Case Study in North Macedonia: Entrepreneurial Learning and Training Needs Analysis

Ljubica Topuzoska*

Teacher, PhD, Head of the Department for International Collaboration University of Information Science and Technology St. Paul the Apostle

Volgogradska 12, 1000 Skopje, North Macedonia

Email: ljubica.topuzoska@uist.edu.mk

Abstract

This report provides and analyzes the training needs of potential entrepreneurs per sector in the Macedonian side of the cross-border area with Greece. The research is trying to achieve, explain and understand the priorities, missing skills and skills upgrade needed for the young people who are engaged with ICT enabled technology and aspire to become entrepreneurs. The report juxtaposes the findings with information on education background, personal skills and personality traits, gender and other relevant parameters. Also, complements the training needs analysis of the direct beneficiaries of the accelerator with interviews of people who were in their position a few years ago and have either become successful entrepreneurs or have failed in their enterprise. The research was seeking to learn what were the difficulties they face, what were the major challenges, what are the critical skills that young people need to acquire and what are the best ways of acquiring these skills. The research has been conducted as part of the project activities of the University of Information Science and Technology St. Paul the Apostle from Ohrid, Macedonia with the purpose to provide better opportunities to young people who aspire to become entrepreneurs, especially in the south-west region of the country. The main goal was to identify the skills gap among young people to establish business, as a starting point for the potential establishment of a business startup accelerator. Once the skills gap is identified, the University would develop an intense training, personalized mentoring, pitching events and workshops to assist in creating ICT-enabled startups.

Keywords: business; entrepreneurship; learning; startups.

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* Corresponding author.

1. Introduction

North Macedonia is slowly picking up with the rest of the region in creating a dynamic local entrepreneurial ecosystem which will attract investors. In the Global Innovation Index, North Macedonia improved notably during the past years. It went from 84th place (2018) to 57th (2020), according to Financial Times. The report details how the country's performance is better than expected having in mind its level of development and highlights Macedonia's market sophistication. The World Economic Forum Global Gender Gap 2021 report 44 ranks North Macedonia overall on 73rd place out of analysed 156 economies.

One of the key opportunities is linked to Skopje, the capital, being ranked as the cost-effective tech hub of the future in the FDI (by Financial Times) global ranking. There is a growing interest from international founders and startup teams to set up their HQ in Macedonia. The country needs to attract talent with experience in go-to market, sales, and business development. The ecosystem keeps close contact with successful diaspora tech entrepreneurs in different geographical key markets (USA, UK, Germany, the Netherlands etc.), creating an opportunity for an easier soft-landing of local teams within these markets. Given that most of the startup's focus industries are related to the area of ICT, such as AI, fin tech, blockchain, edtech, etc. The University of Information Science and Technology St. Paul the Apostle is looking at ways to assist the creation of the eco-system by developing trainings and lectures relevant to the needs of the entrepreneurs. The level of education, knowledge and skills are factors that strongly determine entrepreneurial ability. The current state of affairs of these factors is elaborated in the following part, which represents the screening of the current state of formal and informal training and educational programs, all contributing to the ability of entrepreneurs.

The information and communication technology (ICT) industry is the fastest growing sector of the Macedonian economy, and it plays an important role in the economy as a provider of jobs and generator of exports. With an annual growth rate between 2.5 and 8 percent over the last several years, the Information and Communication Technology (ICT) sector in North Macedonia is a promising area for foreign companies. The ICT sector in the country benefits from a skilled and cost effective workforce with excellent English language skills, solid telecommunications infrastructure, and low corporate tax. ICT representatives expect the sector will continue to grow. The local talent is gaining knowledge at the foreign owned companies and some of them are opening their startup companies. Given that they do have technical capacities, with this research we are looking at which of the business-related skills they need most in order to gain business traction. There is a continuous growth in active ICT companies. The Macedonian Government has been implementing a series of measures to encourage young employment and entrepreneurship. However, there are still many obstacles in practice, as well as missed opportunities. Some of the main constraints that have been identified are entry regulation for starting business, institutional constraint that affects development of entrepreneurship and favorability of the business environment, financial constraint as limited liability and moral hazard which influences the lack of finance and entrepreneurial ability described as education levels, experience, knowledge or the human capital one possesses to spot business opportunities or to run a business.

The research conducted by the Institute of Sociological, Legal and Political Research in North Macedonia, confirms the need and the desire of young entrepreneurs for entrepreneurial education, which would enable a

young person to assess what entrepreneurial behavior and capacity entails.

The educational system needs to further upgrade in order to stimulate the creative entrepreneurial potential. Also additional non-formal programs should be organized, such as leadership development, entrepreneurship development, business acceleration etc. in order to further stimulate young entrepreneurship.

2. Literature review

Startup accelerators support early-stage, growth-driven companies through education, mentorship, and financing. Startups enter accelerators for a fixed period of time, and as part of a cohort of companies. The accelerator experience is a process of intense, rapid, and immersive education aimed at accelerating the life cycle of young innovative companies, compressing years worth of learning-by-doing into just a few months. Entrepreneurship is a complex process that includes many opportunities on one hand, and on the other hand contains many difficulties. Practice on the material while applying the new ideas will be made by combining practical tools, pitching practice, and group discussions with mentors in a viable learning environment. Teaching and learning methodologies for delivering of the accelerator will focus on three components: know-what, know-how and know-who [20].

Startup accelerators also known as Seed accelerators, are fixed-term, that include mentorship and educational components and culminate in a public pitch event or demo day. While traditional business incubators are often government-funded, generally take no equity, and rarely provide funding, accelerators can be either privately or publicly funded and cover a wide range of industries. Unlike business incubators, the application process for seed accelerators is open to anyone, but highly competitive. There are specific types of seed accelerators, such as corporate accelerators, which are often subsidiaries or programs of larger corporations that act like seed accelerators. The central place in accelerator program is mentoring. [1].

The multi-stage process implies a linear direction of progress, but designing and learning are inherently more unpredictable, so the model is flexible. Information learned from testing helps refine the problem definition and the overall design. There is a perpetual loop of feedback. Ultimately, solutions are evolved and improved through reiteration and repetition, as fewer factors are considered for each iteration. The challenge of design thinking is often knowing when this evolutionary process of redesigning is done. Solving a problem, particularly a vexing one, is unlikely within the constraints of school. Academic calendars and restrictions are quite different from practice, so there are often situations in which a good enough for now scenario is the goal. Ideally, of course, the process can spark an interest in students to continue a life-long engagement in these research projects. This process is ultimately about joining on-going conversations and searching for new knowledge through design solutions. It isn't about resolution. The passion of the search is what is essential to teach and learn. [2].

For answering business questions, a practical guide should be followed for groups of any size, from small startups to the biggest, from teachers to non-profits. It is for anyone with a big opportunity, problem, or idea who needs to get answers. [16].

An original and more natural business strategy that's focused on a commitment to being better instead of bigger may be the great guidence . Staying small provides the freedom to pursue more meaningful and avoid the headaches that come with traditional growth-oriented business. Having personally discovered the benefits of cutting out the corporate hierarchy that constantly demands more, author Paul Jarvis explains how to do the same. [12].

We have to mentioned lessons and inspiration drawn from the experiences of dozens of influencers and entrepreneurs who rejected the predictable corporate path in favor of pursuing their dreams by building thriving businesses and extraordinary personal brands. By sharing their stories we have a blueprint of measures, steps and skills that should be followed. [22]

A psychological point of view explains why habits exist and how they can be changed. A whole new understanding of a human nature and its potential is presented which helps to transform businesses and communities. [8]

3. Methodology

The research has been conducted in three main focus groups - organizations, young people and entrepreneurs. A semi-structured questionnaire was prepared for collecting the data. The questions were about detecting the needs that the mentioned groups have in terms of establishing their own business or startups. According to the pandemic situation, the target groups were asked to fill an online questionnaire. The organizations were municipalities, chambers, business unions, academic institutions and the universities. Young people were students and the new entrepreneurs. The Entrepreneurs were successful and established firms in the region.

3.1. Results of the interviews from relevant Organizations

The Questionnaire was sent to 30 organizations. Summary of innovative initiatives and entrepreneurial activities that are organized throughout the region are the following, there are innovation hubs and innovation centers at different universities or nonprofit organizations that are focused on technical skills, but an acceleration program that will upgrade the business skills is needed.

Additional areas that are covered by these centers include: circular economy, eco-tourism, applied IT technologies and social entrepreneurship.

The sectors in which these organizations participate were eco-tourism, innovation and adventure tourism (35%), fin tech, automation, robotics, AI, VR, software development (26%), agriculture (14%), digitalization and e-commerce (9%), circular economy (8%), IT, engineering, construction, marketing, education, ecology, medicine, textile and leather industry (5%), social entrepreneurship (3%).

Most of the respondents have indicated that they believe that there are human resources which can start a new business but an additional training is needed. The current education and know-how has been obtained through different sources, such as the faculty through the theoretical education (23%), internships (16%), practical

experience and learning by doing, with some mentoring and peer support (15%), self-learning, online courses, YouTube videos (13%), Social Key for Start-up program (12%), mentoring programs (12%), certificates of several EU projects (9%).

70% of the respondents believe that there are human resources with developed digital skills that could start or support a new innovative business if the right conditions are met. Some believe that there are such individuals, but not many. "We lack awareness of trending problems/challenges that need a solution. Also, we lack stability, people are still more or less looking for a steady job" - is their comment.

60% of the respondents believe that there is a digital readiness in the area to support a new innovative business, but definitely there is space for improvements across the nation. Some believe that there is digital readiness when it comes to IT companies, however the traditional businesses are still facing challenges when it comes to transferring activities online or introducing digital solutions.

95% of the respondents believe that there is interest from businesses and young people to participate in innovation actions such as hackathons, challenges, competitions and similar activities. Our opinion based on the experience we have so far is that business entities are gradually changing the traditional way of thinking and are increasingly encouraged to get involved in new innovative activities and businesses that are the future of society. Some respondents feel that the companies are not ready to invest in upgrade of skills of the young people given that they are not entirely sure of what the return of this investment is going to be as an impact to their business.

Below are some of the proposals that have been provided for strengthening young entrepreneurship and innovation. In a nutshell, the organizations think that more practical curricula at the universities are needed (58%), more training programs on entrepreneurship (30%) and knowledge transfer from experienced entrepreneurs towards young people (12%). In addition, according to some, a stronger community and better innovation hubs are needed. For example, co-working spaces and shared offices where new and young start-ups can mingle with bigger and more experienced companies.

A list of some of the proposals that have been provided were the areas in which young entrepreneurs need to receive training or instruction at. Generally, the following areas are highlighted: Entrepreneurship (22%); Soft Skills (20%); Business planning (16%); Management, Human resource management, personal management, strategic management, project management (16%); Innovations, digitalization, new technologies (12%); Sales, market access, product development, financial operations (8%); Establishing a company and protecting their ideas (3%) and E-business (3%).

3.2 Results of the questionnaires from young people

The questionnaire was send out to 500 young people.

Most of the interviewed people were form the age of 20 to 30 (78%). Most of the respondents are female (62%). 80% of the responders have tertiary or postgraduate education, meaning that they have a level of education that

can enable them to consider on establishing their business in the ICT or cross cutting area.

Around 80% have no or little work experience ranging from years of work experience. This is a negative factor, meaning that these young people haven't had any work experience during their studies which can have a negative impact on their potential or desire to establish their own business. More opportunities need to be there to facilitate these young people to experiment with innovative ideas and opening businesses at a younger age.

Those who have experiences, the prevailing sectors include ICT, web development, software development and areas such as graphic design, digital marketing, media and communications. Other sectors include tourism, engineering and financial services. This corresponds to the regional focus on tourism and engineering.

As mentioned above, the percentage of unemployed young people is huge, 61% from the respondents. Only 5% of the respondents have their own ventures.

Most of the young people who are employed work in ICT and Marketing sectors. Other sectors include education, business (trade, finance) and hospitality.

Most of the interviewed entrepreneurs are running a startup that has been established in the recent years, i.e. around 60% of the companies have been opened in the past 5 years. The business acceleration program can help them strengthen their business activities in the most fragile years of operations.

Around 30% of the respondents are not interested, while 70% of them are interested in establishing a new innovative business in the areas of: ICT (AI, fintech, VR), Digital marketing and e-commerce, and service industry (call centers, etc), Organic agriculture, Mechanical engineering, Hospitality.

50% of the respondents believe that they have the digital readiness to set up a new innovative venture. Having this on mind, a new educational or business acceleration program should focus on enhancing their business and leadership knowledge and skills.

The responders have specified the areas in which they believe that they have knowledge and expertise. The prevailing areas include technical knowledge, marketing and management.

The respondents have selected the areas in which they would like to receive additional training. In addition to other skills, 50% of the responders would like to upgrade their technical skills with knowledge on advanced technical skills (software development, advanced technologies, etc). However, the prevailing most business-related capacities that will enable them to establish and run a business in which they need additional knowledge are marketing, business planning, e-commerce, soft skills (communications, presentations, negotiations, leadership), financial and investment planning, access to finance, international sales.

In addition to the ICT skills, the respondents believe that for them it is beneficial to receive a specific training on digital marketing, starting a business, business planning, financial and investment planning, access to finance, entrepreneurial strategy, innovations.

65% would be interested to participate in actions for youth or innovative entrepreneurship and additional 35% would also be interested to participate depending on the topic and the scope of those activities. Having this on mind, the interest for such programs can be considered as very high.

Some of the responses related to the input and proposals of the respondents as to what activities can be implemented to stimulating entrepreneurship and innovation.

In summary, the prevailing activities include entrepreneurial trainings, courses, seminars, mentoring from experienced business leaders, knowledge sharing from successful entrepreneurs in a form of inspirational speeches, lectures, workshops, networking events where young people can meet established business leaders, bigger visibility of entrepreneurial activities through more aggressive PR activities for creating awareness.

3.3 Results of the questionnaires for entrepreneurs

The questionnaire was send to 50 companies. The majority of the entrepreneurs that have responded to the Survey are above 30 years (82%), a small portion of them are between 25-29 years old. 2/3 of the respondents were male, while 1/3 were female.

Almost half of the entrepreneurs have a post graduate degree, and 42% of them have a tertiary education. Half of the respondents have more than 15 years of work experience, while 13% of them have an experience between 10-15 years. They come from a variety of sectors, including ICT, engineering, marketing, architecture, consulting and services. Most were either employed or owners of the companies and come from the ICT sector (43%), while the other sectors were equally represented including architecture, marketing, logistics, tourism, etc. 23% of the companies were well established and have been in business for over 15 years. 43% of them were between 10-15 years in operations, which 13% have been in business in the past 5-10 years.

The top three difficulties that the entrepreneurs have faced when starting a business include: market entry and internationalization, financial support and access to market, and access to high quality staff. Communications, innovations, bureaucracy and legislation, unstable economy, unfair competition and remuneration, promotion were included as an additional barriers. Some have pointed COVID 19 as one of the barriers for staring the business. 60% of the entrepreneurs believe that soft skills are the most critical skills set that young people need to acquire in order to set up an innovative business. Those include communication, presentation, leadership, teamwork, emotional intelligence, etc.

More than 20% consider access to finance, business planning, business canvas and strategy development as an additional critical skill set for setting up a new innovative business.

Between 10% and 20% consider that technical skills, digital marketing, market research, e-commerce and international sales as an additional deciding factor and skills set. Between 5% and 10% consider financial skills, investment planning, IPR protection and technology evaluation as important skills setting up a new innovative business.

Most respondents consider that participation in seminars, trainings and entrepreneurial courses and other non-formal education activities is the best way of acquiring these skills. This belief reinforces the importance of the acceleration programs focused on non-formal skills upscale. 70% have already participated in young or innovative entrepreneurship activities.

The prevailing suggestions include training, mentoring, networking, workshops. Additional comments and ideas include internships, lower cost of training for professional and soft skills, opening start-up centers, acceleration programs, lower cost of training for professional and soft skills, etc. The entrepreneurs are also suggesting more activities to support such business in other regions, not only in Skopje, the capital.

4. Conclusion and Discussion

In a nutshell, the following consultations can be taken from the survey:

- ICT activities and skills are prevailing, and ICT can be used a cross cutting sector
- Business skills are needed to be further developed given the lack of formal education in business planning
- Most of the young people are interested in following trainings that will help them enhance their business skills

Also, a significant number of ICT graduates are interested and willing to set up their business. However, the ICT focused universities don't offer programs in business and entrepreneurship. All the crucial factors, young people, entrepreneurs and organizations, have highlighted that more business skills trainings, workshops, seminars and motivational events are need to create a new set of ICT driven companies in variety of sectors.

The prevailing suggestions for enhancing the regional entrepreneurial eco-system include training, mentoring, networking, workshops. Additional ideas include internships, lower cost of training for professional and soft skills, opening start-up centers, acceleration programs, lower cost of training for professional and soft skills.

Some of the most needed skills include soft skills, access to finance, business planning, business canvas and strategy development as an additional critical skill set for setting up a new innovative business. Additionally, skills such as digital marketing, market research, e-commerce and international sales as an additional deciding factor and skills set. Financial skills, investment planning, IPR protection and technology evaluation were also indicated as important skills setting up a new innovative business.
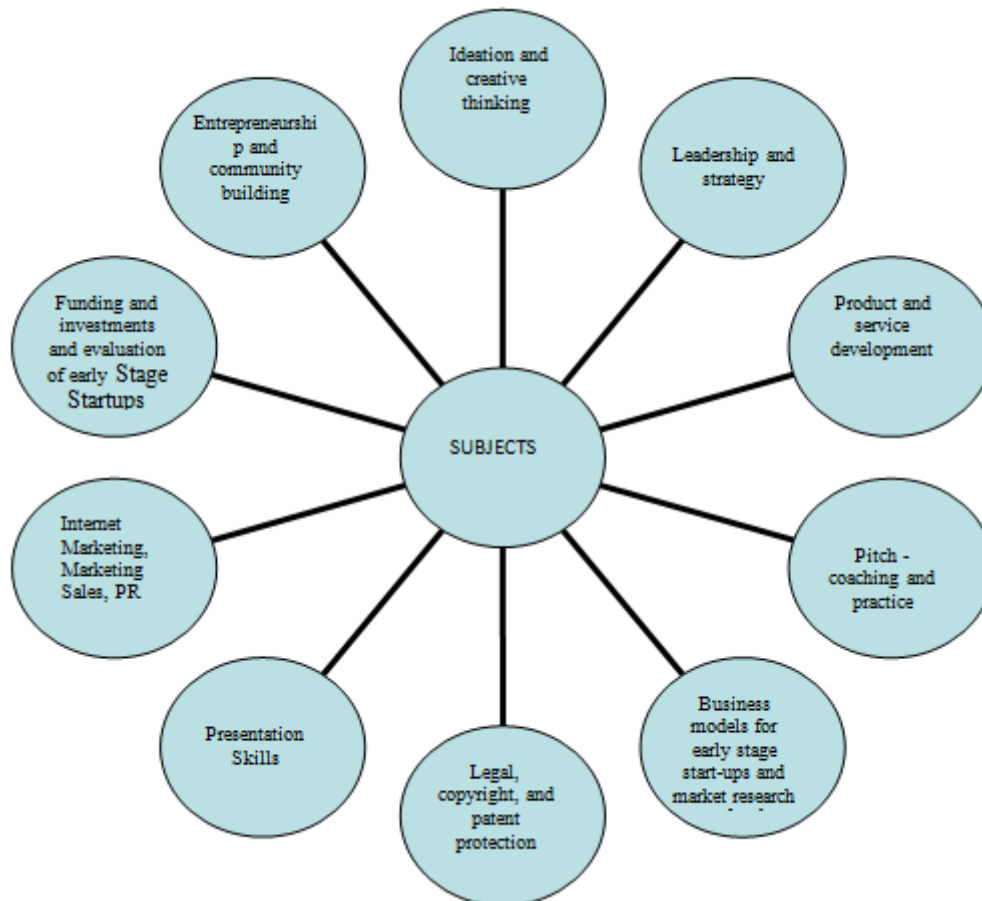
Figure 1: The responders pointed following subjects for hands-on sessions, workshops and master classes with the professional mentors.

Entrepreneurship is a complex process which includes many opportunities on the one hand, and on the other hand contains many difficulties. Throughout the different courses the students will practice the material they learn and applying it on their own new technological idea. The course includes lectures combined with practical tools, pitching practice, and group discussions with mentors in a viable learning environment. The teams should be prepared for the next stage by interacting with potential investors, regulators, and other key players in this ecosystem. The course includes theoretical lectures combined with hands-on workshops taught by entrepreneurs and industry practitioners. In addition, students will visit startups, investors, accelerators and ecosystem key leaders.

The following should be considered:

To increase entrepreneurial activity by support the establishment of business services (business registration and licensing process, easier access to finance, networks, mentoring, formalizing grey economy etc.), within the target municipalities, by supporting LED offices and municipalities in developing their catalogue of services.

To increase the number of graduated students in the sectors with high market demand by facilitate the linkages between the business associations and universities and supporting the establishment of career information days

at vocational schools and universities to increase visibility. Also to support educational institutions in promoting opportunities to potential students like career fairs, career counselling.

To have easy access to finance by increasing the variety of alternative sources of finance in the target regions through identifying and bringing together potential investors in accelerator programs and raise the awareness about investment possibilities. Also, to promote crowdfunding as a funding possibility through expert's workshops and establishing alliances with commercial banks to promote specialized credit lines or similar products for entrepreneurs.

To increase the number of sustainable start-ups that are competitive and innovative by creating partnerships with BSOs for the delivery of accelerator programmes in the target regions by implementing regional accelerator programmes with the successful applicants and developing the mentor network and provide support to high potential start-ups.

To increase the involvement of the diaspora and business angels through the creation of events and informative material on a clear investment process in the local economy - accelerator programmes.

To contribute in providing qualified work force according the needs of the business sector. We have to involve entrepreneurs in the secondary and higher education and support regional centers through networking events to perform their coordination role and to provide post-secondary education and to foster the innovation of companies. Involve private vocational training providers in the regions in post-secondary education and education of adults.

To involve media in promoting entrepreneurship and create entrepreneurial content which can be shared and broadcasted through the media.

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