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Electronic Marketing What, How and Why

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One of the "hot" topics in agricultural circles is electronic or computer marketing. It has been touted as the wave of the future and criticized as unworkable. An objective evaluation of a marketing method using new technology requires an understanding of what is involved, how it operates and why it is being considered. Those are the purposes of this publication. This publication does the following:

- 1. Describes electronic marketing systems.
- 2. Discusses potential benefits of computer auctions to sellers and buyers.
- 3. Outlines the necessary conditions for successful computer auctions.
- 4. Summarizes some of the experience in marketing agricultural commodities using electronic media.

While this publication focuses on selling feeder cattle, many of the points discussed also apply to other agricultural and nonagricultural products.

What Is Electronic Marketing?

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Electronic marketing involves communication between seller and buyer (or their agents) by nearinstantaneous media. This transmission of information may be by telephone, television or computer. Buyers and sellers, therefore, need not be at a single location in order to transact business. Further, the commodity being traded need not be inspected by the buyers, provided it is described with enough completeness and accuracy to determine its value. Thus, electronic marketing provides a mechanism for marketing products by description with near-instantaneous communication between sellers and buyers, regardless of the physical location of both people and products.

Teletype auctions for slaughter hogs were initiated in Canada in 1961. Teleauctions for feeder lamb sales began in Idaho in 1974. Today, electronic marketing uses telephones, television, computers or a combination for transmitting information. The most frequently used systems are teleauction, video auction and computer auction.

Teleauction — This marketing method involves:

- 1. Circulating to potential buyers a description of the products offered for sale, including weighing and delivery terms.
- 2. Setting up a conference phone call connecting potential buyers and an auctioneer.
- 3. Offering each lot for sale successively by the auctioneer with competitive bidding by the buyers, who are identified by number.

A lot is sold when no higher bid is received, unless the seller's minimum price is not reached in which case a "no-sale" results. The sale is over when all consignments have been offered.

Video-auction — This method entails producing a videotape of the animals or other products being sold. Then, after buyers have received written descriptions, the auction is held. The sale is conducted with all buyers assembled in one room, with the video screen replacing the animals in the auction ring. A variation would involve buyers viewing the videotapes from separate locations on closed circuit television and bidding by telephone auction.

Computer Auction — Computer auctions replace the conference telephone call and auctioneer with electronic computers. Again, products are described before the sale with the descriptions transmitted by computer. The sale is conducted with the computer identifying by number the lot being offered. An offering price is typed by a printer or displayed on a TV (video) monitor. This offering price may drop for cattle, for example, by 50 cents per cwt every 20 seconds until a buyer activates the bid key on his computer terminal. He then has the bid. If another

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buyer wishes to raise the bid, he pushes his bid key (cattle bids are usually in increments of 25 cents per cwt). When a higher bid is not entered within the 20second interval, the lot is declared sold, unless a seller-set minimum price has not been reached. The computer records the identity of the buyer and informs him of the specifics of his purchase. Buyers are not identified to other bidders. (The numbers price and time intervals — cited here are for illustration only; the system can be set up to use any price and time intervals.)

How Is an Electronic Computer Marketing System Organized?

Any market requires (1) sellers, (2) buyers, (3) the means of bringing buyers and sellers together and (4) the means of transferring the product to the buyer and the payment to the seller. In electronic computer marketing, buyers and sellers communicate through computer hookups. A marketing agency is responsible for soliciting consignments, grading and describing the product, specifying terms of trade (weighing, delivery time and place), collecting and disbursing payment.

A possible model for a feeder cattle computer marketing system might be:

- 1. Producers: consign cattle to ...
- 2. Local Producer Marketing Association: provides certified scales, assembly and loading facilities and contracts with...
- 3. **Regional Livestock Marketing Agency**: responsible for grading, descriptions, terms of trade, collections and payments, buyer awareness, sale times and contracts with...
- 4. Computer Services Organization: furnishes computer hardware and software to conduct sale in which...
- 5. **Buyers**: purchase cattle and arrange for trucking (buyers may elect to use their own computer terminals).

Refinements and additional services can be built into the system. Some of these might be producer product promotion, market news and buyer promotion.

What Are the Potential Benefits Of Computer Marketing?

Several characteristics of computer-operated, sale-by-description marketing can be advantageous to sellers and buyers. Table 1 summarizes these for marketing feeder cattle.

Some real or potential disadvantages to computer auctions exist, however. For sellers, these include:

- 1. Cattle must be sold in truckload lots (about 50,000 pounds).
- 2. The explicit marketing costs may be higher than for other selling methods.
- 3. No more or even less competition may occur if buyers do not respond.
- 4. Sale volume may be too low to attract buyers and sellers.
- 5. Newness of the system precludes a predictable and reliable outcome.

Buyers may believe the sale volume is too low to afford adequate selection, the weigh-up and shrinkage terms favor the seller, and the system is too new to be predictable. Also, they may object to a no-sale option by the seller.

What Is Needed To Carry Out Computer Marketing?

This section addresses important considerations in organizing and operating a computerized auction marketing system. These considerations include: (1) cost and risk, (2) education and acceptability, (3) terms of trade and (4) some precautions.

Cost and Risk — A major cost and risk for a new technology is that of invention and adaptation. In

Table 1. Characteristics and advantages of marketing feeder cattle by computer auction.

Characteristic	Seller advantage	Buyer advantage
One owner (single brand) animals, not moved before sale	 Price known before cattle moved Less handling stress 	 Cattle of known origin, background Fresher cattle Less disease exposure
Large numbers of uniform lots of animals offered at each sale from multiple owners	• Cattle graded and sorted into most attractive packages	 Greater selection Truckload sale lots Less time and travel required
Potentially more buyers	• More competition	• All buyers have equal market access
Weighing, delivery conditions	• More tailored to seller's operation	• More flexibility for buyer
Market agency guarantees contract	• Seller guaranteed payment	• Buyer guaranteed terms of trade (weighing, shrinkage, delivery date)
Improved market information	Better knowledge of volume, prices, sales University of Idaho Library	• Better knowledge of volume, prices, sales



the case of computerized auctions, the computer hardware and software are now available and ready for implementation. The operating costs have not been fully documented. It is known, however, that costs are prohibitively high for low volume systems since many costs (salaries, for example) are fixed. With large volume, costs are probably comparable with other selling methods and perhaps lower when all costs of traditional marketing methods are included (buyer and seller time and travel, transportation, product deterioration).

While too little experience has been acquired to determine the number of animals needed for economical operation of a computer auction, one marketing agency official has suggested 500 head per sale as a minimum volume for a feeder cattle auction. This, however, is an advisory figure only. A cost that often is not recognized is the displacement of previously used systems, such as the facilities and workers not required by the new system. Displacement costs will differ with each market or community.

Education and Acceptability — Almost every new technology or method of operation requires some new knowledge or skills for users and an acceptance of change for those affected by it. In setting up a computer auction system, the affected persons and institutions must be involved early in the discussion and planning process. This should include invitations to existing marketing personnel to join in the discussion (some will, others will not). All (buyers, sellers, marketing agents) should attempt to learn the possibilities, requirements and limitations of the new system.

User acceptance of computer marketing depends on overcoming a widespread lack of understanding and mistrust of computers and on gaining confidence in trading by description. These impersonal aspects of computer auctions are big hurdles in livestock marketing where personal contacts with people and animals have strong social and psychological attraction.

Terms of Trade — The integrity of a marketing system depends on the terms of trade or agreements between sellers and buyers. When trading by description with remote bidding, the terms of trade must be accurate, complete and meaningful. Feeder cattle descriptions should include:

- 1. Statistical Specifications: breed(s), sex (lot should be one sex), number (truckload lots of about 50,000 pounds), average weight and weight range, price discounts, sorting or "cut-outs."
- Grade(s): USDA feeder cattle grading factors (frame — large, medium, small; thickness — 1, 2, 3) with perhaps regional terminology such as Okie #1, and the grader's name.

- 3. Weighing conditions: time and place and pencil shrink, if any.
- 4. Delivery conditions: time and place.
- 5. Performance Guarantees: delivery of cattle, payment, penalties for nonperformance.
- 6. Comments: Cattle background, pasture, treatments, etc.

Fig. 1 on the next page is a facsimile copy of a lot of feeder cattle described by the Texas Livestock Marketing Association for their computer auction.

Some Precautions — A successful computerized auction marketing system must:

- 1. Accommodate the needs of buyers and sellers.
- 2. Solve a marketing problem perceived by participants.
- 3. Minimize the disruption of existing trading practices.
- 4. Avoid overbuilding and be as simple as possible, seeking to have sufficient volume to hold costs per head down.
- 5. Encourage buyers from outside the area to participate in the sales.
- 6. Show patience and have staying power.
- 7. Not judge results on the first sale only.

In summary, producers and buyers must realize the need for a new marketing program. The organization and management must be reliable and honest. The grading system and other terms of trade must be acceptable to both buyers and producers.

What Is the Experience With Electronic Marketing In Agriculture?

The scorecard on electronic marketing of agricultural products is still out. Telephone auctions have been operating for more than a decade. Video auctions have been used for several years also, most often for special sales. Computer auctions are most recent. Some have remained in operation, and others have been discontinued.

The USDA Agricultural Marketing Service sponsored five demonstration projects in computerized marketing in the early 1980s — feeder cattle, slaughter cattle, slaughter hogs, meat and eggs. Only one has evolved into a commercialized operation — NEMA (National Electronic Marketing Association). The general conclusions of the AMS projects were:

- 1. They were successful from a technical standpoint.
- 2. They demonstrated the necessity for high volume to be economically feasible.
- 3. They did not attract sufficient producer and buyer interest to be continued by private firms.

Fig. 1. Facsimile copy of feeder cattle description, Texas Livestock Marketing Association.

LOT NUMBER 79 DESCRIPTION OF CATTLE: 170 1 1/2 OKIES & FEW CB STEERS, YEARLINGS HORNS: MULEY-DEHORN-TIPPED 30 % ANGUS, 10 % BRAHMAN CROSS, 15 % CHAROLAIS CROSS, 30 % HEREFORD, 15 % BLACK WHT. FACE BRANDS: PRICE:			
VISIA GRADES ESTIMATED WEIGHTS FLESH CONDITION 90 M1 610 LB AVERAGE STOCKER 10 S1 500- 650 WT RANGE 103700 LB TOTAL			
FEEDING: NOT PRE-SORTED IN WEIGHT - 395 LB # DAYS ON FEED - 180 FEEDING PROGRAM: NATIVE PASTURE TERMS OF SALE: DELIVERY DATE: 7/15 - 7/22/83 WEIGHED AT: CRESSON, TX WEIGHING CONDITIONS: EARLY MORNING GATHER W/O FEED OR WATER, DRIVE 2 MILES TO RANCH SCALES & WEIGH WITH A 1.5% SHRINK. BEENT INFORMATION:			
AGENCY: TEXAS LIVESTOCK MKT ASSOC. TEL: 800 772-8590 DESCRIBED BY: ROGER SMITH DATE DESCRIBED: 07/12/83 CONSIGNOR: ADDRESS:			
COMMENTS: THESE CATTLE WINTERED HARD ON NATIVE PASTURE & ARE JUST NOW STARTING TO GAIN. 170 HEAD TO BE CUT OUT OF 200. BUYER CAN CUT FROM EITHER END OR A FEW LIGHTS + A FEW FLESHIER HEAVY YRLGS-WILL SHAPE TO A FAIRLY UNIFORM SET-READY TO TURN OUT-CATTLE WOULD PROBABLY NEED WORMING AGAIN BEFORE TURNING OUT. NO PRICE S LIDE.			
THIS DOCUMENT CONFIRMS THE TERMS ENTERED INTO BETWEEN THE SAID SELLER AND BUYER ON THIS DATE. THE TEXAS LIVESTOCK MARKETING ASSOCIATION ENTERS INTO THIS AGREEMENT AS AN AGENT AND WILL MAKE REASONABLE EFFORT TO SEE THAT THE TERMS OF THIS AGREEMENT ARE PERFORMED, BUT SHALL HAVE NO LIABILITY ON ACCOUNT OF FAILURE OF EITHER PARTY TO PERFORM IN ACCORDANCE WITH THIS AGREEMENT			
SELLER DATE BUYER DATE			

Cost figures for computer marketing are scarce and tentative, since most of the experience has been experimental and short term. A study in southwest Georgia estimated the cost for selling slaughter hogs to be \$1.16 to \$1.44 per head and for feeder cattle \$4.63 to \$6.84 per head. The study assumed that 15% of the area's sales would be by computer (90,000 hogs, 17,250 cattle).

The Eastern Lamb Producers Cooperative computer sales of slaughter lambs cost producers \$1.50 per head. Sales were from six states for the 1980-81 marketing season.

Currently, the Ontario (Canada) Livestock Exchange is charging \$5.00 per head for selling slaughter cattle by computer. The Texas Livestock Marketing Association has a 1 percent commission for feeder cattle sold, with a \$2.00 per head (\$250.00 maximum per consignor) fee assessed for cattle "nosaled." The Mississippi Livestock Producers Association charges 3½ percent commission for sales of feeder cattle and \$1.00 per head pass-up fee if the owner rejects the high bid. Producers Commission Association, Sioux City, Iowa, will charge 35 cents per cwt for selling slaughter hogs in full-load (200 head) lots and 50 cents per cwt for less than full loads from one shipping point.

At the time this publication was prepared (September 1983), the following computer livestock auctions were known to be operating:

- Ontario (Canada) Livestock Exchange slaughter cattle.
- Mississippi Livestock Producers Association, Jackson — feeder cattle.
- Texas Livestock Marketing Association, Fort Worth — feeder cattle.
- Equity Cooperative Livestock Sales Association, Baraboo, Wisconsin — slaughter lambs.
- Eastern Lamb Producers Cooperative, Blacksburg, Virginia — slaughter lambs.

Also, Producers Livestock Marketing Association, Salt Lake City, is planning to begin a computer auction for slaughter lambs. Also, associations in seven midwestern states have recently started or are planning computer hog sales.