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Source / Izvornik: **Ekonomski vjesnik : Review of Contemporary Entrepreneurship, Business, and Economic Issues, 2015, 28, 393 - 408**

Journal article, Published version
Rad u časopisu, Objavljena verzija rada (izdavačev PDF)

Permanent link / Trajna poveznica: https://urn.nsk.hr/urn:nbn:hr:145:806337

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Download date / Datum preuzimanja: **2024-03-28**



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UDK: 65.012(497.6)
Preliminary communication

Received: July 20, 2015
Accepted for publishing: October 11, 2015

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Abstract

Growth and development are among the main goals of every company. A dedication to the activities which create conditions for growth and development is an important management operation. Entrepreneurial activity provides prerequisites so that growth and development can be achieved. In large and existing companies, entrepreneurial activity presents intrapreneurship. The subject of this paper is to what extent are intrapreneurial activities present in production companies in Bosnia and Herzegovina. In addition, we explored organizational prerequisites for intensifying the impact of intrapreneurship, and the impact of intrapreneurial activities on company growth. Primary research was conducted in the field using the survey as a tool for data collection. By interviewing people we obtained the answer to the question, to what extent is intrapreneurship developed in the production companies in Bosnia and Herzegovina in terms of two key dimensions of intrapreneurship: innovation and autonomy of action, and their impact on the growth of production companies. Additionally, we reached an answer as to what is necessary to do in the field of management of the companies in order to create assumptions for intensifying the intrapreneurial activities of those companies. The sample represented 50 major production companies in the Federation of Bosnia and Herzegovina. We used statistical methods of data processing: descriptive analysis, factor analysis, regression, and correlation. By analyzing the results of the research, we confirmed the hypothesis that the implementation of intrapreneurial activities has a positive effect on the development of production companies. Recommendations were given in order to improve organizational presumptions for intensive intrapreneurial activities.

Keywords: Entrepreneurship, intrapreneurship, innovation, autonomy of action, growth of companies

1. Introduction

Finding appropriate models and management techniques that can contribute to the development and growth of the company is a challenge for management in companies. One area that occupies an important place is entrepreneurial activity, which in the existing and large companies is called intrapreneurship. The subject of this paper is to determine the level of the implementation of intrapreneurial activities and their impact on the indicators of company growth with regard to the value of assets, the value of total incomes, and the value of profits. The attitude of employees towards intrapreneurship is observed through creativity, innovation, and intrapreneurship. The theoretical part is seen through the ratio of innovation management and the importance of innovation. In addition, it is seen through encouraging innovation, and through performance of company growth.

On the example of the specific research, a research methodology was observed through an area of research, goals, hypothesis, samples, and methods of research as well as through the research process itself. The results of research on the impact of intrapreneurship growth of production companies in the Federation are presented in this paper. The analysis of the researched variables has been conducted. In addition, by using factor analysis and regression and correlation we established the connection, the direction, and intensity of the impact on intrapreneurial effects on the indicators of company growth.

It is concluded that the presented results of the research defined propositions of the activities which management needs to take into consideration in order to create organizational assumptions for intensifying intrapreneurial activities.

2. The research area

Intrapreneurship as entrepreneurship in existing companies is necessary as an activity that can improve business performance and create long-term conditions for growth and development. One of the goals of management in companies is to provide organizational assumptions in order to intensify later intrapreneurial activities.

This is significant, considering that large companies employ the largest number of employees and at the present in Bosnia and Herzegovina (B&H) one of the key problems is unemployment. In this paper, we have focused our research on intrapreneurial activities in large companies, because the development and growth of big companies creates necessary conditions for further employment. In the classical sense, the concept of entrepreneurship refers to the formation of new companies. The concept of intrapreneurship differs in that the entrepreneurial process takes place within an existing enterprise (Kuratko, Hodgest, 1995: 94).

On the one hand, with its organizational structure the company represents a framework and creates a climate that encourages innovation and a development of entrepreneurial initiatives, while on the other hand, the existing enterprise has the appropriate means that may easily be allocated for the development and implementation of entrepreneurial ideas.

The term intrapreneurship is linked to the name of Gifford Pinchot. With the term intrapreneurship he began to describe the activities of managers of large corporations who at the beginning of the eighties began to understand that entrepreneurial ideas have a positive impact on the profitability of the business. Intrapreneurship refers to the development of the entrepreneurial spirit and culture in the companies as well as to the help innovative entrepreneurs in order to develop their business ideas. In that case, they can use the infrastructure of the company, which gives a certain advantage compared to independent entrepreneurs.

According to some authors, intrapreneurship represents large enterprises of business, and it represents one of the possibilities for the large enterprises in which often inefficient bureaucratic structures "stifle" the development of new ideas and innovation and the entrepreneurial spirit. Today, specific conditions are set before small, middle and large intrapreneurships. There is a search for the extraordinary economic dynamism, innovation, and continuous adjustment. Traditional business structures disappear, because they are not able to maintain the game with time and quality which modern business conditions demand. Employees are required to do inventive and creative work, which as a direct consequence has an increase of quality, productivity, and cost-effectiveness.

Table 1 Frequency of the entrepreneurial employee activity in the entities of Bosnia and Herzegovina and the Brcko District of Bosnia and Herzegovina in 2011

	Broad definition: involvement in entrepreneurial activity of employees in the last three years in a percentage of:		Narrow definition: currently involved in entrepreneurial activity in percentage of:	
	adult populations	employee	adult populations	employee
Federation of Bosnia and Herzegovina	3.8	12.3	2.8	9.1
Republic of Srpska	1.7	5.0	1.7	5.0
Brčko District of Bosnia and Herzegovina	2.3	7.7	1.8	6.1

Source: GEM research of the adult population (APS) 2011, Taken from Umihanić, B., Tulumović, R., Arifović, M., Simić, S. (2012), GEM B&H 2011: To develop and strengthen the entrepreneurial spirit in B&H. Tuzla: Harfo-graf, p. 143

In the literature that deals with the concept of entrepreneurship, we can see an increase of interest for the existing, large enterprises in terms of intrapreneurship, corporate entrepreneurship, internal corporate entrepreneurship, corporate enterprise, and so on.

If we summarize the above-mentioned definitions or understanding of intrapreneurship, we can conclude that intrapreneurship represents enterprises of large and existing companies and it includes:

- creating new jobs and activities within the existing company,
- the transformation of the company by changing key business areas,
- creating and innovating.

In reviewing the literature about intrapreneurship, Zahra et al. (1999) has identified 45 empirical studies about intrapreneurship, of which three appeared in the 1970s, 10 were published in the 1980s and 32 were published in the 1990s. The main reason for the increased interest in intrapreneurship is: legitimacy of the research about intrapreneurship, and an increased interest in the USA for intrapreneurship. Just like in other countries where there is a need for the revitalization of the companies and for improving their ability to innovate and take risks, there is an additional third factor, comprising the availability of instruments, which enabled the research of this complex phenomenon. Social communities recognized the importance of entrepreneurship and the need to research this topic. Therefore, on the global level, every year these kinds of researches are conducted in the field of entrepreneurship through the GEM project.

According to the research of GEM B&H 2011: To develop and strengthen the entrepreneurial spirit in Bosnia and Herzegovina, it was noted that the rate of participation in entrepreneurial activity of employees in the Federation B&H and Brcko District of B&H is higher according to the broader definition than in relation to involvement in entrepreneurial activity of the employees according to the narrower definition. However, in the Republic of Srpska both extensive definitions of entrepreneurial activities of employees are at the same level (Table 1).

The general indicator of entrepreneurial employee activity in the Federation is 2.8. This indicator is higher when compared to the indicator for the Republic of Srpska (1.7). Certainly, further studies for this kind of entrepreneurial activity will contribute to a better understanding of the importance of its development. Already, certain positive characteristics were noticed among entrepreneurial-oriented employees who mostly have positive entrepreneurial attitudes and aspirations and for whom it was established that their entrepreneurial ventures usually are more innovative in relation to the earlier entrepreneurs in general. Taking into consideration all of the above mentioned, it is certainly significant to promote entrepreneurial activity of employees and to encourage the entrepreneurial spirit among employees in the public as well as in the private sector in all three administrative units in Bosnia and Herzegovina.

To what extent intrapreneurial activity in large manufacturing companies can influence the growth of the company, is also the subject of this research paper. The current level of intrapreneurial activity can be measured by examining attitudes through questionnaires with defined questions in the field of innovation and autonomy of action as the two main elements of intrapreneurship. On the other hand, other measures for determining the growth of the company are also the values of assets, transactions, and realized profit. The mutual connection of these dependent and independent variables is determined by the implementation of statistical methods of correlation and regression analysis.

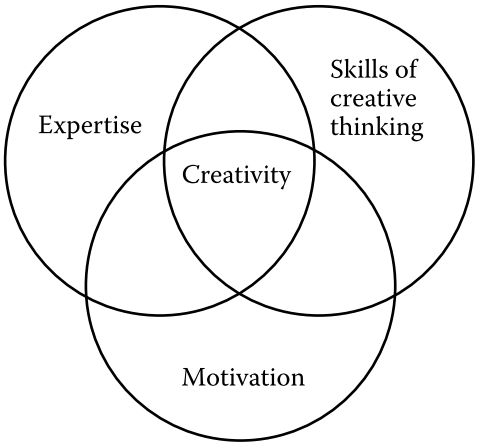
3. Variables in the research

Intrapreneurship is significantly determined by the activities of company employees. Intrapreneurship depends on their creativity, innovation, and motivation, which is reflected in the ways and forms of encouraging employees to intrapreneurship action. The independent variable in the research is innovation and autonomy of action, while dependent variables are indicators of the company growth.

3.1 Creativity, innovation and intrapreneurship

Creativity is the ability to create original ideas or understand existing ideas in new ways. Originality or new ideas are not enough for analysis of the creativity from the organizational aspect. An idea must be useful and enforceable. The idea can be evaluated according to the positive effect, which has key organizational factors such as productivity, communication, coordination, and quality of products. Creativity involves looking at the problem from different aspects, and looking beyond the old rules and norms that bind us with the traditional methods of performing tasks. Creativity makes us different, and it helps us to find new answers and solutions for the old and as well for the new problems. Creativity is primarily linked with an individual and that is called individual creativity. The creativity of each individual is a function of three components: expertise, skills of creative thinking and motivation.

Figure 1 Three components of the creativity



Source: Authors (according to: Certo, S. C., Certo, S. T. (2009). Modern management. 10th edition. Zagreb: Mate, p. 455

Expertise is everything an individual knows and can do in the field of work, which a person performs. This refers to the techniques and procedures, which are associated with business and with the overall understanding of the working conditions.

Creative thinking is the ability to combine old ideas in a new way. It determines how flexible and imaginative an individual can be when it comes to approaching problems.

Motivation is a passion and the need of the individual to be creative. Expertise and creative thinking allows an individual to be creative, but motivation determines whether a person really will be creative. An individual can be stimulated to be creative by organizational rewards and punishments, or by satisfying personal interests and passions in a particular situation.

Innovation can be seen as a process or series of steps that need to be taken so that a creative idea can be realized. Therefore, managing innovations is carried out in several steps. Most often, the process of innovation is viewed through five steps:

- an invention as a step in which a new idea is determined,

- development which implies that the new idea becomes practical,
- a diffusion is the third step in which users and consumers put this idea into practice,
- an integration is the fourth step in which the product becomes a part of the organization, and
- the fifth step is the process of innovation in which the new idea is monitored in order to determine whether it needs to be perfected or canceled.[1]

Managing the innovation process implies taking appropriate actions in each step of the innovation process. The importance of innovation is reflected primarily in the fact that only innovative companies today have predispositions for growth and development. It is also often believed that innovation is a precondition for the survival of the company. The importance of innovation is particularly great for Entrepreneurship and Intrapreneurship. Entrepreneurship is often equated with innovation.

Enterprise culture is perhaps the most important element of the intrapreneurship development, i.e. if the enterprise culture is entrepreneurially oriented, then the company itself will act in an entrepreneurial way (Burns, 2005). It can be said that the enterprise culture has an impact on the development of intrapreneurship in the short term. If the company wants to encourage the entrepreneurial spirit of its employees and encourage them to act innovatively and proactively in the long term, it must provide and ensure a satisfactory system to its employees so that they are willing to take certain risks associated with their entrepreneurial activity. This ultimately means a necessity to give greater freedom to its employees whereby the company itself exposes itself to certain risks (Marvel et al., 2007). It should be stressed that the system of encouragement must also include a rewarding system, which is linked to the level of achieved results. In order to achieve an adequate system of encouragement and rewards, it is necessary that the company realize with that system the following goals: to develop an entrepreneurial company which is prone to take risks, to attract and retain top quality employees and to improve the results and success that have been achieved with this entrepreneurial undertaking.

3.2 Indicators of the company growth

The growth of the company is a very dynamic process, which is viewed from many different aspects such as financial, strategic, structural, and organizational aspects (Wickham, 1988).

Financial growth is related to the growth of the company from the business point of view. The financial growth of the company implies an increase in gross income, net profit, and material resources.

The strategic growth of the company refers to the way that the company responds to its business environment, and in what way the company is developing its competitive ability in relation to the existing competition.

Structural growth represents how the company is organized internally in terms of the company organization management, and how the company is organized in terms of responsibilities, hierarchical communications, and control systems.

Organizational growth of the company observes changes in the company in terms of structure of the company, the organizational culture, and the entrepreneur's role and style of running the business.

Although Wichkam observes company growth from the aspect of variability of the above-mentioned factors, we believe that these factors such as strategic growth, structural growth and organizational growth actually represent the development of the company. Although they have a different semantic meaning, in the literature, very often the terms "growth" and "development" are identified as two same terms. The term "development" means "gradual transformation into more complex forms, into a more modern state, while the "development" of companies is defined as a process within which business activities are conducted. Through these activities, the company moves from one smaller format into another larger and more complex form, creating an increased business performance of the company. The term "growth" is manifested in the form of quantitative indicators, which with changes in size indicate whether something grows or shrinks.

The growth of the company can be shown in different ways, such as horizontal growth that takes place within the framework of an existing business enterprises, vertical growth, which takes place by connecting phases in advance (with the users of the products such as raw materials) or backwards (with suppliers), conglomerated which takes place by a total diversification of more activities. Depending on the environment, listed types of growth are divided into two categories:

- Organic company growth
- Inorganic company growth.

The organic growth of the company is based on the positive changes of internal factors, which affect business performance directly. In this case, the company records its growth through an increase of profit, through the market share of the company and through an increase in gross incomes of each new fiscal year. The growth of the company is based on the continuous increase of sales, on marketing of existing products to the new customers and on sale of new products. A characteristic of organic growth or as it is also called the internal growth of the company, is reflected in the growth which proceeds very slowly and can last for many years, creating uncertainty for the survival of the company. The management of the company achieves organic growth through the implementation of various strategies, such as:

- strategy of intensive growth or expansion of the company
- strategy for diferification of the company
- strategy for modernization of the company.

Inorganic growth of the company depends primarily on external factors whose actions affect the growth of the company. Inorganic growth of the company is far faster than organic growth, primarily because in addition to significantly higher incomes, the company can use the synergy effect of the merging. Thus, a company may buy another company or merge with that company, with the aim of a joint approach to the market, in order to create synergy. The effects of synergy increase its competitive ability. Inorganic or the external company growth can be achieved by using two strategies:

- mergers or acquisitions
- joint venture.

The growth of the company is manifested by continuous positive changes, which are reflected, in the following indicators (Isaković, 2010):

- an increase of the annual gross incomes
- an increase in net profit
- an increase in production
- an increase of productivity
- an increase of the employee number
- an increase of new customers
- an increase of market share
- a possbility to engage own and other people's resources in order to develop new products
- an investment in the development of human resources
- an investment in the facilities and infrastructure
- strategic orientation of the company
- organisational orientation of the company
- structural organisation of the company.

These factors represent indicators of growth, but their increase is not a guarantee that a company will grow. As Drucker (2006) said: *"The Company needs to distinguish the wrong kind of growth from the good. ...a healthy growth is any growth, which in a short period results by giving a total increase of company's productivity resource."* Thus, the growth of the company requires complex activities of managers. These activities are focused on developing a company in terms of forming the organizational structure of the company, selection, and development of human resources, as well as establishing of business systems. All this with an aim that the company "growth" is followed in parallel by the "*development*" and expansion of functions within the company. The company will be able to respond to the coming changes, differentiating itself from the competition, by proactively reacting through the development of new products and services, which the market needs or will soon need[2]. For the purposes of this paper as the most important quantitative indicators of the company growth we will mention the following:

- total income
- total assets
- profit.

Income is the gross inflow of economic benefits during a period arising from the ordinary operating activities of the subject, and which result in an increase of capital, besides the increase of capital which is related to the contribution of investors (Association of Accountants, Auditors and Financial Workers of Federation of B&H, 2014). Income includes only the gross inflows of economic benefits which a subject received or claims for its own account. The amounts collected on behalf of third parties such as sales taxes, taxes on goods and services and value added taxes are not economic benefits which a subject receives and this amount does not result with an increase in capital. Therefore, this amount is excluded from incomes. Similarly, when it comes to representation, the gross inflows of economic benefits include also the amounts which are collected on behalf of the principal and which do not result in an increase of the subject's capital. The amounts collected on behalf of the principal are not incomes. Instead, income is an amount of commission. Income should be measured at fair value of the fee, which is received or claimed.

Total assets are total means shown in the balance sheet. This is a bookkeeping value of the fixed assets and working capital. This is the most common measure of the value of assets, taking into consideration that the given amount is easily available and it is reflected in the financial statements of the company.

Profit or loss is a total income minus expenses, excluding the components of other comprehensive incomes (Association of Accountants, Auditors and Financial Workers of Federation of B&H, 2014).

4. Methodological framework of the research

Intrapreneurship can be observed as enterprises of large companies, which represent one of the possibilities for large companies in which usually inefficient bureaucratic structures "choke" the development of new ideas and the innovative and entrepreneurial spirit. Traditional business structures disappear, because they are not able to maintain the game with time and quality which modern business conditions demand. Employees are required to do inventive and creative work, which has a direct effect of quality increase, as well as the increase of productivity and cost-effectiveness. Intrapreneurship can be viewed as a means to achieve and maintain competitive advantages, which emphasizes the innovative capacities of employees and at the same time increases the success of the company by creating a new corporate enterprise. In addition, intrapreneurship can be viewed as an important element of economic growth, as well as company and environment growth. Intrapreneurship is important for the country, not only because large companies provide more of the national output and more jobs, but because intrapreneurship and independent businesses are complementary, and at the same time they are competing against each other, which provides benefits for consumers and for the economy. According to the data of the previous research on intrapreneurship in Bosnia and Herzegovina, we can evaluate that the intrapreneurship in B&H companies is insufficiently explored. The reason for that can be in less recognitions and representations in our companies. It is indisputable that companies which first recognize the advantages provided by its practical application have an advantage over the competition. Written characteristics of the research problem prepare us to pose the following question in our research: *Will intensifying intrapreneurial actions increase the growth of manufacturing companies in the Federation of Bosnia and Herzegovina?*

4.1 The subject of the research

Taking into consideration the problematic issue, *the subject of this paper is research of intrapreneurship resources, its status, intensity, and connection with indicators of growth in manufacturing companies in the Federation of Bosnia and Herzegovina.* Intrapreneurial activities should be carried out in each company, because in addition to the short-term benefits, they represent a way for long-term sustainable growth and positive financial effects.

Namely, in order for companies in B&H to successfully compete in the dynamic and rapid environmental changes, it is necessary to understand the importance of introducing an innovative and enterprising management approach. One of these approaches or possibilities is certainly the development of entrepreneurship within the company, generally known as intrapreneurship. Intrapreneurial activities within the company indicate the opportunities for creating additional value. Creat-

ing of additional value is achieved by improving the existing products and developing new products and / or services, and with the development of new and improvement of existing business processes. In the research, in the context of intrapreneurial activities, there is a focus is on employees who have entrepreneurial potential as well as experience and relevant expertise. Those employees need to be ready to implement their potential within the company in which they work. The focus of the research is on determining the readiness of employees, primarily the management's readiness, to establish an intrapreneurship climate in the companies, and to recognize the individuals and groups who have entrepreneurial potential within the company.

4.2 Goals

The topic for the research is the impact of intrapreneurship on the growth of production companies in the Federation of Bosnia and Herzegovina. The goals of the research are divided into the general (overall) goal and the operational goals.

The general goal of the research is to explore in practice, whether intrapreneurial activities can increase the growth in the manufacturing companies of the FBiH.

The achievement of the general goal demands the implementation of the following operational goals of the research:

- By using empirical research on a sample it is possible to investigate whether the strengthening of intrapreneurial activities can achieve an increase in the company assets value,
- By empirical research on a sample it is possible to investigate whether innovation and autonomy of action such as intrapreneurial activities may result in an increase in the total revenue value and profits in the company,
- To interpret the results of research versus the hypothesis.

4.3 Hypothesis

In accordance with the requirements of scientific research methodology, we have set a central and two additional research hypotheses for the research.

The central research hypothesis is: "The implementation of intrapreneurial activities has a positive effect on the development of manufacturing companies". With this formulated hypothesis, we want to show that intrapreneurial activities, which are implemented through the innovation of individuals and their autonomy of action directly, increase the performance growth of manufacturing companies. These performances were measured with indicators of:

- Value of property/assets,
- Total income value,
- Profit value (gain/loss).

Apart from the central, the following additional hypotheses are defined:

H1: Increased intrapreneurial activities imply an increase of assets value.

H2: An innovation and autonomy of action as a result has an increased value of total income and profits in the company.

In order to confirm or negate the central research hypothesis, it is necessary to conduct research by using appropriate scientific methods in order to confirm the defined auxiliary hypotheses.

4.4 The sample and methods of research

For the purpose of research, we collected secondary data using the literature of domestic and foreign authors in the field of management, organization, innovation, entrepreneurship, intrapreneurship, entrepreneurship culture, etc. These works are published in various different formats: books and manuals; dissertations, master's and specialist works; articles and studies; and from the Internet. Because of research from secondary sources, knowledge of the justification for this type of research is created in the Federation of Bosnia and Herzegovina. The existing literature offered the methodology for intrapreneurship research based on which data suitable for statistical analysis were collected.

Primary data were collected during field research. The research was conducted by interviewing with the aim of collecting data about the circumstances and experiences of large manufacturing companies with regard to intrapreneurial activities. For the purpose of research, an a priori assumption was set that the performance growth of manufacturing companies can be increased with entrepreneurial activity.

Based on data collected from the AFIP in 2011, classification was performed on large enterprises in accordance with the criteria of the FB&H Accounting Act. All large production companies (based on activity codes KD B&H 2006 - Classification of B&H Economic Activities in 2006, code 15.110 to 41.000) went through the process of classification, and in that way the size of population (set) for the research was formed and it comprised 182 companies. We decided that the sample contain 50 units which represents 27% of the number of units in the set. In order for the sample to be representative, in selecting the sample for the investigation we used a deliberate sample which was suitable for the qualitative study. In addition, since this allowed for a generalization of findings in such a study, we included in the sample at least one company from each type of business which is represented in the basic set. In order to provide a representative sample in terms of territorial representation, an application of a stratified sample was done where the strata's were administrative communities or cantons in the Federation of Bosnia and Herzegovina. In this way we ensured that the sample comprises an equal representation of manufacturing companies from each canton. The sample size is compared to the size of the set. For the companies in the sample a collection of data was carried out by a questionnaire and from the database of the AFIP report from 2012.

The questionnaire contained structured questions, which were taken from the available secondary data sources, and some questions are new and were formulated for this study. The questionnaire contained 16 questions grouped in 7 groups where we used closed type questions, dichotomous questions, multiple choice questions and a Likert-type scale. The Likert-type scale is defined with a scale from 1 to 5.

4.5 Research procedure

From the marketing agency "New Market Consulting" which is located in Sarajevo, we procured data from the AFIP database from the year 2012 for specific companies which are located in the territory of the Federation of Bosnia and Herzegovina. These companies have registered production activity on the basis of activity codes to KD B&H 2006 - Classification of B&H Economic Activities 2006, code 15.110 to 41.000 and meet the requirements for classification as large business organizations in accordance with the provisions of Article 4 of the Law on Accounting and Revision in the Federation of Bosnia and Herzegovina[3]. The total number of 182 companies met these two criteria. A stratified sample was determined (strata are administrative community - cantons in FB&H) of 50 units. Data for the survey were collected from two sources.

- Data about indicators of growth (number of employees, value of property / assets, the value of total income, profit value) were procured from the AFIP[4] database. The data contain the final reports concerning business operations for the year 2012.
- General information about the company, its environment, intrapreneurial activities, organizational culture, intrapreneurship practice, and qualitative effects of growth were collected by a survey using questionnaires.

The survey was carried out by a questionnaire via e-mail. After completing the survey, the data from the questionnaires and from the AFIP database were processed. Statistical analysis of data was performed using SPSS 17.0. The processing of data was carried out in four phases.

In the first phase, an analysis of the survey sample was conducted. Data were collected from questionnaires and from the database of AFIP. These are the following data:

- the market in which the company operates
- type of company ownership structure
- additional information about the subjects who filled out the questionnaire.

In the second phase, an analysis of the researched variables was conducted by descriptive analysis. The following main characteristics of the sample were described: frequencies, its arithmetic mean, standard deviation, mode, and coefficient of asymmetry. Based on these data, conclusions were made

about the environment in which companies operate, also about the dimensions of intrapreneurship, the organizational culture, the intrapreneurship practice and the company growth.

A descriptive analysis of the following variables was conducted:

- environment
- innovation
- autonomy of action
- organizational culture
- motivation and rewarding
- managing changes
- creativity
- organizational learning
- qualitative effects of growth.

In the third phase, an analysis of the research on the impact of intrapreneurship on company growth was conducted. Intrapreneurship was observed through the elements of innovation and autonomous actions that were described in the questionnaire with 29 characteristic statements divided into two groups. The respondents expressed their agreement with these statements on the scale of 1 to 5. The analysis of the criteria satisfaction of the appropriate data for conducting factor analysis on computer tests was conducted using Bartlett's test and Kaiser-Meyer-Olkin measure (KMO). The factor analysis was conducted using *principal axis factoring* methods whose results are characteristic roots and variance. The calculation of communality of variables was conducted, followed by the rotation of factors and in the end eight factors were derived and given specific names.

In the fourth stage, multivariate regression analysis was used in order to determine a linear relationship between the elements of intrapreneurship presented by secreted factors and indicators of growth enterprises where the elements of intrapreneurship are the independent variable and the indicators of growth companies are the dependent variable. By the correlation matrix of intrapreneurship dimensions and indicators of growth in the companies, we determined a mutual connection and with the regression analysis we determined the impact of intrapreneurship dimensions on the company growth and thereby confirmed / negated the additional and central research hypothesis.

5. The analysis of the research variables

The impact of innovation and autonomy of action as intrapreneurship elements were studied using the Likert-type scale from 1 to 5. We asked from the respondents to evaluate to what extent an individual's claim describes the business practices of the company. For the innovation, 17 claims have been studied while for the autonomy of action 12 claims. The variables were evaluated at least once with the highest and lowest evaluation grade. A coefficient of asymmetry for all but one variable falls within the range of -1 to +1, and therefore we conclude that for all but one variable, a normal distribution is assumed. Using descriptive analysis of quantitative indicators of the company growth it is assumed that, according to the values of asymmetry coalitions each range from -1 to +1, variables: asset value, income and profits, they do not have a normal distribution.

5.1 The analysis of intrapreneurship impact on the indicators of the company growth

Intrapreneurship is now observed through the elements of innovation and autonomous impact of the described elements in the questionnaire with 29 characteristic statements, which are appropriately classified into two groups. The respondents on the scale of 1 to 5 expressed their agreement with these statements. The analysis of the criteria satisfaction of the appropriate data for conducting factor analysis on computer tests was conducted using Bartlett's test and Kaiser-Meyer-Olkin measure (KMO). KMO measure is 0.616 and given that higher for 0.5, we conclude that the criteria's were met for the implementation of factor analysis. The Bartlett test, whose value should be less than 0.05, is in our case 0.000, which confirms the same thing.

Given that there is an assumption that there are several factors that represent innovation and autonomous acting as elements of intrapreneurship, the *Principal Axis Factoring* method of factor analysis was conducted. The applying of the above-mentioned method has resulted in eigenvalue 5 and with the total explained variance shown in the next table.

Table 2 Eigenvalue and totally explained variance

Factor	Characteristic root	Percentage of variance	Cumulative percentage of variance
1	7.251	25.005	25.005
2	5.249	18.099	43.104
3	2.040	7.033	50.137
4	1.733	5.976	56.114
5	1.435	4.947	61.060
6	1.272	4.386	65.447
7	1.108	3.821	69.268
8	1.024	3.531	72.799
9	0.906	3.125	75.924
10	0.892	3.075	78.999
11	0.765	2.639	81.638
12	0.742	2.558	84.196
13	0.703	2.423	86.619
14	0.553	1.906	88.525
15	0.495	1.708	90.233
16	0.427	1.473	91.706
17	0.384	1.324	93.030
18	0.368	1.268	94.298
19	0.348	1.200	95.497
20	0.261	0.901	96.398
21	0.222	0.766	97.163
22	0.191	0.659	97.822
23	0.159	0.548	98.370
24	0.134	0.461	98.831
25	0.091	0.314	99.145
26	0.088	0.303	99.449
27	0.066	0.229	99.678
28	0.052	0.178	99.856
29	0.042	0.144	100.000

Source: Authors

According to the Kaiser-Guttmann's criterion, factors, which have a characteristic root that is larger than the number one, are considered statistically significant factors. According to the percentage criteria of the explained variance, several factors are used which are necessary in order to explain 60% of the total variance. There are eight factors in our example: autonomy of action; innovation and utilization of opportunities; workplace, resources and rewards; new methods and business; encouragement of the employees on the new products development; a new product development, extensiveness of changes and risk of innovation; and leadership.

Levels of communality range from 0.291 to 0.910, which indicates that the variance of the original values is very well explained with eight derived factors. Since the initial matrix of the factor structure is not interpretable, we carried out a factor rotation with the varimax rotation method, which represents one of the rectangular (orthogonal) methods of the factor rotation and has as a result a modified structure of the factor loadings allowing easier interpretation. All the factor loadings are greater than 0.3, which is considered a high load. The eight derived factors explained 63.616% of the variance and with these criteria the percentage of variance (which is over 60%) was met. Based on these data, it can be concluded that the variables are very well mutually connected with one another.

Considering the central and auxiliary hypothesis of the paper, a correlation and regression analysis of the intrapreneurship elements was performed through derivative factors and indicators of company growth: value of property / assets, the value of incomes and value of the profit.

The correlation between the independent variables and the value of property/assets is R = 0.604 so we can say that there is a correlation between the observed variables, that is, through eight derived factors, innovation and autonomy of action have an influence on the value of the property / assets of the company. According to the coefficient of determination (R^2 = 0.365) variables share 36.5% of the common factors. "Innovation and utilization of opportunity" has the highest value of beta, 0.368, at the level of 0.005. The regression coefficients in the connection analysis of intrapreneurship with the value of property / assets indicate that an increase in the scale results of "Innovation and utilization of opportunity" by one point, on the average, increases the value of assets by 48,255,887.42 KM.

The correlation in the amount of R = 0.363 indicates that there is a correlation between the observed variables, that is, through eight derived factors, in-

novation and autonomy of action have an effect on the value of the property / assets of the company. According to the coefficient of determination (R^2 = 0.365) variables share 13.2% of the common factors. "Innovation and utilization of opportunity" has the highest value of beta dimensions, 0.270, which is on the significance level of 0.073. An increase of the scale results of "Innovation and utilization of opportunity" by one point, on average, is associated with an increase in the value of income by 23,973,044.85 KM.

The correlation between the independent variables and values of profits is R = 0.527 indicating that there is a correlation between the observed variables. According to the coefficient of determination (R^2 = 0.278) variables share 27.8% of the common factors. "The extent of the change and innovation of the risk" has the highest value of beta, 0.324, which is on the significance level 0.019. The increase in the scale results of "The extent of the change and innovation risk" by one point, on average, is associated with an increase on the scale of profit values by 4,513,776.63 KM.

Taking into consideration the results of the analysis we can conclude that there is a positive impact of intrapreneurial activity on the asset value indicators. Therefore, with this we can confirm the auxiliary hypothesis H_1: Enhanced intrapreneurial activities imply an increase in the value of assets, as well as the fact that innovation and autonomy of action increase the value of incomes and profit. Based on that, the second auxiliary hypothesis is confirmed H2: Innovation and autonomy of action as a result have an increased value of total incomes and profits in the company.

These results show that innovation and autonomy of action as elements of intrapreneurial activities increase the indicators of growth of the company: the value of assets, incomes and profit, on the basis of which, the central research hypothesis that the implementation of intrapreneurial activities positively effect on the development of manufacturing enterprises, is acceptable. Namely, the results on the scale of innovation and autonomy of action in all the cases were associated with an increase in results of the indicators of growth.

However, it should be noted that the high coefficient of determination does not mean that the independent variables have an impact on the value of the dependent variables, but they express the correlation without causality implications. In fact, it can be argued that between these indicators of growth and innovation and autonomy of action exists as a positive linear relation.

5.2 Critical review of the research

In the research on intrapreneurship in the companies, we used an electronic questionnaire. The limiting factor was the subjectivity of the respondents in completing the questionnaire. The subjectivity arises from ignorance or confusion regarding the terminology of the asked questions and the tendency of the respondents to exaggerate their answers in order to make themselves look a little bit better. The problem of subjectivity can be reduced by using additional methods for data collection, e.g. an interview. The research was conducted on a sample of 50 companies that are located in the Federation of Bosnia and Herzegovina. These companies perform production activities and they are part of the large enterprises category. Taking into account that the total number of companies that meet these criteria was 182, we included 50 companies with whom we did a complete stratification of the sample where strata's were Cantons as administrative units. It can be said that the sample is representative for the Federation of Bosnia and Herzegovina.

Using this research, we have discovered that the implementation of intrapreneurial activities affects the indicators of large companies' production growth. Given the different approaches in identifying elements of intrapreneurship, it is possible that the instrument that we used does not include a researched area. Although a large number of researchers identify the multidimensionality of intrapreneurship, it is necessary to investigate the mutual influence of the individual elements in greater detail. There are a small number of authors, who explore all elements of intrapreneurship. They conclude that elements of intrapreneurship do not contribute equally to the company growth; therefore, the managers should focus on innovation and autonomy of action.

According to the results of the factor analysis, we can see that the elements of intrapreneurship are presented through eight factors. Those are autonomy of action; innovation and utilization of opportunities; workplace, resources and rewards; new methods and business; encouragement of the

employees on the new products development; a development of the new products, extensiveness of changes and risk of innovation; and leadership in introducing innovations, which deviates from previous researches. The confirmed results indicate that the greatest impact on the growth of the company is due to: innovation and utilization of opportunities; new methods and activities; encouraging employees to develop new products, new product development; extensiveness of the changes and the risk of innovation. In the research were used indicators of the company growth: value of property/assets; income and profit. However, although the intrapreneurial activities were described as a predictor of company growth, we cannot rule out the reverse connection. Interdependence of these variables is dynamic by its nature. Successful companies have the resources to invest in business projects, which make it possible to increase the innovation of the company. Describing one variable independent and the other dependent is still arbitrary.

Further research might include implications of intrapreneurship given the size of the company and explore the determinants of intrapreneurship in small versus large businesses. In addition, it would be interesting to investigate the influence of certain elements of intrapreneurship on the growth of the company with regard to the life cycle stage. At the same time, the impact of intrapreneurship on the company results may be deepened by including sophisticated measures of financial performances like evaluation of results and performances using BEX models and the BEX index. Parallel intrapreneurship research in Bosnia and Herzegovina and in one of the Western European countries would provide a basis for comparing the performance of Bosnian and European enterprises according to intensity of intrapreneurial activities.

6. Conclusion

Today, management in companies deals with the challenge to create preconditions for the implementation of activities in order to improve the growth and development of companies. One of those activities, which have this characteristic, is intrapreneurship in existing companies. Therefore, finding the mechanisms that create a favorable climate for intrapreneurial activities is a focus of managerial action.

In this paper, we measured an existing level of intrapreneurial activity observed through innovation and autonomy of action and by using the statistical method of regression and correlation; we have carried out analysis of the impact of intrapreneurship on the indicators of productive company growth. Thereby, we established that innovation and autonomy of action as elements of intrapreneurial activities affect the increase of company growth indicators: value of assets, incomes, and profits. We have also carried out measurement and analysis so that we can identify organizational assumptions for the creation of a suitable environment for the development of intrapreneurship (looking at the environment in which businesses work, organizational culture, and intrapreneurial practices through motivation and rewards, through managing of changes, creativity and organizational learning). The conducted analysis can define recommendations for managerial actions in order to create a favorable environment for intrapreneurial activities. These are:

- to take action in order to reduce the difference between the products that the company offers with respect to the market dynamics and uncertainty as well as to meet the needs of the market and to innovate products that meet the needs of consumers,
- to improve the mechanisms of decision-making and to speed up decision making on the acceptance of new ideas (enterprise) and to create an atmosphere which is characterized by positive and proactive thinking, mutual trust, openness and cooperation,
- to improve the policy of rewarding employees who take the expected risk and innovate, and those who obey and follow the rules,
- to develop and implement techniques which company management uses to successfully predict, control and reduce resistance to changes,
- to constantly encourage and motivate individuals who stand out in terms of creativity,
- to constantly explore and critically relate to assumptions that the company has with regard to its customers.

This research has scientifically confirmed that the company's management with more powerful implementation of intrapreneurial activities and implementation of the above-mentioned recommendations can achieve company growth.

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(Endnotes)

1 Ibid: p. 461

2 As already mentioned, it is not enough to have good organizational structure of the company, human resources, or high productivity, if we are producing products, which the market does not need, or which are outdated.

3 Law on Accounting and Auditing of the Federation of Bosnia and Herzegovina, Official Gazette of the Federation Bosnia and Herzegovina, No. 83/09.

4 AFIP – Agency for financial information and mediation services, www.afip.ba

5 Eigenvalue (engl.) a characteristic root or eigenvalue, it is value of variance explained by a certain factor.

Muzafer Brigić
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Utjecaj intrapoduzetništva na rast proizvodnih poduzeća u Bosni i Hercegovini

Sažetak

Rast i razvoj osnovni su ciljevi svakoga poduzeća. Posvećenost aktivnostima koje stvaraju pretpostavke za rast i razvoj važna su aktivnost menadžmenta. Poduzetničko djelovanje osigurava pretpostavke ostvarenja rasta i razvoja. U velikim i postojećim poduzećima poduzetničke aktivnosti predstavljaju intrapoduzetništvo. U kojoj je mjeri prisutno intrapoduzetničko djelovanje u proizvodnim poduzećima u Bosni i Hercegovini te koje su organizacijske pretpostavke za intenziviranje intrapoduzetničkog djelovanja i kakav je utjecaj na rast poduzeća, predmet su istraživanja u radu. Primarno istraživanje provedeno je terenskim istraživanjem primjenom ankete kao instrumenta za prikupljanje podataka. Anketiranjem se došlo do odgovora na pitanje do koje mjere je intrapoduzetništvo razvijeno u proizvodnim poduzećima u FBiH iz perspektive ključnih dviju dimenzija intrapoduzetništva: inovativnost i autonomnost djelovanja i njihov utjecaj na rast proizvodnih poduzeća te što je neophdono učiniti na polju menadžmenta poduzećima kako bi se stvorili preduvjeti za intenziviranje intrapoduzetničke aktivnosti u tim poduzećima. Uzorak je predstavljalo 50 velikih proizvodnih poduzeća u Federaciji Bosne i Hercegovine. Korištene su statističke metode obrade podataka: deskriptivna analiza, faktorska analiza, regresija i korelacija. Analizom rezultata istraživanja potvrđena je postavljena hipoteza da implementacija intrapoduzetničkih aktivnosti pozitivno utječe na rast proizvodnih poduzeća. Dane su preporuke kako bi se poboljšale organizacijske pretpostavke za intenzivnije intrapoduzetničko djelovanje.

Ključne riječi: poduzetništvo, intrapoduzetništvo, inovativnost, autonomnost djelovanja, rast poduzeća