

**Research Article**

**A STUDY ON EFFECTIVE FACTORS ON AGRICULTURAL  
PROCESSING INDUSTRIES MARKETING CASE STUDY:  
AGRICULTURAL PROCESSING INDUSTRIES OF KERMANSHAH  
PROVINCE IN 2013 (USING 4P NEIL BOURDEN THEORY)**

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**ABSTRACT**

This research aims to study effective factors on marketing of conversion industries in 2013 using 4p marketing, determination of value and share for each effective variable on marketing mix which are along with goals, marketing strategies, and raking these variables. Statistical population of this research contains top managers, middle managers, and marketing managers of production units of conversion industries and related major food Place companies. According to prepared statistics, statistical population is nearly 253 individuals. Using determination table of Cochran sample volume, almost 83 people were selected by the help of stratified random sampling. The results of data analysis show that marketing -mix factors influence conversion-industry marketing and the priorities of variable effects are for product, 0.331; Place to 0.271; price, -0.233; and Promotion, 0.165.

**Keywords:** *Agricultural Processing Industries, Factors Affecting, 4p, Marketing*

**INTRODUCTION**

A considerable number of people have made mistake in terms of marketing term and they know it as equal as sale or commercial Promotion, leading to increased sale. It might be weird for some people to find out that sale is a small part of marketing operation. If we assimilate entire marketing to an ice mountain, sale is the summit and the rest of 90 percent is hidden under water (Kotler and Armstrong, 2001). Peter Drucker, one of management scientists, says that the marketing aim is noticeable sale. The target is to know the customers and understand their needs in order to adapt the goods and services with their needs and finally sell the goods (Taleb, 2009).

Although identifying and discovering market needs seem simple and easy, you will realize the difficulties and problems of presenting the goods and service to the market. You will simply think that this need will be met

by asking from customers and knowing their needs and requests. The experience has shown that customers are probably not aware of their needs and demands. Nowadays, small and medium-sized industries are considered as the main growth factor of industrial structure in a substantial number of countries. These types of industries are highly important in many developing countries (Soraya, 2010).

One of subsections of small industries is conversion and completion industries. It is referred, based on definition by economic committee of government cabinet, to industries where it contributes from worker to processing of material (agriculture, garden, fishery, livestock, forest, and meadow). Processing includes physical and chemical changes as well as maintenance, packaging, and Place (Amir, 2011).

**MATERIALS AND METHODS**

**Research Background**

In modern literature of management, each of managers`tasks like planning, organizing, control and etc. is one part of decision making aspect. Decision making about selection of marketing mix elements (product, price, Place, and promotion) and determining priorities form basic foundations of marketing system, enjoying an important aspect (Heidari, 2010). Major factors, probably influencing purchase volume and

## **Research Article**

types of goods, enjoy a broad range of domain and they are extended from personal factors to marketing environment factors (Bolurian, 1997). Organizations not only do not just think about their product sale in order to achieve their goals but also should think about their customers' needs and demands and they change their technology, planning, and designing all of their affairs according to their customers' needs (Nastaran, 2011). Markets, their sizes, and type of customers play an important role in directing strategy of companies on marketing and company managers need to have strategic plan according to their type, size, place, type of customers, and etc. (Molaei, 2008).

This research studies effective factors on marketing of conversion industries of Kermanshah province. In this regard, 4p theory of Neil Borden (marketing mix) was used and factors were studied and analyzed.

### **The Main Research Hypothesis**

Some factors are effective on conversion industries of Kermanshah province.

#### **Secondary Hypotheses**

- It seems that effective product-related factors on marketing in conversion industries exist.
- It seems that effective Place-related factors on marketing in conversion industries exist.
- It seems that effective Promotion-related factors on marketing in conversion industries exist.
- It seems that effective price -related factors on marketing in conversion industries exist.

Despite of some limitations, small and medium-sized companies have successfully been able to take advantage of marketing to increase sale (Kumar, 2012). Needs of all customers are not similar so the commercial ideas of companies are not equally attractive. Thus, customers should be followed in that the goods or services match the highest usage for them. Accessibility is easier and they are ready to pay for these goods and service. In terms of marketing, "target market " needs to be selected and its characteristics ought to be identified (Esmaeili, 2006). Then, when a market is fallen in to customer sections, the decision about which fields need to be focused must be made. The goal should not be focusing on all sections in industry but the goal is focusing on sections guaranteeing the highest profit in current and future conditions. Considering various criteria help industry make decision in following issues (Mehrani, 2003).

-Size of its section

-Growth rate of that section

-Conformity between product and customers' needs of that section

- Appropriate capability of product for being distinguished compared to rival goods.

A considerable number of marketing field activists know marketing mix as product, price, Promotion, and Place and they consider them as the whole concept of marketing and they are mainly taken in to account as complete principles of marketing. Marketing mix is one of operational mechanism elements and it is as the most observable section of market like floating glacier in the water. In fact, marketing mix is integrating company products and way of accessibility to them (Pili, 2005).

#### **Research Theoretical Frame Work and Principles**

Theory of 4p Bourden: four main factors play roles in marketing as following:

The concept of 4P has been accepted as a rule in various marketing texts. Four P stands for:

Product

Price

Promotion

Place

### **Product**

The belief that good products are sold by themselves has historically existed. In the competitive world of today with severe competition among various producers and sellers, bad products are meaningless. In addition, customer-protection laws have also increased problems of low-quality products producers. Here, the "product" factor mainly supervises the conformity between products and their features with customers' needs and requests.

The meaning of "products" in marketing mix is part of physical and applied features such as:

Brand

## **Research Article**

Functionality

Model

Quality

Safety

Packing

Support and warranty

Accessories

It is obvious that marketing mix-related decisions can be correction of product problems, increasing durability, easy consumption, designing product packing, and flavor diversity, leading to success or failure of products in markets (Manktelou, 2013).

### **Price**

The pricing strategies can be discussed here.

The life span of competition on price is as equal as that of mankind and the role of marketing mix cannot be ignored at all. Some of decision-making samples about price marketing mix are as following (Same source, 2013):

Pricing strategy

Retail price recommendation

Wholesale price recommendation

Price flexibility

### **Place**

As it is clear from the name, Place is delivering products in different locations and Place systems can be key factor in success or failure of products and consequently the company or organization (Same Source, 2013).

### **Promotion**

The fourth P, promotion, seems more difficult than other marketing mix factors. Promotion refers to activities to create the link with customers.

This link is made to create positive sense and perception among target customers.

It is noteworthy that analysis of break-even point in promotion measures of companies as well as studying the value of customers created after promotion programs are highly important. Some of these promotion measures are as following (Same Resource, 2013).

### **Research Method**

The above research is applied in terms of goal and descriptive and correlational in terms of method (relation between variables).

Survey method was used to identify the current condition of each of variables taking advantage of questionnaire Place among statistical population. This study is cross sectional in terms of time.

### **General Characteristics of Responders**

#### **Gender**

The following table shows Place of responders according to gender. More than 80 percent of responders were men while the rest (17 %) were women.

#### **Age Groups**

Studying responders according to aging groups reveal that the highest number belonged to 41-to-50 year old group, 38.6% -32 people, while the lowest number of people belonged to less-than-30 year old group with 11 percent -9people.

#### **Level of Education**

Studying the responders in terms of education level indicate that the highest percentage of responders enjoyed B.S. degrees (42 %) and the lowest ones were allocated for graduate studies.

#### **Activity History**

Studying the collected data shows that the highest percentage of conversion industry owners, 41 %, was 5-to-10 year experience of activity and the lowest activity history belonged to less-than-3 year work history.

## Research Article

### Effective Factors on Marketing

Price  
 Product  
 Place  
 Promotion

Initially, table is shown to provide general overview from the questionnaire of descriptive data of statistics.

**Table 1: Descriptive data of elements (Price-product-Place-and Promotion)**

Element	Number	Mean	Standard deviation
Price	83	3.65	0.526
Product	83	4.30	0.447
Place	83	3.51	0.441
Promotion	83	2.58	0.793

Normalization-determination test of statistical population:

To this end, Kolomogrov-Smirov and Shapiro-Wilk Normality tests are used and the results are as following:

**Table 2: Result of normal test (K-S)**

Element	Price	Product	Place	Promotion
Kolomogrov-Smirov datum (K-S)	0.274	0.321	0.313	0.314
Sig. value	0.000	0.000	0.000	0.000
Test result	Not normal	Not normal	Not normal	Not normal

Thus, being not normal population and being non-parametric are determined according to the test result. Now, it can be studied if the effect of these four factors, price-product – Place-Promotion, is equal or not. To respond this question, multi-sample comparisons tests are used (Variance analysis or Kruskal–Wallis). Kruskal –Wallis test is used due to the fact that data for products and Place are not normal but they are normal for price and Promotion.

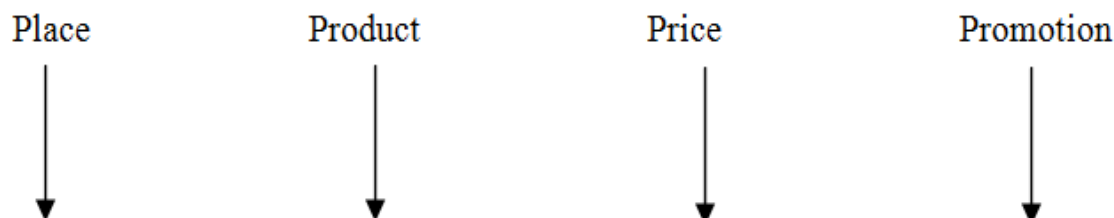
The result of Kruskal–Wallis test

Value of Chi-Square	330.170
Freedom degree	3
Sig. Value	0.00

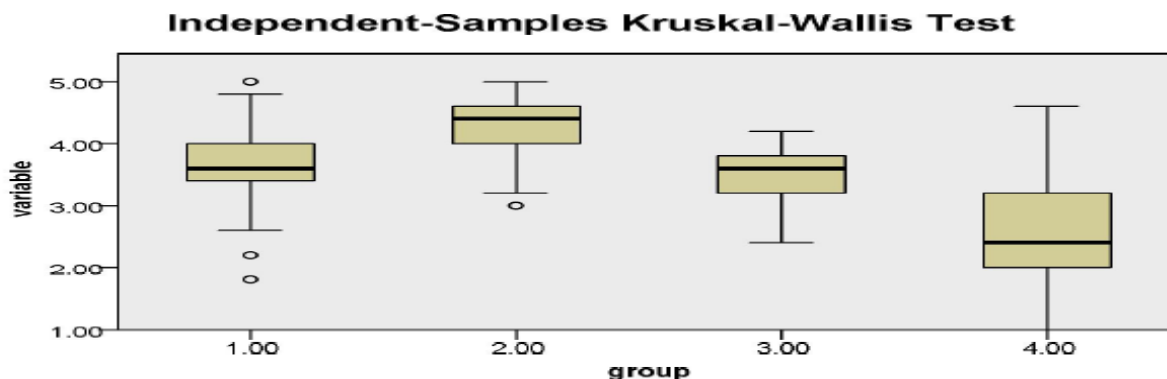
The probability value in table is less than 0.05. Thus the effect of price, product, Place, and Promotion factors is not equal in certainty level of 95 %.

Using related Box Plot for four factors as following, it can be stated that, taking advantage of median, the effect of factors are products, Place, price, and Promotion, respectively, meaning that the product is more important than others.

Graph: Box Plot



## Research Article



To determine the relationship type and effect of each variable (positive, negative, direct, or reverse), Spirman correlational coefficient is used, analyzed as following:

Considering the fact that the result of K-S test is negative, Spirman correlational coefficients are used. This coefficient is used to determine the amount, type, and direction of relationship between two relative or interval variables and /or one interval variable and one relative variable.

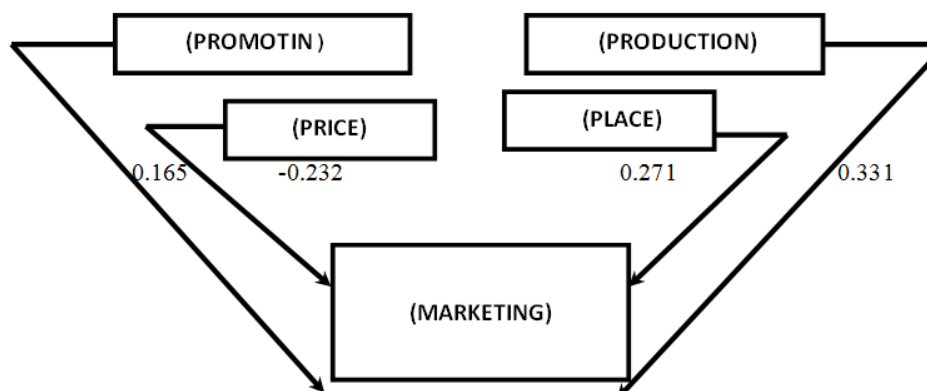
Spirman correlational coefficient for marketing mix factors

Variable	Number	Correlation	Significance
Price	83	-0.102	0.03
Product	83	0.681	0.000
Place	83	0.787	0.000
Promotion	83	0.544	0.000

Path analysis method is used to determine the level of effect of each variable. Path diagram shows that product enjoys the highest share (direct effect) on marketing. The effect of this variable is 0.331. Thus, it can be concluded that product promotion leads to approaching to marketing goals. Place with path coefficient of 0.271 indicates the fact that the more appropriate the Place system is, the easier it is to achieve marketing goals. Price, as the third determining dependent variable with coefficient of -0.233, shows that price reduction leads to improved marketing goals. The last effective variable is Promotion where it leads to improved marketing goals by path coefficient of 0.165.

Now, it can cautiously be stated that separate increasing and promoting of each of variables including products, Place, Promotion and reduced price variables have growing effect on marketing condition of agricultural products of the province.

Level of effect of each of variables in conversion-industry marketing



## **Research Article**

### **Conclusion**

#### **Product**

Products in the field of conversion industries can receive attention due to direct consumption by different society classes in terms quality, diversity, and packing. Quality of food items is the first highlighted point. Low quality items of companies are rejected after the first usage and perception of low quality. Damage resulted from quality not only reduces sale and loss of stock market but also removes trust from company brand. Customers` loss of trust regarding to one trade mark in food industry will create severe problems for the company. After quality, product diversity and innovation in packing are highly important in this field. Focusing on only quality seems enough for companies which deliver the items through dealers.

#### **Place**

Most products in this field need to be provided for customers through channel method. Nevertheless, companies take these responsibilities by themselves based on their facilities and decisions made by their managers or through Place and wholesale companies. One of important factors in this regard is labeling expiry date on food and drinking items, doubling the importance of Place. Longer durable products make delivery to wholesale providers and then Place possible but when the durability is short, necessary measures should be taken in to account to deliver the products on time such as using fridges and refrigeration system while carrying as well as location of Place (shops and etc.)

#### **Price**

Food and conversion industry are fallen into two sections because of close link with people`s lives in terms of price and pricing. One section is related to food and drinking items in food baskets of families. Considering sensitivities in this field, pricing of these items is mainly done under the severe control of government agencies including consumer –right protection. In this section, price cannot be accounted for competitive advantage or tool for benefit. What is clear is the fact that price for these types of products is considered minimum in order to help society along with sustainable development of the country and this price cannot be lowered. There are some other items which are not essential for families. In other words, they are considered luxury food and drinking items. In this section, pricing is free and competitive. What is obvious is the fact that quality, packing, and other factors can influence pricing.

#### **Promotion**

Promotion is highly important for conversion industries. Tendency to consume new and diverse products in this field is created through Promotion. Perhaps, a high -quality and attractively-packed product does not reach its deserved success due to lack of appropriate Promotion. It is recommended that direct Promotions be used in society through media and newspapers in this field. When it comes to other industries, determining target market and Promotion in the same market is an important topic. Like for instance, extensive Promotion will not be beneficial for a dairy company with medium-sized production which has chosen regional market around the company as target market because products are not distributed in larger scale . Instead, Promotion must be done in that regional market. Posters in regional shops, regional advertising areas, and local newspapers are good options to advertise. The current research has tried to study four important factors of marketing in conversion industries, 4P including Product, Price, Promotion, and Place.

According to conducted research, it is clear that conversion industries of the province enjoy especial sensitivity despite high quality and diversity in other marketing sections (pricing, Promotion, and delivery location) as following. The results of conducted research and study show that a positive and direct relationship exists between product, Place, and Promotion variables with agricultural product marketing, meaning that improvement of marketing goals for agricultural products can be seen by increasing and improving the product, Place, and Promotion indicators. Thus, the following hypotheses are confirmed

- A positive relationship exists between product and agricultural product marketing.
- A positive relationship exists between Place and agricultural product marketing.
- A positive relationship exists between Promotion and agricultural product marketing.

Moreover, the statistical results between price variable and agricultural product marketing enjoy a negative and significant relationship, meaning that price reduction can lead to improvement of marketing



### Research Article

goals of agricultural products. Therefore, the hypothesis saying that a negative relationship exists between price and agricultural product marketing is confirmed.

Generally, it can be stated that research findings have provided experimental support for theory of 4p through confirmation of findings and previous researches. In addition, evidence to reject was not found.

### Recommendations to Production Units

- All units pay special attention to product along with the attention price, Place, and Promotion.
- Creating marketing unit in order to only focus on marketing
- Personnel training for beginner and professional marketing courses according to conducted studies in this research to production units.

It is recommended that companies consider marketing training for their staff based on their budget and control and supervise marketing unit independently.

- Taking advantage of skilled workforce in production lines as well as marketing system
- Allocating one mini –truck for Place system
- Applying and using marketing companies
- Taking advantage from out of family system in case of need (especially skilled workforce)
- Planning to distribute the products to out of province and especially neighboring and western provinces
- Identifying competitive units across the country and neighboring countries
- Producing new and diverse products
- More concentration of type and quality of product packing
- Taking advantage of Promotions in order to introduce current and new products.
- Taking advantage of channel Place in order to distribute their products.
- Taking advantage of wholesale channel Place is essential for most products.

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