was engaged to conduct the feasibility study. The study was completed and a report was published in April of 1980. This study, involving a large cross-section of companies in the industry, concluded that the project was both technically and economically feasible and would serve to improve productivity in the administrative areas of order and invoice handling.

These were some of the manufacturers most heavily involved during that phase of the project. The brokers... and the distributors. In addition to these manufacturer, broker, and distributor companies who were directly involved, many other companies participated through mail and telephone surveys.

Now, let's look briefly at some of the highlights of that feasibility report. First, it was determined that in order to achieve the objectives, an electronic data interchange is needed to communicate transaction data between companies...and that each industry segment would benefit from such a system. Direct savings alone represent over \$85 MM and are equally available for distributors, brokers, and manufacturers. That indirect benefits will take longer to achieve, but will utlimately exceed direct benefits. These benefits are more dependent on how effectively individual firms act to seize them.

The consultants estimated that 50% of the total grocery industry transactions could be represented by companies joining UCS during the first five years of implementation...and that with 50% of the volume on UCS, total direct and

indirect benefits would exceed \$300 million annually for the grocery industry. The study further reported that these savings could be achieved without major capital investment and that industry-wide message standards were the key to getting UCS started.

The report concluded that the critical next step for the industry was to undertake a program directed toward developing, testing and demonstrating the use of message standards.

Touche Ross & Co. was engaged to perform the second phase of the system which developed the UCS standards. This phase becan in October of 1980 and concluded in the summer of 1981, with publication of draft standards. A field review of these standards was conducted by an extended group of over 100 companies within the grocery industry and uncovered no significant problems. This success is attributed to the fact that the standards were developed by a team of highly qualified volunteer representatives from within the grocery industry itself and are tailored specifically for our needs.

The standards themselves, however, are based on a format developed by the transportation industry under the guidance of the Transportation Data Coordinating Committee, also known as TDCC. Because of this, UCS participants will be closely compatible to the message formats used by carriers for communicating shipment and freight bill information. I might add that other industries are following our lead and developing standards based on UCS and the TDCC format, For example, the WINS system, Warehouse Information Network Standards, is currently in development for use by public warehouses and will be 100% compatible with UCS.

Phase Three of the UCS effort, pilot implementation, was managed by TDCC and they will continue to provide ongoing technical assistance as we add new companies and develop additional message standards. Thirteen companies were selected to participate in the pilot phase which began in July, 1981. Their

purpose was to establish the validity of the standards by testing the purchase order and invoice messages.

These companies were initially paired as follows:

- -- Kraft was paired with Safeway Stores, Incorporated.
- -- Chesebrough Ponds used RMI sales brokers to link up with Giant Food, Incorporated.
- -- Dow Chemical Company, using Sales Force Companies, Incorporated, communicated with Super Valu Stores.
- -- Nabisco was paired with Giant Food.
- -- Procter & Gamble with Wetterau, Incorporated.
- -- and Quaker Oats was initially paired with Ralphs Grocery out on the West Coast.

The pilot implementation phase was completed on schedule in June of last year. All companies had at that time successfully communicated purchase orders and invoices computer-to-computer using UCS standards. Since then, these companies have expanded their implementation to include communication with other companies in the pilot and have also expanded to new start-up companies.

With that as a history of UCS, perhaps I should slow down a bit and summarize this part of my talk by answering some typical questions.

Once again, what is UCS? It is simply a set of standards for communicating information within the grocery industry—a common language, if you will, that computers understand—and will enable information to be communicated more efficiently between companies in the grocery industry.

What data will be transmitted? The current standards call for the transmission of; purchase orders, shipment advices, receiving advices, invoices, payment adjustment advices, remittance advices, price lists, promotion announcements and associated adjustments to each. The pilot test concentrated first only on the purchase order and the invoice.

And perhaps of most concern: Will participating companies need to reprogram their current system for purchasing or order processing? The answer is:

Probably not. UCS has been designed as an interfact between companies for communicating information.

It's important to remember, UCS <u>is a standard</u>, it is not a system. It will not prepare purchase orders, not will it process orders, produce price lists, invoices or anything else. Now, this may surprise some of you. If UCS is not a system and it doesn't do these functions, once again, what is UCS? UCS is nothing more or less than a set of industry standards for communicating information between companies within the grocery industry, using modern computer and communications technology.

Next question: If UCS is only a standard for communicating information—how will it affect the way we conduct business and, more importantly, how do we get the benefits claimed in the feasibility report?

That brings me to the next part of my talk this morning: How does UCS work?
Let's discuss that now.

Remember--UCS addresses the administrative ordering and invoicing process—not the buying and selling process in which the sales representative presents his or her products and programs to the buyer. That interface will not change because it calls for the kind of information exchange and decision making only people can do. UCS only records and communicates these decisions.

Ordering is done in different ways today, depending on customer operations, location, size, and so forth. Under UCS, there will still be different buying and selling methods, but each will be streamlined and the administrative work reduced. Let's take a representative look at just one of these methods—both before and after UCS.

We will begin with the buyer and sales rep reviewing information about advertising, product features and other special promotional programs. The buyer might then develop his merchandising and special ordering plan for input into his computer system. This information, along with current inventory positions and movement projections, will be used to produce the purchase order. Where distributors do not have automated ordering systems, the purchase order is keyed into the computer at this time.

After the final order is printed from the distributor's computer, it is either telephoned, mailed or handed directly to a representative of the manufacturer. The order is then usually re-copied onto the manufacturer's order form or, in some cases, may be entered into a broker's computer. Then, it may once again be mailed, telephoned, or carried to an accounting office for entry into the manufacturer's computer.

Let's stop now for a moment and see what changes might occur in this process if UCS were used. First, the process of reviewing advertising and promotion plans will not change-although some preliminary information will have been made available through the UCS transmission of price lists and promotion announcements. The buyer will still prepare merchandising and special ordering plans for entry into his computer. Once the final purchase order is approved and is stored in the distributor's computer, either through an automated system or manually, UCS will now come into play.

The distributor will no longer need to mail, telephone, or hand carry the final purchase order to the manufacturer's representative. And, the manufacturer's representative will no longer need to copy the order onto the manufacturer's order forms. Nor will it need to be entered into his computer. The order will be transmitted from the distributor's computer, through UCS, directly into the manufacturer's computer. Each company has their own way of processing orders, and this need not change. However, it is advisable to have the sales rep review the order before it is released for shipment.

Administrative messages, adjustments, shipment advices and other related communications will all pass back and forth through the Uniform Communications System, thereby avoiding costly, time consuming and sometimes confusing telephone conversations between the two companies. In addition to streamlining order entry and tracking, the invoicing function can also be done more efficiently and with less time involved.

Now, let's look at invoicing as it is done today and how it would change under UCS. After the shipment is made in today's system, the order is released and an invoice is printed on the manufacturer's computer. This invoice is then sorted and stuffed into an envelope and is mailed to the customer with all the costs and delays associated with the U.S. Postal system.

The UCS will permit the communication of the invoice directly to the customer without printing, manual handling, or costly mailing. And, just as the manufacturer and broker avoided the handling and entry of the order into their computers, the distributor can avoid the handling and entry of the invoice into his computer for reconciliation and payment.

So, as you can see, the Uniform Communications Standards will assist in the handling of orders, invoices, and related tasks, and will reduce direct administrative costs and improve productivity in this critical area of our business. At the same time, it will preserve the important personal relationships between the buyer and the sales rep.

Before closing today, let me relate to you a little more specifically some of Kraft's experience with UCS.

We began implementation of UCS into our order processing and invoice system as one of the original thirteen pilot companies in 1981. Kraft, with our computer located in Glenview, Illinois, was initially paired with Safeway Stores, Inc. whose main computer is located in Oakland, California. Our initial test was in Dallas with Safeway's Dallas Division and Kraft's local sales district. This system went operational on December 1, 1981. We added Safeway's Oklahoma City Division in February of 1982 and Houston in March.

Having gained confidence with these three locations, we began to roll the system out into implementation groups of multiple locations with the last of Safeway's 20 divisions going live in July. In the meantime, in June we began communicating with our second partner, Ralphs Grocery.

At this time, all pilot companies were communicating computer-to-computer with their designated partners and most

companies had expanded their implementation to include multiple partners. Having found no conceptual problems with the standards UCS was announced to the industry at an orientation meeting in Washington, DC in August of last year. This was followed by the start up of the first training session for new companies last October.

In the meantime, Kraft continued our implementation of UCS with other pilot companies...adding Giant Food in July of last year and Super Valu Stores in November. I'm very happy to report that in April of this year we cut over live with our first non-pilot partner, Certified Grocers of California. There are now 45 companies involved in UCS, either actively communicating in production, testing or preparing for UCS.

Obvious by the aggressive implementation programs of all current UCS participants, we believe that the benefits outlined in the A. D. Little feasibility report are real and will offer substantial productivity improvement in the ordering and invoicing process.