A PERSPECTIVE OF THE ECONOMIC ENVIRONMENT ON THE RESEARCH AND DEVELOPMENT INSTITUTE OF TRANSYLVANIA UNIVERSITY OF BRAȘOV

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Abstract: This paper addresses the necessity of the relationship between the academic and economic environments. Specifically, this article presents a quantitative research study conducted among representatives of companies from the Central Region of Romania regarding the Research and Development Institute of Transylvania University of Brașov. By conducting this research, valuable insights have been obtained that can be useful both for promoting the institute and for establishing future collaborations between the business and academic sectors.

Key words: promotion, Research and Development Institute of Transylvania University of Brașov, economic environment, commercial society, educational marketing

1. Introduction

Currently, the academic environment aims at cultivating individuals not only for personal growth, but particularly for professional development. The academic sphere also seeks to supply future employees to the economic sector, thus necessitating a keen awareness of the advancements occurring within the entrepreneurial landscape.

A novel perspective on career and life success demands a deeper understanding, prompting academic institutions to adapt by anticipating the developmental level of their students. It is imperative to foster individuals with responsible decision-making abilities, capable of anticipating and adjusting to the diverse contexts of work and life, analyzing both their own actions and those of others, and exhibiting flexible and adaptable behaviors amidst socio-economic changes (Rusu, Frujină, 2023). In light of these considerations, the existence of a connection as well as the necessity for a stable and enduring relationship between the academic and economic spheres is evident.

Dindire, Asandei and Gănescu underscores the imperative of improving the linkage

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between universities and the external world, with a focus on the universities' responsibility to provide students with professional training relevant to the demands of the labor market. A central aspect is that universities must evolve into open institutions capable of seamlessly integrating with the economic, administrative, and non-profit sectors and adequately responding to the challenges of knowledge-based society. It is essential for universities to closely collaborate with the business sector at the regional or local level to foster the development of new and innovative businesses (Dindire, Asandei, Gânescu, 2011).

The primary aim of this study is to identify the opinions of commercial companies in the Central Region of Romania regarding consultancy services, especially concerning the Research and Development Institute of Transilvania University of Brașov.

2. Literature Review

Philip Kotler asserts that marketing has expanded into various domains, including the educational sector. Despite the apparent disconnect between the concept of marketing and education, the latter serves as the foundation for economic advancement. Educational institutions now offer a diverse array of specializations, and there is a growing interest among individuals in pursuing education, leading to intense competition among educational institutions. Consequently, educational marketing has gained significant importance, serving as the primary tool used by educational institutions to differentiate themselves from competitors and, more importantly, to fulfill their missions and objectives (Brătucu, Enache, Pralea, 2013).

Gabriel Brătucu and Ovidiu Țierean argue that even organizations engaged in non-economic activities, such as those in politics, culture, healthcare, and education, conduct marketing in a traditional manner. In other words, in these domains as well, the entire marketing process revolves around standard elements: "products, consumers, and marketing tools" (Brătucu, Țierean, 2011).

The educational market is experiencing expansion at the European level, leading to increased competition in the provision of educational and research services. Concerning Romania's situation, educational and research services aim to integrate the Romanian model into the European framework, with European education adapting to the specific conditions in Romania to a limited extent (Popovici, 2015). Both in Romania and globally, the educational market faces numerous challenges. Both teachers and students have increasingly high expectations regarding their interests and resources (Enache, 2012).

An important branch of nonprofit activities marketing is social marketing. The authors Liliana Budevici and Ecaterina Amelicchin define the concept of social marketing as "a specialization of marketing, a result of its extensive development, characterized by a well-defined scope". To better understand this concept, the aforementioned study presents the differences between classical and traditional marketing. A primary difference lies in the fact that social marketing, unlike traditional marketing, applies to organizations, places, individuals, and ideas. In the case of social marketing, exchanges are not typically financial, as they are in classical marketing. Another differentiation lies in the type of target market a specific campaign addresses. While classical marketing
targets profitable target markets, social marketing directs its attention to target groups with lower purchasing power (Budevici, Amelicichin, 2016). According to Manole V. and Stoian M., the most important subcategories of social marketing are: educational marketing, cultural marketing, road safety marketing, environmental marketing, electoral marketing, ecclesiastical marketing, sports marketing, and health marketing (Brezoi).

The core of promotion policies for educational institutions lies in continuous and personalized communication tailored to the target audience. The message conveyed to the end consumer will differ from that intended for the workforce or other categories of individuals interested in the services offered by the university. A high-quality academic product with competitive pricing is not sufficient if this information does not reach the consumer. The messages conveyed must be clear and comprehensive, enabling the recipient to understand the university's mission, educational offerings, institutional activities, as well as extracurricular activities in which they can participate. With all these details, the decision-making process for prospective students is simplified. Present times demand continuous adaptation to change, and the digital era can represent both an opportunity for the educational services market and a threat if institutions fail to adapt. Promotion methods in the online environment are highly diverse and advantageous as they can reach a very large audience. The main promotional actions that universities can undertake include maximizing visibility on social networking sites, educational forums, various search engines, and above all, shaping a comprehensive and attractive website containing clear information (Şișcan, 2019).

Academic institutions should choose their marketing strategy in line with their objectives and institutional mission, combining strategic alternatives based on their interests, capabilities, and market characteristics. Marketing objectives stem from the overall objectives of the institution (Bulat, 2011).

3. Research Methodology

Within this paper, a quantitative research study was conducted within the business environment, specifically targeting firms in the Central Region with a turnover exceeding 100,000 euros. The survey analysis was employed for questioning representatives from the economic sector, with the questionnaire serving as the data collection instrument.

The main aim was to identify the attitudes of company representatives from the Central Region of Romania regarding the Research and Development Institute of Transilvania University of Brașov, referred to as "RDIT" further on. Additionally, the study aimed to identify potential future collaborations between these representatives and the Research and Development Institute, considering the consultancy services provided by RDIT.

To conduct the study, research objectives were formulated initially. These objectives are as follows:
1. Identifying companies currently benefiting from consultancy services.
2. Quantifying the extent to which consultancy services can contribute to the development of the targeted companies.
3. Identifying the extent to which companies in the central region of Romania are aware of the existence of the Research and Development Institute of Transilvania University of Brașov.

4. Determining the companies in the central region of the country that have collaborated with the Research and Development Institute of Transilvania University of Brașov to date.

5. Establishing which firms are interested in collaborating with the Research and Development Institute of Transilvania University of Brașov.

In accordance with the five objectives, the research hypotheses were developed. The general hypotheses of the quantitative research are as follows:

I. A large portion of firms benefit from consultancy services for promotion.

II. A small portion of the surveyed companies are aware of the Research and Development Institute of Transilvania University of Brașov.

III. Overall, companies would like to be contacted by representatives of Transilvania University to receive details about the services offered by the Research and Development Institute.

The statistical hypotheses of the research are:

H1: 50% of the targeted subjects benefit from consultancy from a third-party company.

H2: The mean assessment regarding the contribution of consultancy services to the development of the subjects' companies is 3 points on a scale from 1 to 5.

H3: 40% of the companies in central Romania wish to be contacted for a detailed offer regarding the services offered by the Research and Development Institute.

4. Results

The population under study consists of a total of 4,433 firms from the Central Region of Romania. This includes businesses from the following counties: Brașov, Sibiu, Alba, Mureș, Covasna, Harghita, and Bucharest, provided that their turnover exceeds 100,000 euros.

For data collection, the questionnaire designed in Google Forms was sent to the email addresses of the targeted companies. A non-probabilistic sampling method was used, and for this reason, it is impossible to statistically validate the sample.

In Figure 1, the distribution of firms from the sample is graphically represented according to the county in which they operate. It can be noted that the majority of companies are from Brașov County, comprising 52% of the total respondents. Sibiu ranks second with a percentage of 15.7% of all enterprises, followed by Mureș, which holds a share of 10.8%. The list continues with Covasna and Alba counties, each accounting for the same percentage of companies (7.8%), with the fewest firms coming from Harghita County (5.9%).
In order to assess the level of awareness of the Research and Development Institute, a dichotomous scale question was included in the questionnaire. It can be observed that the majority of respondents (69.7%) have not heard of the RDIT. Only 30.3% are familiar with this institution (Figure 2).

Subsequently, the aim was to ascertain the percentage of those who have collaborated with the Institute to date. Out of the total number of respondents, only 9.5% have engaged in various collaborative activities with the research center (Figure 3).
Fig. 3. The extent to which firms have collaborated with the RDIT thus far

The work proceeds with testing the statistical hypotheses regarding the quantitative research conducted among companies in central Romania.

H$_1$: 50% of the targeted subjects benefit from consultancy provided by a third-party company.

**Descriptive statistical indicators of the Student’s t-test**

<table>
<thead>
<tr>
<th>Are you currently benefiting from consultancy services?</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>102</td>
<td>.2647</td>
<td>.44336</td>
<td>.04390</td>
</tr>
</tbody>
</table>

The average among the 102 respondent companies that expressed their opinion regarding the contracting of consultancy services is 0.26. Thus, only 26% of these firms are currently benefiting from consultancy services (Table 1).

**The results obtained following the application of the Student’s t-test**

<table>
<thead>
<tr>
<th>Are you currently benefiting from consultancy services?</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-5.360</td>
<td>101</td>
<td>.000</td>
<td>-.23529</td>
<td>-.3224</td>
<td>-.1482</td>
</tr>
</tbody>
</table>
guaranteed with a probability of 95% that at the level of the researched population the percentage of respondents who benefit from consulting from a third company is 50%.

Furthermore, the aim was to identify the importance of consultancy services in the development of a company. Therefore, the questionnaire included the question: “In your opinion, to what extent can consultancy services contribute to the development of your company? (Please indicate a level between the two limits, considering equal distances between the scale levels)”.

The statistical hypotheses regarding this topic are H₂ and H₃.

H₂: The mean assessment regarding the contribution of consultancy services to the development of the subjects' companies is 3 points on a scale from 1 to 5.

With the aid of the SPSS software, the following information was obtained:

\[
\text{Table 3} \\
\begin{array}{|c|c|c|c|}
\hline
\text{The contribution of consultancy services to the development of firms} & N & \text{Mean} & \text{Std. Deviation} \\
\hline
97 & 3.1237 & 1.40874 & \text{.14304} \\
\hline
\end{array}
\]

As observed in Table 3, the mean assessment is 3.12 points on a scale from 1 to 5 (5 - complete agreement). Therefore, we can infer that the average contribution of consultancy services to the development of firms is higher than 3 points on a scale from 1 to 5, where 1 represents complete disagreement, and 5 represents complete agreement.

\[
\text{Table 4} \\
\begin{array}{|c|c|c|c|c|c|}
\hline
\text{The contribution of consultancy services to the development of firms} & \text{t} & \text{df} & \text{Sig. (2-tailed)} & \text{Mean Difference} & 95\% \text{ Confidence Interval of the Difference} \\
\hline
.865 & 96 & .389 & .12371 & -.1602 & .4076 \\
\hline
\end{array}
\]

The final decision can be made either on the basis of the calculated t value or on the value of the calculated significance level. In the first case, the calculated t (0.865) is lower than the theoretical t (1.96), so it does not belong to the interval [-1.96; +1.96]. Taking into account this aspect, it can be stated that the null hypothesis is accepted and we can guarantee with a probability of 95% that at the level of the researched population, the average appreciation regarding the contribution of consulting services to the development of companies is 3 points, on a scale from 1 to 5 (where 1 represents total disagreement and 5-total agreement).
The same decision will be made in the case of comparing the calculated significance level (0.389) (Table 4) with the theoretical one (0.05) because the former is higher and the null hypothesis is accepted. So, consulting services neither contribute in a very visible way to the development of companies, but they are not useless either.

Furthermore, the aim was to identify the extent to which firms in central Romania would be interested in the service offerings provided by RDIT. Therefore, hypothesis number 3 was formulated.

H₃: 40% of the companies in central Romania are interested in being contacted for a detailed offer regarding the services provided by the Research and Development Institute.

The Student’s t-test was applied using the SPSS software, and the information contained in the two tables below (Table 5 and Table 6) was generated:

**Descriptive statistical indicators of the Student’s t-test**

<table>
<thead>
<tr>
<th>Interest in contact from the RDIT</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96</td>
<td>.7604</td>
<td>.42907</td>
<td>.04379</td>
</tr>
</tbody>
</table>

At the level of the 96 respondents, the mean of the binary characteristic is 0.76, indicating that only 76% of the subjects wish to be contacted by RDIT for further information about the services it offers.

**The results obtained following the application of the Student’s t-test**

<table>
<thead>
<tr>
<th>Interest in contact from the RDIT</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.230</td>
<td>95</td>
<td>.000</td>
<td>.36042</td>
<td>.2735 - .4474</td>
</tr>
</tbody>
</table>

As the calculated minimum significance level (0.00) is less than the theoretical level of 0.05, we can say that the null hypothesis is rejected and the alternative hypothesis is accepted. Considering this aspect, we can guarantee with a probability of 95% that at the level of the researched population, the percentage of companies from the center of Romania that want to be contacted for a detailed offer of the Research and Development Institute’s services is different from 40%.

5. Conclusions

Based on the results of the quantitative research conducted among companies in the Central Region of Romania, the conclusion reached has been that there is demand from these companies for further details regarding the offerings of Transylvania University of
Brașov's Institute, which could lead to potential future collaborations. The visibility of RDIT is relatively low among enterprises, therefore, a specific strategy tailored to this type of audience needs to be devised in this direction as well.

A primary conclusion of the conducted research among companies in the Central Region of Romania pertains to consultancy services, specifically that only 26% of the respondents have utilized consultancy services. Thus, this type of service is considered neither highly useful nor useless in the development of an enterprise, with the average rating being 3 points on a scale from 1 to 5.

Although only 30% of the participating firms in the research are aware of the existence of the Transylvania University of Brașov's Institute, 76% of them would like to receive more information about the institute's activities. Therefore, it can be concluded that there is an interest from the economic environment in the central region of the country. However, the issue lies at the level of promotional activities, and RDIT should develop a specific strategy for this target audience.

In the course of this research, limitations were encountered, such as the limited number of responses obtained from the targeted enterprises, as well as the fact that most questions were closed-ended to facilitate completion, but in doing so, the response options were restricted.

Another limitation encountered is imposed by the typology of the population under study, as it necessitated the use of non-random sampling, which led to the impossibility of extrapolating the research results.

References

Budevici, L., Amelicichin, E., 2016. The approach of social marketing of the higher education institution of physical culture and sport based on image, Sport and society. *Interdisciplinary journal of physical education and sports*, Vol.16, Special Issue, pp. 3-6