

Network Marketing Strategies in Sale and Marketing Products Based on Advanced Technology in Micro-Enterprises

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Abstract—New products based on modern technologies (high-tech), in order to enter the market, face a number of challenges such as high investment required for research and development of these products, high cost of labor force, high cost of products, making profit at advanced stages, low life expectancy, high level of associated risks and required innovation. In terms of marketing these products, issues such as centralized decision making by the manager or the owner, dynamic environment, existence of larger competitors with higher resources and influence in the market, high expectation of customers and lack of resources are just some of the issues to mention.

In this study the effects and functionality of network marketing strategies such as reduction of costs, increase in the rate of sales, brand making, job creation, effective networking, high level of innovative potentials, and increase in liquidity as the result of growth of sales; which itself is obtained by viral marketing and its expansion to a social networking site with exchanges of social capital has been investigated. The statistical population are a number of small scale companies providing microfiber Nano silver cleaning cloths based in the city of Tehran. The research method which has been used in this research is qualitative research method.

The results of the research show that by providing a favorable reward plan in network marketing, microenterprises offering high-tech products can overcome many of their problems and difficulties in presenting, selling and promoting their products in the market.

Index Terms—Microenterprises, network marketing, social network, social capital, viral marketing.

I. INTRODUCTION

Fundamental changes during the past century have had a staggering effect on every aspect of human life. Management systems and commercial relationships are some of the most important factors in advancement of technology, information and methods of work that have experienced fundamental transformation and evolution. The marketing system with daily innovation in creating new and modern methods, have created and provided a new environment for marketing mix (product, price, distribution and promotion) of a variety of products or services to the consumer's market.

Network marketing is a modern method of selling

products with the use of social communication tools and networks that promotes its products with the use of verbal marketing that has eliminated traditional intermediaries and no longer requires expensive advertisement procedures to achieve its goals [1]-[5]. Network marketing is a way for spreading information on a product to consumers via social communication channels. Trading between the seller and the consumer in the market only occurs when the consumer possesses a certain level of information on the product. Companies often spend enormous amounts on promotion of their new products. The important point to mention is that, with increasing cost of advertisements, the final price of the product is also increased which in effect reduces the profit of the company. Therefore, in order to transfer information to the consumers, companies look into alternative low-cost methods for promoting and positioning their products in the market. One of these alternative methods is to use human relations within social networks efficiently. By using network marketing method, not only companies no longer need to spend heavily on advertisements, the potential buyers will also experience a higher level of trust and security in their shopping behavior by obtaining information from people around them [6]-[9].

Taking into account the information provided on abilities and capabilities of network marketing and special marketing of new High-Tech products, this study intends to look into and identify functions and solutions associated with network marketing of high-tech products in microenterprises. In order to implement the results, companies offering microfiber Nano silver cleaning cloths as a high-tech product in Tehran have been selected for the purpose of this study.

II. LITERATURE REVIEW

A. The Concept of Network Marketing

The concept of network marketing of the healthy, legal type is used in some cases as equivalent to "direct marketing." In this method, the producer sells its goods through the people and customers themselves rather than through distribution agents with a high percentage of commission. Thus, a network of customers who are willing to help the producer with the sale task while benefitting themselves take charge of the goods marketing and sale tasks via a contract. In some cases in the literature, network marketing is also referred to as "multi-layer marketing" [3].

Network marketing is one of the several ways of activity in the area of goods and service distribution. In this method,

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the company employs a network of distributors to sell its products to the user. The distributors sell the products to the final user not at a fixed retail store but through interpersonal communication. They are also allowed to make and manage

their sales force through “recruitment” and “training” of other participants in order to sell products [3], [10]. The literature review of network marketing has provided in Table I.

TABLE I: LITERATURE REVIEW OF NETWORK MARKETING

Concept	Researcher	Year	The Emphasized aspects and Variables
Network Marketing	[3]	2008	Behavioral Growth and potential revenue aspects in both single-level and binary structure of the network assessment
	[2]	2008	Behavioral Growth and potential revenue aspects in both single-level and binary structure of the network assessment
	[11]	2007	Network Marketing by increasing communication skills, presentation skills, motivation levels, and the inner personal skills are potential tools for the socio - economic development.
	[9]	2007	Attracting customers to their interested products and giving representative ship through online-based marketing expert system.
	[12]	2007	Attracting more customers using the network marketing and the development of previous models by using data on the network, and Ranking network neighbors into smaller groups.

Social Network or Social Capital

Social networks consist of powerful interpersonal communication such as friendship, kinship, and long-term cooperation with members of other groups or companies based on social communication [13]. The Literature review of social capital has provided in Table II.

Sociological studies of native entrepreneurs confirm that social capital is the very social networks. Network capital

can be described as complex networks of the society capable of guiding and screening information based on cultural identity. Social capital also addresses the control of allocation of scarce resources available to entrepreneurs. Social capital forms behavior based on cultural values, so that the more powerful the social capital, the richer the cultural values [14].

TABLE II: LITERATURE REVIEW OF SOCIAL CAPITAL

Concept	Researcher	Year	The Emphasized aspects and Variables
Social Capital	[15]	2010	Positive and negative effects and impact of structural dimensions of social capital or dense and sparse networks in creating incremental and fundamental innovations.
	[16]	2008	Mutual trust in social capital plays an important role in the acquisition of knowledge, companies success and facilitation of knowledge flow compromise between companies, and social capital plays and strategic role in building sustainable competitive advantages

Marketing in Small and Medium Companies

Small and medium companies are one of the most important parts of job creation in the economy. It is very important, therefore, to increase conception of the key factors effective on their success. Review of the literature demonstrates that in order to achieve their goals, small and medium companies pursue marketing differently from the way in which large companies do it [17], [18], [19], [20].

Researchers all agree that marketing is different in small and medium companies than in large ones [21], [22], [23].

The operation of marketing is restricted in small and medium companies for many reasons. The reasons include low resources (like financial and human), conception of operation, skills, and insight [24], weak money supply, lack of marketing skills, company size, tactical and strategic problems concerning the customer [25], [26]. The Literature review of small enterprises has provided in Table III.

TABLE III: LITERATURE REVIEW OF SMALL ENTERPRISES

Concept	Researcher	Year	The Emphasized aspects and Variables
Small Enterprises	[27]	2006	Small businesses have an inappropriate working physical condition, and organizational health and safety management systems than large businesses, but on the other hand have better psychological conditions.
	[28]	2002	In terms of internationalization and market development, small businesses have some major difficulties. Complementary assets are considered a threat to them. Marketing skills, distribution and access to financial resources and mechanisms are some of their main weaknesses and pricing level is one of their main strengths.

III. SUMMARY

Issues that retail companies are faced with include

shortage of capital, high costs, and lack of experts. New products based on modern technology are also confronted with problems upon entry to the market such as great

investment of the research and development sector, high workforce cost, high product prices, obtaining premature benefit, their short lifetimes, high risk-taking, and innovation. On the other hand, marketing these products is also affected by factors such as centralized decision-making on the part of the manager or owner, dynamic environment, presence of greater competitors with higher resources and

effects on the market, customers' great expectations, and lack of effective resources. The network marketing strategy also has functions such as cost reduction, sale rate increase, branding, job creation, networking power, high innovation power, and money supply increase resulting from sale growth, made by viral marketing and its extension into a social network through social capital exchange.

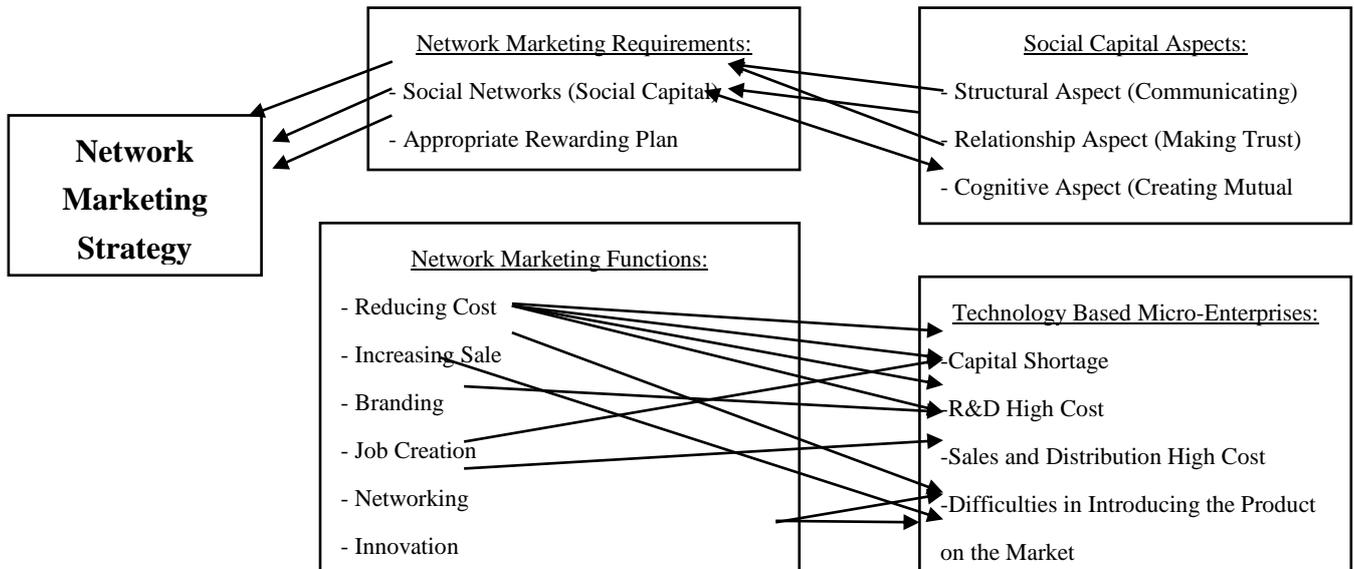


Fig. 1. The Model of research.

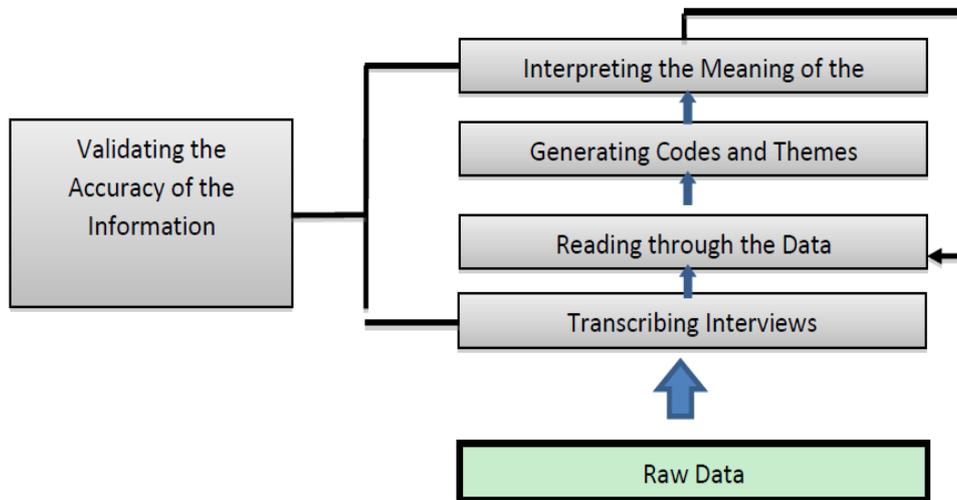


Fig. 2. Steps of qualitative data Analysis [29].

IV. 3-8- METHOD OF INFORMATION ANALYSIS

The method of qualitative content analysis and data and category coding has been used.

3-8-1- Coding Method

It was performed with the “open-axial” method in the following two steps:

- In the first step, open coding, we formed the information categories (classes) through fractionating and studying the information, and specified the core and subsidiary categories using the collected data.
- In the second step, we selected open coding for axial coding of a category, and investigated it as the core category or phenomenon at the center of the process, and then associated the rest of the categories to it.

Performing this step requires the coding table to be drawn. The diagram demonstrated the relationships between the causal conditions, strategies, environmental conditions, and particular grounds and resulting consequences.

In qualitative data analysis, the researcher states his interpretation of what he has seen, heard, and perceived, and tries to provide a picture of the problem under investigation including reports of different points of view, identification of several factors effective in a situation, etc. [29].

V. RESULTS CONCERNING THE MAIN QUESTION

The main research question is “what are the functions and solutions of network marketing for marketing and sale of new products based on advanced technology?” In view of

the results obtained from the research, network marketing can have the following functions and solutions in marketing and sale of new products based on advanced technology in microenterprises, which have been included in the case study obtained from the theoretical foundations and field study of the companies under investigation:

A. Functions of Network Marketing

The functions of network marketing based on the theoretical foundations and qualitative research in this project include:

1) Cost reduction

One of the issues involved in microenterprises is their high costs. Analysis of the data obtained from the theoretical foundations and interviews in Coded Table demonstrates that man-to-man or network marketing leads to reduction of advertisement, distribution, and market research costs, costs concerning test of goods, sale unit training costs, costs concerning embellishment and decoration of the store showcase, and human force costs, which has been significantly effective on reduction of their costs and increase in their money supply.

2) Sale Increase

Based on the researcher's findings from the interviews made according to Coded Table and the theoretical foundations, sale volume and rate increased through further attraction of independent vendors and the value added made for users.

Confirming the above statements, [30] hold that actual products are used in the network marketing strategy, where the purpose is to increase sale and provide information on new products using a network of independent vendors. [5] also believes that products are presented in this strategy directly by the independent distributors to the final users, and they charge a commission in return for selling the products. Each of these distributors can also introduce other distributors, and the primary distributor also charges an amount as commission in return for the secondary distributor's sale, and value added is made for the sale network and users by the commissions paid.

3) Product branding

Based on the data obtained from this research according to Coded Table and the theoretical foundations, everybody agrees that network marketing proved very useful in identifying and introducing goods and their quality and efficiency to users.

Ref. [12] also hold that in network marketing, people provide their friends and acquaintances with information concerning products or services by verbally supporting them, and recommend that they use the products.

4) Job creation

Based on the researcher's findings from interviews made with cleaning industry companies with products based on modern technology, according to Coded Table and the theoretical foundations, network marketing will cause motivation and attraction of independent vendors and, finally, job creation by attracting independent vendors further and paying desirable commissions.

Ref. [30] Also hold that actual products are used in the network marketing strategy, where the purpose is to increase

sale and provide information on new products using a network of independent vendors. Subsequently, [5] believes that products are presented in this strategy directly by the independent distributors to the final users, and they charge a commission in return for selling the products. Each of these distributors can also introduce other distributors, and the primary distributor also charges an amount as commission in return for the secondary distributor's sale, and value added will be made for the sale network and users by the commissions paid, and will lead to job creation.

5) Viral marketing

Based on the researcher's findings from the interviews made according to Coded Table and the theoretical foundations, face-to-face selling and marketing to family members, relatives, and acquaintances in man-to-man marketing, suggesting the function of viral marketing in network marketing, which has led to advertisement for the above users' knowledge and goods sale and distribution.

which is in complete accordance with [31] belief, who hold that in network marketing, people provide their friends and acquaintances with information concerning products or services by verbally supporting them, and recommend that they use the products. This state of affairs is also referred to as viral marketing.

6) Networking

Based on the researcher's findings from the interviews made according to Coded Table and the theoretical foundations, network marketing leads to relations made among family members and relatives and independent vendors, and these relations can result in networking.

Ref. [5] also believes that products are presented in this strategy directly by the independent distributors to the final users, and they charge a commission in return for selling the products. Each of these distributors can also introduce other distributors, and the primary distributor also charges an amount as commission in return for the secondary distributor's sale.

7) Innovation

Based on the researcher's findings from the interviews made according to Coded Table and the theoretical foundations, network marketing helps facilitate market research from the operational as well as cost reduction aspect through permanent, continuous relations between independent vendors and identify customers' instant and future needs, and finally helps the business innovate in the products. This is in line with [31] research, focused on the efficiency of network marketing in research on marketing and reduction of its costs.

B. Money Supply Increase

Based on the researcher's findings from the interviews made according to Coded Table and the theoretical foundations, network marketing causes sale to increase, and seeks to charge the users for the sold goods so that the independent vendors obtain their commissions faster. On the other hand, cost reduction is also one of the functions of network marketing. The sale increase and cost reduction functions lead to increase in the money supply of the company.

C. Use of Social Networks along with Social Capital Exchange

Based on the researcher’s findings from the interviews made according to Coded Table and the theoretical foundations, it is communication that makes the social network in network marketing, and it is social capital exchange that develops trust and sympathy in the network, and the common values and goals, such as higher product sale, are finally created.

Furthermore, [32] consider three dimension for intra-organizational social capital with an organizational approach: the cognitive dimension (creation of common values, which is one of the social capital concepts),

relational dimension (development of trust and sympathy), and structural dimension (communication), which is in line with the researcher’s findings.

VI. CONCLUSION

As shown in Table IV, the functions which are found in the research have been provided in nine groups that have been extracted and interpreted through the interview coding program.

TABLE IV: NETWORK MARKETING FUNCTIONS FOUND IN RESEARCH

No.	Network Marketing Functions Found in Research	
1	Reducing cost	Reducing the cost of advertising
		Reducing distribution costs
		Reducing the cost of market research
		Reducing the cost of product testing
		Reducing the unit cost of sales training
		Reducing or eliminating the shop’s decoration
2	Sale Increase	Reducing human resource cost
		Attract more independent retailers
3	Branding	The added value created for independent dealers and distributors
		Product and brand recognition
4	Job Creation	Attract more independent retailers
		Pay good commission
5	Viral Marketing	Face to face Sales and marketing to relatives
6	Networking	Networking with customers and independent distributors
7	Innovation	Market research and understanding the customer needs
8	Increasing Liquidity	Sell more products in cash while reducing costs
9	Using a Social Network with Social Capital Exchange	Communicating, creating trust and shared values

VII. RECOMMENDATIONS FOR FUTURE STUDIES

Regarding to the spatial scope of the study is limited to cleaning companies that their products are Consumer products or Fast Moving Consuming Goods (FMCG) and are based on Microfiber and Nano silver technology, Functions and network marketing strategies for other products based on advanced technology can be investigated. Moreover, we recommend that in future studies, generalizability of the findings of the research and application in a wider range of space, time and Industry Be checked.

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