A Model for Execution of Product Concentric Diversification Strategy: A Case Study of Kadbanoo Company

Esmaeil Hasanpour Ghoroghchi*, Helen Ebrahim Ghaleh ghazi
Department of Management, Qeshm Branch, Islamic Azad University, Qeshm, Iran.
*E-mail:dresmaeihasanpour@gmail.com

Abstract
According to worrying rate of failure of product concentric diversification projects in Iran, critiques to concentric diversification models of existing literature, and regarding the high importance of concentric diversification in companies growth, this research aims to introduce a model for execution of product concentric diversification in Iranian food processing companies. In this research, Kadbanoo Company in Iran is chosen and studied by using action research method and pluralistic approach. In this company, current process of product concentric diversification and recommendatory product concentric diversification model are explored and defined by using different methods like semi-structured interviews, participatory observation, and document analysis. Then, emerged recommendatory models of the company are implemented and refined according to implementation feedback. Finally, the emerged model is compared with existing models of literature. The result of this research is a unique model for Kadbanoo Company, due to its various context and internal condition. Recommendatory model of this research can solve one of the company’s important problems and can fill the gap of absence of applicable and utilisable models in product concentric diversification.

Keywords: Concentric diversification, Action research, Kadbanoo Company, Iran

Introduction
The execution of concentric diversification strategy and the successful launching in competitive markets are going to be more and more difficult every year. According to new studies conducted by the Product Development and Management Association, about 40% of new products do not meet their goals. The success rate of diversified products is worryingly low. The failure rate of new packaged products also stands at about 80%. Awa (2010) indicated that the new products and financial services such as credit cards and insurance services also face the same failure rates. Cooper and Kleinschmidt (1991) also underlined that about 75% of new products are false at the beginning. The issue of new products failure is also applied to Fast Moving Consumer Goods (FMCG) in Iran, as well as western countries in most of the time fail. For instance, about 90% of new products of Kadbanoo Company do not achieve their sales targets. Consequently, this issue is chosen as the main topic in the present study. Although, there are a lot of models in new product development, literature faces lack of theoretical background on the topic of concentric diversification. Therefore, the chosen topic can help to the enrichment of diversification literature. In addition to the theoretical importance of this research, present study can help to studied company to increase its success rate in product development and product concentric diversification. Thus, the general aim of the this research is to develop a model for execution of concentric diversification strategy which is consistent with Kadbanoo Company's condition.

The present study also enjoys methodological innovation because a few studies is conducted in Iran on the issue of product concentric diversification by action research methodology and pluralism approaches to reasoning. Developing a well-adjusted model of product concentric diversification for studied company is a contribution to knowledge of this research (applicable and
suitable for Kadbanoo Company). This is mainly because of the fact that the model in the present study is based on practical results of product concentric diversification implementation. Consequently, issues such as lack of practicality and applicability (Hoffman, Kopalle, & Novak, 2010, Cooper & Kleinschmidt, 1993) could not be applied to the model of the study.

**Theoretical framework**

Product concentric diversification is a complex sequence of activities to achieve the pre-determined goals. These activities will result in a diversified product (Drejer & Gudmundsson, 2002). Product concentric diversification is a series of activities that begin with the perception of a market opportunity and end with the production and sale of the different product (Hoffman, Kopalle, & Novak, 2010). The most common and the most popular model of product development and product concentric diversification which is the source of many future models in those fields is the base model of product development and product concentric diversification by Booz, Allen, and Hamilton (1982). This model which is the base of a lot of product diversification models can be found in many sales and marketing textbooks and envisions of the execution of product development process as a series of sequential activities. These activities are new product strategy, developing ideas, screening ideas, development and examination of idea, commercial analysis, product development and examination, marketing analysis, and introduction of product respectively (Mowry, 2007 & Cooper, 2000). However, this pre-mentioned model is modified over the time according to different conditions and different requirements of industries. Now, some important and famous models of product concentric diversification are compared below.

**Table 1. Comparison of theoretical models of product concentric diversification**

<table>
<thead>
<tr>
<th>Sources</th>
<th>Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Booz, Allen, &amp; Hamilton, 1982)</td>
<td>(Kumar, 2009)</td>
</tr>
<tr>
<td>(Crawford &amp; Costa, 2007)</td>
<td>(Mowry, 2007)</td>
</tr>
<tr>
<td>(Ulrich &amp; Eppinger, 2004)</td>
<td>(Cooper, 2000)</td>
</tr>
<tr>
<td>(Bessant &amp; Francis, 1997)</td>
<td>(Crawford &amp; Benedetto, 2007)</td>
</tr>
<tr>
<td>(Kumar, 2009)</td>
<td>(Awa, 2010)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sources</th>
<th>Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy Identification</td>
<td></td>
</tr>
<tr>
<td>Idea navigation</td>
<td>√</td>
</tr>
<tr>
<td>Feasibility studies and screening ideas</td>
<td>√</td>
</tr>
<tr>
<td>Concept Development and Testing</td>
<td>√</td>
</tr>
<tr>
<td>Presentation and edition of formulas</td>
<td>√</td>
</tr>
<tr>
<td>Market research and Determination of sales goals</td>
<td>√</td>
</tr>
<tr>
<td>Financial feasibility</td>
<td>√</td>
</tr>
<tr>
<td>Trial production</td>
<td>√</td>
</tr>
<tr>
<td>Identification of marketing mix</td>
<td>√</td>
</tr>
<tr>
<td>Real test of market</td>
<td>√</td>
</tr>
<tr>
<td>Sales and controlling factors of marketing mix</td>
<td>√</td>
</tr>
</tbody>
</table>

As illustrated, in most of the presented patterns attention is paid to the processes of idea generation, feasibility studies and screening ideas, formulation, market research, financial
feasibility, trial production, real test of market, sales and controlling factors of the marketing mix (Saren, 1994).

According to the value of local research based on the social construction approach and postmodernism (Smith, 2005, p.87, Rahmanseresht, 1998, p. 389) and considering the fact that action research method is a constructionist one(Smith, 2005; p.98), and due to the objective of the research which is to provide an indigenous model for product concentric diversification, in this part of the study a review of the related literature on the influencing factors on product development and diversification in Iran is presented.

Taheri (2009) conducted a research to identify factors affecting product development. He announced that the most important affecting factors were buying the technical know-how, government regulations, capital requirements, culture and organizational structure, and infrastructure.

Manafi (2010) reviewed the factors influencing the successful development of the products and highlighted the following factors as the most influential: the speed of the process (to minimize the execution process time), integration between related departments specially between R&D and marketing, investment in R&D, the use of value engineering in production, training, and new diversified product advertisement.

Therefore, according to research objective (developing a model for product concentric diversification and product development), and the lack of well-adjusted models for food industry companies of Iran the main research question is: how is the well-adjusted model for product concentric diversification and product development and which are its stages and components?

Methodology

In the present study, the action research method is utilized because in order to achieve research objective, the complex process of product concentric diversification should be investigated and studied in Kadbanoo Company deeply and precisely. At the first step, current process of product concentric diversification should be identified and its problems should be found (descriptive model), and then appropriate solutions should be explored for improving the process (prescriptive model), and finally, the pre-mentioned solutions should be implemented to remedy and improve the process (implementing the prescriptive model). This is mainly because of the fact that action research is the best way to study the subject in depth (Eisenhardt, 1989) and could yet realize the theory-building purposes (Gersik, 1988, Harris & Sutton, 1989; Mc Lean, 2011, p 33; Yen, 2008, p 14) and even by this method researcher can implement the solutions and prescriptive notes.

In this section of the paper, the research stages are elaborated respectively. The site selection comes first. The site selection stage (case) was done with regards to the potential role of site to gather information, logistical considerations such as proximity and availability, and level of experience. General information of the studied company in this research which was selected according to the above mentioned criteria are summarized in Table2. The study was conducted from 2011 to 2012, when the researcher was in charge of the product concentric diversification and involved in the implementation processes in company (linclon & guba, 1985).

Table 2. General information of the studied companies

<table>
<thead>
<tr>
<th>Company</th>
<th>Trade Mark</th>
<th>Age (Years)</th>
<th>No. of Personnel</th>
<th>Ranking in Industry based on sales</th>
<th>No. of Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kadbanoo (Delpazir)</td>
<td>Delpazir</td>
<td>20</td>
<td>190</td>
<td>3rd</td>
<td>48</td>
</tr>
</tbody>
</table>
Then, the current process of product concentric diversification (descriptive model) and improvement strategies in company are identified and exported separately (prescriptive model), and finally, the exported solutions are implemented (implementing the prescriptive model). In data collection, in order to improve the accuracy of the data, the researcher used the Triangulation approach. Data collection methods of participatory observation, interviewing with managers involved in the product concentric diversification process, and reviewing about documents and written texts in the Kadbanoo Company are used to describe the current situations and to find ways to improve the process.

Audio documenting devices (in the case of data obtained from interviews); visual documenting cameras and camcorders (in the case of data obtained from observation); and written documentation of emails, letters and other documents (in the case of data obtained from written documents) are used to document data collection and to increase the reliability of data.

Interviews, participatory observations and documents, theme analysis (Braun & Clarke, 2006, P. 80) are used to analyze data. Accordingly, the key points contained in the text of the interviews, documentation reviews, and the researcher’s reports of observations are encoded. Then, the similar codes were combined in to themes.

Results
The current situation of product concentric diversification in Kadbanoo Company (descriptive model)
In this section the current situation of product concentric diversification in Kadbanoo Company is presented based on gathered data.
- At the first step, there is no clear strategy (SHTK1).
- Second step is idea generation or in other word, idea imitation from western pioneer companies, but most of the time, Kadbanoo Company does not scan the environment enough, and even idea comes from board of directors.
- Then, marketing department does week market research on the idea. Marketing research report is sent to board of directors and they decide about the next stages.
- If they accept the idea as a good idea, idea formulation is done (without taking the license of idea from country of origin) in R&D department. Formula is tested in the marketing department and revised up on marketing department’s feedback.
- After pre mentioned stages, row material and packaging supply feasibility study is done.
- Then, trading department supplies the production requirements and design dep. begins to design the packaging materials. Concurrently and simultaneously QC dep. begins to receive the governmental permissions of production. At the most of the time, financial feasibility does not done and feasibility study is incomplete, defective and faulty. Some times after pre mentioned stages test production is done.
- In this stage the possible defects of the production line is detected and determined.
- Now, sales dep. determines the products sales budget.
- Mass production begins after budget formulation.
- Usually product is sent to distribution channel warehouses and without any marketing plan and without any training to the sales forces. In addition, most of the time Kadbanoo Company does not advertise on new diversified product and almost company prefers to advertise the current products that are very important from the standpoint of sales volume and margin.
- One of product managers’ duties is controlling the new product in launching stage, but in Kadbanoo Company because of lack of enough product managers most of products are not controlled in the market.
The contextual components that affect and shape the current process are passive and imitative and unclear marketing strategy, high centralization, semi organic structure, slow process, uncoordinated process, and vague and ambiguous process.

**The detected solutions for improving the product concentric diversification in Kadbanoo Company (prescriptive model)**

Based on gathered data, the detected solutions for improving the product concentric diversification (prescriptive model) are presented in this section.

a. The first step refers to determining and announcing the corporate and marketing strategy.

b. Second step is idea generation by analyzing the competitors, consumers’ feedback, and other inside and outside resources.

c. The third step is the ideas screening by the multidisciplinary team (including marketing manager, R&D manager, QC manager and so on) to study the feasibility of product diversification according to criteria such as congruency with marketing strategy (by the marketing management), compatibility with the company’s ability to supply raw materials and packaging materials (by trading management in 15 days), compliance with the production facilities of the company (by production management in 30 days for new products requiring new production lines and 7 days for new products that is produced with existing production facilities), congruency with distribution and...
sales facilities of the company (by sales management), and compliance with the legal restrictions and regulations by the quality control management in 7 days.

Figure 2. Prescriptive mode

d. After previous stages, R&D unit (following reviewing standard brochures) could prepare the formulation of the diversified product (in cases that there is no standard brochure). Then, the prototype formula is revised based on consumers’ feedback. Consequently, the modified formula could be returned to the marketing department.

e. Then, the marketing department has to conduct market researches to focus on the analysis of competitors, potential market size, market growth potential, and buyers’ intention to buy that diversified product. Sometimes, according to market research results product formula could revise.

f. In the following, if the market assessment to be positive, comprehensive feasibility study could be done. That is, in this stage like screening stage, the product is assessed from some viewpoints (marketing and sales, financial, production and technical stand point).

g. After the mentioned steps, if the production of the product is financially, technically and market-wise positive, various processes are implemented in parallel to successful ensure that the
perquisites of production are met, the QC takes on the task of acquiring necessary permissions of production in 30 days, the marketing unit designs product packaging and send it to the trading unit. The commercial unit is assigned to prepare and arrange the necessary packing items, the necessary advertising, and the production raw material (based on the BOM presented by the R&D). Also, the technical department of production takes on the task of organizing the production facility.

h. When the production facility is prepared to detect the mass production possible defects, production test is done and even produced goods are sold in a prototype market.

i. After the steps explained above, the marketing mix which is based on the Push Strategy is defined to realize the selling point.

j. At the tenth stage, the diverse marketing elements are introduced to the agents of the distribution network and sale reps. and the sale's target is defined for all branches and company reps in categories.

k. Then, one week before the product launching, sale team is trained. Training content includes product specifics, product competitive advantages and techniques for selling the product.

l. At the Twelfth stage, the advertising line is started.

m. At the final stage, mass production and introduction of the diversified product to the market begins.

**Final revised prescriptive model based on its execution**

In this section, the results of executing the detected solutions (prescriptive model) for improving the product concentric diversification are explained.

a. Regarding the importance of strategy clarification as an overall guideline, the first step should be defined and announced the corporate and marketing strategy.

b. Second step refers to the idea generation by analyzing the competitors, consumers need and other internal and external resources, and idea screening according to some criteria such as market volume, market demand trend, compatibility with marketing strategy, and so on.

c. At the third step, with determining the products’ package and other primary specifications the preliminary comprehensive feasibility study is done. That is, a multidisciplinary team (including marketing manager, R&D manager, QC manager and so on) studies the feasibility of product diversification according to criteria such as compatibility with the company’s ability to supply raw materials and packaging materials, compliance with the production facilities of the company, congruency with distribution and sales facilities of the company, and compliance with the legal restrictions and regulations.

d. After previous stages, R&D unit could prepare the formulation of the diversified product (in cases that there is no standard brochure). Then, the prototype formula is revised based on consumers' feedback. Consequently, the modified formula could be returned to the marketing department.

e. Then, the marketing department has to conduct market researches which focus on the analysis of competitors, and target markets intention to buy that diversified product. Result of this stage should be the products demand in current year and even some years later.

f. At the sixth stage, cost-benefit analysis could be done. In this stage, the products margin will be detected. Input of defining the products BOM (Body of Material) determines the price and predicts the sales volume.

g. Then, if the products margin is good enough QC dep. will follow to take legal permissions for producing the product and marketing dep. will design the needed packaging.

h. After the mentioned steps, various processes are implemented in parallel to successful ensure that the perquisites of production are met, the QC takes on the task of acquiring necessary permissions of production in 30 days, the marketing unit designs product packaging and sends it to
the trading unit. The commercial unit is assigned to prepare and arrange the necessary packing items, the necessary advertising and the production raw material (based on the BOM presented by the R&D). Also, the technical department of production takes on the task of organizing the production facility.

Figure 3. The proposed 13-step process for product development

a. When the production facility is prepared to detect the mass production possible defects, production test is done and even produced goods is sold in a prototype market.

b. After the steps explained above, the marketing mix which is based on the Push Strategy is defined to realize the selling point.

c. Then, because of the importance of rapidness in production and selling the product in markets, the existence of enough shelf life in the stores and the precise time planning between sales and production departments should be done by marketing unit.

d. Then at the 12th stage, the diverse marketing elements are introduced to the agents of the distribution network, sales reps. and the sale's target is defined for all branches, and company reps in
categories. Also, sales team is trained one week before the product launching. Training content includes product specifics, product competitive advantages and techniques for selling the product.

e. At the final stage, the mass production and introduction of the diversified product to the market begins.

Discussion and Conclusion

In this section of the article, the proposed model of this research is compared with current and existent models of literature (Table 1) and then the limitations of this research and research suggestions will be presented. The CTK (Contribution to knowledge) of this research is a different model compared to the existent models in the literature (Table 1). This differences, are mostly due to the different circumstances of the Kadbanoo Company in comparison with literature models.

a. The first step of proposed model and some similar common models is determining the marketing strategy. According to the proposed model, a development team is formed. The reason of the emphasizing on this stage by the proposed model is the dispersed and single-tasked decision making which is mostly done by the board of directors regarding screening of ideas and directing the process.

b. At the second stage of the proposed model, there is strong emphasis on the idea generation and idea screening. The focus is on generating ideas from different sources especially foreign competitors. It is due to the fact that the strategic style of the reviewed company is analytical and imitative. The proposed model in this research refers to the evaluation and screening of ideas by the multidisciplinary team according to some criteria such as companies’ capabilities, legal restrictions and so on. Almost the models of literature has focused on this stage as well as proposed model.

c. At the third step, the preliminary comprehensive feasibility study is done by determining the products’ package and other initial and primary specifications. That is, a multidisciplinary team (including marketing manager, R&D manager, QC manager and so on) studies the feasibility of product diversification according to criteria such as compatibility with the company’s ability to supply raw materials and packaging materials, compliance with the production facilities of the company, congruency with distribution and sales facilities of the company, and compliance with the legal restrictions and regulations. In the existing models of literature, this stage has been proposed as sixth or seventh stage with the title of commercial analysis.

d. Consuming and costly market research should be done only for ideas that have passed the feasibility study gate.

e. After previous stages, R&D unit could prepare the formulation of the diversified product (in cases that there is no standard brochure). Then, the prototype formula will be revised based on consumers feedback. Consequently, the modified formula could be returned to the marketing department once again for another test. This stage is focused in literature models as well as proposed model. The topics of technology are transferred and sample imitation subject is discussed in this model, unlike the existent theoretical models. The reason for this difference is the weakness among Iranian firms regarding the mentioned phase and their imitative strategy which makes this worthy.

f. Stage five is market research and determining the exact demand of market for product. In this stage, marketing department to conduct market researches focuses on the analysis of competitors and target markets' intention is to buy that diversified product. Result of this stage should be products demand in current year and even some years later. At this stage which is the most sensitive stage of all, the demands for the newly produced product is determined (based of the approved formula). The estimation of demand shows the required ingredients, packaging materials, and the necessary production line. This topic is mentioned in the existent models, but under the frame of the commercial analysis.
g. In the financial evaluation stage, the amount of product margin is estimated based on cost-benefit analysis and the formulation is modified if necessary, or even the whole process may be terminated. This topic is mentioned in the existent models, but under the frame of the commercial analysis.

h. Then, if the products margin is good enough, QC dep. will follow to take legal permissions for producing the product and marketing dep. will design the needed packaging. The packaging materials should be supplied by trading dep. This stage is not mentioned in existing models. Therefore, it is one of proposed models’ creativities.

i. After the mentioned steps, various processes are implemented in parallel to successful ensure that the requirements of production are met the QC takes on the task of acquiring necessary permissions of production in 30 days, the marketing unit designs product packaging and send it to the trading unit. The commercial unit is assigned to prepare and arrange the necessary packing items, the necessary advertising and the production raw material (based on the BOM presented by the R&D). Also the technical department of production takes on the task of organizing the production facility. These activities are not mentioned in theoretical existent models. The reason why it is mentioned in this model is the ongoing problems of the reviewed company because acquiring the governmental permissions and providing the production and packaging materials are time-consuming and costly due to the increasing sanction.

j. When the production facility is prepared to detect the mass production possible defects, production test is done and even produced goods is sold in a prototype market. This stage is a very important in the proposed model and in the theoretical patterns.

k. After the steps explained above, the marketing mix which is based on the Push Strategy is defined to realize the selling point. This is because Iranian consumers compared to western countries consumers are not brand oriented and nowadays power is in the hand of distribution network and retailers. On the contrary, western countries consumers are brand oriented and that’s why pull strategy is emphasized in the existing models of literature.

l. Then, because of the importance of rapidness in production and selling product in markets, and existence of enough shelf life in the stores, precise time planning between sales and production departments should be done by marketing unit. It can be said that none of western models have focused on this issue.

m. Then, at the present stage the diverse marketing elements are introduced to the agents of the distribution network and sales reps. and the sales target is defined for all branches and company reps in categories. Also, one week before the product launching, sales team is trained. Training content includes product specifics, product competitive advantages and techniques for selling the product because distribution network holds great deal of importance in Iran. It can be claimed that according to organization theory, strategic management and chapter dedication to the topic of training in strategic formation discussions, training the sales team is necessary when aims to successful entrance of product into the market. The reviewed patterns have not mentioned anything regarding this aspect and it is discussed here in this model because of poor sellers in Iran.

n. At the final stage, mass production and introduction of the diversified product to the market begins. This stage is emphasized in the proposed model. It is also mentioned in some models of literature.

Generally, the specific restrictions regarding this research were time limit, (time needed for action research is more), impossibility of generalizing the model to all the active companies in the field of food industry due to the possible differences among them with the Kadbanoo.
References

Openly accessible at http://www.european-science.com