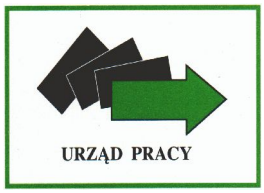
VOIVODSHIP LABOUR OFFICE IN TORUŃ
DEPARTMENT OF INFORMATION, RESEARCH, AND ANALYSIS

A DEMAND FOR ECONOMIC ANIMATORS IN THE KUYAVIAN-POMERANIAN REGION

LEONARDO DA VINCI Project

''European Curricula for Economic Animators in the Enlarging Europe''

Leonardo da Vinci



TORUŃ, MAY 2005

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I. INTRODUCTION

The Leonardo da Vinci program, which includes *Economic Animator Training in the Enlarging Europe project (no PL/04/B/F/PP-174 446)*, is one of the education programs of the European Union. The main objective of the project is to equip school graduates, and persons employed in companies and institutions with a knowledge of technological culture and entrepreneurship. To achieve this, three education programs for economic animators have been developed:

- "animating technological development",
- "animating regional development",
- "animating entrepreneurship".

The realization of the project will involve elaborating three education programs along with all the didactic tools, both for teachers and students. These will later be published in both hard copy and electronic form (a CD, website). The target group of the project results will be educational institutions and training centres, and the impact of the project effects will be used by pro-innovation institutions (e.g. technology transfer centres, enterprise incubators, business consulting centres, regional centre for enterprise support), companies, government/self-government administration units at regional and local level alike.

II. INTRODUCTION TO THE PROBLEMS OF BUSINESS ENTITIES IN THE KUYAVIAN-POMERANIAN REGION.

At the end of December 2004, 185.175 business entities* were registered in the Kuyavian-Pomeranian region. This number decreased by 5.854 compared to the same period in the previous year. The structure of the registered entities according to the number of people employed is shown in the following table:

Number of people employed	Kuyavian-Pomeranian region	
	Number of business entities registered	%
0-9	176 710	95,43
10-49	6 721	3,63
50-249	1 495	0,81
250-99	207	0,11
1 000 and more	42	0,02
Total	185 175	100,00

The registered business entities also differ in their scope of business. A unified classification of business activity in Poland is called Polish Classification of Activity (PCA).

The greatest number of business entities in Kuyavian-Pomeranian region for the end of December 2004 was registered in the following categories:

D Manufacturing (19.264 entities)
F Construction (17.790 entities)
G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods (65.194 entities)
I Transport, storage and communication (13.761 entities)
K Real estate, renting and business activities (25.971 entities)
N Health and social work (151.523 entities)
O Other community, social and personal service activities (11.746 entities)

The research covered those areas of labour market where, as we assumed, companies and institutions employ people performing tasks aimed at regional, entrepreneurship, and technological development. In the case of regional development, the research covered government and self-government administration units in the region, whose total employed persons at the end of December 2003 equaled 27.921. The research for technological development and entrepreneurship included business-related units, which are present in every community. Estimating an accurate number of people employed in these units proved difficult, however, the estimates reach 200-300 persons.

* The data has been obtained from the Statistical Office in Bydgoszcz

III. METHODOLOGICAL NOTES

The demand analysis for economic animators was performed in Kuyavian-Pomeranian region in April and May 2005.

The research covered those areas of labour market which, as we assumed, companies and institutions employ people performing tasks aimed at regional, entrepreneurship, and technological development. In the case of regional development, the research covered government and self-government administration units in the region as well as agriculture consulting canters. The issue of entrepreneurship was consulted with the region's government and self-government administration offices, agriculture consulting centers, centers for business support, chambers of commerce and industry, and scientific-technical associations. In the case of tasks related to technological development, the research covered institutions supporting business, agriculture consulting centers, and a sample of entrepreneurs operating in the region.

The research was conducted in association with the Kuyavian-Pomeranian Association of Employers and Entrepreneurs in Bydgoszcz and Bydgoszcz Board of Federations of Research-Technological Association. **Altogether, 466 questionnaires were sent of which 131 were completed and returned** (the return rate equaled 28,%). The structure of the questionnaires sent and returned, according to the institution conducting the research is presented in the chart below:

Realization of the demand analysis for economic animators

Specifications	Number of questionnaires on:			Total
	Regional development animator	Entrepreneurship animator	Technological development animator	
Toruń Regional Labour Office	58	70	23	151
Kuyavian-Pomeranian Association of Employers and Entrepreneurs in Bydgoszcz	0	6	6 + approx. 300 entrepreneurs	Approx. 312
Bydgoszcz Board of Federations of Research-Technological Association	0	2	1	3
TOTAL	58	78	Approx. 330	466
QUESTIONNAIRES RETURNED	37	36	58	131
RETURN RATE (%)	63,8	46,2	17,6	28,1

The main research objective was to gather information on tasks aimed at regional, entrepreneurship and technological development which are performed by companies and institutions of the region. The research set out to determine persons responsible for these tasks and answer the question to what extent they should improve their qualifications. Another objective was establishing whether there is a demand for economic animators and the background they are expected to have. The research was based on three types of questionnaires which were to determine the characteristics of the three animator professions: regional, entrepreneurship, and technological.

Each of the questionnaires consisted of 12 questions classified into 4 groups. The first group

depicts the respondent's labour force and scope of activity. The second group describes the tasks aimed at regional, entrepreneurship, or technological development performed by the respondent. The third group characterizes the age, education, profession, and professional background of the people responsible for these tasks. The fourth group specifies the respondent's preferences for the candidates for regional, enterprise, and technological development positions.

Although the questionnaire return rate was low, the results seem to be conclusive. However, interpreting the data from the analytical section, it is crucial to remember that only some of the companies and institutions from the chosen sample decided to participate in the research. Therefore, any conclusions drawn from the data may not be representative of the whole population.

IV. ANALYTICAL SECTION

1. CHARACTERISTICS OF THE RESPONDENTS

1.1 The first question in the questionnaire raised the issue of **the company's/institution's scope of activity**. In the case of the demand analysis for regional development and entrepreneurship, the respondents belonged mainly to category L: "Public administration and defence; compulsory social security".

Table 1. The scope of activity of the companies and institutions participating in the demand analysis for regional animator.

Company's/institution's scope of activity acc. to Polish Classification of Activity	Number of respondents	%
Public administration and defence; compulsory social security	35	94,6
Agriculture, hunting and forestry	2	5,4
Total	**37**	**100,0**

Table 2. The scope of activity of the companies and institutions participating in the demand analysis for entrepreneurship animator.

Company's/institution's scope of activity acc. to Polish Classification of Activity	Number of respondents	%
Public administration and defence; compulsory social security	27	75,0
Other community, social and personal service activities	6	16,7
Extra - territorial organizations and bodies	2	5,6
Agriculture, hunting and forestry	1	2,8
Total	**36**	**100,0**

The greatest variety of answers to this question came from the respondents in the demand analysis for technological animator.

Table 3. The scope of activity of the companies and institutions participating in the demand analysis for technological animator.

Company's/institution's scope of activity acc. to Polish Classification of Activity	Number of respondents	%
Other community, social and personal service activities	12	22,4
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	8	15,5
Manufacturing	6	13,8
Construction	6	12,1
Transport, storage and communication	5	10,3
Hotels and restaurants	3	5,2
Agriculture, hunting and forestry	2	3,4
Real estate, renting and business activities	2	3,4
Public administration and defence; compulsory social security	2	3,4
Fishing	1	1,7
Electricity, gas and water supply	1	1,7
Financial intermediation	1	1,7
Extra - territorial organizations and bodies	1	1,7
Sum	**50**	**96,6**
No data	2	3,4
Total	**52**	**100,0**

1.2. Question 2 was on t**he total persons employed in the researched companies and institutions**. The greatest group of the respondents was small and medium business entities, whose total labour force was up to 49 persons. Their share in the research was over 50% for all animator types.

Table 4. The structure of the companies/institutions participating in the demand analysis for regional development animator acc. to their labour force.

Persons employed	Number of respondents	%
Up to 9 (small business)	9	24,3
From 10 to 49 (medium business)	13	35,1
From 50 to 199	10	27,0
From 200 to 999	2	5,4
1 000 and more	0	0,0
Sum	**34**	**91,9**

Persons employed	Number of respondents	%
No data	3	8,1
Total	**37**	**100,0**

Table 5. The structure of the companies/institutions participating in the demand analysis for entrepreneurship animator acc. to their labour force.

Persons employed	Number of respondents	%
Up to 9 (small business)	14	40,0
From 10 to 49 (medium business)	9	25,7
From 50 to 199	9	25,7
From 200 to 999	3	8,6
1 000 and more	0	0,0
Total	**35**	**100,0**

Table 6. The structure of the companies/institutions participating in the demand analysis for technological development animator acc. to labour force.

Persons employed	Number of respondents	%
Up to 9 (small business)	14	24,6
From 10 to 49 (medium business)	17	29,8
From 50 to 199	17	29,8
From 200 to 999	6	10,5
1 000 and more	3	5,3
Total	**57**	**100,0**

The majority of the labour force in the researched companies/institutions were employed full-time. Among the respondents of the demand analysis for regional development and entrepreneurship animator, the percentage of full-time workers exceeded 90% of all the persons employed (including cooperators). The percentage for the respondents participating in the demand analysis for technological development equaled 83,6%. The share of persons employed part-time and permanent cooperators in the researched business entities did not exceed 11%.

Table 7. The structure of the researched business entities acc. to mode of employment.

Business entities participating in demand analyses for		Number of persons employed		Number of permanent cooperators	Total
		Full-time	Part-time		
Regional development animator	total	**1 822**	**101**	**7**	**1 930**
	%	94,4	5,2	0,4	100,0
Entrepreneurship animator	total	**2 109**	**102**	**57**	**2 268**
	%	93,0	4,5	2,5	100,0
Technological development animator	total	**11 927**	**844**	**1 493**	**14 264**
	%	83,6	5,9	10,5	100,0
Total	Total	**15 858**	**1 047**	**1 557**	**18 462**
	%	85,9	5,7	8,4	100,0

2. TASKS AIMED AT REGIONAL, ENTREPRENEURSHIP, AND TECHNOLOGICAL

DEVELOPMENT PERFORMED BY THE RESEARCHED COMPANIES AND INSTITUTIONS.

2.1. A group of respondents participating in the demand analysis for regional development animator were asked **what regional policy tasks they performed. The respondents were to describe these tasks in full detail, on their own in one of the questions.**

A significant number of the answers given described elaborating general schemes of development (46,0% of all answers). These included: cooperation with other institutions and organizations for regional development, initiating investments in the region as well as creating interregional partnership. Mere 14% of the researched companies and institutions have access to EU funds to promote regional development. Finally, only 6 respondents (12,0%) claimed they did not perform any regional development tasks at all.

Table 8. Tasks related to regional development performed by the researched companies and institutions (answers given by the respondents).

Regional development tasks	Number of quotes for each group of tasks	%
Elaborating general schemes of regional development	23	46,0
Accessing outside sources of financing (e.g. EU funds)	7	14,0
Managing environment protection in the region	4	8,0
Spatial economy, road infrastructure	3	6,0
Services for entrepreneurs	3	6,0
Road construction and maintenance	2	4,0
Initiating, executing, and supervising investments	2	4,0
None	6	12,0
Total	**50**	**100,0**

The answers were corroborated in another question which tested **the respondents' specific actions taken to promote regional development**. **The respondents could choose their answers from a list of tasks which, as we assumed, were related to regional development.**

Table 9. Tasks related to regional development performed by the researched companies and institutions (tasks proposed by the authors of the questionnaire).

Regional development tasks	Yes	%	No	%
Cooperation with other institutions for establishing a general course of development	20	66,7	10	33,3
Initiating, coordinating, and supervising tasks and investments related to regional development	19	63,3	11	36,7
Representing and promoting the region outside, also abroad	15	51,7	14	48,3
Developing cooperation with other regions and countries	16	53,3	14	46,7
Accessing EU funds	5	27,8	13	72,2

A comparison of the tasks, which were assumed to be related to regional development (table 9), with those listed by the respondents as related to regional development (table 8) reveals that most tasks falls into the establishing-a-general-course-of-regional-development category. Besides the 'accessing EU funds' task and partly the 'initiating, coordinating, and supervising tasks and investments related to regional development' task, no other task understood by the respondents as related to regional development was taken into consideration.

2.2. A group of the respondents participating in the demand analysis for entrepreneurship animator were asked **what tasks aimed at entrepreneurship development they performed. The respondents were to describe these tasks in full detail, on their own.** Most answers listed 'providing services for entrepreneurs'. These services, according to the respondents, include providing information on possible investment opportunities in the region, organized trainings, as well as on granting bank loans. As many as 10 respondents (25,6%) claimed they did not perform any tasks aimed at entrepreneurship development at all. This made up the second largest group of answers.

Table 10. Tasks related to entrepreneurship development performed by the researched companies and institutions (answers given by the respondents).

Entrepreneurship development tasks	Number of quotes for each group of tasks	%
Services for entrepreneurs	13	33,3
Accessing outside financing sources (e.g. EU funds)	4	10,3
Spatial economy, road infrastructure	3	7,7
Elaborating general schemes of regional development	4	10,3
Supervising government-owned and municipal companies	2	5,1
Implementing new products, procedures, technologies	1	2,6
Services for farmers	1	2,6
Initiating, executing, and supervising investments	1	2,6
None	10	25,6
Total	**39**	**100,0**

Another question tested **the respondents' specific actions which, as we assumed, were related to entrepreneurship development**. Answers to almost each question of the type mentioned above were negative. All in all, none of the researched companies and institutions perform tasks aimed at protecting intellectual property law and industrial property. The fewest number of the researched companies and institutions establish the company's strategy (5 quotes) and estimate their competitive capabilities on the market (6 quotes). The tasks which were listed most often include: promoting and supporting regional entrepreneurship (21 quotes), developing partnership with other organizations and companies (16 quotes), as well as accessing outside financing sources, including EU funds for entrepreneurship development (15 quotes).

Table 11. Tasks related to entrepreneurship development performed by the researched companies and institutions (tasks proposed by the authors of the questionnaire)

Entrepreneurship development tasks	Yes	%	No	%
Promoting and supporting entrepreneurship in the region	21	60,0	14	40,0
Developing partnership for entrepreneurship development with particular branches of economy, organizations of entrepreneurs, other regions and countries	16	45,7	19	54,3
Accessing outside financing sources, including EU funds	15	42,9	20	57,1
Market analysis	12	34,3	23	65,7
Representing and promoting regional economy, also abroad	12	34,3	23	65,7
Initiating, coordinating, and supervising tasks and investments aimed at regional development of particular areas	11	31,4	24	68,6
Entrepreneurship consulting	10	28,6	25	71,4
Analyzing laws, procedures, norms, effective regulations and requirements necessary for establishing and proper functioning of a business enterprise on the national and European market	9	25,7	26	74,3
Estimating competitive capabilities of the company	6	17,1	29	82,9
Developing the company's strategy	5	14,3	30	85,7
Protecting intellectual property law and industrial property	0	0,0	35	100,0

2.3. A group of the respondents participating in the demand analysis for technological development animator were asked **what tasks related to designing, implementing, and promoting technological development they performed. The respondents were to list these tasks on their own.** The most frequent answer was that no tasks related to technological development were performed. (27 answers - 55,1%). Out of the performed tasks, they dominant group (16 quotes - 32,7%) was implementing new products, procedures, and technologies. This group included among others such tasks as: creating building projects, elaborating new solutions for energy transfer as well as optimisation and modernization of technologies in processing.

Table 12 Tasks related to technological development performed by the researched companies

and institutions (answers given by the respondents)

Technological development tasks	Number of quotes for each group of tasks	%
Implementing new products, procedures, and technologies	16	32,7
Promoting technological progress	2	4,1
Building and maintaining roads	1	2,0
Transport and logistics	1	2,0
Elaborating general schemes of regional development	1	2,0
Services for entrepreneurs	1	2,0
None	27	55,1
Total	**49**	**100,0**

These findings have been confirmed in the next question on **the realization of particular tasks which were assumed to be related to technological development**. The most frequent answer to questions about any task was negative. The greatest number of quotes received tasks connected with accessing EU funds for new technological solutions (13 quotes), analysing market and identifying potential providers of new technologies, issuing decisions on investments, granting permissions and quality norms, as well as designing, implementing, promoting and evaluating new technological solutions (11 quotes for each).

Table 13. Tasks related to technological development performed by the researched companies

and institutions (tasks proposed by the authors of the questionnaire).

Technological development tasks	Yes	%	No	%
Accessing EU funds for new technological solutions	13	25,0	39	75,0
Analyzing market and identifying potential providers of new technologies	11	20,8	42	79,2
Issuing decisions on investments, granting permissions and quality norms	11	21,2	41	78,8
Designing, implementing, promoting and evaluating new technological solutions	11	21,2	41	78,8
Evaluating and implementing computer technologies	10	18,9	43	81,1
Computer and technology development consulting	10	18,9	43	81,1
Identifying effective and key technologies for the company's development	9	17,0	44	83,0
Establishing technological strategy of the company	9	17,0	44	83,0
Negotiating technological and computer investments	9	17,0	44	83,0
Representing and promoting technologies developed in the region	6	11,5	46	88,5
Technological audit, analyzing and evaluating competitive and developmental capabilities of technologies and innovations	5	9,4	48	90,6
Building partnership for technology development with other regions and countries	5	9,8	46	90,2
Laws of intellectual property and industrial property protection	4	7,5	49	92,5

Because of the small size of the eventual respondent sample, the table of tasks related to regional, entrepreneurship, and technological development listed according to the scope of business and labour force has not revealed any clear tendencies.

The business entities participating in the research most frequently claimed to perform tasks related to regional development. In the case of the respondents participating in the demand analysis for regional development animator, nearly 27,0% of them claimed to perform all the tasks listed (10 respondents). As much as 78,4% of the entities participating in this research claimed to perform at least one of the tasks listed.

Table 14. The number of tasks performed by the researched companies and institutions aimed at regional development (tasks proposed by the authors of the questionnaire).

Number of performed tasks aimed at regional development	Number of respondents	%
1	5	13,5
2	5	13,5
3	4	10,8
4	5	13,5
5	10	27,0
0	8	21,6
Total	**37**	**100,0**

In the case of tasks related to entrepreneurship, only 1 respondent claimed to perform all the tasks listed. Most (38,9%) respondents claimed to perform 4 to 6 of the tasks listed. 72,2% of the respondents claimed to perform at least one of the tasks listed.

Table 15. The number of tasks performed by the researched companies and institutions aimed at entrepreneurship development (tasks proposed by the authors of the questionnaire).

Number of performed tasks aimed at entrepreneurship development	Number of respondents	%
From 1 to 3	6	16,7
From 4 to 6	14	38,9
From 7 to 9	5	13,9
From 10 to 12	1	2,8
0	10	27,8
Total	**36**	**100,0**

Only 56,9% of the respondents participating in the demand analysis for technological development claimed to perform at least one of the tasks listed. The greatest numbers of the respondents claimed either not to perform any of the proposed tasks aimed at technological development (43,1%) or 1 to 3 of the 13 tasks listed (25,9%).

Table 16. The number of tasks performed by the researched companies and institutions aimed at technological development (tasks proposed by the authors of the questionnaire).

Number of performed tasks aimed at technological development	Number of respondents	%
From 1 to 3	15	25,9
From 4 to 6	10	17,2
From 7 to 9	3	5,2
From 10 to 13	5	8,6
0	25	43,1
Total	**58**	**100,0**

3. CHARACTERISTICS OF PERSONS PERFORMING TASKS AIMED AT REGIONAL, ENTREPRENEURSHIP, AND TECHNOLOGICAL DEVELOPMENT IN THE

RESEARCHED COMPANIES AND INSTITUTIONS

3.1. The respondents were asked about **the age of the persons responsible for tasks aimed at regional, entrepreneurship, and technological development.** The answers reveal that the age structure of these persons is very diversified. The share of all age groups in most cases does not exceed 25,0%. However, certain age groups seem to be dominant. These groups differ depending on the type of task.

In the case of tasks aimed at regional development, the following age groups appear to be dominant: 46-55 years (39,4% of all persons performing regional development tasks). Persons aged 26-35 constitute only 3,5% of all persons employed in the researched companies and institutions who perform regional development tasks.

In the case of tasks aimed at entrepreneurship development, the dominant age groups are 46-55 years (38,1%) and 26-35 years (30,0%). The smallest group are persons aged 56 and more (3,8%).

In the case of tasks aimed at technological development, younger age groups are clearly dominant. Persons aged up to 25 years constitute 46,8% of persons performing regional development tasks. The second largest age group is made up of persons aged 26-35 years (28,0%). The fact that younger age group dominates over older persons is attributed to, among others, dynamic technological development, which requires up-to-date knowledge.

Table 17. The age structure of persons performing regional, entrepreneurship, and technological development tasks.

Persons responsible for:		Age					**Total**
		Up to 25	26-35	36-45	46-55	56 a. more	
Regional development	total	**9**	**76**	**55**	**100**	**14**	**254**
	%	3,5	29,9	21,7	39,4	5,5	100,0
Entrepreneurship development	total	**15**	**48**	**30**	**61**	**6**	**160**
	%	9,4	30,0	18,8	38,1	3,8	100,0
Technological development	total	**1 515**	**908**	**633**	**156**	**27**	**3 239**
	%	46,8	28,0	19,5	4,8	0,8	100,0
Total	total	**1 539**	**1 032**	**718**	**317**	**47**	**3 653**
	%	42,1	28,3	19,7	8,7	1,3	100,0

3.2. The respondents were also asked about **the level of education of the persons performing tasks aimed at regional, entrepreneurship, and technological development**. In all three types, persons with an MA degree were clearly dominant. They constituted over 75% of all persons performing tasks related to regional and entrepreneurship development. In the case of technological development tasks, the share of persons with an MA degree was lower (45,7%), yet still dominant.

Table 18. The education level of the persons performing regional, entrepreneurship, and technological development tasks.

Persons responsible for:		Education				Total
		MA	BA	Secondary	Vocational	
Regional development	Total	**208**	**12**	**7**	**16**	**243**
	%	85,6	4,9	2,9	6,6	100,0
Entrepreneurship development	Total	**127**	**7**	**14**	**14**	**162**
	%	78,4	4,3	8,6	8,6	100,0
Technological development	Total	**1 613**	**883**	**893**	**143**	**3 532**
	%	45,7	25,0	25,3	4,0	100,0
Total	Total	**1 948**	**902**	**914**	**173**	**3 937**
	%	49,5	22,9	23,2	4,4	100,0

3.3. Another question asked was about **the professions of persons performing regional, entrepreneurship, and technological development**. The results reveal a great difference in domination of particular profession groups, depending on the tasks performed. However, certain professions were often quoted by the respondents in all three research types.

Among the answers to the question about the professions of persons responsible for regional development tasks, the following professions were most frequently listed: social sciences (sociologists, political science graduates, educators, journalists) - 27,2% of all quotes; legal and administrative - 20,7% of all quotes.

Table 19. Learned professions of persons performing regional development tasks.

Professional groups	Number of quotes for each professional group	%
Social sciences	25	27,2
Law and administration	19	20,7
Agriculture and food processing	13	14,1
Economics, marketing and management	11	12,0
Biology, environment formation and protection	11	12,0
Building industry	7	7,6
Electronics and electrotechnics	4	4,3
Computer science and mathematics	2	2,2
Total	**92**	**100,0**

Among the answers to the question about the professions of persons responsible for entrepreneurship development tasks, the following professions were most frequently listed: economic - 27,8% of all quotes; agriculture and food processing, and social sciences - 16,7% (each) of all quotes; legal and administrative - 15,3% of all quotes.

Table 20. Learned professions of persons performing entrepreneurship development tasks.

Professional groups	Number of quotes for each professional group	%
Economics, marketing and management	20	27,8
Agriculture and food processing	12	16,7
Social sciences	12	16,7
Law and administration	11	15,3
Building industry	6	8,3
Biology, environment formation and protection	5	6,9
Computer science and mathematics	2	2,8
Mechanics	2	2,8
Electronics and electrotechnics	1	1,4
Services	1	1,4
Total	**72**	**100,0**

Among the answers to the question about the professions of persons responsible for technological development tasks, the following professions were most frequently listed: economic - 27,9% of all quotes; computer sciences and mathematical - 13,2%, electronic and electrotechnics, and mechanic - 11,8% each.

Table 21. Learned professions of persons performing technological development tasks.

Professional groups	Number of quotes for each professional group	%
Economics, marketing and management	19	27,9
Computer science and mathematics	9	13,2
Electronics and electrotechnics	8	11,8
Mechanics	8	11,8
Services	6	8,8
Biology, environment formation and protection	6	8,8
Social sciences	4	5,9
Agriculture and food processing	3	4,4
Building industry	2	2,9
Law and administration	1	1,5
Tourism and hotel management	1	1,5
Welfare services	1	1,5
Total	**68**	**100,0**

While the respondents quoted a particular profession, they often failed to specify the number of persons with this profession. This may cause difficulty interpreting the data cited. Therefore, the data includes not the number of persons trained in a particular profession, but the number of quotes for each professional group.

3.4. The respondents were asked **whether the persons performing regional, entrepreneurship, and technological development tasks should improve their knowledge, skills, or professional qualifications**. For all three types of tasks, the overwhelming majority of respondents confirmed the need to further educate their employees. In the case of regional development tasks, the affirmative answer constituted 70,3% of all answers and as much as 96,3% of the answers counted as valid i.e. excluding answers with insufficient data. In the case

of entrepreneurship development tasks the share constituted 63,9% and 88,5%, respectively; in the case of technological development tasks - 43,1% and 80,6%.

Table 22. Do you think the persons responsible for regional development tasks need to improve their qualifications?

Details	Number of respondents	%
Yes	26	70,3
No	1	2,7
Sum	**27**	**73,0**
No data	10	27,0
Total	**37**	**100,0**

Table 23. Do you think the persons responsible for entrepreneurship development tasks need to improve their qualifications?

Details	Number of respondents	%
Yes	23	63,9
No	3	8,3
Sum	**26**	**72,2**
No data	10	27,8
Total	**36**	**100,0**

Table 24. Do you think the persons responsible for technological development tasks need to improve their qualifications?

Details	Number of respondents	%
Yes	25	43,1
No	6	10,3
Sum	**31**	**53,4**
No data	27	46,6
Total	**58**	**100,0**

In the answers to the question about **the extent to which the persons performing regional, entrepreneurship, and technological development tasks should improve their qualifications**, certain differences can be observed, depending on the type of the tasks performed. According to the respondents, the persons responsible for regional development tasks should improve their knowledge mainly on how to access outside financing sources, especially EU funds (29,2% of all quotes) and foreign language capabilities (25,0%).

Table 25. The extent to which persons performing regional development tasks should improve their qualifications.

Extent	Number of quotes	%
Accessing outside financing sources (esp. EU funds)	14	29,2
Foreign language capabilities	12	25,0
Regional policy	8	16,7

Extent	Number of quotes	%
Training certificates obtained	4	8,3
Economics, marketing and management, accountancy	4	8,3
Expert knowledge of the performed activity	2	4,2
Computer skills	2	4,2
Interpersonal skills	1	2,1
Law	1	2,1
Total	**48**	**100,0**

In the case of the persons performing entrepreneurship development tasks, the results suggest the necessity to improve their knowledge of law (22,5%), especially the laws which regulate establishing and maintaining business entities on the Polish and European markets as well as their foreign language capabilities (20,0% of all quotes).

Table 26. The extent to which persons performing entrepreneurship development tasks should improve their qualifications.

Extent	Number of quotes	%
Law	9	22,5
Foreign language capabilities	8	20,0
Economics, marketing and management, accountancy	7	17,5
Accessing outside financing sources (esp. EU funds)	5	12,5
Training certificates obtained	3	7,5
Administration	3	7,5
Regional policy	2	5,0
Computer skills	1	2,5
Interpersonal skills	1	2,5
Expert knowledge of the performed activity	1	2,5
Total	**40**	**100,0**

In the case of persons performing technological development tasks, there seems to be a need to improve their specialist knowledge related to the scope of activity (17,5%). The types of this knowledge listed by the respondents are various, e.g. printing, interior design, latest technological solutions - all connected with the company's/institution's scope of activity. The second most commonly mentioned group were economic issues, computer skills, and foreign language capabilities (15% each).

Table 27. The extent to which persons performing technological development tasks should improve their qualifications.

Extent	Number of quotes	%
Expert knowledge related to the scope of activity	7	17,5
Economics, marketing and management, accountancy	6	15,0

Extent	Number of quotes	%
Computer skills	6	15,0
Foreign language capabilities	6	15,0
Interpersonal skills	5	12,5
Implementing new technologies	4	10,0
Accessing outside financing sources (esp. EU funds)	3	7,5
Training certificates obtained	2	5,0
Regional policy	1	2,5
Total	**40**	**100.0**

It needs to be explained that the "training certificates obtained" category appearing in all three groups proves the importance of gaining formal documents, for example, postgraduate course diplomas, which certify the actual practical skills acquired.

3.5. The respondents were then asked **if they would agree to enrol the persons performing regional, entrepreneurship, and technological development tasks in postgraduate studies**.

The answers were mostly affirmative (32,4% of all answers and 46,2% of answers counted as valid, i.e. excluding answers with insufficient data) for the persons responsible for regional development tasks.

Table 28. Would you enrol the persons responsible for regional development tasks in postgraduate studies?

Details	Number of respondents	%
Yes	12	32,4
No	7	18,9
I don't know	7	18,9
Sum	**26**	**70.3**
No data	11	29,7
Total	**37**	**100,0**

In the case of persons performing entrepreneurship development tasks, the respondents were undecided as to whether they would enrol these persons in postgraduate studies (30,6% of all answers and 40,7% of the answers counted as valid). At the same time, many admit they could do this (27,8% of all answers and 37,0% of all the answers counted as valid).

Table 29. Would you enrol the persons responsible for entrepreneurship development tasks in postgraduate studies?

Details	Number of respondents	%
Yes	10	27,8
No	6	16,7
I don't know	11	30,6
Sum	**27**	**75,0**
No data	9	25,0
Total	**36**	**100,0**

Among the companies and institutions employing persons responsible for technological development tasks the most frequent answer was that they don't know if they would enrol these persons in postgraduate studies (25,9% of all answers and 50,0% of the answers counted as valid). The number of affirmative answers was almost the same as those negative.

Table 30. Would you enrol the persons responsible for technological development tasks in postgraduate studies?

Details	Number of respondents	%
Yes	8	13,8
No	7	12,1
I don't know	15	25,9
Sum	**30**	**51,7**
No data	28	48,3
Total	**58**	**100,0**

Asked about t**he reasons for enrolling the persons responsible for regional, entrepreneurship, and technological development tasks in postgraduate studies**, the respondents' most frequent answers were that such studies could be an opportunity to extend and update their knowledge (14 answers altogether, regardless of the type of the tasks performed). The respondents also felt that such studies would make it possible to learn a different profession from the one in which the employees are already trained (2 answers) as well as boosting the institution's/company's efficiency. Postgraduate studies are also believed to facilitate the implementation of new services (4 answers).

Asked about **their unwillingness to enrol the persons performing the above mentioned tasks in postgraduate studies**, the respondents explained that their employees already had sufficient professional skills (3 answers) and that entrepreneurship issues were outside the institution's/company's scope of the activity (3 answers). The respondents also pointed to high costs of postgraduate studies (2 answers).

The respondents' explained that their hesitation is caused by the fact that extending employees' knowledge was dependent on the source of financing. One respondent concluded that there was no need for postgraduate studies, however, as modern technology develops, such a need may arise in the future, and one respondent answered that whether to enrol employees in postgraduate studies or not, depends on the quality of particular courses.

4. ANTICIPATED INCREASE IN EMPLOYMENT FOR POSITIONS RELATED TO REGIONAL, ENTREPRENEURSHIP, AND TECHNOLOGICAL DEVELOPMENT.

4.1. The respondents were asked **if they anticipated an increase in employment for positions related to regional, entrepreneurship, and technological developmen**t. Regardless of the type of the tasks performed, negative answers were dominant. They constituted 51,4% of all answers for persons performing regional development tasks. The share for entrepreneurship development tasks was 38,9% and 39,7% for technological development tasks. The share of "I don't know" answers with respect to persons responsible for entrepreneurship development tasks was slightly higher, compared to negative answers.

Table 31. Do you anticipate an increase in employment for positions related to regional development tasks?

Details	Number of respondents	%
Yes	4	10,8
No	19	51,4
I don't know	11	29,7
Sum	**34**	**91,9**
No data	3	8,1
Total	**37**	**100,0**

Table 32. Do you anticipate an increase in employment for positions related to entrepreneurship development tasks?

Details	Number of respondents	%
Yes	6	16,7
No	14	38,9
I don't know	15	41,7
Sum	**35**	**97,2**
No data	1	2,8
Total	**36**	**100,0**

Table 33. Do you anticipate an increase in employment for positions related to technological development tasks?

Details	Number of respondents	%
Yes	13	22,4
No	23	39,7
I don't know	19	32,8
Sum	**55**	**94,8**
No data	3	5,2
Total	**58**	**100,0**

In order to obtain more reliable results, it has been attempted to compare the data according to the researched entity's scope of activity and its labour force. Unfortunately, due to the small size of the eventual sample, hardly any tendencies have been observed. The only tendency for increasing in employment has been noticed for positions related to entrepreneurship development. This applied to small business entities providing entrepreneurship consulting. No similar tendencies have been observed in large and medium business entities and, especially in public administration institutions. However, because of the small size of the sample distributed in the categories, it is hard to detect any significant regularities here.

4.2. The respondents were also asked **what would be the candidates' for regional, entrepreneurship, and technological development positions relevant abilities.** We asked the respondents to name three most important abilities and rate them on a scale from the most to least relevant. Each ability listed as most relevant has been given the score of 3 points, abilities listed as relevant have been given the score of 2 points. Consequently, abilities considered the least relevant scored 1 point. The tables below present the total number of points scored by each ability.

For all these positions specialist qualifications seem to be the most relevant (34,9% of the total score for regional development positions, 29,5% for entrepreneurship development positions, and 35,4% for technological development positions). Practical skills and experience

in a similar position scored second. The latter is especially important in technological development positions (28,0% of the total score). General qualifications have proved much less relevant for all the three types of positions (17,8% for regional development positions, 15,3% for entrepreneurship development positions, and mere 9,1% for technological development positions).

Table 34. Candidates' for regional development positions relevant abilities, sorted by relevance.

Candidates' desired abilities	Total Score	%
Specialist qualifications	53	34,9
Experience in a similar position	31	20,4
Practical skills	30	19,7
General qualifications	27	17,8
Interpersonal skills	9	5,9
Foreign language capabilities	2	1,3
Total	**152**	**100,0**

Table 35. Candidates' for entrepreneurship development positions relevant abilities, sorted by relevance.

Candidates' desired abilities	Total Score	%
Specialist qualifications	52	29,5
Experience in a similar position	39	22,2
Practical skills	31	17,6
General qualifications	27	15,3
Interpersonal skills	23	13,1
Foreign language capabilities	4	2,3
Total	**176**	**100,0**

Table 36. Candidates' for technological development positions relevant abilities, sorted by relevance.

Candidates' desired abilities	Total Score	%
Specialist qualifications	86	35,4
Experience in a similar position	68	28,0
Practical skills	46	18,9
General qualifications	22	9,1
Interpersonal skills	20	8,2
Foreign language capabilities	1	0,4
Total	**243**	**100,0**

4.3. The respondents were also asked about **the candidates' for regional, entrepreneurship, and technological development positions preferred education**. The respondents were asked to list all education levels accepted for these positions. MA degree education received the greatest number of quotes for all the three types of positions (68,4%

of quotes for regional development positions, 58,7% for entrepreneurship development positions, and 56,7% for technological development positions). BA degree education received 21,1% of quotes for regional development positions, 26,1% for entrepreneurship development positions, and 26,9% for technological development positions.

Table 37. Candidates' for regional development positions preferred education.

Education level	Number of quotes	%
Master's degree	26	68,4
Bachelor's degree	8	21,1
Secondary	2	5,3
Vocational	2	5,3
Total	**38**	**100,0**

Table 38. Candidates' for entrepreneurship development positions preferred education.

Education level	Number of quotes	%
Master's degree	27	58,7
Bachelor's degree	12	26,1
Secondary	4	8,7
Other (PhD, MBA)	2	4,3
Vocational	1	2,2
Total	**46**	**100,0**

Table 39. Candidates' for technological development positions preferred education.

Education level	Number of quotes	%
Master's degree	38	56,7
Bachelor's degree	18	26,9
Secondary	5	7,5
Vocational	6	9,0
Total	**67**	**100,0**

4.4. Finally, the respondents were asked about **the candidates' for regional, entrepreneurship, and technological development positions additional skills and competences**. For regional development positions, the respondents would like the candidates to have a good knowledge of the region and its developmental capabilities (25,7% of all answers), foreign language capabilities (20,0%), and interpersonal skills (17,1%). The respondents also thought it important that the candidates have certain experience in positions related to executing regional policy (14,3%) and a knowledge of EU funding regulations (14,3%).

Table 40. Additional skills and competences expected from candidates for regional development positions.

Additional skills and competences	Number of quotes	%
Knowledge of the region and its capabilities	9	25,7
Foreign language capabilities	7	20,0
Interpersonal skills	6	17,1
Professional experience in executing regional policy	5	14,3
Knowledge of EU funding regulations	5	14,3
Knowledge of law	1	2,9
Specialist knowledge related to particular scope of activity	1	2,9
Knowledge of economics	1	2,9
Total	**35**	**100,0**

According to the respondents, the candidates for entrepreneurship development position should, first of all, have interpersonal skills (18,4% of all answers) and a knowledge of economics (18,4%). It is also important that they have foreign language capabilities and computer skills (14,3% each) and a knowledge of law (10,2%).

Table 41. Additional skills and competences expected from candidates for entrepreneurship development positions.

Additional skills and competences	Number of quotes	%
Interpersonal skills	9	18,4
Knowledge of economics	9	18,4
Foreign language capabilities	7	14,3
Computer skills	7	14,3
Knowledge of law	5	10,2
Knowledge of EU funding regulations	4	8,2
Knowledge of the region and its capabilities	3	6,1
Knowledge of technology and computer science	2	4,1
Specialist knowledge related to a particular scope of activity	2	4,1
Professional experience in executing regional policy	1	2,0
Total	**49**	**100,0**

The respondents' answers reveal that the candidates for technological development positions should have a knowledge of computer technology development and implementation (27,3% of all

answers), specialist knowledge closely related to the company's/institution's scope of activity (22,7%). Interpersonal skills are also desirable (22,7%).

Table 42. Additional skills and competences expected from candidates for technological development positions.

Additional skills and competences	Number of quotes	%
Knowledge of technology and computer science	12	27,3
Specialist knowledge related to a particular scope	10	22,7
Interpersonal skills	10	22,7
Knowledge of economics	4	9,1
Foreign language capabilities	4	9,1
Knowledge of EU funding regulations	2	4,5
Computer skills	2	4,5
Total	**44**	**100,0**

V. CONCLUSIONS

The aim of the research was primarily to gather information on tasks related to regional, entrepreneurship, and technological development which are performed by companies and institutions of the region as well as determining who performs these tasks and to what extent persons responsible for these tasks should improve their qualifications. Secondly, we also set out to answer if there is a demand for economic animators and what professional background they are expected to have.

The main conclusions drawn on the basis of research findings are the following:

- While the researched companies and institutions perform a wide range of tasks related to regional and entrepreneurship development, they generally fail to associate their business activity with technological development.
- The age structure and professional structure of the persons responsible for the above mentioned tasks is very diversified. The most frequently quoted professions are related to law and economics. As for the preferred level of education, Master's degree is a clearly dominant preference.
- Most of the researched companies and institutions recognize the necessity to improve the qualifications of the persons performing regional, entrepreneurship, and technological development.
- Depending on the type of performed tasks, the respondents differently perceive the extent to which employers' qualifications should be improved. In the case of persons responsible for regional and entrepreneurship development tasks, the expected competences include: foreign language capabilities, accessing outside financing sources (including EU funds), knowledge of law and economics. In the case of persons responsible for technological development tasks, the respondents put an emphasis on economics, computer science, abilities to implement new technologies, and a specialist knowledge related to the company's/institution's scope of activity.

- The respondents were hesitant about enrolling the persons performing regional, entrepreneurship, and technological tasks employed in their companies and institutions in postgraduate studies. This was usually caused by high cost of such courses.
- Most of the researched companies and institutions do not anticipate any increase in employment for positions related to regional, entrepreneurship, and technological development. Some respondents are still undecided.
- The respondents who are willing to employ persons responsible for regional, entrepreneurship, and technological development tasks stress that the candidates should have a Master's or Bachelor's degree, specialist qualifications, and practical skills. Moreover, for regional development positions, the candidates are expected to have a knowledge of the region, foreign language capabilities, and interpersonal skills. The key abilities for entrepreneurship development positions are interpersonal skills and a knowledge of economics, whereas a knowledge of computer science, abilities to implement new technologies, and a specialist knowledge related to the company's/institution's scope of activity are favoured in technological development positions.