Market Information
Implications for the Food Industry
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1. Introduction

“Market information is a facilitating marketing function, and market intelligence is essential to a smooth, efficiently operating marketing system. Accurate and timely market information facilitates marketing decisions, regulate the competitive market process, and lubricates the marketing machinery...Market news, information, and research are the lifeblood of markets.”[2]

The importance of market information results from the following facts:

1. It enables producers, sellers, and buyers to get the accurate prices, supplies, demand, and other market conditions when they use it, amass it, and revise it.

2. The number of public and private agencies specialized in food marketing information and research is increasing.

3. The demand for adequate information has been increasing with the increased complexity of the food system.

4. The nature and organization of industries both in the U.S. and globally has been altered.

5. The productivity in the U.S. and globally has been increasing through the adoption of information technology.

These trends are crucial for the food industry because of:

- The leadership of the food industry in information technology initiatives for more than 30 years.

- The improvement in the thin profit margins.

- The cost and market advantages regarding the adoption of information technology, which led to changing structure through mergers and acquisitions.
The food system as informational flows

The food system can be considered as a system of information exchange in two directions as figure 1 shows:

![Diagram of the food system as informational flow]

Figure 1: The food system as informational flow

What are the objectives of information exchange?
2. Roles of market information

Improving the decision making process is the main task of market information; for example, information is required by selecting enterprises, by changing production plans, and by establishing long-term investments. Such choices are important to farmers, to farmers’ cooperatives, to marketing firms, to farm organizations, and to legislators.

Another aspect of market information is the regulation of product flows and prices in the food industry. This is crucial for the law of one price and the price discovery process.

Moreover, the importance of market information results from its contribution to operational (productive) efficiency regarding cost reduction and increased profitability.

Other areas where information plays a role are auctions, industrial organization, grading and blending, and information technology.

Historically, auctions have been playing an important task by discovering buyers demand. However, the changing structure of the food industry is causing its importance to decline, for example contract linkage.

Transaction costs as key factor in market interactions depends mainly on adequate information. This justifies the importance of the studies of industrial organization including transaction costs.

The importance of grading and blending as informational aspect results from identifying quality and coordination failures.
Information technology has been playing a main role in discovering consumer preferences, in consumer awareness, in vertically linked food markets, and in the coordination among retailers and their suppliers.

3. Criteria for evaluating market information

To maximize benefit, market information must be complete and comprehensive, accurate and trustful, relevant, in usable form, confidential, and timely.

The difficulty of completeness results from the large disparity and diversity of agricultural products, agricultural plants and trade items. Moreover, the continuously changing structure makes this task more difficult.

Accuracy, trustworthiness, and credibility of the U.S. department of agriculture (USDA) market information make its reports highly protected assets. Thus, more efforts will be made to increase the accuracy of these assets.

Information should be published also in relevant and usable form to the customer. Thus information can be used adequately without difficulties or additional processing. Delivering it in adequate form leads to an increased informational efficiency because the loss of the data will be avoided.

Confidentiality of the information is an important aspect. The data should be aggregated and distributed that all receivers’ benefits are equal. For example, the confidentiality of the USDA and its service is very important.

Finally, timely information is also an important criterion because information in time means a correct decision.
In conclusion, it is a hard work to meet all these requirements in the same time. For this reason, the results of the marketing agencies should be based on high quality publication and sources. Moreover, the marketing research should be highly evaluated. This makes the publications of the USDA highly protected assets.

4. Problems and criticisms of market information

The problems of market information and its distribution result mainly from price specification, information costs, and voluntary cooperation.

Price specification problems are combined with publishing the prices in time, in form, according to geographic markets, and according to large varieties of agricultural products and their uses. Moreover, the most published prices are net prices because the various locations differ in their marketing costs, which make the comparisons difficult. Such difficulties will arise for example by the differentiation between fresh and processed products in the various locations.

The information cost is also a problem. To collect and disseminate information for all commodities in the various locations is a difficult and costly task. Thus, the availability of information budget is crucial for the accuracy and completeness of information. This difficulty is increasing with continuously changing structure of the food industry.

Voluntary cooperation among the institutions, buyers, and sellers to report prices and other market conditions is also a hindrance when it is not conducted adequately. For example, each agent reports the news according to his point of view and not according to the demand of the information user.
Marketing information programs are crucial for enhancing the efficiency of the marketing process. However, many criticisms were reported such as:

- The forecasts are usually inaccurate (USDA crop and livestock intentions reports).
- Market reports depress farm prices.
- Market information is of greater value to the buyers of farm products than to farmers.
- Market reports are manipulated.

5. Information efficiency and comparisons

According to the efficient market hypothesis, “An asset market is said to be efficient with respect to an information set if revealing that information to all agents would not change equilibrium-asset prices or equilibrium-portfolio holdings [3].”

There are three forms of informational efficiency: weak form efficiency, semi-strong form efficiency, and strong form efficiency.

According to the weak form efficiency (WFE), “The market is efficient with respect to the history of its past prices [3].”

The semi-strong form efficiency (SSFE) requires that “the market is efficient with respect to all public information [3].”

With respect to the strong form efficiency, “The market is efficient with respect to all information on the economy -public and private [3].”

The different forms of information efficiency can be compared according to environmental circumstances and size of the data as follows:

1. According to environmental circumstances

SFE is stricter. This means exactly defined circumstances.
SSRF is less strict. This means more freedom than SFE.

WFE is the least strict. This means that the restriction only to past prices.

2. According to the size of the data

WFE considers only past prices (the least strict).

SSFE considers publicly available data (stricter than WFE).

SFE considers all data of the economy (the strictest).

Figure 2: Comparison according to circumstances
6. Types of information

There are private and public sources of information.

Private information can be published or unpublished. Unpublished information are information collected by business firm marketing activities or purchased from other private sources of marketing research. The aim of this information activity is to evaluate the market potential of a new product, to investigate new marketing activities, and to perform other related services.

Some private research companies publish their findings in addition to selling information to clients such as Leslie Report (monthly crop estimate) and the “Yellow Sheet” published by the National Provisioner (daily livestock price report).

Trade associations also compile and frequently publish market information about the food industry such as the American Meat Institute, the National Canners Association…

In addition to private agencies, public agencies play an important role in collecting, analyzing, and disseminating U.S. agricultural and food marketing information such as USDA. These institutions will be supported publicly because they benefit farmers, food marketing firms, and consumers and because they function as market equalizer which strengthens the bargaining power of farmers.
The most important public institution is the USDA. Its programs include market news reports, market situation reports, outlook and forecasting services, statistical reports, and research reports.

7. Recommendations

The following recommendations can be considered as useful:

• Testing informational game models in order to maximize the benefit of information exchange among consumers.

• Increasing the flexibility of information exchange in order to adjust to quality and market requirements.

• Harmonizing the information sets across countries because of the globalization of the marketing process.

• Comparing among different data sources in order to improve the accuracy of the data.

8. References

