

The Influence of a Business Incubator on the Business Success of a Beginner Entrepreneur: Case Study of a Technology-innovation Center in Međimurje County

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Abstract

The recession of the 1990s in Europe and the United States of America marked a defining moment for entrepreneurship. Business incubators emerged as a means of redistributing strategic resources and developing new tools for local and regional economies. In Croatia, most incubators are founded by cities and counties, with two private incubators also in operation. The Technological Innovation Center “Međimurje” (TICM) in Čakovec was established by Međimurje County in 2009 to incubate startup entrepreneurs, with the aim of supporting regional development and strengthening the entrepreneurial sector. With recent population emigration, the Međimurje County Development Plan until 2027 underscores the heightened importance of TICM as an entrepreneurial support institution. This paper presents a comprehensive analysis of the challenges, needs, and obstacles faced by beginner entrepreneurs working in the TICM incubator. It critically evaluates the extent to which TICM meets the needs of newly founded companies, identifies the challenges it faces, and proposes solutions. By analysing the survey responses, the research questions were answered, and guidelines for the potential future operation of the incubator were developed. Research shows unequivocally that there are numerous advantages of doing business in an incubator, primarily the possibility of survival in the market. The work determines the needs of beginner entrepreneurs, which can guide the building and redefinition of existing services, and also highlights the need to increase the incubator’s capacity.

Keywords: business incubator, beginner entrepreneurs, startup, entrepreneurship

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Introduction

In the modern business world, innovation and diversity are essential for the success and survival of companies. However, it is crucial to know how to commercialise an innovation rather than just having a good idea (Golob, 2009). Beginner entrepreneurs often lack experience, financial resources, mentoring, and other forms of help and guidance, making it challenging for them to succeed, and for this reason, they need help the most (Lee Tupek et al., 2018). Business incubators provide organised support and assistance to beginner entrepreneurs.

The European Union set a goal in its Lisbon strategy for growth and development in 2000 to create a favourable business environment for startups and innovative companies (Stojanović et al., 2016). Emphasis is on small and medium-sized enterprises as drivers of innovation, employment, and builders of cross-border connections (Stojanović et al., 2016). Entrepreneurship development strategy in the Republic of Croatia 2013-2020. (Croatian Parliament, 2013a) stated that small and medium-sized entrepreneurship is strengthening, and its intensification is a national goal due to the negative attitude of young people towards self-employment. The strategy established entrepreneurial support institutions at the local and regional levels, such as regional development agencies, entrepreneurial centres, business incubators, entrepreneurial incubators, and technology parks (Croatian Parliament, 2013b), many of which were co-financed by the local and regional self-government, the Government of the Republic of Croatia, and the European Union. In the past two decades, science and technology parks have emerged to help develop regions and continue to grow to this day (Gomes et al., 2022) and are seen as important tools for economic and technological development (Gomes et al. 2022). On the contrary, some authors express scepticism about the intended purpose of science and technology parks, assessing that they serve as real estate for companies that are unable to meet the requirements for which they were originally established (Gomes et al., 2022).

According to a recent study on science and technology parks (STP) in Sweden (Mondal and Mellor (2021), young STPs tend to grow better when they are able to attract divisions of larger companies. This, in turn, leads to an improvement in decision-making at the science and technology park level. Therefore, it is important to understand the success of incubators in order to better comprehend their role in providing support to newly established companies and their contribution to economic development (Morić Milovanović & Tutić, 2021), as well as their impact on the progress and improvements of technology transfer (Nyemba et al., 2021). Typically, the entrepreneurs who are incubated in Croatia are beginners who do not have a foothold in an already-developed family business. The absence of transfer of management and ownership is reflected in the leadership style, which Letonja et al. (2021) associate with a tendency towards innovation and a strong entrepreneurial orientation of the founder.

This paper focuses on investigating the satisfaction level of the tenants (users) of the business incubator at the Technology and Innovation Center "Međimurje" (TICM) in

Čakovec, which Međimurje County established. It aims to gain insight into the issues of the needs of beginner entrepreneurs. The research questions explore the level of support to beginner entrepreneurs, the challenges they face, and the additional needs required to acquire the necessary knowledge and skills.

The paper aims to identify the support that TICM provides and the activities it undertakes to meet the current needs of its tenants and to determine the needs and challenges that startup entrepreneurs face after they start working in the incubator.

Literature review

The American organisation, the National Business Incubation Association (NBIA), explains business incubators as one of the tools for economic development, using a range of resources and services. Most of the ventures fail during the early stages of their development (Posza, 2019). Business incubators can help to decrease the number of venture failures and increase survival rates (Posza, 2019). The goal of the incubator is to create successful companies that are financially self-sustaining and independent after incubation. Inside the incubator, several services are usually offered, such as spatial and technical leasing, technological and flexible leasing, consulting, and education. As startup entrepreneurs face numerous obstacles and difficulties in the early stages of their development cycle, incubators are an important basis for their growth. An incubator is an institution that connects the community and incubates startup entrepreneurs with the purpose of developing a startup company and contributing to the community (Medić, 2004).

Innovation can be viewed from several aspects, for example, as the development, adaptation and implementation of a new and useful idea for the organisation (Turulja et al., 2023). It can also refer to the organisation's focus on technological advancements, launching new products and services, or enhancing production (Turulja et al., 2023). Innovations include several types: behavioural innovations, product innovations, process innovations, and market innovations (Turulja et al., 2023). The concept of open innovation is particularly crucial for incubators, which use the inflow and outflow of knowledge to accelerate the internal innovation of the company, expand the market, and use external sources of knowledge (Bogers and Bogers, 2014).

Definitions of business incubators are constructed from three fundamental themes: the business incubation model, the purpose of the incubator and the support provided by the incubator (Al Ayyash et al., 2020). Several factors affect the efficiency of an incubator (Sama et al., 2022). Companies that are incubated are more resistant to external cost-related factors (Al-Kfairy, Mellor, 2023), and early-stage entrepreneurs have enough self-confidence and willingness to make quick decisions (de Freitas Michelin et al., 2023). With the help of digital technologies, growing opportunities for advertising and getting closer to consumers are open to startups (Globočnik Žunac et al., 2021). Perception and design can be crucial in determining whether a potential user is interested in contacting a startup (Schmitt et al., 2021). Startups operating in

incubators demonstrate better innovation performance (Albahari et al., 2018), and open innovation tools can accelerate their growth (Fortiş and Petcu, 2022).

The purpose of a business incubator

The purpose of an incubator is to improve the chances of growth, ensure the survival of new companies, and provide managerial support and professional assistance through consulting (Čizmadija & Stanković, 2011). It is a modern tool for the development of entrepreneurship, as it offers a range of services that enable tenants to survive in the market, further develop, and contribute to the local community and the national economy in the long term (Bošnjak, 2011). Incubators create new small businesses that are either starting up or in the growth phase and do not have their own space (Čizmadija & Stanković, 2011). Beginner entrepreneurs can use the incubator's space for a limited number of years, while startups and small entrepreneurs whose businesses are no older than two years have priority. The founders of an incubator can be local and regional self-government units, institutions, or private investors.

A startup is a newly founded company or an entrepreneurial project that is in the development and market research phase. These are usually, but not necessarily, high-tech projects that have great growth potential (Klačmer Čalopa et al., 2014). Startups are newly founded companies that are struggling to survive and are usually based on ideas (Salamzadeh & Kawamorita, 2015). The distinctive feature of startup founders is their acceptance of risk and uncertainty. According to the definition of the International Association for Business Innovation, incubators are one of the economic development tools that use resources and services to create successful businesses that become self-sustaining and independent (Lee Tupek, K., Ćorić, G., 2018). Under the conditions of an underdeveloped financial market, it is difficult for small and medium-sized enterprises, especially startup entrepreneurs, to obtain external sources of financing on acceptable terms. Therefore, they are forced to use mainly internal sources (Delić et al., 2016).

Lending by banks is usually associated with restrictions and conditions that do not meet the interests and financial capacity of the borrower (Petrov, 2015), especially since they often take liquid assets and impose restrictive clauses that limit the ability to attract capital from potential investors. Therefore, starting a business under the conditions offered by a business incubator is a solid foundation for beginners to start a business and survive in the market.

During the incubation period, the tenants of the incubator can use business premises and certain services at favourable conditions. Afterwards, the startup entrepreneurs become self-employed and leave the incubator premises to other users (Alpeza et al., 2007). By working in the incubator, effective knowledge sharing is also achieved, which leads to an improvement in the development of innovations (Fojs, Detelj, 2021), and the framework for managing business processes is implemented more reliably (Bačun, 2017). Considering the scientific and technological signs of the incubator, the use of information and communication technology (ICT) in work and process automation

affects the change from traditional management to smart management (Roblek et al., 2020a). The development of knowledge, the professional attitude to work, and the use of ICT in the fourth industrial revolution are stable bases for creative and innovative processes that increase efficiency and effectiveness (Roblek et al., 2020b). With the fourth industrial revolution, innovation became a lever for shaping market success (Roblek et al., 2020b).

At the end of 2019, the world was confronted with the COVID-19 pandemic, which, in addition to the global health crisis, also led to an economic and social crisis that severely affected companies and their employees (Gomes et al., 2022). Following the pandemic, the government of the Republic of Croatia adopted the National Recovery and Resilience Plan (NPOO) in 2020. Through government measures, the Croatian Employment Service supported self-employment, enabling young people to start their entrepreneurial ventures. This trend has continued until today, when the National Plan for Recovery and Resilience came into force (Government of the Republic of Croatia, 2020). The NPOO is aligned with the priority actions of the European Union's Recovery and Resilience Mechanism, which was agreed upon by the European Commission, the European Parliament, and European leaders. The aim is for the NPOO measures to contribute to smart, sustainable and inclusive growth in the period up to 2026 and to increase the number of jobs and productivity growth. Measures to strengthen competitiveness, innovation, and the green and digital transitions also have high priority. Significant progress is expected in the steps towards innovation, the introduction of new technologies and the internationalisation of companies (Government of the Republic of Croatia, 2020).

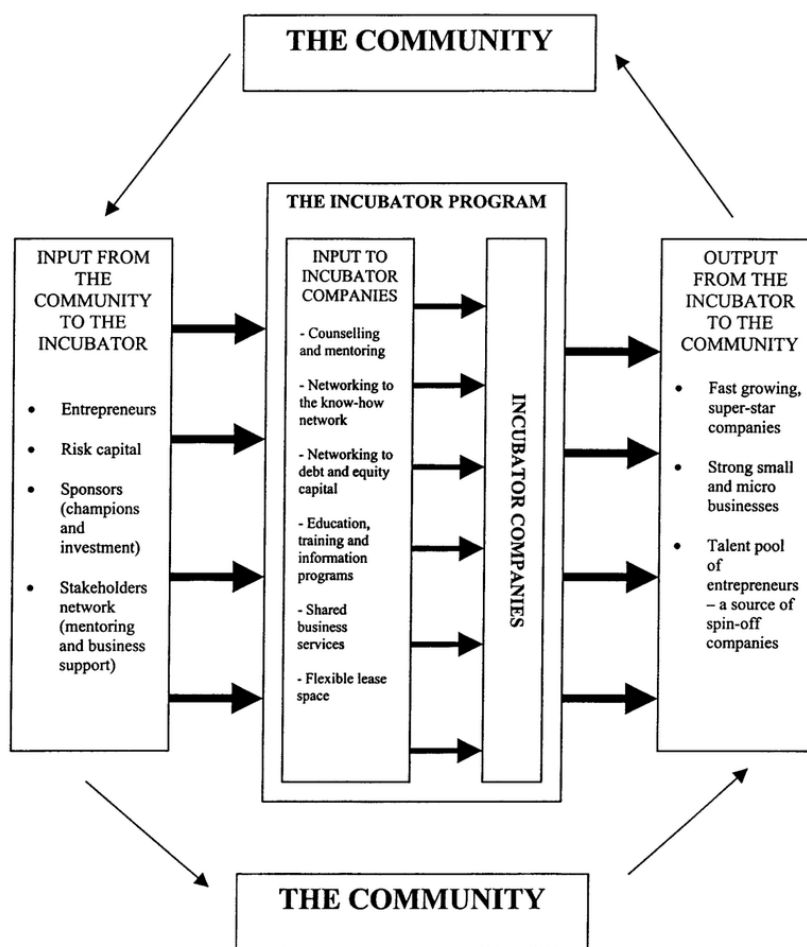
The link between the business incubator and the community

The business simulation of a beginner entrepreneur with an innovative idea, characterised by diversity compared to the products and services on the market, takes place in the community. The place where a business idea is born, develops and grows is actually a business incubator that provides its tenants, the beginner entrepreneurs, with space, infrastructure, and various services. Young entrepreneurs finance themselves by selling their products and services, but their startup projects can also be supported by investors who are willing to invest, taking the risk into account. The entrepreneurs invest their own funds and loan funds for the development of prototypes.

One of the ways to develop a business is networking between stakeholders through mentoring, business support, and sponsorship. The incubator program includes support for startup projects, i.e., young entrepreneurs, through consulting and mentoring, networking in a know-how network, education, coworking (shared space), shared workspaces, and flexible space rental. With this support, beginner entrepreneurs have the opportunity to develop their businesses into fast-growing companies, strong small and micro-enterprises, and a pool of talented entrepreneurs. In this way, the investment in young entrepreneurs and their business ideas is returned to the community.

The circular link between business incubators and the community is described by Gupta and Ross (2001). Figure 1 explains the links between the society (community) and the incubator in such a way that the inputs (investments, input unit) come from the community (society) and consist of the following elements: Startup entrepreneurs, venture capital, venture capital sponsors (champions and investments) and a network of stakeholders (mentoring and business support). The inputs mentioned above from the community flow into the incubator program.

Figure 1: The relationship between the community (society) and the incubator



Source: Authors' adaptation according to Gupta & Ross (2001).

The incubator program involves providing services and support to the incubated companies, such as consulting and mentoring, networking in the knowledge network, accessing debt and equity capital, education and training programs, information programs, joint business services, and flexible leasing of business space. Outputs (output values) emerge from incubated companies and enter the society (community)

as fast-growing, strong small businesses and pools of entrepreneurial talent, which serve as sources for establishing spin-off companies (subsidiary companies).

The number of successful startups in the field of entrepreneurship increases when there is systematic support for beginner entrepreneurs. This support leads to job creation and long-term growth for the incubator. Today, young people are more inclined to start their businesses because they know that their knowledge and skills are a strong basis for success. However, the biggest challenges faced by entrepreneurs are spatial limitations, funding, and administrative barriers. Over time, incubators have gained recognition as an ideal place for starting a business, but they still face a lack of accommodation capacity.

There are currently 55 business incubators in Croatia, as reported by the Unified Register of Entrepreneurial Infrastructure of the Ministry of Economy and Sustainable Development. These are founded by cities and counties, with two being privately owned - one for business intelligence and the other for business. Additionally, there are 51 entrepreneurial centres, 13 entrepreneurial accelerators, one business park, one science and technology park, and eight competence centres available to provide support for startup entrepreneurs and other groups.

Technology and Innovation Center “Međimurje”

This article provides an overview of the business incubator at the Technology and Innovation Center “Međimurje” (TICM) in Čakovec, which Međimurje County established to meet the needs of beginner entrepreneurs. The TICM incubator is located in the Center of Knowledge, a complex of business and educational facilities built on the site of the former Čakovec barracks. The incubator’s tenants are housed in three buildings with a total area of 3,692 square meters. Currently, fifty companies are operating there, and with the external users who utilise the IT rooms, multimedia rooms, and other spaces daily, the total number of users comes up to 69. All offices are currently occupied, and there is a waiting list. The TICM also provides work units in a coworking space and has plans to expand the incubator space to increase capacity in the medium term.

The criteria and conditions for the admission of potential tenants to the business incubator are contained in the Rulebook for Incubation in the Technology and Innovation Center “Međimurje”. (TICM, 2018). The criteria for inclusion in the incubator are the technological innovation of the company, project, or enterprise that is being applied. Priority is given to companies operating in the field of new technologies, such as information and communication technologies and in areas of strategic interest for Međimurje County, such as technologies in the metalworking industry, energy, and construction (Međimurje County, 2022). The criteria for technological innovation are described in detail in the Rulebook. Potential candidates must be one of the following: an innovator or individual with an innovative business idea, a startup entrepreneur (a company that is up to 1 year old), an existing company in the phase of growth or change of activity (up to 4 employees), a company starting a new project (applying for

incubation with only one business segment), or a new spin-off company or branch of a company located outside Čakovec. The incubation period in the TICM lasts five years, and the average utilisation of services is close to the upper limit of that period.

In order to be considered for entry into the incubation process, a potential candidate must be willing to work collaboratively in a team-oriented way. This includes promoting co-tenants and the Technology and Innovation Center Međimurje (TICM) as a community of small businesses with big plans and a promising outlook. The decision to admit a company into the incubator is made by a committee composed of qualified and experienced employees of TICM. In addition to the more affordable rental prices for office space, incubator tenants can also make use of common areas such as meeting rooms, IT classrooms, multimedia halls, kitchens, and sanitary facilities. The multimedia room and IT classrooms can be used with prior arrangements, while the meeting rooms can be reserved indefinitely. Furthermore, the startup centre's new premises come equipped with office furniture, making it easy for users to move in without prior investment.

Coexistence with other incubator tenants and the numerous opportunities that this cohabitation brings are emphasised as the most important advantages of living in an incubator. In addition to fruitful collaborations, the exchange of existing ideas, and the creation of new ones, business partnerships are often formed in the incubator ecosystem, which the TICM also encourages by organising various informal meetings. Training courses, seminars, and conferences are organised on business management, IT technologies, and other topics relevant to business development. The TICM team also assists tenants in applying for grants from domestic and foreign funds and regularly informs them about open calls and tenders. They also help tenants find additional sources of funding necessary for the realisation of their projects.

Incubated companies are promoted through various means, such as dedicated announcements, media mentions, and inclusion in joint promotional materials such as brochures and flyers. Their website regularly publishes news and information related to education, calls for project financing, and cooperation with other organisations. For instance, TICM organised a workshop for incubated companies on the sales process and conducting sales conversations, and there was an announcement about the presentation and application of high-performance milling tools. They also conducted training on the use of Excel for business users and Trello tool for organising and managing projects. Furthermore, the press and the internet featured experiences in the preparation and implementation of entrepreneurial projects. Lastly, upcoming events that are potential of interest to incubated companies and the business public in general are also announced.

Methodology of research

Data was collected via a questionnaire sent via email to 69 tenants of the incubator managed by TICM. From September 1 to 15, 2022, 27 responses were received, which corresponds to a response rate of 39.13%, and these responses form the basis for the research results. The interviews in the incubator took place from August 25 to September 10. By analysing the survey responses, the research questions (RQ) were answered, and guidelines for the possible future operation of the incubator were obtained. The needs of beginner entrepreneurs in the TICM incubator were crystallised through the method of synthesis, and the conclusions were summarised. The research questions of the paper are as follows:

- RQ1: Does the business incubator of the Technology and Innovation Center “Međimurje” offer its tenants the necessary support?
- RQ2: What challenges do beginner entrepreneurs who are tenants of the business incubator of the Technology and Innovation Center “Međimurje” face?
- RQ3: What activities does the Technology and Innovation Center “Međimurje” undertake to help tenants acquire the necessary knowledge and skills?

The respondents based in the incubator answered 20 questions: how many employees do they have, how do they finance themselves, what types of services do they use in the incubator, do they use the coworking space, do they use other available spaces (multimedia rooms, IT classrooms, etc.), do they think that the TICM incubator’s service is complete (satisfactory), do they think that the incubator’s services can be expanded, and what do they suggest to enrich the incubator’s offer? Respondents were able to rate on a scale of 1 to 5 the extent to which the knowledge and skills acquired in the incubator help them in their business and how satisfied they are with the incubator’s service. According to the self-assessment, the respondents expressed their satisfaction with working in an incubator rather than a commercial space. They were also given the opportunity to freely answer the most common challenges they face as entrepreneurs, regardless of their placement in the incubator. Furthermore, they indicated the kind of support they require the most as startup entrepreneurs.

Research results

The results of a survey conducted on startup entrepreneurs

Startup entrepreneurs who are located in the incubator operate mainly in the IT sector, 40.7% of them, followed by entrepreneurs in marketing (11.1%). Other sectors include financial services (7.4%), media services (3.7%), coaching, non-governmental organisations, improvement and space planning, legal services, consulting services, sales and technical support, consulting in the metalworking industry, learning assistance, engineering and technical consulting, and the media.

Out of the 27 incubated companies, 11 of them (40.7%) have only one employee, who is both the employer and the employee. Four companies (14.8%) have two employees, while three companies (11.1%) have three employees, and two companies (7.4%) have four employees. Only one company employs five people, making up 3.7% of the total. Four companies (14.8%) employ between six to nine employees, while two companies (7.4%) employ between ten to nineteen employees. None of the companies employ 20 or more workers (Table 1).

Table 1: Number of employees in companies of beginner entrepreneurs

Number of employees	The entrepreneur's answer	Share (%)
1	11	40,74
2	4	14,81
3	3	11,11
4	2	7,41
5	1	3,70
6 to 9	4	14,81
10 to 19	2	7,41
20 and more	0	0,00
Total	27	100,00

Source: Author's research

When asked about funding sources, beginner entrepreneurs could choose several answers. A majority of them choose to finance themselves by selling their products and services. Specifically, 24 out of 27 (88.9%) take this approach, and 5 of them (18.5%) opt to receive project financing provided by the European Union programs (Table 2). In addition, 7.4% of startup entrepreneurs receive funding from private investors or the Ministry of Culture and Media. For a more detailed overview of the financing methods used by startup entrepreneurs, refer to Table 2.

Table 2: Ways of financing for startup entrepreneurs

Financing method	The entrepreneur's answer	Share (%)
By selling own products and services	24	88,89
Project financing provided by the EU programs	5	18,52
Funded by the Ministry of Economy and Sustainable Development of the Republic of Croatia	0	0,00
Funded by the Ministry of Culture and Media of the Republic of Croatia	2	7,41
Funds from other ministries	0	0,00
Business angels funding	0	0,00
Private investors' funds	2	7,41
Total	33	122,22

Source: Author's research

All beginner entrepreneurs in the TICM incubator hold the view that the leasing conditions for business premises are favourable and enable them to survive in the market (Table 3).

Table 3: Types of services used by tenants

Services	The entrepreneur's answer	Share (%)
Space lease	27	100,00
Advisory services	3	11,11
Education	5	18,52
Technical services	4	14,81

Source: Author's research

Out of the 27 tenants, only 5 of them use the coworking space, which represents 18.5% of the total. 2 tenants plan to use it in the future, and 20 of them (74.1%) do not use it at all. On the other hand, tenants utilise other spaces such as meeting rooms (77.8%), multimedia halls (14.8%), and computer classrooms (11.1%) more frequently. When asked about the TICM Incubator service, 88.9% of the residents (24 out of 27) responded positively and believed that the service is comprehensive and provides satisfactory education, counselling, and other services. 2 tenants (7.4%) had a negative opinion, and one tenant (3.7%) was undecided.

The majority of tenants, 66.7%, feel that incubator services need to be expanded, while 3.7% of tenants think that the current services are sufficient, and 29.6% are unsure. The survey asked tenants for suggestions on how to improve the incubator services, and the responses were similar. The tenants were asked to rate how much the knowledge and skills they acquired in the incubator helped them in their business (Table 4).

Table 4. Assessment of knowledge and skills acquired in the incubator as help in business

Mark	The entrepreneur's answer	Share (%)
1	0	0,00
2	1	3,70
3	0	0,00
4	12	44,44
5	14	51,85
Total	27	100,00

Source: Author's research

They were asked to rate on a scale of 1 to 5, where grade 5 was given by 44.4% of them, and grade 4 was given by 25.9% of them. 14.8% of tenants chose to rate 3, 11.1% rated 2, and only one tenant gave a rating of 1. The tenants also rated the services provided by the incubator in general (as shown in Table 4). 51.85% of them gave a rating of 5, 44.44% gave a rating of 4, and only 3.70% of tenants gave a rating of 2.

There is a high percentage of those who are satisfied with the readiness of the incubator to adapt to their needs. 92.6% of tenants (25 out of 27) spoke positively about this, while 7.4% were undecided on this issue. Tenants rate their satisfaction with working in the incubator highly when they correlate it with working in a commercial space. Most of them rated 5 (59.3%) and 4 (40.7%).

Results of a survey on the problems of beginner entrepreneurs

In the part of the research dedicated to the challenges that beginner entrepreneurs face on their business journey, the tenants of the TICM incubator expressed themselves by citing various problems. They often struggle with a shortage of financial resources, high initial investments, and the constant effort to secure clients as soon as possible. This requires them to invest a lot of knowledge, skills, time, and resources. One of the key factors they consider important is the high labour costs.

Many beginner entrepreneurs consider legal support to be a top priority. They indicate the lack of unified information about what they need to start a business. They are primarily interested in legal regulations, acts, and protocols, as well as precise information about the place where they will receive authoritative answers for a specific area. The available information is often contradictory, as it varies from source to source, and as a result, different entrepreneurs have different information. Some tenants have expressed concerns about the lack of space for expansion, which limits their growth and development. In the area of providing higher-level consulting services, the incubatees point out that they offer services that Croatian small and medium-sized enterprises are not looking for, so they provide them abroad.

According to tenants, networking support is the most required support for beginner entrepreneurs (29.6%), followed by finance (12.1%), mentoring, consulting, education, and support from the state administration, which should be simpler and more transparent. The biggest obstacles for startup entrepreneurs in Croatia include high payments to the state, a lack of courage among young people to enter into entrepreneurial ventures, a lack of an adequate system to support startup projects, a lack of moral support, complicated administration, and high tax loads. The majority of tenants (70.4%) collaborate with other entrepreneurs within the incubator and in other incubators in Croatia.

Results of an in-depth interview in the TICM incubator

An interview was conducted with the director and deputy director of the TICM incubator to understand more about the sustainability and nature of their work. Currently, all the available space at the TICM incubator is fully occupied. Many of the tenants who are being incubated have expressed the need for more space due to business growth. When new tenants are accepted, they begin by working in the coworking space, and as offices become available, they are moved into them. At the same time, entrepreneurs from the waiting list are also contacted so that all the spaces in the incubator can be used. The most frequent reason for companies leaving the incubator is the need for more space as a result of business expansion. Over the last two years, one of the reasons for exiting the incubator has been the shift towards remote work. Additionally, some novice entrepreneurs are unable to succeed due to objective or subjective reasons, leading them to abandon further development of their business venture.

As the management wants the number of users of incubation services at TICM to continue to grow and the community created there to expand, TICM, in cooperation with the County of Međimurje as the owner and other partners, is preparing a project for further expansion in the remaining, currently unused premises of the Knowledges central complex. During the interview with the director and deputy director of TICM, it was mentioned that TICM actively participated in the DIGITRANS project, which was funded by the Interreg Danube program. The project aimed to develop and test the methodology of digital transformation for companies and IC4HEDS in practice. TICM has developed courses in the areas of Industry 4.0 and digital transformation. Additionally, virtual incubation is offered at TICM, where a company can register its address and use a mailbox. However, other types of virtual incubation have not been successful. TICM welcomes all entrepreneurs who approach it and supports them within the limits of available resources.

TICM continuously implements projects financed by the Erasmus+ program of the European Union and other sources. A list of these projects is available on the TIC Međimurje website in the "Projects" section. They offer a wide range of educational courses, from basic business knowledge and skills, including accounting, the application of digital tools in business, and digital marketing, to more specific topics like innovation management. The incubator has achieved a high degree of self-sustainability, as a significant portion of its income is generated through consulting services provided to the market. The incubation aspect of the activity is not based entirely on commercial purposes, as the primary objective is to assist entrepreneurs who are just starting with business development. TICM generates 90% of its revenue independently through services provided to the market and EU projects. Funds for activities focused on general economic development, such as education, seminars, and national-level training, have been scarce in the last few years, resulting in a reduction in non-commercial activities.

Discussion

The outcomes of the research conducted on the attitudes and needs of startup entrepreneurs who are tenants of the incubator at the Technological Innovation Center "Međimurje" must be implemented as a guideline to upgrade the incubator's services or redefine its existing services. The data obtained from this research demonstrates an imperative need to encourage startup projects in society and provide unwavering support in the form of credible information and knowledge.

The data analysis helped in answering the research questions. A question was asked about whether the business incubator of the Technology and Innovation Center "Međimurje" offers all the necessary support to its tenants (IP1). Most of the tenants responded positively and expressed satisfaction with the available facilities. However, they also suggested that there is room for further improvement and expansion of services. About 88.9% of the tenants confirmed that the TICM incubator's services are comprehensive. When asked about additional services that the incubator could offer, 66.7% of entrepreneurs gave specific suggestions. After analysing the data, it can be

concluded that the TICM incubator offers comprehensive support to its tenants. However, the study also revealed that the tenants have made suggestions for additional improvements to existing or new incubator services.

Regarding the usage of TICM incubator services, the tenants do not use all available services. The majority of them use the leased space, while a smaller portion use the education, consulting, and technical services. A meagre percentage of tenants use the coworking space (18.5%), while a high percentage of tenants use the multimedia hall and meeting rooms. Overall, this partly confirms the assumption that TICM provides its tenants with various types of support, but some tenants do not take advantage of all the services provided.

A survey was conducted to identify the challenges faced by beginner entrepreneurs and tenants of the Technology and Innovation Center "Međimurje" (IP2). The survey revealed that the most important support for them is financial, followed by mentoring, consulting, education, credible information, technical support, networking, and support from the state administration that aligns with their business needs. Despite tenants' satisfaction with the working conditions and the acceptable rental price in the incubator, it was concluded that beginner entrepreneurs have unique needs that are not currently met by the incubator's offerings. 12.1% of them said that beginner entrepreneurs lack money. Investors the most, and 29.6% highlighted networking as their biggest need. Respondents—58.3% of them—believe that they need stronger mentoring, educational, consulting, technical, and infrastructural support. It provides legal support to entrepreneurs depending on the sector in which they operate, the absence of a system that provides unequivocal information and answers to their questions, and insufficient courage to start their own business.

The director of TICM was interviewed to answer the third research question regarding the activities carried out by TICM to assist tenants in acquiring knowledge and skills (IP3). During the interview, the director identified several challenges, such as the need for additional space and digital transformation, continuous training, and networking with potential business partners and investors. To address the issue of space shortage, TICM plans to expand into the currently unused facilities in the Knowledge Center area. TICM also conducts projects funded by the Erasmus+ program of the European Union, provides training on basic business knowledge and skills, and practices innovation management. TICM is actively involved in the DIGITRANS project, which aims further to develop the methodology of digital transformation for companies, offer Industry 4.0 courses, and provide virtual incubation facilities.

It is essential to highlight that the entrepreneurs who are being incubated value the opportunity to receive education and meet with foreign lecturers and entrepreneurs. They consider these opportunities necessary for their entrepreneurial development. Additionally, they stress the significance of having access to relevant information related to starting a business. The responses to the research questions show that there are disparities in the information available from different sources which entrepreneurs deem relevant. Entrepreneurs believe that it would be beneficial to provide all the

necessary information required by those starting their entrepreneurial journey in one place.

The majority of startup entrepreneurs in the TICM incubator are from the IT sector, which suggests that their primary asset is intellectual property. The IT industry specialises in high-tech products with significant growth potential. These entrepreneurs require assistance with finding new business contacts and receiving guidance and advice on entering foreign markets. Novice entrepreneurs from other fields, such as audiovisual activity and marketing also identify this need for support. Although some incubator occupants admit to lacking the courage to start their own business, the public perception of business incubators has evolved, and there is growing interest in joining them.

Conclusion

This research aimed to assess the needs of startup entrepreneurs and other occupants of the Technology and Innovation Center “Međimurje” (TICM) incubator, as well as to evaluate their level of satisfaction with working there. TICM is located in the Knowledge Center, a complex of educational and business facilities that were built on the former Čakovec barracks site. Until now, no systematic research has been conducted on the satisfaction levels of novice entrepreneurs working in the TICM incubator. The purpose of this study was to examine the tenants’ attitudes using an online survey and in-depth interviews with the TICM management team. The results of the research can help TICM management make necessary improvements and enhance the range of services that they offer to startup companies. By obtaining insights from both tenants and service providers, the study was able to provide a comprehensive perspective on the incubator’s operations. The incubator’s accommodation capacity is insufficient, and as a result, two of the old, derelict buildings in the Knowledge Center area are being redesigned to provide additional spaces.

The limitations of the research include the fact that less than half of the incubator tenants responded to the questionnaire, which was sent to all tenants at 69 email addresses. After three email reminders to respond to the survey, 27 respondents responded, which is 39.13% of the response rate. This indicates that the tenants’ interest is primarily related to the use of business space rather than the wider offerings of the incubator. However, it is important to understand the importance of surveying service satisfaction in the incubator, as this helps to improve services for future tenants. Beginner entrepreneurs who use the incubator need to have their opinions and feedback heard, regardless of whether some services need improvement or new ones need to be created. Unfortunately, the survey did not examine the gender of the respondents, so there is no information on the ratio of men to women in the research.

In addition to the confirmation of the benefits offered by business incubators, the needs of beginner entrepreneurs have also been identified, which can serve as a guideline for enhancing or redefining existing services that are less utilised. It has been observed that only a small percentage of tenants actually use the coworking space,

which suggests that external experts collaborate with companies in the incubator to a lesser extent. The coworking space available at TICM is a convenience used for work by freelance experts, regardless of whether they are cooperating with incubated companies. The tenants' belief that working in an incubator enables them to survive in the market indicates that incubators will continue to play a significant role in the future by fostering the creation of new businesses and encouraging young people to become independent and start their entrepreneurial ventures.

The TICM business incubator is run by a team of experienced professionals who provide much-needed support to beginner entrepreneurs and startup projects. This support helps to increase the number of new ventures in entrepreneurship and also contributes to the community. The incubator offers support in generating business ventures, developing innovations in services and products, and managing processes. Startup entrepreneurs require networking opportunities and additional financing, and the incubator can create added value by partnering with other incubators and finding potential investors to strengthen their support. The state, such as the ministry, should provide funds for direct assistance to incubators. Further research is necessary to provide professional and legal support to incubated companies and to inform the public about the importance and work of incubators. It is recommended to continue this type of research to improve the quality of incubators, support institutions in the Republic of Croatia, and satisfy beginner entrepreneurs.

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