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IMPROVING LOCAL ELEVATOR OPERATIONS

Summary of remarks by W. S. Farris, Purdue University at
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at Springfield, Illinois, November 18, 1958

What can be improved about local elevator and feed mill operation? The local manager is faced with several problems of operation which effect the profitability of his business. Among these are:

1. The use of outmoded facilities
2. The seasonality of his business
3. Technological advancements in agriculture
4. The changing character of management decision making

It is a comparatively easy job to design new facilities for efficiency of operation. It is more difficult, however, to remodel old facilities and realize a better use of labor and equipment. The manager, however, should keep his facilities under a constant surveilance for opportunities of modifying his old facilities to meet the stepped up requirements of today's elevator and feed business. Those who work with the grain and feed industry can be of assistance to local managers by counseling with them as they make plans for changes. He can assist by offering suggested alternatives for changing of facilities, help gather information on the cost of such improvements, and assist in calculating the benefits to be derived from these improvements. He may be of service simply by raising questions as to the advisability of certain changes. For example, must an additional mixer be so located that the additional volume which it permits be offset by the inconvenience caused by its location?

The problem of seasonality in his business challenges the local elevator and feed mill manager to make good use of his labor during slack seasons. Most managers like to keep their key workers throughout the year because they are not easily replaced on a seasonal basis. Maintenance and repair work around the plant appear to be one of the principal methods managers use to employ workers during the slack periods. A possible way of meeting this seasonal challenge is the addition of services or lines of merchandise which do not seriously compete with the peak seasons in his regular business. Such additional items as outside feed selling and servicing, seed cleaning and treating, fertilizer sales, distributing farm chemicals and handling a complete line of farm supplies offer opportunities for increasing business volume without materially increasing the overhead or labor force.

Technological improvements in agriculture are bringing ever-increasing demands for services to the local elevator and feed mill. We have seen the harvesting of the wheat crop reduced in time span from several weeks under the old binder and thrasher method to a few days with the new self-propelled combines. We are experiencing a similar technological change in the harvesting of corn. The increased use of the picker-sheller and the corn combine are bringing additional demands upon the local elevator for faster handling of the corn crop, increased storage facilities, and increased drying facilites. New developments in livestock feeding emphasize the problem of mixing feed with minute amounts of additives and medical ingredients which need to be almost perfectly distributed through the feed. The exacting requirements for getting the maximum rate of growth in different types of livestock require the feed mill manager to keep abreast of the very latest information in feed formulation. The addition of such ingredients as molasses, fat, and phosphoric acid to feed necessitate that the feed mill have the proper equipment and sufficient knowledge for handling these ingredients and incorporating them into the feed mix satisfactorily.

Managerial problems themselves come with an ever-increasing tempo. The manager finds that he must supervise personnel with higher degrees of skill. He must provide facilities and arrange work methods that will efficiently utilize this higher price labor and competition dictates that he needs to be an astute student of the business scene, especially in his buying and selling practices. Assisting the manager in making the best use of his time as a manager is a real service to him.

Another way in which important assistance can be rendered to local managers and feed mills in improving their operations is to assist them in taking an inventory of present work allocations and methods. In many instances simply finding out how they do it will be suggestive of methods of improvement. (See Purdue Bulletin 639 for details on a study of this kind.) Two major categories of improvements may result from a study of the time required for the different operations throughout the day and the methods employed in these operations. One of these improvements is that delay time can be identified and this otherwise idle time put into productive use. The other is that a matching of the time required and the methods used for certain operations may suggest short cuts that will reduce the amount of time required per unit and result in an improvement in labor efficiency. Here are some examples of improvements that have been developed as a result of study of work times and methods.

1. Bolting a small tab of belting material on the approach side of the cradle hoist reduced the time for adjusting the cradle hoist by 30 seconds.

2. Substituting a cradle hoist for individual wheel hooks reduced the time for this work element from 2.45 man-minutes to 1.65 man-minutes per customer.

3. Providing a box for discarding tags and strings from supplement sacks near the feed mixer saved 20 seconds and 20 steps per bag at one installation.

4. Storing the supplement near the mixer cut the time for moving the supplement to the mixer by about 50% in several elevators.

5. Handling feed in bulk instead of in sacks reduced the handling time per ton from 12 minutes to 4 minutes.

6. The use of an automatic scale cut weighing and recording time by 1/3.

7. Dumps large enough to match grinding and mixing equipment can speed up the receiving and dumping operation.

8. Remote control screen changing was done in one-fifth the time required for a man to go to the basement and change grinding screens manually.

A new method of handling the feed grinding and mixing business which has gained considerable attention recently is the grain bank. The grain bank is an arrangement whereby the farmer stores corn with the local feed mill to be later withdrawn in the form of mixed feed. Many variations of these grain bank arrangements exist but basically they are designed to perform at the feed mill services that were once performed by the farmer himself on the farm. The mill may arrange to haul the corn to the mill, store the corn, dry the corn, process the corn, mix with proper supplements and deliver back to the farm. Sometimes the mixed feed is delivered directly into the feeders in the feed lot. The attractive part of arrangements such as the grain bank is that it saves time for both the farmer and the feed mill manager. The farmer can haul his corn or have it hauled to the elevator at his convenience at irregular interverals. Then as he needs feed he simply makes a phone call to the feed mill specifying the number of tons, the formula and time he wants the feed delivered. On the other hand this method gives the feed mill manager some flexibility in processing the corn and the feed. Within the time the farmer allows for delivery of the feed the mill manager may be able to even out many of his rush and slack periods. The charge for thsse services can usually be priced at a level so that they will carry their own load as well as help reduce the overhead on other phases of the business. There are some problems connected with the grain bank arrangement but they can be adequately solved in most instances.

A fourth area in which we may render assistance to managers of local elevators and feed mills is that of helping the manager improve the use of his management time. One of the approaches we used to get at this problem of improving managers' time was to find out how managers actually spent their time. We studied several Indiana elevator and feed mill combinations to identify the items that claimed the managers' time between the time the business opened in the morning until it closed at night. We found that managers generally knew what they would be doing during the days routine, but that even the best of them were at a loss to supply the details. Time studies of managers' activities revealed the variety of incidents and duties that claimed the managers' time and attention during his working day. During a typical one-hour period it was found that one manager performed 27 different items of work. The manager contacted several customers, weighed four loads of feed, made out several tickets, ran three tests on grain, gave directions to help in the feed mill, answered the phone several times, described location of customer residences to feed truck drivers, and made a couple of attemps at some study and planning during this hour. Business was admittedly a little slow this day. However, it was obvious to see that with all these different items of work claiming the time of the manager he had little time for management in the sense of planning and organizing his business.

In another instance we observed that the manager took advantage of the "coffee break" period to do some good customer relations work. During this brief period when several customers were in the office, he was able to survey the conditions in the community, discuss a few recommended practices, and one specific feeding problem with this group of customers. It appeared to be appreciated by the customers,and it helped the manager to get a feel of his customers' pulse. When a manager is burdened with tasks that could with adequate planning, be delegated to others he can find more time for this kind of customer relation work.

In preparing a check list of duties for elevator and feed mill managers, we had with the help of advice from several managers, what we thought was an all-inclusive list of their activities. In our actual time studies, however, we found out that we were forced to include twenty to thirty per cent of the managers' time in a catagory labeled, "other work". This meant that even with the advice of several managers on formulating the list of jobs which they did, we found approximately a fourth of their time was claimed by unanticipated duties. Many of these duties, among which was listed burning trash and filling the soft drink machine, could easily have been done by other employees and thus saved some of the day's time for real managing.

We found that elevator and feed mill managers spent about 85 percent of their time in four types of work--office work (mostly clerical) 40 percent, handling customers 20 percent, giving instructions 16 percent, and handling tickets, orders, or statments, 9 percent. With schedules as tight as this, managers have little time to manage. Cultivating the art of delegating responsibility, studying your day's activities to see what you do and what can be eliminated, and concentrating on the most important problems rather than routine items, will gain needed management time. Time is of the essence to managers. It is their most valuable resource. Simply by taking time to think and figure, you may be able to help a manager increase his volume of business, cut his costs, improve his buying and selling practices, and help him increase his profits.