BUSINESS STRATEGIES OF SME’s,
INNOVATION TYPES AND FACTORS
INFLUENCING THEIR INNOVATION:
ALBANIAN CASE

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Abstract
The business environment is becoming increasingly dynamic, complex and unpredictable where technology, globalization and changing competitive approaches impact on overall performance. As a result of this reality, the future of many businesses depends upon their ability to innovate. Innovation is crucial in the current business scenario. From this point of view, the research aims to investigate the characteristics of SMEs concerning their innovation and whether they have developed effective strategies. Moreover, it aims to ascertain which strategies, innovation barriers and types they employ. The data used in this study were mostly retrieved from Albanian Institute of Statistics (INSTAT). The data were also collected through a survey that tests strategies, innovation types and factors influencing innovation for SMEs in Albania. The collected data were analyzed using Statistical Package for the Social Science (SPSS). The results of the study showed that there are some relations between some characteristics of SMEs and strategies, innovation types and barriers.

Keywords: SME, sector, Business strategy, Barriers to innovation, Types of innovation
Introduction:
In nowadays, especially for the industrial sector, innovation has become an important issue. Businesses consider innovation as an important element to increase their profits and market shares. SMEs have shorter lines of communication, relatively informal decision making and more flexibility, which seems to give them an advantage for rapid innovation over large companies. SMEs are flexible, easily transform new ideas into market products, and develop new technologies, production methods and marketing. In the information age where it is necessary to adapt rapid change and innovation, SMEs should give greater consideration to R&D and innovation issues to remain competitive. The main factor that determines the strength of competition is R&D and, high and sustainable productivity growth source of innovation.

Research objectives:
This study aims to present a profile of innovation for SMEs in Albania, exploring specifically the degree and types of innovation they use. It is analyzed the internal and external factors that Albanian entrepreneurs find most detrimental to their innovative activity. Through empirical and qualitative analysis, this research marks the innovation types, barriers to innovation and business strategies which ones were adopted. Goals and objectives of the study include:

- Identify business strategies SMEs in Albania employ and determine their strategic orientation,
- Investigate the innovation types SMEs in Albania have used last 1-2 years,
- Determine internal and external barriers which hamper innovation development for SMEs,
- Investigate whether there is a relationship between characteristics of SMEs and types of innovation they use.

Development of Hypotheses:
Proposed hypotheses are as following:
H1: There is a relationship between sector where SMEs operate and external innovation barriers.
H2: There is a relationship between sector where SMEs operate and internal innovation barriers.
H3: There is a relationship between sector where SMEs operate and innovation types.

Variables studied in the research are categorical variables. “Sector where SMEs operate” is determined as a dependent variable. “Descriptive Statistics” tests and statistical tests for correlation between 2 variables (Fisher or Chi-Square test) are applied.

**Methodology:**

The research includes these important steps:

- Identifying, evaluating and synthesizing the existing body of completed and recorded work produced by researchers, scholars and practitioners,
- Gathering existing information and creating a data inventory about SMEs, innovation and business overview mainly from official web pages of INSTAT, Albanian Bank, Ministry of Innovation and ICT etc,
- Finding empirical data using survey technique.

**Data and sample**

In this study, SMEs operating in various sectors in Albania were chosen as the research population. Randomly selected 60 SMEs were taken as the sample of the research. The number of SMEs registered is 111 059 (population) in Albania in 2014 (INSTAT, Business Register 2014). The rate of randomly selected sampling is 0.054%.

Analysis has been carried out using data which were obtained from the SMEs in Albania by using a questionnaire form. The respondents were chosen from the top and mid-level managers in SMEs. Questionnaires were subjected to respondents by interviewing face to face or by e-mail. Data obtained from those 60 questionnaires were analyzed through the SPSS statistical packet program and the proposed relations were tested through Fisher test and Chi-Square test. In this study, four dimensions (product, process, marketing and organizational innovation) with 9 questions for innovation types, two dimensions (internal and external factors) with 11 questions for factors influencing the innovation and four dimensions (prospector, analyzer, defender and reactor) with 12 questions for business strategies were chosen as variables.
Study limitations:

The study is limited to the following aspects:

- Small sample selection

  In this paper, 60 SMEs operating in Albania were randomly selected as the sample of the research. The number of SMEs registered to INSTAT is 111,059. A large sample size is more representative of the population, limiting the influence of outliers or extreme observations. For qualitative studies, where the goal is to “reduce the chances of discovery failure,” a large sample size broadens the range of possible data and forms a better picture for analysis.

  - The reliability of survey data may depend on different factors

    Survey question answer options could lead to unclear data because certain answer options may be interpreted differently by respondents. Respondents may not feel comfortable providing answers that present themselves in an unfavorable manner. Respondents may not be fully aware of their reasons for any given answer because of lack of memory on the subject, or even boredom.

Literature Review:

The ability to develop new ideas and innovation has become a priority for many organizations. Intense global competition and technological development have made innovation a source of competitive advantage. Research on innovation has addressed a number of ways, such as using levels of innovation in individuals, teams/projects or organizations (Drucker, 1999), or by the intensity of innovation (Hollenstein, 1996). Even though, innovation and its processes are perceived as a relatively new concept by organizations, it has been subject to discussions over several decades. The term innovation comes from Latin’s ‘innovare’, which means “to make something new” (Amidon, 2003, Tidd et al., 2005).

Joseph Shumpeter was first to define innovation in 1934 as “the creation of new combinations”. The definition, however, has developed over time and been interpreted very differently (Sauber & Tschirky, 2006). Innovation has continued to be a subject of interest to scholars from a number of different disciplines, including economics, business, engineering, science, and sociology. Arising from this, the concept has hence been viewed differently to the extent of introducing a debate as to what constitutes innovation (Cooper, 1998).
Innovation types:

The Oslo guide (2005: 51) has given a large extent place to the definitions about innovation and the types of innovation. 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. 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).

Innovation barriers:

Even in industrialized countries, SMEs are expected to face relatively more barriers to innovation than large firms. As SMEs have comparatively more inadequate internal resources and lack of expertise, the interactive character of innovation in their case becomes even more intense than in large firms.

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. 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.
Types of business strategies:

Strategic orientation refers to the manner in which a firm adapts to its external (industry/competitive) environment (Miles & Snow, 1978; Mintzberg, 1973). 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). One of the most prominent strategy typologies which describes the relationship between the strategic orientation of firms and their performance was developed by Miles and Snow (1978). According to this typology, firms follow one of the four strategic orientations (prospector, defender, analyzer, and reactor) to achieve firm performance. If management does not select one of these strategies, then the organization will be slow to respond to opportunities and probably show an ineffective performance in its sector (Hambrick, 1983: 8).

A description of these four strategic orientations is provided in Table 1.

Table 1 Description of strategic orientations of Miles and Snow (1978).

| Strategic orientation | Description |
|-----------------------|-------------|
| **Prospectors**       | These firms are externally oriented firms that strive to create competitive advantage by leading the market in pioneering new products and developing innovative techniques and processes. They are constantly involved in monitoring the external environment with the aim of responding quickly to early signs of opportunities and exploiting the benefits of being a first entrant or pioneer in a new product/market area. They have a broad and flexible product/market domain, because they are continually modifying them to take advantage of perceived opportunities, hence, they have a high requirement for marketing and a broad technological base. |
| **Defenders**         | In contrast to prospector, these firms are internally oriented organizations. They stress efficiency, and are tightly organized firms focused on maintaining a niche with a limited range of products or services. As a result of their narrow focus, these firms seldom need to make major adjustments in their technology, structure, or methods of operation, and devote their primary attention to improving the efficiency of existing operations. Because defenders abhor risk, they tend to lag behind industry competitors in innovation, seeking only proven opportunities in their area of expertise. |
| **Analyzers**         | These firms blend the characteristics of both the prospector and defender orientations. These firms are able to focus on efficiency |
| **Reactors**          | These firms adopt a survival strategy and attempt to avoid change or competition whenever possible. They are defensive and have a limited product line. These firms are content with their current state and will not take on any new projects or initiatives. Their main focus is on maintaining the status quo and avoiding any potential risks. |

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and productivity when the market is stable, while at the same time cautiously moving into a new domain with scanning and innovation when the market is dynamic or turbulent. However, they only move into a new domain after its viability has been proven by prospectors. These organizations do everything that defenders do but in moderation and at the same time are imitators in that they take other firms’ promising ideas and market them successfully.

**Reactors**

These firms do not have a consistent product-market orientation and only respond to competitive circumstance when forced to do so in a characteristically inconsistent and unstable manner. Their behavior is unstable and their decisions are oriented towards the short as opposed to the long term. They do not attempt to maintain an already acquired defined product/market domain, nor do they try to capitalize on viable environmental opportunities or take true risks.

*(Source: Umut Avcı, Melih Madanoglu, Fevzi Okumuş (January 2010). “Strategic orientation and performance of tourism firms: Evidence from a developing country”)*

**Business Environment Snapshot for Albania:**

According to the Global Competitiveness Report of the World Economic Forum 2013-2014, in the overall standings, Albania ranks 95th out of 148 countries / economies with a decline in the overall ranking of 6 places since last year. Albania is classified in the group of countries that are in the second stage of development of competitiveness (also called "stage of economic incentives efficiency"). Three dimensions of development (basic requirements, efficiency and factors promoters of innovation and sophistication), Albania recorded the highest scores in the first of (4.2 points) and ranked 94. But overall ranking of Albania decreased in all three dimensions and in most of the indicators and sub indicators.

The most problematic factors for doing business according to the report are: access to finance, tax rates, corruption, and tax adjustment. Increasing the competitiveness of the economy in recent years is due to government reforms, but on the other hand the country to be more competitive requires an emphasis on the factors of innovation, technological readiness, further improving infrastructure and consolidation of institutions.

**Challenges for the development of SMEs in Albania:**

Based on SWOT analysis on the performance of SME development, it found that they face some challenges:

- **Financing SMEs:** Although levels of SME financing have been increasing in recent years, is still considered insufficient to promote a
rapid development of this sector. SMEs encounter many difficulties to get loans while credit cost is relatively high.

- **Internet and electronic commerce:** In recent years in Albania, the number of SMEs that use the services of second-generation internet has increased, especially by the younger generation of entrepreneurs and managers. According to AKEP 2013 online coverage rate is over 50%, but still lower as compared with 67.6% of the EU countries.

- **Creative economy:** Feels necessary intervention with concrete policies for the sector as can be: i) regulatory measures aimed at removing legal and administrative barriers; ii) improve the system of vocational education and training; iii) legal and financial incentives to support this sector and iv) improving the capacity of organizations that represent the sector.

- **Including social responsibility in enhancing the competitiveness of businesses, CSR.** Corporate social responsibility is a key part of the new strategy "Europe 2020", which requires an integrated approach to "a fast-growing, sustainable and inclusive", within an overall vision of a social market economy.

- **Development of Innovation and Technology for SMEs.** Albania continues to lag behind other countries in terms of poor performance in innovation. Enterprises finance technological developments mainly from internal resources, which are limited. Feels the lack of business incubators and clusters.

- **Enterprises led by women are low in number,** at around 28.5% of all active businesses in 2014 (INSTAT, Business Register 2014). Over 90% of businesses run by women are in the service sectors (retail, tourism, freelance etc.)

**Data analysis:**

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 tables and graphs as following (derived from SPSS):
Graph 1: Number of employees

Graph 2: Sector

Graph 3: Number of university graduates

Graph 4: Duration of activity (years)

Graph 5: R&D expenditures/ Total capital

36.6% of the surveyed SMEs exercise their activities in trade and 53.33% have 21-80 employees in their business.
53.3% of SMEs surveyed have 5-20 employees with a university degree in their business and 46.57% of them spend 1-5% for R&D in relation to their overall capital.

Table 1 shows the percentage of expenditures for R&D/ total capital

| Sector | R&D expenditures/ Total capital |
|--------|---------------------------------|
|        | <1%    | 1-5%  | >6%  | Total |
| Production | 8  | 8  | 2  | 18 |
| Service | 4  | 14  | 2  | 20 |
| Trade | 12  | 6  | 4  | 22 |
| Total | 24  | 28  | 8  | 60 |

70.0% of SMEs operating in the service sector spend 1-5% of the total capital for R&D. From the above data it is concluded that SMEs operating in trade spend less for R&D/ Total capital compared with SMEs operating in the service sector or production.

To identify strategies that SMEs in our country mainly use, choose the option Frequencies / Mode. In this way can be identified those statements which express clearly the strategic direction of SMEs. According to the results of the study the strategic orientations of SMEs operating in Albania:

- Carefully monitor changes in the market (analyzers) 90% of selected SMEs responded strongly agree/ agree.
- Carefully monitor the activities of competitors (analyzers) 80% of selected SMEs responded strongly agree/ agree.
- Carefully examine market innovations (analyzers) 83, 3% of selected SMEs responded strongly agree/ agree.
- It is essential for our firm to maintain current market share (defenders) 63, 3% of selected SMEs responded strongly agree/ agree.
- It is essential for our firm to develop new products and finding markets for these products (prospectors) 53, 4% of selected SMEs responded strongly agree/ agree.

Statements SMEs mostly responded yes about innovation types they use:

- Our firm launched a new or significantly improved product/ service before competitors (product innovation) 80% of selected SMEs responded yes.
• Our firm has introduced significant changes in the design and packaging of products or services (marketing innovation) 60% of selected SMEs responded yes.
• Our firm has introduced new or significantly improved distribution or sales methods, such as online sales, franchise, direct sales or distribution licenses (marketing innovation) 73,3% of selected SMEs responded yes.
• Our firm has introduced changes in relationships with other firms or public institutions, such as the creation of alliances, partnerships or outsourcing (organizational innovation) 53, 3% of selected SMEs responded yes.

Statements SMEs mostly responded strongly agree/ agree about internal/ external barriers:

- High economic costs for innovation (internal barrier) 50% of selected SMEs responded strongly agree/ agree.
- Crisis or instability in markets (external barrier) 40% of selected SMEs responded strongly agree/ agree.
- Ease of copying the innovation (external barrier) 76, 6% of selected SMEs responded strongly agree/ agree.

Hypotheses testing:

H1: There is a relationship between sector where SMEs operate and external innovation barriers.

To evaluate the relationship between the variable "sector in which you operate" (nominal variable) and the variable "external barriers to innovation" (ordinal variable) use the Bar chart and Cross tabulation. The result is verified with Fisher Exact test or Chi-Square Test.

Variables considered "crisis or instability in the markets" (Figure 6) and variable "innovation copying simplicity" (Figure 7), were defined as "most fashionable" barriers)
By analyzing the graph, but also by calculating the relative percentages of frequencies, SMEs responses for variable crisis/instability in markets varies between sectors. Consequently, it concludes that there is a link between the sector in which it operates SME and external barriers to innovation.

H2: There is a relationship between sector where SMEs operate and internal innovation barriers.

To evaluate the relationship between the variable "sector in which you operate" (nominal variable) and the variable "internal barriers to innovation" (ordinal variable) use the Bar chart and Cross tabulation. The result is verified with Fisher Exact test or Chi-Square Test.

Variable considered "high innovation costs" (Figure 8) since it was clearly identifiable SMEs answers (defined as the "most fashionable" internal variable).
By analyzing the data, the connection is statistically significant and hypothesis is supported.

H3: There is a relationship between sector where SMEs operate and innovation types.

Uneven distribution of answers "yes" and "no" between sectors signals significant changes in their response (Statistically significant relation.).

Results:

This study reflects a theoretical and empirical point of view about the business strategies of SMEs, the types of innovation and barriers to innovation in Albania. After analyzing the data collected from the survey concluded these findings:

- SMEs in Albania tend to be analyzers and defenders. They carefully monitor changes in the market and carefully monitor the activities of competitors.
- Types of innovation SMEs in Albania have used the last 1-2 years include marketing, product and organizational innovation. SMEs use less process innovation. They clearly stated that the last 1-2 years have launched a new or significantly improved product/service before competitors, introduced significant changes in the design and packaging of products or services, have introduced new or significantly distribution or sales methods (such as online sales, franchises, direct sales or distribution licenses) and have introduced changes in relationships with other firms or public institutions, such as the creation of alliances, partnerships or outsourcing (organizational innovation).
- 46.7% of SMEs spend 1-5% of the total capital for the development of innovation. 70.0% of SMEs operating in the service sector spend 1-5% of the total capital for R&D. From the above data it is concluded that SMEs operating in trade spend less in R&D/ total capital compared with SMEs operating in the service sector or the production.
- Mainly internal/ external barriers for SMEs operating in Albania include: high economic costs for innovation, crisis or instability in the markets, the simplicity of copying of innovation.
- There are some relations between some characteristics of SMEs and strategies, innovation types and barriers.
Proposed hypotheses H1 (there is a relationship between sector and external innovation barriers), H2 (there is a relationship between sector and internal innovation barriers), H3 (there is a relationship between sector and innovation types).

**Recommendations:**
53.3% of selected SMEs claim to have presented changes in relationships with other firms or public institutions, such as the creation of alliances, partnerships or outsourcing (organizational innovation). The rest of the SME have a neutral approach towards organizational innovation. I would recommend SMEs to consider outsourcing, partnerships and alliances with other firms in order to increase the effectiveness of their work and realize sustainable profits. The focus is a trend in the current business environment and organizational innovation best serves this trend.

High costs for innovation was one of the "most fashionable" barriers to the answers given by SMEs. I would recommend SMEs to realize profitability analysis for the implementation of certain innovations. If the investment for innovation is smaller than the benefit arising from the application and its adaptation, SMEs need to sacrifice generating quick cash flow in order to offer more value to their customers and ensure their long-term sustainability. In this point of view, the costs of innovation should not be seen as a significant obstacle for not being innovative.

Being innovative for SMEs means a process that requires the engagement of more resources, therefore the risk associated with innovation and loss of invested resources should at least be rewarded with the guarantee and the right to exercise innovation only for firms who possess its right. Considering the fact that the ease of copying the innovation was one of the main barriers to the development of innovation by SMEs, I think that relevant state institutions must find effective methods to guarantee the right of the business that engages in the process of R&D and innovation.

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Annex

Questionnaire

Business strategies of SME’s, innovation types and factors influencing their innovation: Albanian Case

Invitation

Thanks for your time. I would like to invite you to participate in my research study by completing this questionnaire. You are randomly selected as the representative of SMEs in Albania. My study aims to identify business strategies implemented by SMEs (small and medium), the types of innovation they use, the factors that influence innovation. The data collected from the questionnaires will be processed by a statistical program and will be used to build econometric analysis. Your answers will be treated with confidentiality and only in view of the research topic. If you are interested in research results you can send me an e-mail or browse on .google.com after 25 June 2015.
1. **Section A: General information about the company**

Sector

- □ Production
- □ Service
- □ Trade

Number of employees

- □ 1-5
- □ 6-20
- □ 21-80

Number of university graduates

- □ 1-5
- □ 6-20
- □ 21-80

Duration of activity (years)

- □ 1-5
- □ 6-10
- □ 11-15
- □ Others

R&D expenditures/ Total capital

- □ 0%
- □ <1%
- □ 1-5%
- □ >6%

2. **Section B: Business strategies**

Please indicate how much you agree or disagree with the following statements regarding the strategy followed by your firm:

| Analyzers                                           | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|-----------------------------------------------------|-------------------|----------|---------|-------|---------------|
| a. Carefully monitor changes in the market          | 1                 | 2        | 3       | 4     | 5             |
| b. Carefully monitor the activities of competitors  | 1                 | 2        | 3       | 4     | 5             |
| c. Carefully examine market innovations             | 1                 | 2        | 3       | 4     | 5             |

| Defenders                                           | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|-----------------------------------------------------|-------------------|----------|---------|-------|---------------|
| 1. It is essential for our firm to maintain current market share | 1                 | 2        | 3       | 4     | 5             |
| 2. Our firm prefers to improve existing products /services, instead of expanding to new products/services | 1                 | 2        | 3       | 4     | 5             |
| 3. Instead of generating fast cash flows, our company prefers balanced and continuous cash flows | 1                 | 2        | 3       | 4     | 5             |
### Prospects

| Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|-------------------|----------|---------|-------|---------------|
| **a.** It is essential for our firm to develop new products and finding markets for these products | 1 | 2 | 3 | 4 | 5 |
| **b.** Our firm likes to take risk | 1 | 2 | 3 | 4 | 5 |
| **c.** Our firm is ready to shoulder high level of expenses to be innovative | 1 | 2 | 3 | 4 | 5 |

### Reactor

| Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|-------------------|----------|---------|-------|---------------|
| **1.** Our firm responds to environmental pressure by cost cutting methods | 1 | 2 | 3 | 4 | 5 |
| **2.** Our firm develops policies only when it faces problems related to its main activities | 1 | 2 | 3 | 4 | 5 |
| **3.** Our firm does not have a well-thought market development policy | 1 | 2 | 3 | 4 | 5 |

### 3. Section C: Innovation types

Please answer yes or no about innovation types that your firm has used the last 1-2 years:

| Yes | No |
|-----|----|
| **A.** Our firm has launched new or significantly improved good<br><br>**B.** Our firm has launched new or significantly improved services<br><br>**C.** Our firm launched a new or significantly improved product/service at the international level<br><br>**D.** Our firm launched a new or significantly improved product/service before competitors<br><br>**E.** Our firm introduced a new or significantly improved production technology<br><br>**F.** Our firm introduced a new or significantly improved logistics, supply or distribution methods for your inputs, goods or services? |
G. Our firm has introduced significant changes in the design and packaging of products or services

H. Our firm has introduced new or significantly improved distribution or sales methods, such as online sales, franchise, direct sales or distribution licenses

I. Our firm has introduced changes in relationships with other firms or public institutions, such as the creation of alliances, partnerships or outsourcing

4. Section D: Barriers to innovation

Please indicate how much you agree or disagree with the following statements about the factors that have affected the development of innovation in your firm:

| Internal barriers                              | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|-----------------------------------------------|-------------------|----------|---------|-------|---------------|
| a. Lack of qualified human resources          | 1                 | 2        | 3       | 4     | 5             |
| b. Lack of innovation experience of employees | 1                 | 2        | 3       | 4     | 5             |
| c. Lack of communication between departments  | 1                 | 2        | 3       | 4     | 5             |
| d. High economic costs for innovation         | 1                 | 2        | 3       | 4     | 5             |
| e. The risk associated with innovation        | 1                 | 2        | 3       | 4     | 5             |
| f. Lack of knowledge or information           | 1                 | 2        | 3       | 4     | 5             |

| External barriers                              | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|-----------------------------------------------|-------------------|----------|---------|-------|---------------|
| a. Crisis or instability in markets           | 1                 | 2        | 3       | 4     | 5             |
| b. Lack of government support                 | 1                 | 2        | 3       | 4     | 5             |
| c. Poor cooperation between firms             | 1                 | 2        | 3       | 4     | 5             |
| d. Ease of copying the innovation             | 1                 | 2        | 3       | 4     | 5             |
| e. Government bureaucracy                     | 1                 | 2        | 3       | 4     | 5             |