

## **IMPORTANCE OF MACRO LEVEL INFORMATION FOR START-UPS IN GEORGIA**

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### **Abstract**

*The article aims to highlight importance and availability of the information resources for start-ups. Structured questionnaire with open and closed ended questions was conducted among pre-selected companies in Georgia in years 2015-2016. The survey results have been encoded in SPSS and Microsoft Excel. Survey was conducted among 150 entrepreneurs, with response rate 70%. Research determines that information resource usage is essential for start-up success. Research evaluates the quality of available information resources and defines importance of structured information space development. Research states that Information quality in available information resources is somewhat average according to the entrepreneurs. Elaboration of information support system with the relevant information necessary for start-ups would positively affects the individual companies, as well as the economic environment of Georgia.*

*Keywords: Business venture, Entrepreneurship, Georgia, Information source, Start-up*

### **INTRODUCTION**

For the year 2010 there existed a household data around the world with the amount of 1 zettabyte. Wall Street identifies the information as the “new boss” for the market. Data analysis becomes more and more difficult as with every second more and more information is being conducted while our nowadays technologies are not that fast to keep up with it with the same speed. With the technological development importance of information has been highlighted. Existing industrial society is in the transition process to information and knowledge society. Resources for information in Georgia are scarce. Analysis of the existing information resources and their usefulness is essential for further development of the information management field.

Literature review highlights the importance of information as a resource for start-ups. Through the analysis of the current information resources it can be identified what changes/corrections are needed in existing information and what additional information should be collected to reach the optimal information characteristics start-ups require.

The purpose of the study is to understand Entrepreneurs perception of the information and information resources. The study aims to identify background for the elaboration of information support system for start-ups for Georgia.

## LITERATURE REVIEW

Gebauer J., Lee F. \*2008 identify the importance of flexibility in decision making. According to the article there are three business process characteristics that have critical effect on company and require flexibility of actions. Those factors are: uncertainty, variability and time. Authors define the guidelines for coping with critical processes preventing company success. Research defined that information positively affects the business, when appropriately planned/managed. Brocas et al. (2009) strengthens the assumption through discussing element of information in the decision making process. Decisions without relevant information and ability/skills of proper analyze are assumed as being irrational.

Of course not all the information is necessary for company's flexibility and success. In terms of business hierarchy information can be divided into two parts - micro level information and macro level information.

Micro level information is the type of information the company collects for its private usage and gains competitive advantage through it. Micro level information is emerged inside the companies and the companies usually take responsibility for optimization of its characteristics.

Macro level information is the environmental information describing general market trends and highlighting main characteristics of economical eco-system. It is important for Georgian companies to have access to high quality macro level information, as it creates the background for healthy economical environment and therefore, the whole society.

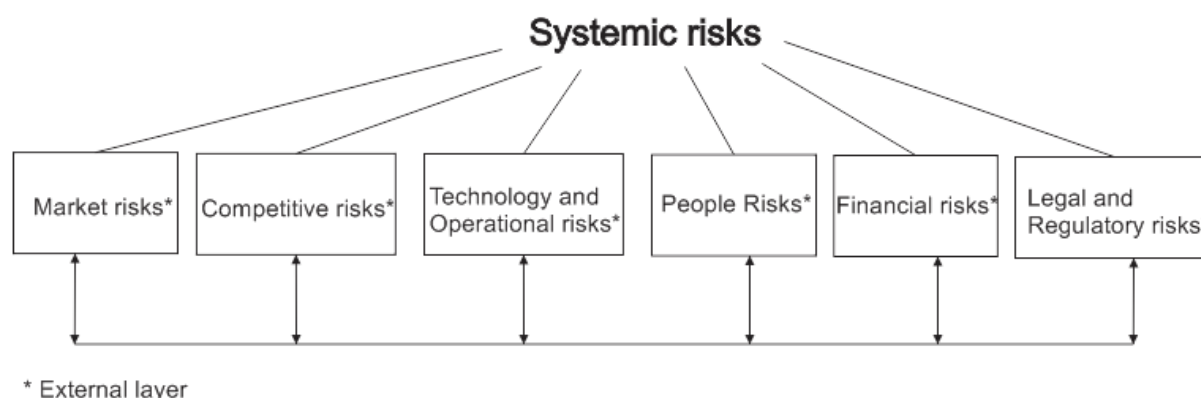
Elaboration of macro-level information support system with the relevant information content will provide increased opportunities for start-up companies. Information environment is the key to creating healthy business relations. Macro-level Information space creates an opportunity, as indicated in paper by Ghlonti (2012):

- Improvement of interaction within subject area;
- Accumulation and sharing of knowledge in various spheres of activity;
- Transparency of administration and control;

- Realization of opportunities for decision making on the basis of modern management techniques;
- Prevention (or even elimination) of conflicts.

Differentiation between micro and macro levels of information can be accomplished through the risk analysis. Harai (2010) provide risk classification into systematic and non-systematic risks. Non-systematic risks can be eliminated through micro level information; while systematic risks can only be reduced with macro level information. Currently macro level information is still chaotic and spread around. The analysis and evaluation of the information resources creates an opportunity for its systemization and organization. Systemization and organization of the macro level information can be accomplished on the basis of systematic risks analysis based on the concepts identified by Harai (2010). Classification is given in Figure 1.

Figure 1: Systematic risk classification



World bank (Fostering the entrepreneurship in Georgia, 2013) provides the paper on defining Georgian entrepreneurs' perception of information resources. According to the research, the Georgian entrepreneurs identify scientific resources such as universities or scientific publications, in-house researches, exhibitions and so on being not important. On the other hand, these resources are relevant providers of macro level information.

The subject of information and information spaces are highlighted all over the world. The consultation committee for space data systems form recommendation for open archival information system (OAIS) under the code CCSDS 650.0-M-2 (<http://public.ccsds.org/publications/archive/650x0m2.pdf>) provides recommendations for information system characteristics. Including information content and structural characteristics.

World trends, as well as the current market situation in Georgia make it essential to evaluate existing information resources and make relevant follow up steps.

## METHODOLOGY

Research purpose is to evaluate and examine information resources availability to entrepreneurs in Georgia. Purpose of the survey is to define necessity for macro-level information support system, through analysis of existing information resources. Survey is created in manner to evaluate entrepreneurs' perception of information available and the questionnaire was sent out to the entrepreneurs, listed in the public register of Georgia – [napr.gov.ge](http://napr.gov.ge).

Survey was conducted in 2015-2016 among predefined sample of entrepreneurs. Sample was chosen randomly. Sample size was defined for confidence interval 95% and margin error of 8. In total sample size is 150 companies (company founders). The questionnaire was distributed via e-mail and 105 out of 150 participants replied filled in questionnaire.

Questionnaire consists of 14 questions. Survey is divided into three sections identifying the following: (1) participator entrepreneurs' demographics; (2) participator company demographics; (3) analysis of the information resource. Collected information is analyzed by SPSS and Microsoft excel.

## ANALYSIS AND FINDINGS

Demographic parameters of the survey participants and size differentiation of companies is provided below. Brief results are summarized in Table 1 and Figure 2.

Figure 2: Surveyed company distribution according to their size

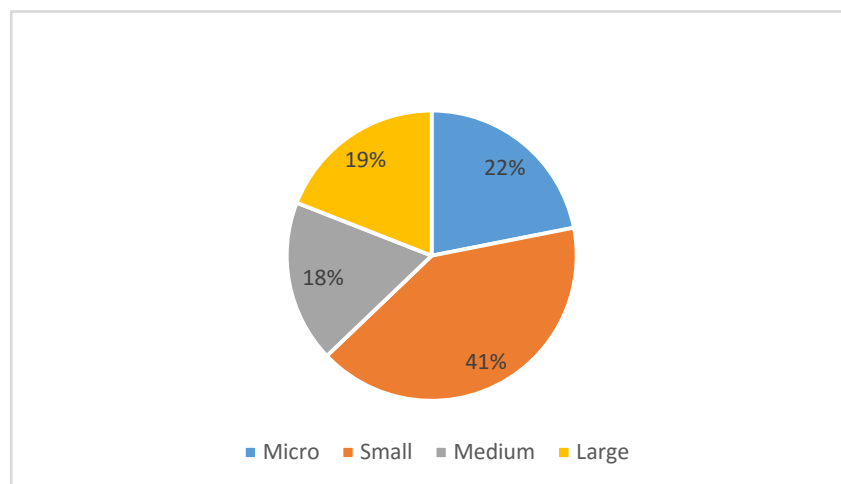


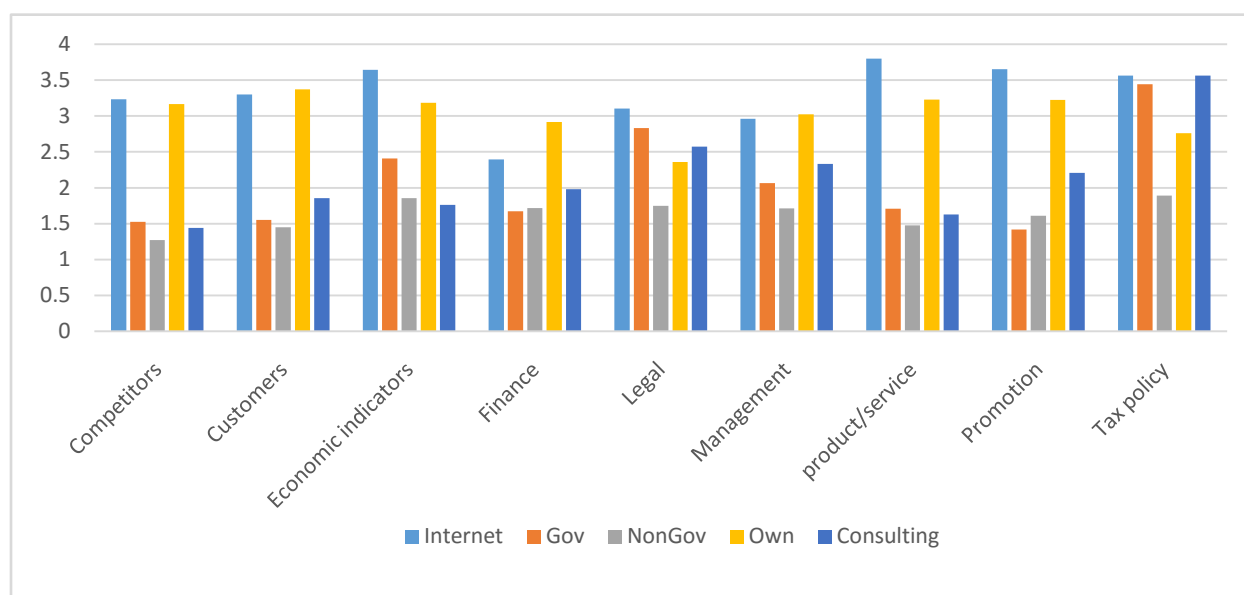
Table 1: Combination of survey participants' demographic parameters

Age	18-24		24-40		41-55		55+		Grand total
Gender →	Female	Male	Female	Male	Female	Male	Female	Male	
Education ↴									
<b>Bachelor</b>	1.9%	1.9%	4.8%	14.3%	3.8%	3.8%	0.0%	5.7%	36.2%
<b>Doctorate</b>	0.0%	0.0%	0.0%	1.0%	1.0%	0.0%	0.0%	1.9%	3.8%
<b>Master</b>	1.0%	0.0%	8.6%	14.3%	14.3%	10.5%	1.0%	2.9%	52.4%
<b>Vocational education</b>	0.0%	0.0%	1.0%	2.9%	0.0%	1.9%	0.0%	1.9%	7.6%
<b>Grand Total</b>	2.9%	1.9%	14.3%	32.4%	19.0%	16.2%	1.0%	12.4%	100.0%

For the evaluation of the information resource (Internet, Governmental institutions, Non-governmental institutions, conducted own research, Consulting and other – blank form entrepreneur can fill in on his/her own) according to information type (information of : economic indicators, customers, competitors, financial issues, legal and tax policies, product/service placement, promotion and management) graph was presented to the survey participants, where they could rate evaluate information obtained from information resources with the relevant number ranged from 1 (not useful) to 5 (most useful).

26 of the survey participants fully filled in all the cells in the evaluation table. 7 of the participants left all the cells blank. 6 out of 7 mentioned they have not participated in any process of start-up establishment; therefore, blank cells were relevant. The 1 out of 7 indicated that participated in start-up process but abstained to answer. Average valuation of information source usefulness for the information is presented in Figure 3.

Figure 3. Average valuation of information source usefulness



According to the figure scoring for each of the information resources can be identified. Overall ratings for the information resources is the following:

- Internet, with the average score of 3.3;
- Conduction of own research – 3.0;
- Consulting companies have overall average score of usefulness 2.2;
- Governmental sources of information get overall score of 2;
- Non-governmental have overall average score of 1.6.

Average evaluation of information resources ranges from 2 to 3. The score indicates there is lack of essential components in the data presented in *available information resources*.

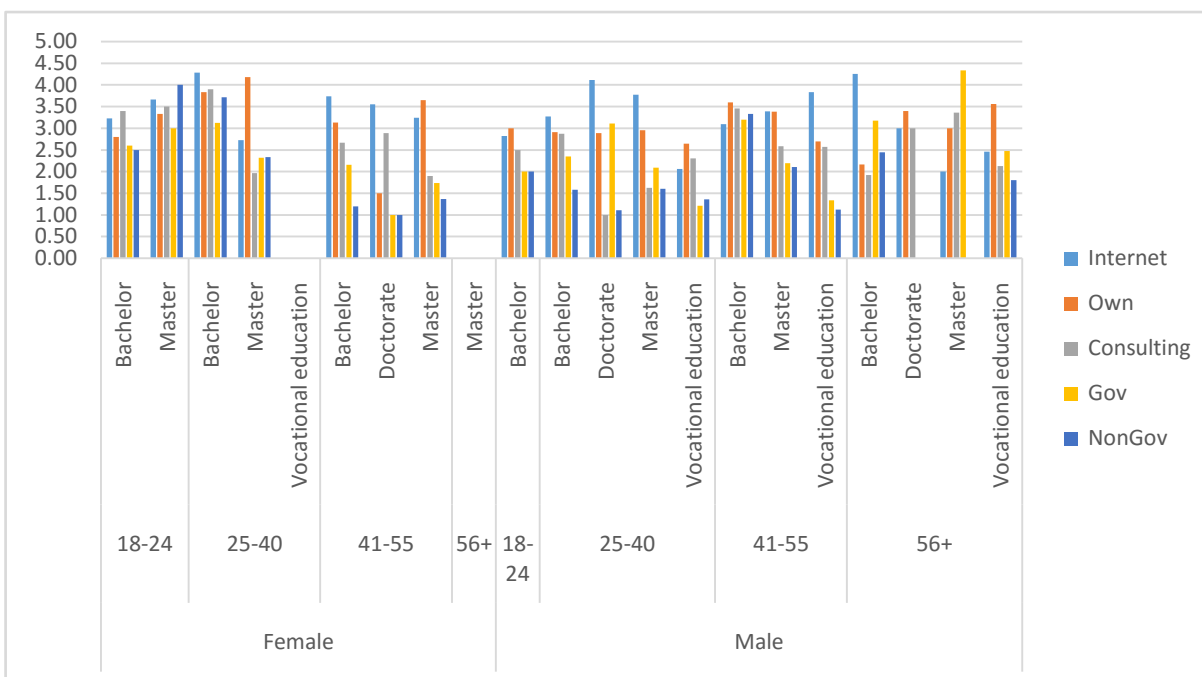
To better understand the problem, the frequencies for each of the grades where analyzed separately. Analysis revealed that governmental resources and internet got most grades of 5, while non-governmental organizations got at most grades of 1.

Through the blank and fill in cell analysis, it is determined which information resources are most frequently used by the survey participants. Most frequently used resource is internet, while non-governmental resources are used least frequently, which can be explained of the scoring. Entrepreneurs are more prone to rely on internet, than other resources. The reason for the phenomenon may be accessibility of the internet. While entrepreneurs consider non-governmental resources as least appropriate for their start-ups.

Demographic analysis presents demographic effect on choosing information resource. When combined demographic parameters with the information resource valuation is as follows in Figure 4.

According to the valuation it can be defined that Males in age range from 25 to 40 with the vocational education are the strictest valuers, their overall score for evaluation information resources is 1.92; Mildest evaluators are female in age group from 25 to 40 with the bachelor degree, they assign overall score of 3.77 to information resources.

Figure 4: Information resource evaluation according to demographics



Through the demographic analysis it is defined that the criteria having most effect on choosing information resource is age. The criteria similar between all age groups is that internet remains the most popular and usable source for information. In comparison with other age groups, participants between 24-40 give higher valuations to consulting companies. Moreover, this age group among all age groups assign highest grade (2.83) to non-governmental organizations. Interesting phenomenon is that age groups 24-40 and 56+ are very similar in their preferences. Age groups 25-40 and 41-55 evaluate information resources in similar manner. This age groups mostly rely on the research they conduct on their own.

Through the analysis it can be defined that the questionnaire sample included both gender, all the specified age and education groups, therefore the sample is fully representative of the country entrepreneurs' population. According to the study most of the entrepreneurs (60%) admit that they participated in start-up set up process. The fact confirms that it is essential to create information support system, as it would promote development of business environment.

## CONCLUSION

Information is required on every stage of the company life cycle, from the very start till the liquidation point. Information should be defined as a part of the company ecosystem in order success to be reached. Investigation costs for the business are also considered to be the start-up expenses, this is an important remark to be remembered. Gather of the information should

be started before the company is even registered as entrepreneurs may face some significant problems while registering, even the type of they did not expect. At the same time the problems they face differ from case to case, from industry to industry. Risk analysis and classification create solid background for information systematization.

Research shows that Georgian entrepreneurs require information for their business, but currently information market in Georgia is not complete. It is essential that through the proper development of information support system the issue with the inconvenience of the information will be resolved. The subject of information as the critical source for the rational decision making tool, needs further studies and information support system for start-ups should be elaborated to promote Georgian entrepreneurship. Further studies include discussion of all steps of information logistics in order to form framework for information support system for start-ups.

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