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Business Strategies of SME's, Innovation Types and Factors Influencing Their Innovation: Burdur Model

KOBİ'lerin İşletme Stratejileri, İnovasyon Türleri ve İnovasyonlarını Etkileyen Faktörler: Burdur Modeli

Özlem ÇETİNKAYA BOZKURT[1], Adnan KALKAN[2]

ABSTRACT

Innovation is what we may call the most significant means of changing and rearranging life through research-and-development and production of technology, including the outcomes in economy. Improvements to innovation support rapid change in information production. Therefore, it is crucial for businesses to apply innovation management to survive and prosper in this age of information. From this point of view, the research aims to investigate the properties of SMEs in Burdur concerning strategy, innovation and whether they have developed innovation and an effective strategy thus far. Moreover, it aims to ascertain which strategies and innovation types they employ and factors influencing their innovation. We retrieved the data used in this study from the Burdur Commerce and Industry Chamber (BUTSO). We collected data through a survey that tests strategies, innovation types and factors influencing innovation for SMEs in Burdur. The results of the study show that internal and external factors are very important for SMEs. According to another result, process and marketing innovation is applied more frequently than product and organizational innovation in SMEs. Finally, the results of this study indicate that SMEs apply analyzer and defender strategy.

Keywords: Business strategies, innovation types, SMEs

ÖZET

İnovasyon araştırma geliştirme ve üretim teknolojisi yoluyla ekonomik sonuçları da içererek hayatı yeniden düzenleyen en önemli araç olarak adlandırılabilir. İnovasyon geliştirmeye yönelik iyileştirmeler bilgi üretimindeki hızlı değişimi desteklemektedir. Bu nedenle inovasyon yönetimi uygulamaları işletmelerin bilgi çağında gelişmeleri takip edebilmeleri ve hayatta kalabilmeleri için çok önemlidir. Bu açıdan bakıldığında araştırma Burdur ilinde faaliyette bulunan KOBİ'lerin inovasyon ve işletme stratejileri ile ilgili özelliklerini ve bugüne kadar inovasyon konusunda etkili bir strateji geliştirip geliştirmediklerini incelemeyi amaçlar. Ayrıca diğer bir amacı da KOBİ'lerin inovasyonlarını etkileyen faktörler ve uyguladıkları inovasyon türleri ile işletme stratejilerini tespit etmektir. Bu çalışmada kullanılan veriler Burdur Ticaret ve Sanayi Odası'ndan (BUTSO) elde edilmiştir. Veriler Burdur ilinde faaliyette bulunan KOBİ'lerin inovasyonlarını etkileyen faktörler ile inovasyon türleri ve işletme stratejilerini belirlemek üzere hazırlanan bir anket aracılığıyla toplanmıştır. Çalışmanın sonuçları iç ve dış faktörlerin KOBİ'ler için çok önemli olduğunu göstermektedir. Bir başka sonuca göre KOBİ'lerde süreç ve pazarlama inovasyonu ürün ve örgütsel inovasyona göre daha sık uygulanmaktadır. Son olarak bu araştırma sonuçları kobilerin daha çok analizci ve savunmacı bir strateji izlediklerini göstermiştir.

Anahtar Kelimeler: İşletme stratejileri, inovasyon türleri, KOBİ.

1. INTRODUCTION

In the changing conditions of our time, to accelerate economic development and capture the technological development for developing countries, one of the most effective methods is to implement new and creative ideas. For this purpose, SMEs are seen as one of the most appropriate tools since SMEs have the flexibility to change and development, cover almost all segments of society, spread to the all points of the settlements and generate about 99.5% of all economic units.

In recent years, especially for the industrial sector, innovation has become an important issue. Businesses consider innovation an important element to increase their profits and market shares. Innovation has been one of the key drivers of sustainable competitive advantage for small and medium-sized enterprises (SMEs). Today's economy is based on information. Information is a product resulting from the combination of R&D and innovation. In the information age, where it is necessary to adapt to rapid change and innovation, SMEs should give greater consideration to R&D and innovation issues to remain competiti-

[1] **Assist. Prof., Mehmet Akif Ersoy University, Technical Sciences Vocational School, Department of Management Information Systems, ozlemcetinkaya@mehmetakif.edu.tr**
[2] **Assist. Prof., Mehmet Akif Ersoy University, Technical Sciences Vocational School, Department of Management Information Systems, adnankalkan@mehmetakif.edu.tr**

ve. The main factor that determines the strength of competition is R&D and a high and sustainable productivity growth source of innovation. Emerging developments and rapidly evolving fields of advanced technology depend significantly on the capability of SMEs, i.e. if they are capable of transforming new ideas into marketable products. The flexible structures of SMEs provide more advantages than that of large enterprises for innovation activities. SMEs which adapt easily to innovations concerning technology, production methods and marketing can be easily constructed for the commercialization of the product resulting from R&D. Innovation-oriented strategies make important contributions, ensuring the protection and sustainability of presence and increasing competitiveness for SMEs.

This study investigates the innovation types, internal and external factors influencing the innovation and determines the business strategies which ones were adopted. In determining the scope of the study, due to the flexible structures, SMEs which were thought to be more prone to innovation were discussed.

2. LITERATURE REVIEW

The transformation of a new product into commercial product which meets the needs of customers constitutes innovation value (Carlson and Wilmot, 2006:56). Businesses, depending on the innovation-related expectations, determine an innovation strategy. It is not possible to perform the necessary steps of innovation management for businesses without an effective strategy (Cormican and O'sullġvan, 2004:819).

2.1. Innovation

In recent years rapid technological change, globalization and fierce competition in the markets, forced enterprises to renew and to differentiate themselves more quickly. At the same time, businesses to achieve market success and to provide sustainable competitive advantage need to take advantage of new opportunities in addition to develop new products, services and/or market (Tajeddini, 2010:221). Innovation is defined as the application of new ideas to create value for businesses. According to this general description means to the types of innovation like the installation of new process technologies, product development, as well as management applications. According to customer needs and requirements of the competition and to increase the profitability of new products and/or processes required to adopt (Leskovar, 2007:535).

2.1.1. Innovation Types

The Oslo guide (2005: 51) has given considerable discussion to definitions concerning innovation and innovation types. In these definitions, four types of innovation are discussed. These are product innovation, process innovation, marketing innovation and organizational innovation. Product innovations include both the presentation of new products and services to market and major improvements in the functionality or user characteristics of existing goods and services (Oslo guide, 2005:52). Process innovation includes major changes in methods, equipment and/or software. A new type of production method can be an example of innovation. To increase the company's sales, marketing innovations aim to respond better to customers' needs. These innovations open new markets or relocate a company's product in the market. Organizational innovation can be defined as implementing a new organizational method in commercial practices, workplace organization or external relations for a company (Antonioli, et al., 2004: 19).

2.1.2. Innovation Barriers

For most authors, their categorizations are divided into internal and external barriers (Piatier, 1984; Hadjimanolis, 2003; Madrid-Guijarro, et al., 2009; Stanislawsky and Olczak, 2010). Internal barriers are those that arise inside the company and external barriers, those that arise from the external environment. In literature, to investigate the innovation barriers in SMEs, so many studies (Kamalian, vd., 2011; Lim and Shyamala, 2007; Madrid -Guijarro vd., 2009; Silva vd., 2007; Stanislawski and Olczak, 2010; Tiwari and Buse, 2007; Buse vd., 2010; Hadjimanolis, 1999; Cordeiro and Vieira, 2012; McAdam vd., 2004; Xie vd., 2010; Piperopoulos, 2007) are available. Besides, there have been multiple studies on the strengths and weaknesses of SMEs in their organization of innovation processes (Vossen, 1998; Acs and Audretsch, 1990). This work concludes that innovation in SMEs is hampered by lack of financial resources, scant opportunities to recruit specialized workers, and small innovation portfolios so that risks associated with innovation cannot be spread. Some barriers to innovation in SMEs are given in Table 1.

Table 1: Some Barriers to Innovation in SMEs

Authors'	Some Barriers to Innovation in SMEs
Piatier (1984)	1) lack of government support as an important barrier to innovation in the European countries
Economist Intelligence Unit (2007)	1) necessities related to the frequency, timing and speed of innovation; 2) organizational culture mutation and reducing time to market as a permanent challenge in the assumption of innovation objectives; 3) Chief Executive Officers (CEO) of full age have a greater departure from the view against the goals of innovation and innovative capacity of the organization
Barañano (2005)	1) lack of qualified human resources; 2) huge absence of external communication between the knowledge generators
Janeiro (2009)	1) organizational structure, as well as the climate; 2) culture and strategy resistance to change; 3) tradition and cemented rules; 4) market leadership and absence of rethinking on it; 5) additional work brought by change; 6) week repay on risk assumption.
Silva, Leitão and Raposo, (2007); Vieira, (2007).	(1) high economic cost and risk associated with innovation; (2) lack of funding; (3) organizational rigidity; (4) lack of skilled human resources; (5) lack of market information and technology; (6) government regulation and (7) weak capacity to approach the client, as well as lack of cooperation with centers of learning
Madrid-Guijarro, Garcia and Auken (2009)	1) external environment; 2) human resources; 3) risk; 4) financial position
Segarra-Blasco, Garcia-Quevedo and Teruel-Carrizosa (2008)	1) cost barriers; 2) knowledge barriers; 3) market barriers
Tovstiga and Birschall, (2007)	1) time of development of innovation; 2) risk aversion; 3) poor market knowledge
Tiwari and Buse, (2007)	1) low budget; 2) difficulty in recruiting adequate human resources; 3) bureaucracy; 4) poor cooperation between enterprises
Buse, Tiwari and Herstatt (2010)	1) lack of the target market; 2) bureaucratic constraints; 3) inability to find or decide for the better partner for strategic cooperation
Hadjimanolis, (1999)	1) lack of time; 2) inadequacy of the R&D activities; 3) design and testing within the company; 4) financial resources inadequate
Hadjimanolis, (1999)	1) ease of copying the innovation; 2) government bureaucracy; 3) lack of government support; 4) lack of qualified human resources policies; 5) bank lending
Demirbas (2010)	1) lack of state policies to support technology and R&D activities; 2) negative impact of the economy in the level of investment; 3) high cost of innovation; 4) lack of appropriate means of financing; 5) lack of qualified personnel.
Necadova and Scholleová (2011)	1) high cost; 2) lack of specialists; 3) payback period of investment extremely long; 4) equipment technology; 5) standards and legislation; 6) lack of capital; 7) lack of consumer response; 8) resistance to change; 9) fear of risk; 10) ignorance of the market; 11) infrastructure of the business.
Comtesse, Hodgkinson and Krug (2002)	1) risk aversion; 2) public complacency; 3) non-recognition of high-value innovation; 4) provincialism; 5) closed networks. 6) inability of framework tools for innovation in education; 7) limited human capital; 8) absence of functional models;9) lack of entrepreneurial mindset; 10) poor access to financing; 11) legal barriers; 12) insufficient political vision and growth; 13) infrastructure and intellectual capital and underutilized; 14) too many restrictions on the innovation.
Galia and Legros (2004)	1) high cost on innovation; 2) nonexistence of appropriate sources of funding; 3) internal resistance to change in firms; 4) too much relevance attributed to economic risk; 5) lack of qualify personnel; 6) insufficient information over technology; 7) low information about the markets; 8) level of legislation, regulations and standards; 9) lack of commitment of the costumer with new products.
Iammarino, Sanna-Randaccio and Savona (2006)	1) lack of funding sources; 2) excessive financial risk; 3) innovation costs dimension; 4) inexistence of qualified human resources; 5) low information about the markets; 6) scarce information on technology; 7) rigid regulatory.
Mussi and Spuldaro (2008)	1) risk associated with excessive specialization of human resources; 2) super enhancement of production processes or services by its practitioners; 3) limitation in the allocation of financial and human resources; 4) limitation on market access.
Alinaitwe, Widen, Mwakali and Hansson (2007)	1) domestic market dimension; 2) security level; 3) governmental intervention; 4) taxing on new products or services; 5) lack of accession to international markets; 6) discouraging policies of labor mobility.
Kamalian, Rashki and Arbabi (2011)	1) excessive economic risk; 2) insufficiency of economic resources; 3) unavailability of funds; 4) high cost associated with innovation.

(Source: Cordeiro, A.,&Vieira, F. D. (2012). "Barriers to innovation in SMEs: an international comparison". II Conferência Internacional de Integração do Design, Engenharia e Gestão para a inovação Florianópolis, SC, Brasil, 21-23, October http://repositorium.sdum.uminho.pt/handle/1822/21812)

2.2. SMEs

Two major issues that require special attention are the large number of SMEs and the capability of moving agile. When examined on a scale of country or sector, it can be seen that emerging and rapidly evolving advances in the fields of advanced technology strongly depend on innovation capability of SMEs that is the intellectual ability to be converted into marketable products. Industrial and national studies show that there is a strong relationship between innovations on emerging technologies and SMEs. The SMEs play an important role in creating jobs and wealth in the Turkish economy. SMEs are essential source of jobs, entrepreneurial spirit and innovation and thus they are very important for fostering competitiveness (Fatoki, 2011: 193). The Turkish economy is characterized by a high growth rate (8.9% for Turkey and 1.8% for EU in 2010), relatively high inflation (Consumer Price Index) rate (6.4% for Turkey and 2.6% for EU in 2010) and a relatively high rate of unemployment (10.7% for Turkey and 9.7% for EU in 2010) compared to EU-27 (TÜİK, 2008). SMEs employ 76.7% of the working population and the share of the SMEs in production is 38% in Turkey (Cansız, 2008: 5). According to the definition of the Small and Medium Industry Development Organization's (KOSGEB) Incentive Decree No: 2429, an SME that employs 1-9 employees is categorized as a micro, 10-49 employees as a small, and 50-250 employees as a medium- sized enterprise (Kosgeb, 2012).

2.3. Business Strategy

Business strategy is the outcome of decisions made to guide an organization with respect to environment, structure and processes that influence its organizational performance. An effective strategy maximizes the efforts of people within the organization. If they understand the strategy, it is much easier to increase the efforts of them and they are able to apply it to the various decisions. The best way to understand and embrace the strategy for people is to involve the people in creating the strategy (McFarland, 2008: 72).

Strategy literature has grown and enriched rapidly since the 1950s, and it has been the scene of considerable controversy about how strategy should be and what it should be. In the light of these discussions, for example, some reclassifications has been made under headings such as linear, adaptive, interpretive (Chafee:1985), the classical thought of school, the evolutionist school, the process school, the system school (Whittington:1993) and strategic management school (Mintzberg:1998). The problem of this study is more concerned with discussions on how the strategy should be than what the strategy is. Therefore, the responses to how the strategy should be will be reference to our study. These responses are collected in the two groups:

a) Those who emphasis on the claims of the actors (entrepreneurial characteristics) in the field of strategy affect their environment and organizational strategy (For example, Snow & Hambrick, 1980; Rumelt, 1979; Miles & Snow, 1978; Meyer & Coleman; 1978).

b) Those who emphasis on the industry's decisive influence (Porter, 1980 and 1985).

The first group that emphasis on factors such as the firm's ability to learn, ability to innovate, entrepreneurial ability, the relative position adopted by the firm against the forces of the market, firm-specific superior resources and capabilities (Barca:2003), is directly related to the problem of this study in terms of detailing the interaction of entrepreneur-strategy. Miles and Snow's (1978) typology of strategy will be the source of our conceptual framework.

This typology referred to as prospector, defender, analyzer and reactor of business strategies (Miles and Snow, 2003). The typology of strategies formulated by Miles and Snow has important implications for management, because depending on the strategic orientation adopted—defender, prospector, or analyzer—the firm can emphasize to a great extent some aspects of management, such as technological position, innovation, organizational design, and human resource management. Moreover, these aspects of management can largely determine firm performance and business efficiency. Many studies about innovation and business strategies (Pittino and Visintin, 2009; Hadjimanolis and Dickson, 2000; Gimenez, 2002; Sánchez and Sánchez-Marín, 2005; Laforet, 2008; Guan vd., 2009) were found in the literature.

Organizations that wish to have access to the market, the strategy most likely support the prospector. Prospector, almost never stop looking for new market opportunities, and environmental changes that will reveal trends that occur on a regular basis to find provisions for experimenting with potential organizations (Zajac ve Shortell, 1989:414).

A defender focuses on the current activities and by improving the efficiency of markets for their products and try to maintain the current balance maintained. New opportunities avoid from pursuing (Zuckerman, 2002:12). Defensive organizations improve posture focus on limited to a small number of products or service to the narrow market and aggressively try to ma-

intain that part of the price or market differentiation strategies applying (Swayne et al., 2006: 260).

Analyzer posture, a combination of prospector and defensive strategic postures. Generally, the ongoing activities in some areas, while continuing to on the other hand investigate new product and market opportunities. For this reason, analysts are market followers some of levels (Zuckerman, 2002:12, Luke et al., 2004: 141).

Finally, organizations following the reactor strategy changes rarely except for the changes caused by external pressures. Reactor strategies can be characterized as imitation (Zuckerman, 2002: 12). They ignore new opportunities and can not take risk (Croteau and Bergeron, 2001: 78-79).

3. METHODS

3.1. The Scope

The contribution of this paper should be discussed with respect to the progress made in methodological and empirical knowledge about strategies and innovation types. This paper aims to present factors influencing innovation and strategies in SMEs. The data is analyzed empirically. This paper investigated the strategies, innovation types and the factors influencing innovation in SMEs operating in Burdur.

3.2. Data and Sample

As creating a set of questions used in the form of the questionnaires, the scales for innovation types and barriers (Günay, 2007) and the scale for business strategies (Croteau ve Bergeron, 2001) were used. In this study, four dimensions (product, process, marketing and organizational innovation) with 20 questions for innovation types, two dimensions (internal and external factors) with 42 questions for factors influencing the innovation and four dimensions (prospector, analyzer, defender and reactor) with 17 questions for business strategies were chosen as variables.

In the application of the research SMEs operating in Burdur were carried out. Burdur economy relies on primarily marble industry, agriculture and livestock, agricultural machinery and food industry (BUTSO, 2012). The amount of export in 2011 was $167 million in Burdur. The largest share of export in Burdur was manufacturing sector which represents 88 percent (TÜİK, 2011).

In this paper, 110 SMEs operating in various sectors in Burdur were randomly selected as the sample of the research. The number of SMEs (research population) registered to BUTSO (Burdur Commerce and Industry Chamber: 2012) is 460. The rate of randomly selected sampling is 24 %. Data collected from questionnaires were entered into the computer and analyzed with SPSS 15.0. The respondents were asked to respond on a 5-point Likert type scale (1: certainly disagree, …, 5: certainly agree) questions. The respondents were chosen from the professionals and managers in SMEs. Questionnaires were given to the respondents via a face-to-face interview in 2011. The reliability of the scale was calculated as Cronbach α= 0,919.

3.3. Data Analysis and Evaluating the Analysis Results

First, the "Descriptive Statistics" test was applied to data in order to obtain descriptive information about SMEs. The values obtained from the test are given in Table 2.

Table 2: Descriptive Statistics

Subjects	Descriptions
Field of Activity	Marble: 26.4 %; Machine: 16.4 %; Construction: 9.1 %; Others: 48.1 %
Sectors	Production: 46.4 %; Service: 35.5 %; Trade: 18.1 %
# of Employees	1-10: 47.3 %; 11-50: 41.8 %; Others: 10.9 %
# of University Graduates	1-10: 86.4 %; 11-50: 10.9 %; Others: 2.7 %
Duration of Activity (years)	1-5: 25.5 %; 6-10: 27.3 %; 11-15: 16.4 %; 16-20: 8.2 %; > 20: 22.7 %
R&D Expenditures/ Total Capital	0 %: 41.8 %; < 1 %: 18.2 %; 1-5 %: 20 %; 6-10 %: 12.7 %; > 11 %: 7.3 %

One-Sample Kolmogorov-Smirnov test was applied to data to check whether they fit a normal distribution in the scale base or not. According to Kolmogorov-Smirnov (n=110 > 29) normality test, it was determined that the distributions of data did not conform (Asyp. Sig.<.05) to normal distribution. The values obtained from the Kolmogorov-Smirnov test are given in Table 3.

Table 3: One-Sample Kolmogorov-Smirnov Test Values

Variables	Kolmogorov-Smirnov Z	Tot. Var. Explained	Asymp. Sig. (2-tailed)
Business Strategies	.850	59.58	.000
Innovation Types	.833	65.27	.000
Factors Influencing Innovation	.710	69.29	.000

The reliability coefficients for variables are given in Table 4.

Table 4: Cronbach Alpha Values

Variables	a	F	Sig.
Innovation Types	.906	19.506	.000
Factors Influencing Innovation	.915	14.861	.000
Business Strategies	.889	13.115	.000
Totally	.919	24.161	.000

Alpha coefficients obtained were accepted because they were higher than 0.50, as defined by Bagozzi and Yi (1988), and 0.70 as defined by Nunnally (1978), respectively.

Table 5: Factor Loadings for Variables

Variables	Sub-Variables	Q	Components		
			1	2	3
Innovation Types	Product	B03	0,786		
		B04	0,765		
		B06	0,769		
	Process	B09		0,695	
		B19		0,692	
		B11		0,683	
	Marketing	B14			0,701
		B12			0,691
		B15			0,609
Factors Influencing Innovation	Internal	C04		0,737	
		C06		0,692	
		C03		0,649	
		C05		0,583	
	External	D03			0,801
		D04			0,782
		D02			0,65
Business Strategies	Analyzer	E03	0,851		
		E06	0,816		
		E05	0,783		
		E08	0,663		
		E07	0,64		
	Defender	E13		0,783	
		E12		0,751	
		E10		0,673	
		E09		0,648	
	Reactor	E17			0,69
		E16			0,681

In factor analysis, the dependent and independent variables were considered separately and variables were analyzed in this way. The results (Communalities > 0.5) of factor analysis for innovation types, factors influencing innovation and business strategies are given in Table 5.

Second, a frequency test was applied to data for "Innovation Types" to get mean, standard deviation and descriptive information. The values obtained from the test are given in Table 6.

Table 6: Innovation Types

Types	Q	Subjects	μ	σ	A (%)	NA/ NDA (%)	DA (%)
Process	B19	Benefits provided from cooperation between functions	3.92	1.16	80	8.2	11.8
	B11	Costs are audited and savings are provided	3.81	1.25	75.4	9.2	15.4
Marketing	B15	Using new methods for promoting of the products	3.70	1.23	70	12.7	17.3
	B12	Changing the package, design or price to increase sales	3.60	1.34	70	7.3	22.7

(**Note:** A: Agree; NA/NDA: Neither Agree Nor Disagree; DA: Disagree)

Then, a frequency test was applied to data for "Factors Influencing Innovation" to get mean, standard deviation and descriptive information. The values obtained from the test are given in Table 7.

Table 7: Factors Influencing Innovation

Factors	Q	Subjects	μ	σ	A (%)	NA/ NDA (%)	DA (%)
Internal Factors	C04	Lack of work experience of employees for innovation	2.67	1.25	28.2	21.8	50
	C03	Lack of adequate training of employees for innovation	2.58	1.29	30	13.7	56.3
	C05	Lack of communication between departments	2.50	1.31	30.9	8.2	60.9
External Factors	D03	Crisis or instability in the markets	3.56	1.28	63.7	13.6	22.7
	D04	The high bureaucracy in government supports	3.46	1.20	56.4	22.7	20.9
	D02	Difficulty in obtaining the support from institutions	3.36	1.33	57.3	13.6	29.1

Finally, a frequency test was applied to data for "Business Strategies" to get mean, standard deviation and descriptive information. The values obtained from the test are given in Table 8.

4. RESULTS

This paper reports the results of a study that examined barriers to innovation among a sample of 110 small and medium-sized enterprises (SMEs) in the Burdur. Very few studies have examined barriers to innovation among Turkish firms. Specifically, the study examined the relation between (1) innovation types, (2) 15 obstacles to innovation and business strategy. Teece (1996) emphasized the need to understand and clarify how SMEs can overcome barriers to innovation. Better understanding of barriers to innovation can assist firms to foster development of an environment that supports innovation (Hadjimanolis, 1999). As a result of the findings, it was found that SMEs operating in Burdur implement the analyzer and defender strategies. In the analyzer strategy, SMEs monitor the changes in market and activities of competitors and also examine the selected innovations carefully. In the defender strategy, SMEs maintain and fill a safe market gap. It is important to determine the factors influencing innovation for SMEs. The results indicate the internal and external factors. Internal factors include the lack of adequate training and work experience of employees for innovation, and also the lack of communication between departments within SMEs. Crisis or instability in the market, the large amount of bureaucracy in government supports, and difficulty in obtaining the support from institutions such as universities, KOSGEB, etc., are external factors for SMEs operating in Burdur. In addition to these results, it is worthwhile to discuss SME innovation types. There are two types of innovation applied in SMEs. One is process innovation, the other is marketing innovation. In process innovation, SMEs have some benefits provided from cooperation between functions and costs are audited with some savings provided. In marketing innovation, SMEs use new methods for the promotion of products and change the package, design or price of the product to increase sales.

Table 8: Types of Business Strategies

Business Strategies	Q	Subjects	μ	σ	A (%)	NA/NDA (%)	DA (%)
Analyzer	E08	Monitor the changes carefully in market	3.94	1.08	80.9	9.1	10
	E07	Monitor the activities of competitors carefully	3.83	1.03	73.6	16.4	10
	E06	Examine the selected innovations carefully	3.80	1.03	74.5	15.5	10
Defender	E10	Maintaining a safe market gap	3.82	1.15	79.1	5.4	15.5
	E09	Filling a safe market gap	3.80	1.15	77.3	6.3	16.4

According to the results of the study the internal factors affecting innovation of SMEs operating in Burdur :

- Lack of work experience of employees for innovation,
- Lack of adequate training of employees for innovation,
- Lack of communication between departments.
- Moreover, external factors affecting innovation of SMEs operating in Burdur:
- Crisis or instability in the markets,
- The high bureaucracy in government supports,
- Difficulty in obtaining the support from institutions.

In addition, process and marketing innovation are more commonly performed according to product and organizational innovation in SMEs operating in Burdur. Finally, the results of this study show that SMEs pursue more analyzer and defensive strategies.

According to Örücü, Kılıç and Savaş (2011), the results of their research in the Balıkesir innovation success of enterprises improves along with the increase in the number of employees; involvement in innovation activities is unresponsive to type of legal structure of SMEs; and the size of R&D allocations plays a significant role in determining their innovation strategies.

The contribution of this paper should be discussed with respect to the progress made in methodological and empirical knowledge concerning innovation types, factors influencing innovation and strategies in SMEs. Internal (lack of adequate training, employee lack of work experience, lack of communication between departments) and external factors (crisis or instability in the market, the large amount of bureaucracy in government supports, difficulty in obtaining the support) are very important for innovation in SMEs. It is expected since past literature has consistently shown that economic and cost barriers are main barriers for innovation process (Madrid-Guijarro et all., 2009; Mohen and Roller, 2005; Baldwin and Lin, 2002). To Demirbas (2010) SMEs hold an important role in national economies because of their number and engaged workforce. However, despite recognizing its importance, some key barriers to innovation for SMEs prevent them to succeed in driving innovation processes. This high number of innovation barriers proves that there is a need for a clear strategy for SMEs to deal with these basic barriers to their position and to implement innovation practices within the firm (Teece, 1996).

Moreover, process and marketing innovation is applied more frequently than product and organizational innovation in SMEs. As we look at frequency results of descriptive statistics of our research, we see that most of SMEs (41.8 %) do not spend for R&D. Finally, the results indicate that SMEs should increase their expenditures for innovation by applying effective strategy and developing their technology accordingly.

According to results of the study, some recommendations are given to SMEs operating in Burdur in below:

- ensuring teamwork and collaboration with other institutions and organizations,
- ensuring organizational communication,
- establishing a suitable organizational structure,
- taking an external expert support as needed,
- communicating with the institutions such as universities, TUBİTAK,
- Communicating with KOSGEB in relation to innovation.

Especially to overcome the obstacles due to the financial, bureaucratic and human resources, strategies should be created. The removing the financial and bureaucratic barriers, accelerates the innovation efforts. Future research should focus on the requirements of open innovation on differences in culture, organization structure and decision making between partners of different sizes and from different industries.

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