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**Adoption of Modern Management Techniques in Small and
Medium Enterprises: The case of Van Organized
Industrial Zone****Yaşar Akça**Economics and Administrative Faculty, Management Department,
Bartın University, 74100 Turkiye**Buket Coşkun**Graduate School, Management Department
Bartın University, 74100 Turkiye**Abstract**

Small and Medium-Sized Enterprises (SMEs) are experiencing a perpetual evolution in management systems as well as in production technologies to sustain their existence. Each SME is obliged to choose and apply the most appropriate one of the modern management techniques for its business structure. In this way, success in getting ahead of the competition, cost minimization, profit maximization, sustainable growth, productivity and organizational performance will be achieved. In this study, the applicability of modern management techniques in SMEs is investigated through the case of the Van Organized Industrial Zone (OIZ). SMEs benefit from seven modern management techniques (learning organizations, outsourcing, benchmarking, employee empowerment, green management, business process reengineering and total quality management) at a high level (71% and above). Two modern management techniques (crisis management and strategic partnership) are utilized at a moderate level (between 36% and 70%). Also, two modern management techniques (lean management and organizational downsizing) are employed at a low level (35% and below).

Keywords: *Small and Medium-Sized Enterprises, Van Organized Industrial Zone, Modern Management Techniques, Organizational Performance.*

Introduction

Modern management techniques have arisen to address the solution of business management problems. As a result of the success of modern management techniques that have begun to be applied in America and European countries, they have become popular worldwide. Modern management techniques have a positive impact on the performance of enterprises. The basic and ultimate objective is to stand out from competitors in a competitive market and to survive by maximizing profits. Thanks to the applications of Modern Management Techniques, the ability of enterprises to innovate improves and adapt to the changing environment.

Modern management techniques help to solve the problems encountered by the business, boost production and productivity while lowering costs, improve competitiveness and achieve organizational growth.

As the emanation point of Modern Management Techniques, the literature (Bakkalbaşı, 2017:432) points to the industrial revolution covering the years 1760-1830. The introduction of machines in the mass and standardized production of commercial goods is called industry. Here, factories, machines, the iron and coal mines are the components of industry (Sucu, 2019:24). The starting point of the industrial revolution is the invention of the steam engine by James Watt (1736-1819) in England (Saruhan, 2014:7). James Watt built the first example of the steam engine in 1765 and put it into commercial exploitation in 1776. Using the magic power of steam in every mine and factory it entered, the steam engine boosted production and thereby significantly lowered total production costs. With the utilization of the steam engine in different fields, it started a series of innovations that would enrich Europe (Şen, 2009:208).

The industrial revolution was the most profound change Europe had ever experienced (Küçükcalay, 1997:51). It reformatted all areas, especially the economy and working life. Machine power replaced human labor and simple hand tools in industrial production. Until this period, a considerably limited number of production activities were practiced at home and on hand looms in small workplaces. With the industrial revolution, factories were born and a large number of workers began to work together in closed spaces. The traditional workshop-type production mode was replaced by fabricated production and mass production. Factories became production centers. During the industrialization process, production grew with new scientific studies, technical and technological inventions (Küçükcalay, 1997:51), and the capital accumulation provided by factories led to new factories (Ersöz, 2012:44). International trade gained momentum with the transition from small-scale production to mass production.

For all these reasons, modern management techniques originated in Europe for the first time. New management techniques have taken and continue to take place in business life for reasons such as changing needs over time, product diversity, differentiation and growth of enterprises.

There are various management practices that have been put forward in the context of globalization and a dynamic environment. The fundamental idea of the approaches in Modern Management Techniques covers encouraging innovation driven by differences, technological developments, continuous learning, quality, competition, customer satisfaction, organizational performance success and strategic management (Nişancı, 2015:257). The ultimate goal is to make the highest quality products with the least cost, revenue maximization and expense minimization and a working environment without hierarchy (Saruhan, 2014:23).

This study is about the determination of the application status of modern management techniques of small and medium sized business (SMEs) that are operating in the organized industrial zone of Van province.

Small and Medium-Sized Businesses

SMEs play an important role in the world and in Turkey. The production of intermediate goods and raw materials is accomplished especially by SMEs. SMEs are easier to establish than large enterprises. SMEs make use of modern management techniques to satisfy the personnel they employ, improve product quality and bring costs down to a minimum. SMEs are understood as non-institutionalized enterprises that produce on a small

scale within the line of activity (Müftüoğlu, 2002). They usually produce for the domestic market. In the classification of SMEs, the number of employment and sales turnover are taken into account as the main factors. In SMEs, there is a tight communication network between senior management and lower-level personnel. It is shaped by the principle of leadership and capital unity (Loecher, 2000). They have a limited budget. SMEs are enterprises whose annual net sales revenue does not surpass 250 million TL and which employ fewer than 250 staff. However, SMEs are subdivided into three categories. Enterprises with less than 10 employees and capital not exceeding 5 million TL are micro-scale enterprises. Enterprises with fewer than 50 employees and capital not exceeding 50 million TL are small enterprises, while enterprises with fewer than 250 employees and capital of less than 250 million TL are medium-sized enterprises.

Unlike large enterprises, SMEs are integrated with their owners. SMEs are businesses that usually stem from one person's dreams and limited capital accumulation. SMEs reinforce economic and social development and create employment. They are enterprises that can swiftly respond to customer needs and expectations with their novel ideas and flexible structures (Kırmızı, 2019:18-19). They act as a driving force in economic development (Erdem, 2019).

SMEs play a locomotive role in economies. SMEs make significant contributions to employment and the development of countries. Each SME is a harvest of entrepreneurship. In parallel with the augmentation in the number of SMEs, prosperity spreads to the public. On the other hand, there are many challenges that impede the growth of SMEs. Foremost among these are lack of capital and challenges in access to funding.

Modern Management Techniques

The philosophical basis of the emergence of modern management techniques is to ensure that the factors that make up the business come together in the most effective way. Depending on the use of alternative management techniques, innovations will be fostered, and technological developments, continuous learning, quality, competition, customer satisfaction, and organizational performance success will occur (Nişancı, 2015:257). The knowledge obtained from the used techniques creates a road map for managers, guides the thoughts and behaviors of the personnel, and assists in solving the management problems encountered.

The main management approaches that comprise the content of Modern Management Techniques are as below;

Learning Organizations

A company is referred to as a learning organization if it continuously draws conclusions from the events it encounters, applies them to adapt to shifting external conditions, transforms them into a system that develops its employees and therefore continuously renews itself (Saruhan, 2014:29). Through organizational learning, the enterprise learns information, interprets its experiences and utilizes them in business life (Zehir & Acar, 2005). Businesses that follow and implement innovations, solve mistakes and act in line with a common mission and vision from the top to the bottom are also learning organizations. Knowledge is shared and augmented throughout the Organization (Özen Kutaniş, 2002: 273). Knowledge and performance are merged. Attitudes of employees are changed. An ambient is prepared to facilitate and share new knowledge. The results are converted into organizational knowledge and implemented in solving problems.

Outsourcing

When a company outsources other service-related tasks to specialized companies while maintaining the core strengths that set it apart from competitors, this practice is known as outsourcing (Saruhan, 2014:26). The works in the main field of activity that enhance the income or diminish the expenses of the business are also core competencies. Businesses obtain a number of services they need from other companies and at the same time cooperate with each other in a complementary way. The driving force of outsourcing is costs and competition (Saruhan, 2014:26). This is the reciprocal of the theory of mutual advantages and specialization (Lacity and Hirschheim, 1993:73).

Benchmarking

Benchmarking is the process of comparing with the best businesses operating in a similar field to achieve higher corporate performance (Türengül, 2005: 112; Saruhan, 2014: 25). The business scrutinizes the competitors it compares. It adapts the practices that make a difference. Thus, costs are minimized, and productivity, efficiency and quality are maximized. Better customer service, environmental adaptation and competitive advantage are achieved. Specific issues and methods that drive success are identified. It enables us to see the reasons for competitive advantage among businesses.

Employee Empowerment

Employee empowerment is the contribution of personnel to the improvement of product quality, productivity, decision-making processes and competitiveness of the business through teamwork (Türengül, 2005: 114). Depending on cooperation, sharing and teamwork, the authority of the personnel to solve problems is increased (Saruhan, 2014: 27-28). Employees' commitment to the workplace, knowledge, skills and motivation levels are increased. Thanks to empowerment, the one who does the job is also made the owner of the job. The right to make choices about the job belongs to the person doing the job. The center of action of empowerment is that the staff who actually do the job use their expertise, see opportunities and make the necessary decisions.

Total Quality Management (TQM)

One of the fundamental issues of business is quality. The generally accepted definition of quality is the degree to which the goods and services purchased by the customer conform to the specified standards and meet the needs. Total Quality Management is the continuous improvement of supplier and customer relations, marketing and production activities and relations between employees and management. In other words, TQM is a management style in which customer needs are identified and customer satisfaction is targeted through continuous arrangements (Mergen, 1993). TQM practices have become widespread, especially in the 1990s.

Business Process Reengineering

This term denotes the fundamental redesign of business processes in critical performance measures such as cost, quality, service, distribution, flexibility, job satisfaction and speed (Saruhan, 2014:28). Thus, all business processes, organizational structure, tasks and values, management system, technology, human resource policies, rewards are redesigned. Things are rethought from start to finish to find better ways of doing business. After implementation, unnecessary tasks and processes are eliminated. Radical changes are made in the organization.

Innovation Management

The transformation of ideas into product and service applications and their commercial launch is called innovation management (Saruhan, 2014:29). There are three stages in the concept of innovation. The first of these is to generate ideas. In the second stage, it is necessary to improve the generated idea. In the third and final stage, the produced innovation is commercialized and put into practice. The product or service that is considered new is turned into commercial value. Adopting new ways of doing business with new ideas and developing new products increases competitiveness.

Crisis Management

A crisis is defined as any potentially risky situation that threatens the existence of the enterprise (Reilly, 1987: 80). In crisis management, it is necessary to re-establish order, correct mistakes, not to make mistakes, form a crisis team and complete the crisis process with the least damage.

The main factors that lead to the crisis in enterprises are as below (Özdemir & Uçar, 2020):

- The source of the crisis may be existing and new technologies,
- Legal, political, social and cultural changes in the external environment may be the source of the crisis,

- Internal problems such as control, coordination and communication are sources of the crisis,
- There are crises caused by competition with the competitors of the enterprise.

Lean Management

The removal of activities that do not generate added value in the business is called lean management (Türengül, 2005: 112). The business gains a flexible body that can respond to customer demands more quickly thanks to leanization. For this, the factors that will create "value" are identified first. Then all unnecessary elements are abolished. Cost advantage, superiority over competitors and the ability to react quickly to changes are gained (Saruhan, 2014:29). The concept of lean management is based on production without waste. Redundant activities are not introduced into the system, delays are not allowed and faulty products are not made. In lean management, anything that does not add value to the business is considered waste.

Organizational Downsizing

Reducing the number of personnel, costs and business processes is called downsizing (Türengül, 2005: 114). The shrinkage of the organization affects the sales volume, market share, production capacity, number of personnel, structure and functioning. Tardiness caused by excessive differentiation, idle capacity, high cost and low efficiency reduce competitiveness. Supervision of the enterprise becomes difficult. The method used to overcome all these problems is downsizing. At the end of the downsizing, the hierarchy chain and the number of departments of the enterprise decrease (Saruhan, 2014:27), and costs are reduced.

Customer Relations Management

Customer relations are the basis of business survival. Businesses that recognize their customers and can provide them with what they want will survive. A good personnel infrastructure must be established for this. The main principle in customer relationship management is communication. All staff must undergo good training to strengthen customer relations. Taking advantage of web applications, making customer service easy and accessible from anywhere, finding quick solutions to customer problems and making them loyal customers are the results of customer relationship management.

Strategic Partnerships

A strategic partnership occurs when a business opens up to the markets and forms cooperation with other businesses in global competition (Saruhan, 2014:32). Today, no business has the resources necessary for competition on its own. At this stage, each business contributes to the responsibilities they undertake in the overall system. Thanks to the collaborative activities of the companies, new specializations will appear and the earning potential will rise. Through this cooperation, risks are shared. Entering the international markets become possible.

Green Management

Although profitability is regarded as the primary purpose in businesses, the existence of the environment takes precedence. For this, a high level of environmental awareness is essential. The environment is the setting where all kinds of living and economic factors exist (Özgener, 2004: 194). What is essential in green management is to carry out manufacturing without destroying the ecosystem and consuming resources. The starting point of green management is sustainable resource utilization, healthy and clean production and thus contributing to the elaboration of appropriate technologies (Özgener, 2004: 195).

Research Method

A questionnaire form was devised to reveal the implementation status of Modern Management Techniques by SMEs operating in Van OIZ. SMEs were interviewed face-to-face and were asked to fill in the questionnaire forms. The acquired information was evaluated.

Target population and sampling

The target population of the research consists of 117 SMEs operating in the Van Organized Industrial Zone. The number of SMEs included in the sampling by filling out the questionnaire form is 85.

Results

The information on the businesses and participants in the research is demonstrated in Table 1.

Table 1: Information about the participants

Groups	Variables	Number (n)	Percentage (%)
Education status	High School	30	35
	University	55	65
Titles of persons	Business Owner	20	23,5
	Business Partner	10	11,8
	Business Manager / Assistant Manager	24	28,2
	Accountant	31	36,5
Age Range of Participants	18-30 Years	25	29,4
	31-45 Years	42	49,4
	46-55 Years	15	17,6
	Age 56 and over	3	3,5
Duration of operation of enterprises	1-5 Years	26	30,6
	6-10 Years	16	18,8
	11-15 Years	26	30,6
	15 Years and Over	17	20,0
Number of personnel working in enterprises	1-9	15	17,6
	10-49	54	63,5
	50-249	12	14,1
	250 and above	4	4,7
Field of activity of enterprises	Textile	14	16,5
	Food	17	20,0
	Plastic	7	8,2
	Forest products	8	9,4
	Other	39	45,9

The enterprises participating in the research were generally asked about their implementation of modern management techniques and the results are given in Table 2.

Table 2: The Status of SMEs' Implementation of Modern Management Techniques

Queue No	Modern Management Techniques	Implemented (%)	Not Implemented (%)	Description
1	Learning Organizations	85,9	14,1	High
2	Outsourcing	80,0	20,0	High
3	Benchmarking	67,1	32,9	High
4	Employee Empowerment	75,3	24,7	High
5	Green Management	77,6	22,4	High

6	Business Processes Engineering	64,7	35,3	High
7	Total Quality Management	67,1	32,9	High
8	Crisis Management	58,8	41,2	Medium
9	Strategic Partnership	45,9	54,1	Medium
10	Lean Management	34,1	65,9	Low
11	Organizational Downsizing	35,3	64,7	Low

Implementation of Modern Management Technique in Business: Low between 0%-35%

Implementation of Modern Management Technique in Business: Medium between 36%-70%

Implementation of Modern Management Technique in Business: High between 71%-100%

Enterprises were generally questioned about their implementation of modern management techniques. Accordingly, we ascertained that the level of use of lean production, organizational downsizing and downgrading techniques was low (between 0% and 35%), while the level of use of strategic partnership and crisis management techniques was medium (36%-70%). The level of use of other modern management techniques was high (71%-100%). The highest here is the learning organization technique.

As the constraints faced by the participants in the implementation of Modern Management Techniques, 34% of the participants marked the option "Qualified personnel is not available". This was followed by "Consultancy is not available" with 33%. The option "The business is not ready for this innovation" is 14%, and the rate of the option "It is not suitable for the business" is 10%. The least marked option was "Implementation costs are high" with a rate of 9%.

Conclusion and Recommendations

In this study, it was concluded that most of the enterprises operating in the Van Organized Industrial Zone have sufficient knowledge about Modern Management Techniques. It was deduced that being aware of these modern management techniques increases the performance of SMEs owing to the high rate of use of modern management techniques. In general, it shows that SMEs in Van Organized Industrial Zone have adopted modern management techniques to a large extent.

Joshi (2001) pointed out that the adoption of newly introduced modern management techniques is low. The reasons for this are cited as conservative attitude of management, autocratic leadership, lack of training, expertise, and long-term orientation (Joshi, 2001). Research in developed countries (Chenhall & Langfield Smith, 1998; Pierce & O'Dea, 1998; Abdel-Kader & Luther, 2006) also underlines the increasing adoption of modern management techniques.

The following recommendations could be suggested for SMEs operating in Van OIZ;

- Professional consultancy firms should be utilized for the implementation of modern management techniques.
- Modern management techniques training should be regularly organized by Van OIZ management.
- Cooperation with the Provincial Directorate of VAN KOSGEB should be established.
- Open Education Faculty studentship should be encouraged to raise the education level of SME owners and managers to the university level.
- Projects on modern management techniques should be developed through protocols to be signed between Van Yüzüncü Yıl University and Van OIZ.

If productivity, efficiency and organizational success are to be achieved in the enterprise, modern management techniques should be learned and used throughout the enterprise. To be a good manager, it is necessary to know modern management techniques and practice them in the business. Modern management techniques bring solutions to the problems the business faces. As a consequence of the adaptation of modern management techniques in businesses, it will be possible to minimize costs, boost production and productivity, increase competitiveness, and realize organizational growth.

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