TEN LESSONS IN MARKETING—Lesson III

Transportation

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1. **The meaning and importance of transportation.** Transportation is the general term applied to the carrying of persons and goods from place to place. In our first lesson, we learned something of the extent to which specialization is carried in the modern production of goods. A moment's thought will convince you that specialization as we find it today could not exist were it not for our modern systems of transportation.

Hood River, for example, could not specialize in apples were it not for the splendid systems of railways and steamships which carry her apples to all parts of the United States and to several foreign countries. The same transportation facilities make it possible for the farmers around Eugene to specialize in products for the Eugene Fruit Growers' Association, which had gross sales amounting close to one and one half million dollars in 1930. These facilities likewise enable Tillamook county to market its [illegible] throughout the entire western section of the United States, and [illegible] Valley to sell its broccoli in the cities of the East and Middle West.

It is our transportation system also which makes it possible for each of these specialized districts to obtain the large quantities of all sorts of products which they obtain from the rest of the world.

Then, too, we must remember that more than half of the people in the United States live in cities. Cities are entirely dependent upon transportation and usually grow up in places where it is easy to have the means of transportation. Chicago, our second largest city, could not exist were it not for its water connections and the

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network of railways of which it is the center. Its inhabitants are not only dependent upon transportation for all their food, clothing, and shelter, but also for the raw materials upon which they find work in their factories.

2. **The means of transportation.** The earliest means of transporting persons and goods was on the backs of men and women. Then came various vehicles carried or drawn along rough paths or paddled over water by men and women. Animals as beasts of burden later came to relieve the human slave. Then followed the harnessing of the wind by means of sails; then the steamboat and locomotive; next electricity, with its trolley systems; and finally the gas engine with the motor vehicles and its airplane.

To illustrate the modern means of transportation, let us follow a car-load of Oregon prunes from the producer to the consumer. The fresh prunes are hauled from the orchard in Polk county to the drier commonly by motor-truck, sometimes by horses and wagon. The dried prunes are taken by truck over graveled and paved highways to the processing plant at Dallas. When processed and packed the prunes are loaded on a car at the Southern Pacific depot and transported to the Southern Pacific main lines at Salem. Here the car becomes part of a freight train going to Portland. Thence it is sent to New York City either by steam or electric railway across the continent or by steamship by way of the Panama Canal. At New York City it is taken by truck over paved streets to the wholesaler's warehouse, and by the same means is distributed to the grocers. Finally, by the grocers' motor deliveries the prunes find their way to the kitchens of the New York consumers.

Like everything else in modern industry, the means of transportation have become highly specialized. There are specially made railway cars for grain, coal, livestock, oil, and timber. Expensive refrigeration cars have been devised for the transportation of perishable products such as fruits, vegetables, and fresh meats. Special fast trains are run for the handling of fruits and meats, and for supplying our large cities with milk. There is similar specialization to meet the varied demands of the traveling public, such as the "chair car," "smoker," "pullman," "tourist sleeper," and more recently air-conditioned and stream-lined trains, making the trip from Portland to Chicago in less than 40 hours, which only a few years ago required from 60 to 72 hours. Water transportation shows about the same variety in specialization that we find on land.

In recent years the motor truck has become an important means of transportation. It can reach many places not close to railways. It enables the producer to get his products to market more quickly

than he could by rail. The products usually arrive in better shape, moreover, and there are practically no losses on the trip.

The airplane is steadily coming into more general use for transporting mail, express and passengers, with great dispatch, for long distances, including transcontinental flights.

3. **The cost of transportation.** Most of our modern transportation facilities have been developed within the past hundred years. In 1807 came the first successful steamboat; in 1825, the Erie Canal linked the Great Lakes to the Atlantic Ocean; in 1830, the opening of the Baltimore and Ohio Railroad introduced the era of the "iron horse." From these beginnings, there has developed a constant improvement in the means of transportation with a corresponding lowering of costs.

Previous to 1825, it cost $100 to send a ton of freight from Buffalo to New York. The opening of the Erie Canal brought the rate down to between $15 and $25 a ton. Today, canned goods are shipped from Corvallis, Oregon, clear across the continent to New York City in car lots at $21 a ton.

The costs of transportation depend upon a number of things. First we might mention the means used. Generally speaking, the cost of hauling a ton per mile is higher over country roads than by rail, and railway rates are higher than those by water. The cost of hauling by wagon is reduced at least one half by giving a hard smooth surface to country roads. Each increase of one per cent to the steepness of a grade adds twenty pounds to the power necessary to haul a ton. The coming of the truck and trailer have also lessened the cost of getting goods to shipping points.

Among the railroads there are great differences in efficiency depending upon the kind of track, the capacity of cars, loading and unloading facilities, and the kind of power used. The use of electricity instead of steam in places where water power is cheap also lessens the cost of getting goods to market.

There are also differences in the cost of transporting different products, due to the kind of car needed, care necessary in handling, etc. These costs are shown by the rates charged for hauling different commodities. For example, the rate on Willamette Valley hops to New York City is $2.50, on apples $1.50, and on lumber only 90 cents per hundred pounds in car-loads.

It also makes a big difference in the actual costs of transportation if cars can be hauled loaded both ways, instead of having to travel one way empty.

But after all, distance remains the principal cause of differences in the cost of transportation. This can be best understood by taking

a widely grown commodity like apples and comparing the average freight rates from different producing districts.

New York City, for example, consumes large quantities of apples shipped from all the principal producing sections. An investigation conducted in 1921 showed that the average transportation charge per bushel box on northwestern apples was $1.03, while for eastern producing sections, because of their nearness to the metropolis, the average per bushel was a trifle under 19¢. That is, it cost the northwestern producer more than five times as much as the eastern grower to get his apples to New York City. Only by heavy yields and a superior product bringing the highest prices can this handicap be overcome.

4. **The influence of transportation rates on production.** The example of the apple industry shows clearly the influence of transportation rates upon the production and marketing of farm products. Many localities are well adapted to the growing of commodities which cannot be marketed on account of the cost of transportation. Many others must carefully grade or change the form of their commodities so as to obtain greater value in smaller bulk in order to stand the cost of shipment. For example, in places where the freight rates on grain are too high, it may be fed to hogs and transported in the form of pork. Likewise, hay, too bulky to ship profitably, may be fed to livestock and marketed in the form of dairy products or meat; and fresh fruit may be dried, preserved, or canned. Producers must so shape their work that the goods they turn out will bear the cost of transportation and leave a profit.

QUESTIONS AND EXERCISES

1. Figure out the annual cost of hauling the products from some farm to the depot or local market.
2. Have some member of your club obtain from your local freight agent the costs of transportation on the list of commodities shipped from your community.
3. Take three of the principal products of your community and trace them to the consumer, showing how each is transported.

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