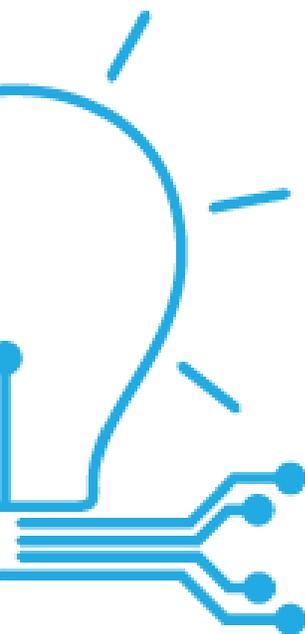


STARTUP ECOSYSTEM KOSOVO

NEEDS EVALUATION REPORT

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INTRODUCTION

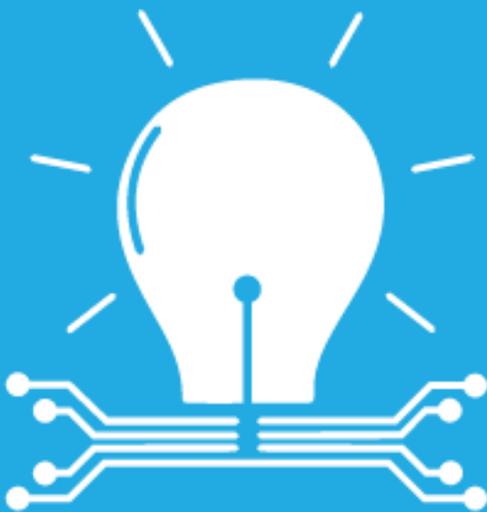
As one of the strategic sectors of the country while playing a major role in economic growth, government institutions and international organizations have given their support towards empowering key stakeholders in this sector. As such, Kosovo' ICT sector has become a sensational destination for international companies outsourcing services. With the development of the ICT sector, the establishment and the ongoing increase of the number of start-ups, the Kosovar government and various organizations in Kosovo have turned their attention to enhancing the startup ecosystem.

Yet, despite the received support and the fragile economy in Kosovo, many start-ups struggle in their journey to success and the rate of startup failure remains high. This study aimed at evaluating the needs in the present startup ecosystem, serves the purpose of increasing their survival rate by identifying the key challenges start-ups face as well easing their various attempts to overcome obstacles and become sustainable and profitable.

This document is compiled to present findings from the conducted primary market researched in regard to the needs and support for start-ups in the ICT sector. This research study unfolds crucial information through the identification of startup's challenges in the ICT sector through stages of their development.

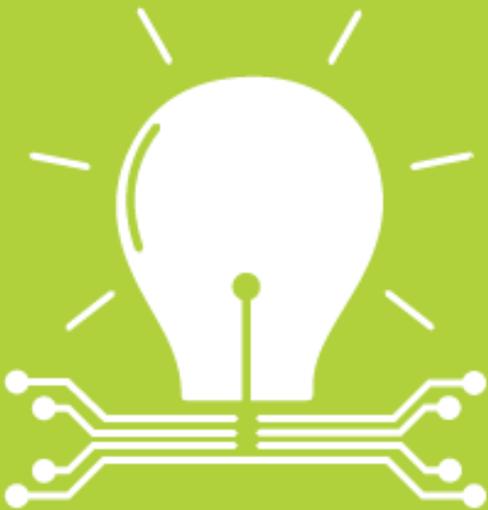
The first part of this study provides important information regarding the entrepreneur's profile which enables the study to clearly present data in terms of demographic information such as gender and age, education and entrepreneurship where information regarding their level of education, filed of study and previous experiences with startups are further revealed. To further extend the research, this study focuses shortly on entrepreneurs with previous startups experiences in success or failure to better understand the factors that make a difference a success or failure of a startup in the ICT sector.

The second part of the research study focuses on startups profile where important information is reveled including but not limited to year of



foundation, number of founders, number of current employees, operating industry, development strategy, revenues, obstacles and stagnation and challenges for growth. This part of the report enables a better understanding of the research participants as well as define a clear picture of the ICT sector in Kosovo.

The third part of this report directly concerns startup's strategies for further development, respectfully, identifying the actions that startups foresee to undertake as part of their strategic development in the coming years. During this section of the study, the research clearly identifies the most beneficial support for startups in this sector, meanwhile it also identifies the start-ups that are in need for further support. In addition, through this research, startups have provided information for services that startups most needed and have also indicated the areas where startups expect that stakeholders of this sector will put more time and effort in order to best serve the ICT startup community.

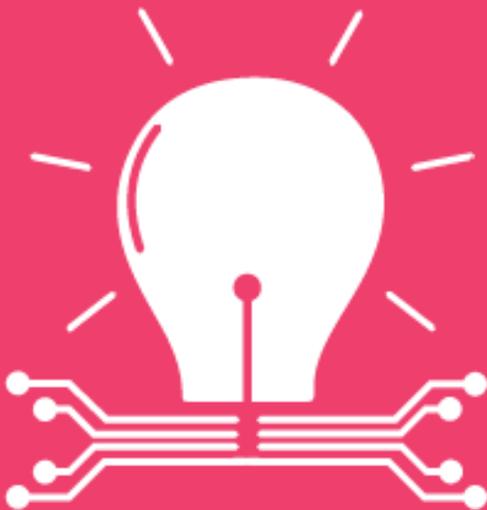


METHODOLOGY

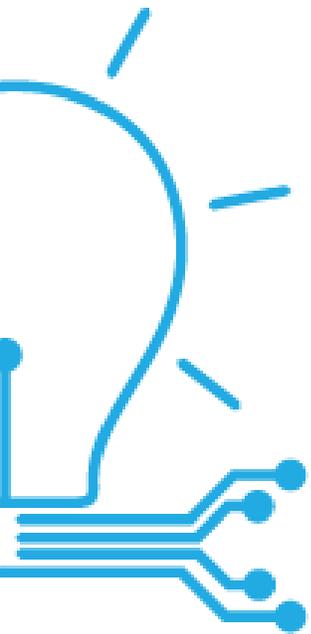
The purpose of this research study focused on evaluating the needs of startups in Kosovo. For this, the research tool implemented for this study was a questionnaire containing both closed and open-ended questions which aimed at measuring the current state of startups and their potential for further growth.

The participation on the study was voluntary and the study was conducted with startup owners or shareholders, from a list of (i) startups provided by Innovation Centre Kosovo (ICK), (ii) businesses registered at the Kosovo Business Registration Agency, and (iii) businesses who were found via Google search engine. Based on this, the overall sample size for this study consisted of 105 startups in the ICT sector.

The quantitative research was conducted through Computer Assisted Web Interview via Odds of Roller's platform "Pyper". The research methodology implemented for this study made use of PYPER, an online-based technological platform, whose designed infrastructure enables the collection of data. In addition to this, the methodology also incorporated the Panel, an online-based platform that serves as a recipient of data and generator of reports based on the obtained information via PYPER. As such, opinions provided on the web/mobile app were automatically forwarded to the platform and thus eliminating any possible interviewer bias.



RESEARCH RESULTS



Entrepreneurs Profile

Gender and entrepreneurship

Entrepreneurship in the ICT sector is highly disproportionate in terms of gender where entrepreneurial men make up about 85% of the total number of entrepreneurs and is 5.5 times higher than the number of female entrepreneurs with only 15.24% participation. Also, while male entrepreneurs who participated in this study were mainly owners/co-owners (79.78%) and directors (16.85%), female participants of the sampled startups were significantly less in leadership positions as only 68.75% were owners/co-owners and 6.24% were directors. These results show a pronounced skew in the sample when it comes to gender and leadership roles.

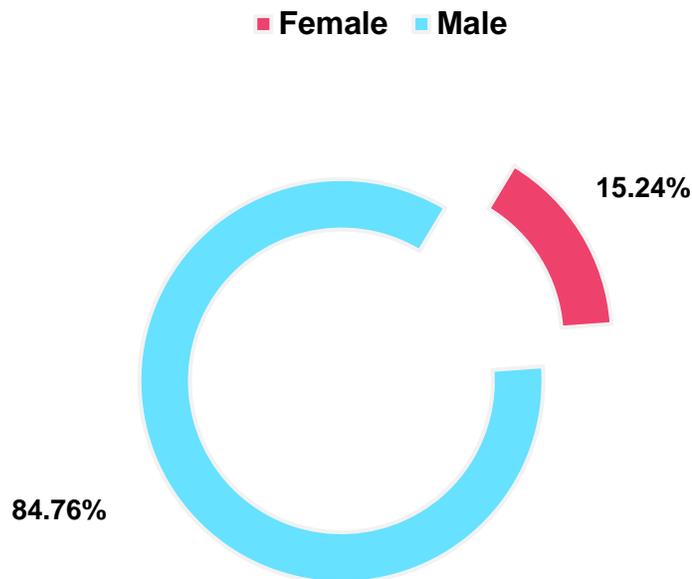
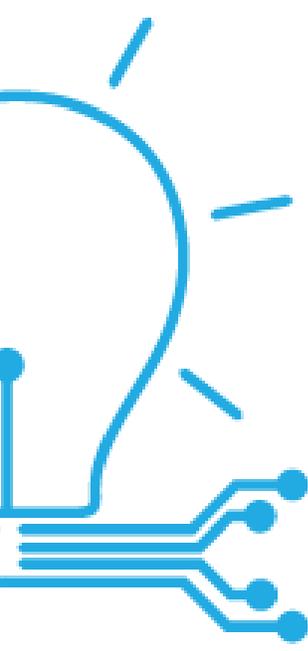


Figure 1: Gender distribution of startup representatives

Age and Entrepreneurship

The majority of the ICT sector consists of entrepreneurs aged 25 to 34 years old, whereas the age group 25-29 years old constitutes for 36.19% of the overall number of entrepreneurs. In addition to this, the entrepreneurs aged 30-34 years old and those aged 35 or higher make up for a smaller group of entrepreneurs, namely 20.95% each.

Moreover, Kosovo also has many young entrepreneurs aged 24 years old or lower. It is important to note that, though young, this group of entrepreneurs makes up for 21.91% of the total number of entrepreneurs. More precisely, 20-24 year-old entrepreneurs consist of 19.05% whereas those under 20 make up for 2.86%.



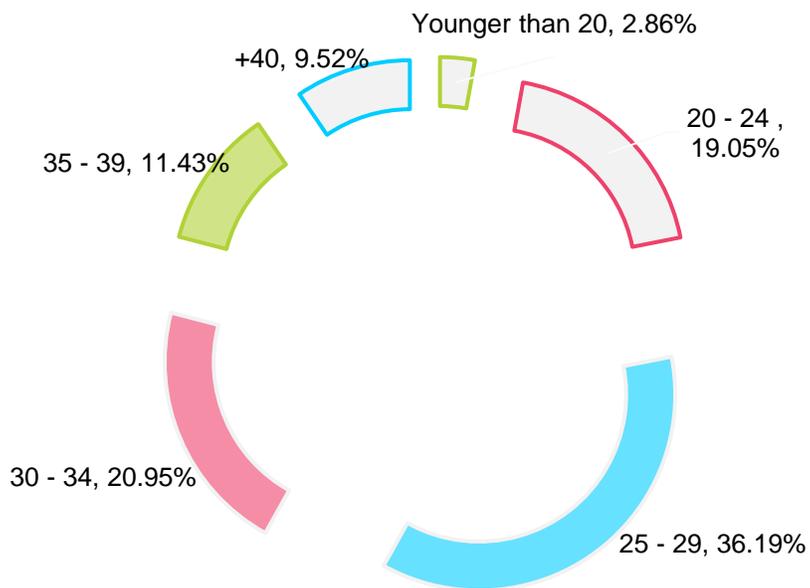


Figure 2: Age distribution of startup representatives

Education and Entrepreneurship

The majority of entrepreneurs, almost 90% of them, have received a higher education with more than half of them having a bachelor's degree. As illustrated in Figure 3, it is evident that with the increase of the higher educational qualifications, namely master's, doctoral or post-doctoral degree, the percentage of entrepreneurs possessing such a degree decreases.

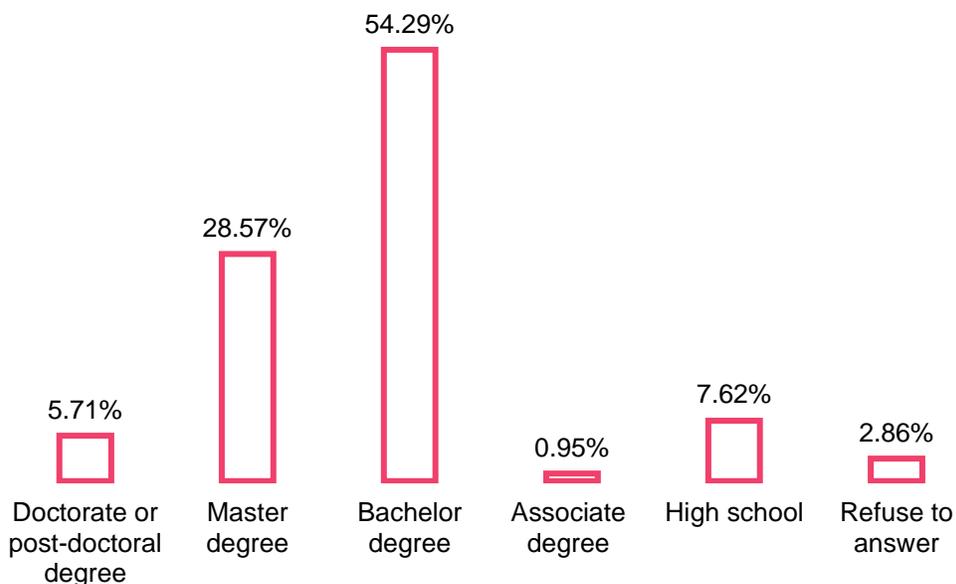
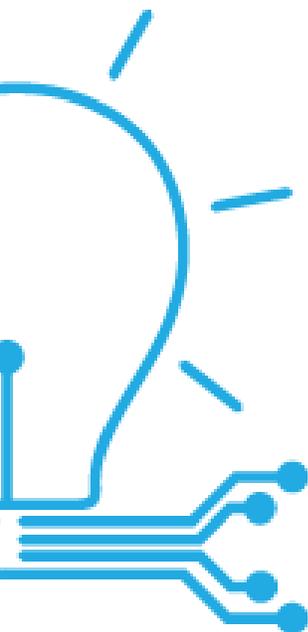


Figure 3: Educational attainment of startup representatives



Only 28.57% of the people who participated in the study hold a master's degree and only 5.71% of them hold a doctoral or post-doctoral degree. Furthermore, the number of entrepreneurs without a higher education degree is 7.62%, and only 3% of the surveyed entrepreneurs in total have an associate degree or have refused to answer.

It is also important to note that the entrepreneurs who have a higher educational attainment, especially those who have received a master degree or a higher form of educational qualification are situated in the highest leadership positions, thus either as owners/co-owners (80.56%) or directors (19.44%). By contrast, only half of those who possess a high school degree as their highest level of education are owners/co-owners. As for the rest of the latter group, their main positions lie in working as directors (37.50%) and COOs (12.50%).

Field of Study

The majority of entrepreneurs hold good knowledge of the required skills to operate in the ICT market. More precisely 37.14% of respondents have studied the field of Computer Science and 35.24% of them have finished studies in Business & Management, two very crucial fields in terms of understanding operations of the ICT sector.

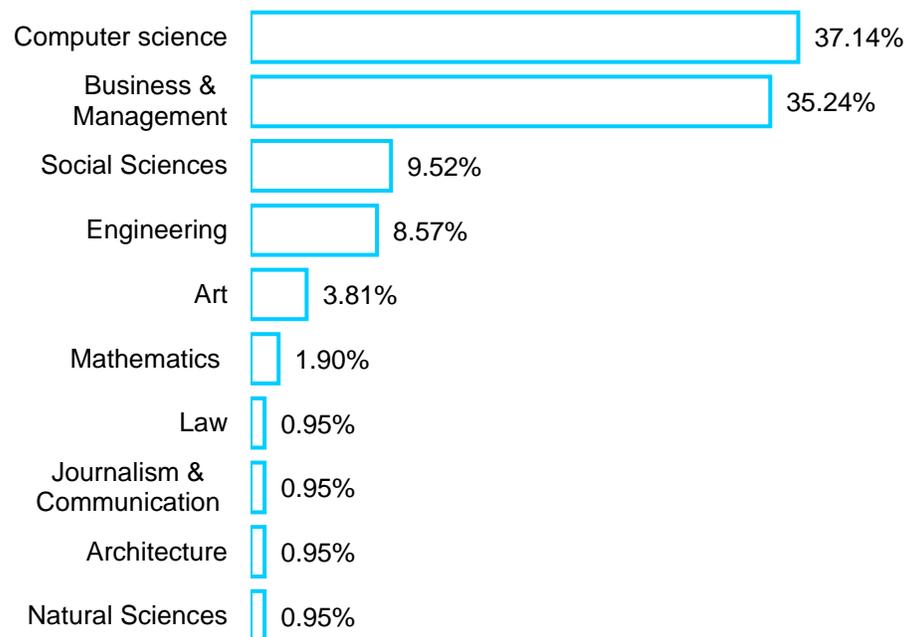


Figure 4: Field of study of startup representatives

Moreover, 9.52% of respondents have studied the field of social studies and 8.57% of them have also studied in engineering fields. The remaining part of entrepreneurs' background consists of uncommon fields of study for the ICT sector including law, journalism, architecture and more. The main fields linked to entrepreneurial behavior in the ICT sector are Computer Sciences composing 40.24% of owners/co-owners and Business & Management with 32.93% of the sampled startups.

Previous Involvement in Startups and Failure

With the exception of the current startup(s) established by entrepreneurs in Kosovo, 43.8% of the current startup entrepreneurs have established one or more startup(s) in the past.



Figure 5: Have you established any other startup in the past?

However, a significant number of entrepreneurs (80.4%) have experienced startup failure. Such a phenomenon greatly emphasizes the impact of challenges in the startup ecosystem which, if not addressed, will increase the rate of startup failure.

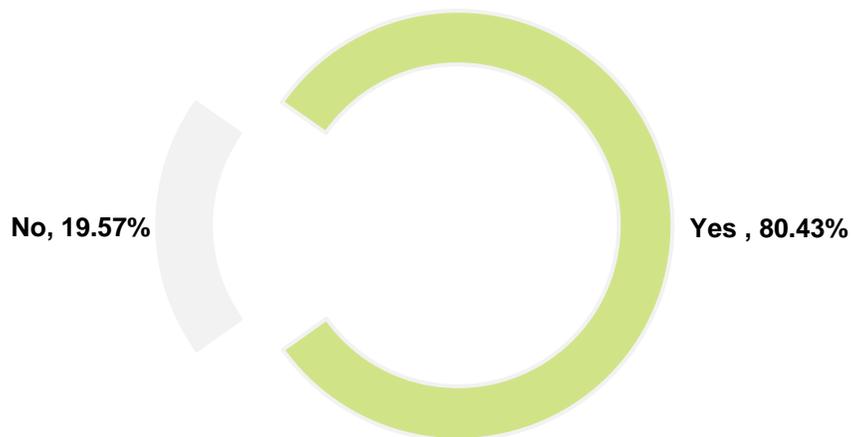
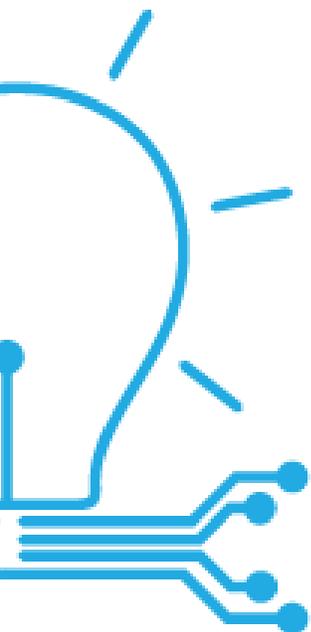


Figure 6: Has any of the startups you have established in the past failed?



As shown in Figure 7, the startups that had been established have evidently failed to survive in the market for a myriad of reasons ranging from lack of financial support to personal issues such as lack of motivation. However, it is important to note that more than half of the startups have been in need for financial support and 40.54% also attribute the failure of their previous startup to the lack of qualified staff. A poorly designed business plan and unmet needs to assess market needs have been the third and fourth most common reasons for failure. Personal attributions such as lack of expertise or motivation are ranked at the bottom.

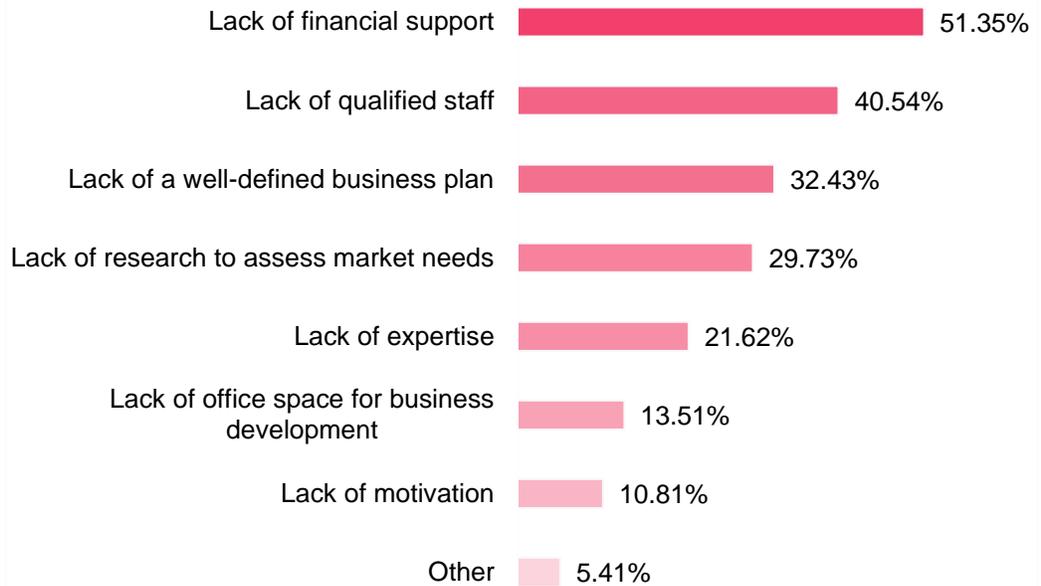
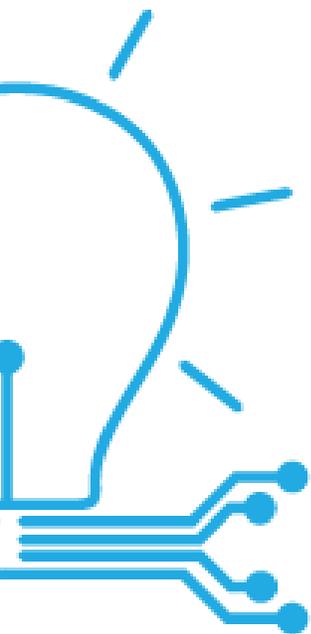


Figure 7: Reasons for startup failure



Startups profile

Year of foundation

Based on the data obtained from participants of this research, 79.6% of them have established their startup between 2018-2020. As opposed to this, the number of sampled startups established earlier than 2018 decreases significantly. However, it is unknown whether this drop could be attributed to the fact that businesses operating for more than two years are less likely to consider themselves as startups and consequently do not participate in startup-related-studies concerning the start-up ecosystem and its needs or whether a considerable number of startups established prior two years have faced many difficulties which ultimately caused them to fail and hence explain this decrease.

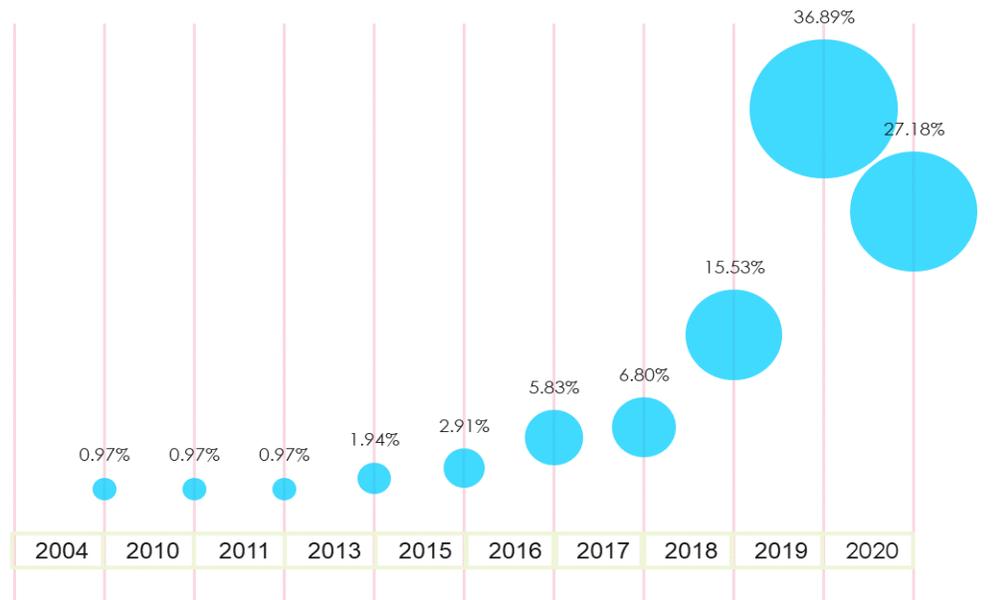


Figure 8: When was your startup founded?

Number of owners/co-owners in startups

Almost 40% of ICT startups in Kosovo consist of a sole shareholder. On the other hand, the remaining startups consist of more than one shareholder. Specifically, more than 1/3 consist of two shareholders, 13.33% consist of three and 5.71% of four shareholders. Approximately, 5% of the sampled startups, constitute startups that have 5 or more than 5 shareholders.

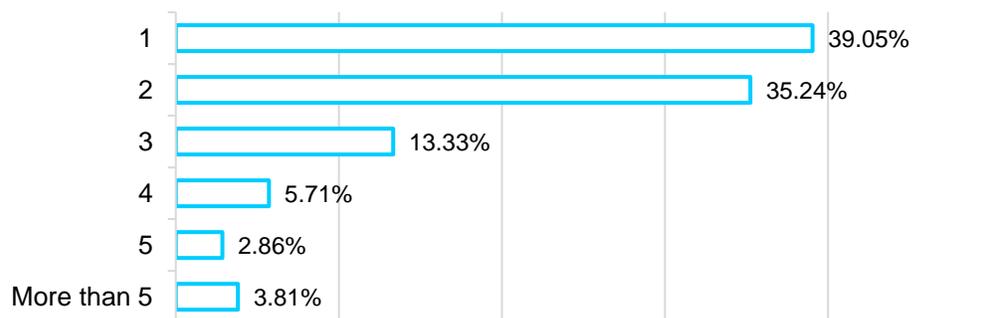
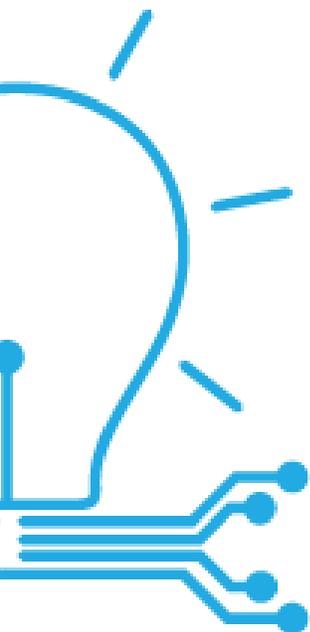


Figure 9: How many shareholders does your startup consist of?



Number of employees in startups

Considering the present startup ecosystem in Kosovo and the challenges that many startups face on the journey to growth and a well establishment, the number of employees in a startup is quite fragile. Thus, not surprisingly, almost a quarter of the startups in Kosovo have no employee(s). In addition, 42.86% of the startups consist of one or two employees. As shown in Figure 10, only about a third of the sampled startups have three employees or more.

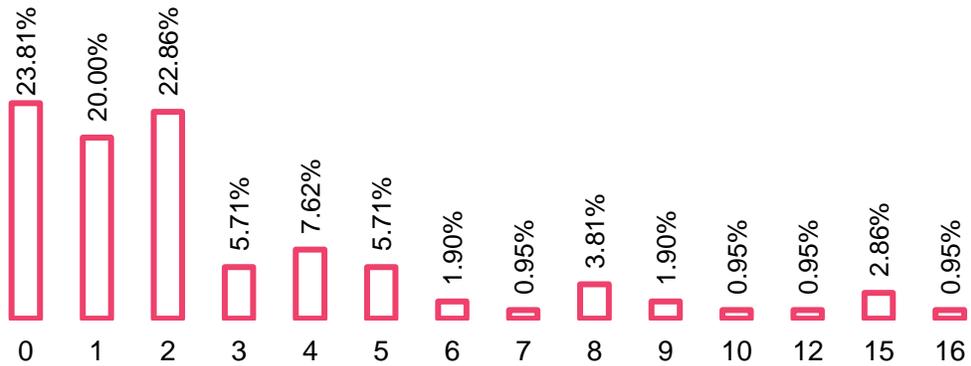


Figure 10: Number of employees

Operating Industry

With the development of technology, e-commerce has been the focus of many entrepreneurs in Kosovo. Thus, from the total number of startups who participated in this research, E-commerce scores the highest market share of 25.71%. Not far behind e-commerce stands also the field of Marketing and Advertising Technology with 24.76% and Enterprise Software (19.05%). A smaller share is occupied by startups who are engaged in Big Data & Analytics (13.33%) and Artificial Intelligence & Machine Learning (12.38%). As opposed to these, fields such as Blockchain and Robotics make up for the lowest market share accounting together for 5.72%.

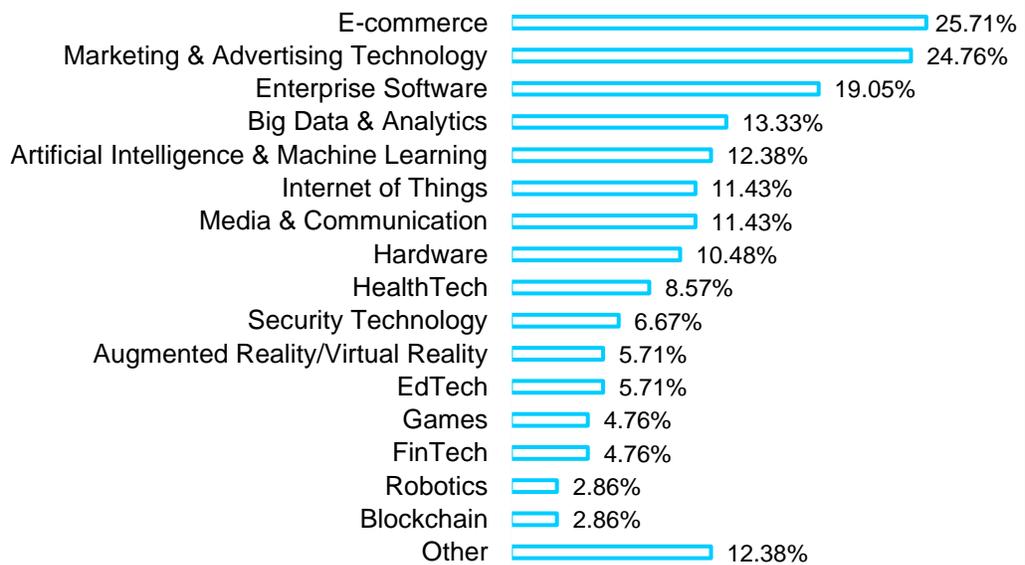
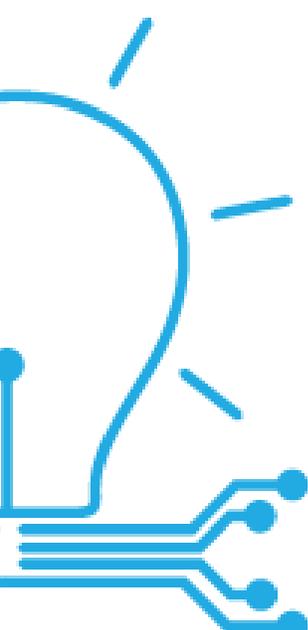


Figure 11: In which industry does your business operate?



Development stage

In coherence with market data obtained from this research, ICT startups in Kosovo currently are at different stages. While 17.14% of the total startups are currently successful, namely they are at the growth stage, almost 80% of startups are in the beginning stages. More precisely they are at the seed stage (43.81%) and startup stage (35.24%).

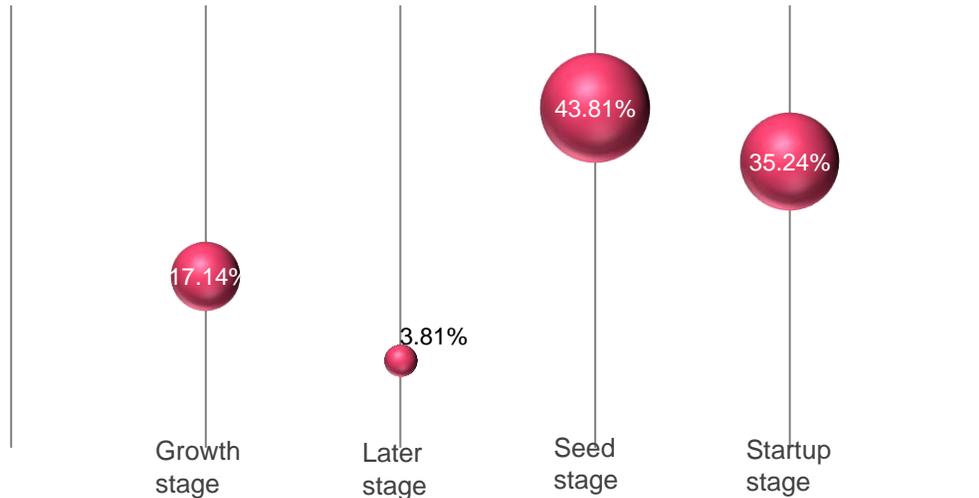


Figure 12: In which stage is your startup?

Generating revenue

Having in consideration that generating revenue is a crucial factor in a startup's success, a great number of startups in Kosovo are not performing well in regard to the financial aspect. Except for 12.38% of startups that are generating enough revenue, 45.71% are not generating enough revenue for their needs and another 41.90% are not generating revenue at all. A possible explanation to this could be that, as stated above, most startups are in the seed and startup stage, meaning that they are either in the process of creating a concept for their startup or they have developed the product/service and are making their first sales.

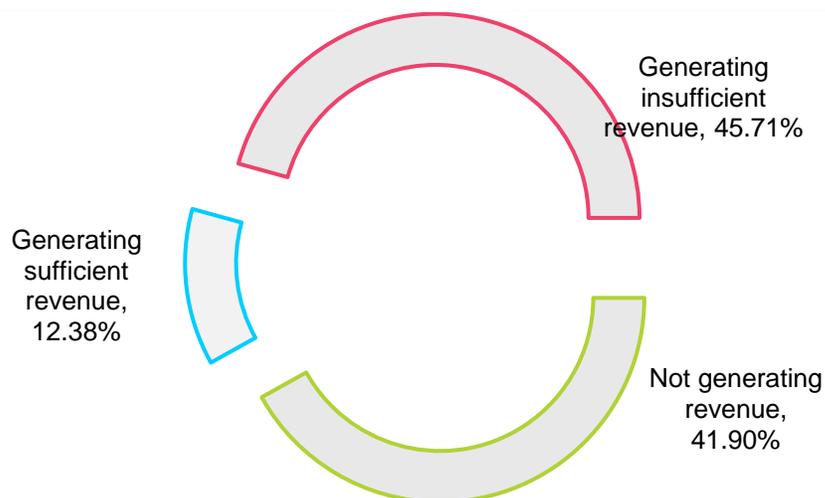


Figure 13: Is your startup generating revenue?

Startup's revenue

From the total number of revenues generating startups, 32.79% of them had generated a revenue of up to 5,000 euros in 2020 by the time the study was conducted. In addition to that, a smaller number of startups, 18.03%, had successfully generated 5,001 – 10,000 euros. 11.48% had an income of 10.001 - 20.000 euros and almost 15% have generated more than 20,001 euros during 2020. 23% of respondents had no interest in disclosing their revenue and hence have refused to answer the question.

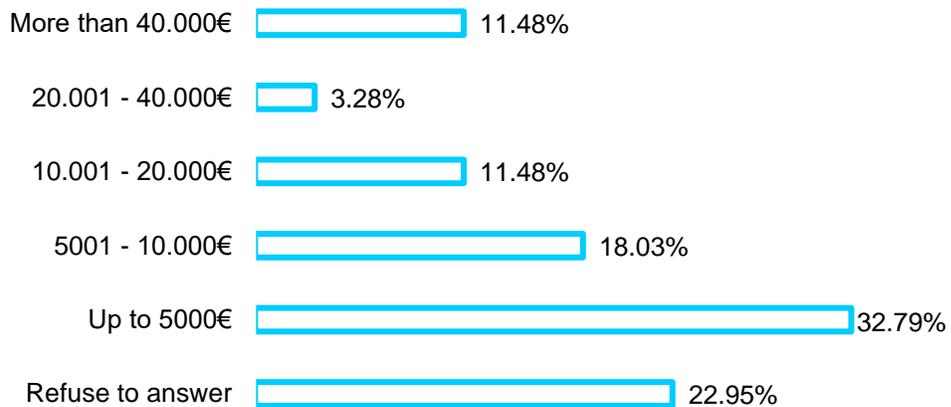


Figure 14: During this year, how much money has your business generated?

Obstacles encountered by startups and reasons for stagnation

The present obstacles encountered by ICT startups have resulted in the stagnation of 44.76% of startups and if startups cannot overcome the current situation, many, if not all, can experience failure through time. Concerning the main factors that have led to stagnation, almost half of the participants have attributed the stagnation of their start-ups to COVID-19 (48.84%). Financial shortages are considered as the second most major issue that has led to stagnation.



Figure 15: Has your startup currently stagnated?

Not only that but also difficulties in educating customers regarding technological products and lack of institutional support have also been reported as key challenges that have contributed to this stagnation. Factors such as inability to fully commit to the startup, the economic situation, difficulties in finding customers,

blocked customs and more are also considered as issues that damage the startup ecosystem.

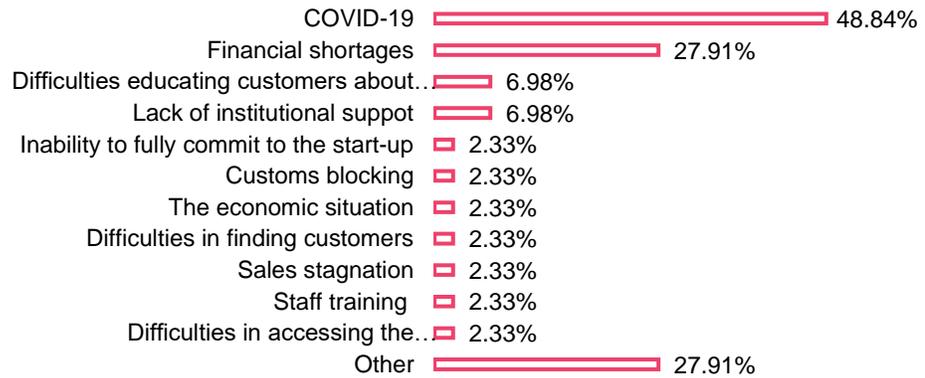


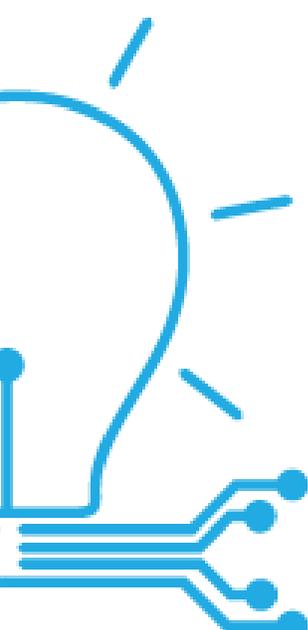
Figure 16: Why did your startup stagnate?

Challenges for growth

A diverse number of obstacles prohibits the expansion of startups in Kosovo. The three most important challenges lie in the lack of financial means (61.90%), difficulties in market access (41.90%) and lack of investors (37.14%). It is important to note that such lack of financial support has mostly been reported by the interviewed entrepreneurs as the main reason for their startups' failure in the past and also as the second most important factor that has led to startup stagnation. Difficulties with business trips to countries in the European Union, USA and so on are also considered a major challenge for growth as a total of 22.86% of respondents have reported this as a problem. Lack of material equipment (22.86%), inability to hire qualified staff (21.90%), difficulties expanding and diversifying (11.43%), difficulties in product development (11.43%), lack of entrepreneurial experience (10.48%) and inability to withstand competition (10.48%) are some of the other factors that hinder startup growth.



Figure 17: What would you say are the main challenges for developing your startup?



Strategies for further development

With so many factors constricting startup expansion, startups in Kosovo aim to overcome these challenges by finding clients (72.38%) and investors (44.76%). The third and fourth most selected alternatives focus on improving products/services or by changing the trajectory of the offered services/products and by offering new ones. 39.05% are planning to expand in new markets and 37.14% are considering hiring experts in order to develop their business. In addition, crowdfunding is the least chosen alternative which may be used to expand one's startup.

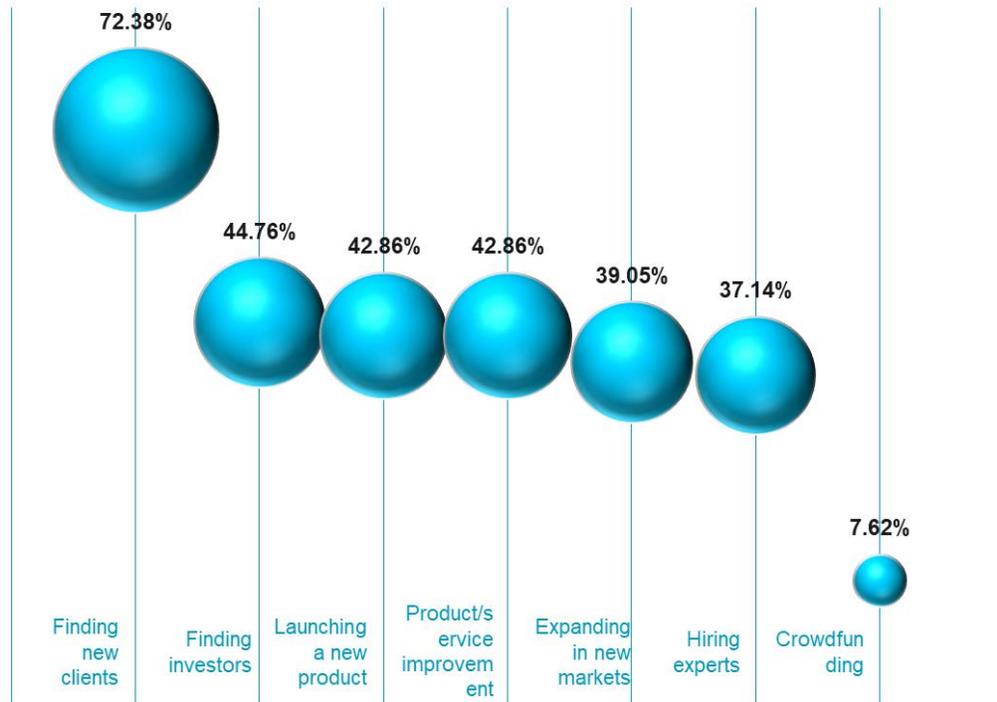


Figure 18: What are your strategies for business development for the coming years?

Help for startups

While a considerable number of startups (40%) have been a beneficiary of some type of help or service for their startup, 60% have received none.

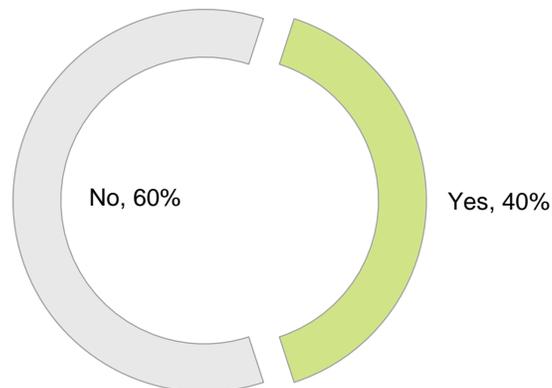


Figure 19: Has you ever received help for your startup?

Most beneficial support for startups

The three most beneficial support for startups have been the receipt of grants (34.29%), networking (14.29%) as well as the availability of an office for use at a reasonable price (12.38%).

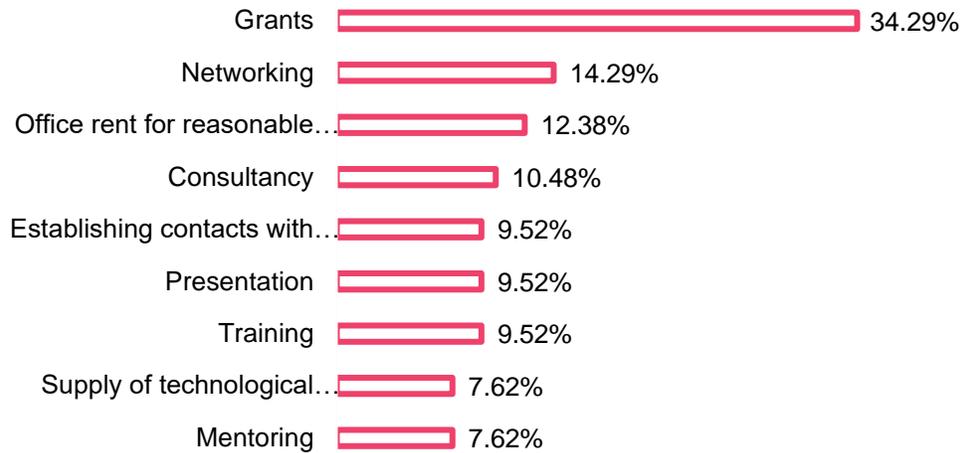


Figure 20: Of all the received support, which ones have been most beneficial?

In addition, consultancy has been beneficial for 10.48% of startups, whereas establishing contacts with various investors has been helpful for 9.52% of startups. Amongst other beneficial support are presentations (9.52%) and training (9.52%) which are also considered as beneficial. The least helpful support received has been mentoring (7.62%) and the supply with technological equipment (7.62%).

Need for support

A significant number of startups are in need of support or any other external help which can be offered for startups. More precisely, 93.33% have stated that they are in need of help.

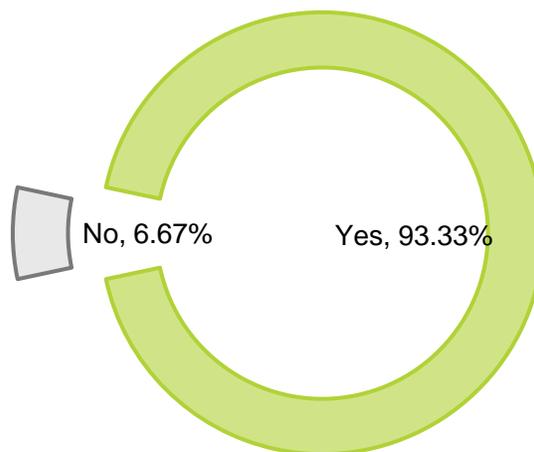


Figure 21: Do you consider that you need support?

Concerning the kind of help, of paramount importance is receiving financial help (82.65%) followed by the availability of an office of various kinds as well as mentoring/consultancy. As it concerns the availability of an office, there has been a more pronounced preference to receive office rent discounts within the incubator/accelerator (23.47%) than outside the incubator/accelerator (16.33%). Moreover, 13.27% of the startup representatives who participated in this study also consider coaching and consulting as a necessary help. Concerning the least needed support, only 6.12% consider accelerating the process of obtaining a business visa as a beneficial help and a minority of 2.04% view discount on trainings as useful.

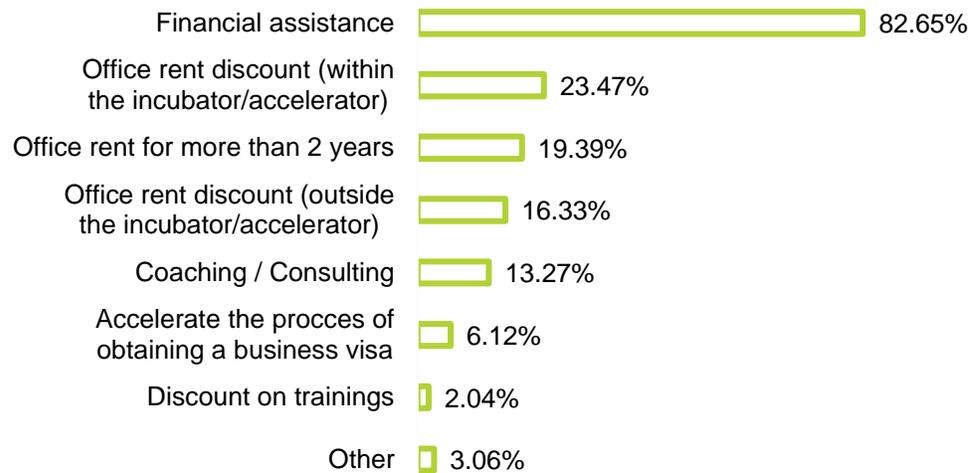
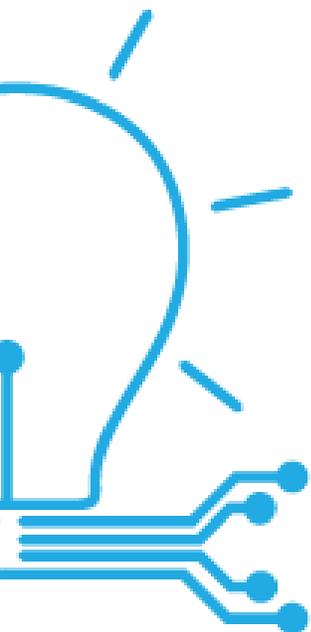


Figure 22: Which service is most needed for your startup?



Perceived sufficiency of support & ways to strengthen the ICT sector

The majority of startups that took part in this research consider that financial aid, support in finding potential investors and consulting/mentoring are the most important ways to strengthen the ICT sector. More precisely, 30.43% of startups consider financial aid as the main way to help strengthen this sector, while around 15.22% consider the support in finding the investors as their main way to strengthen their market position in the ICT sector. Moreover, 13.04% foresee consulting and mentoring services as the best way to strengthen their startup and ICT sector as well.

In this regard and in coherence with research results illustrated in the graph below, organizations are ought to focus their incentives mainly in financial aid for startups, supporting them to find potential investors and provisions for consulting and mentoring services.

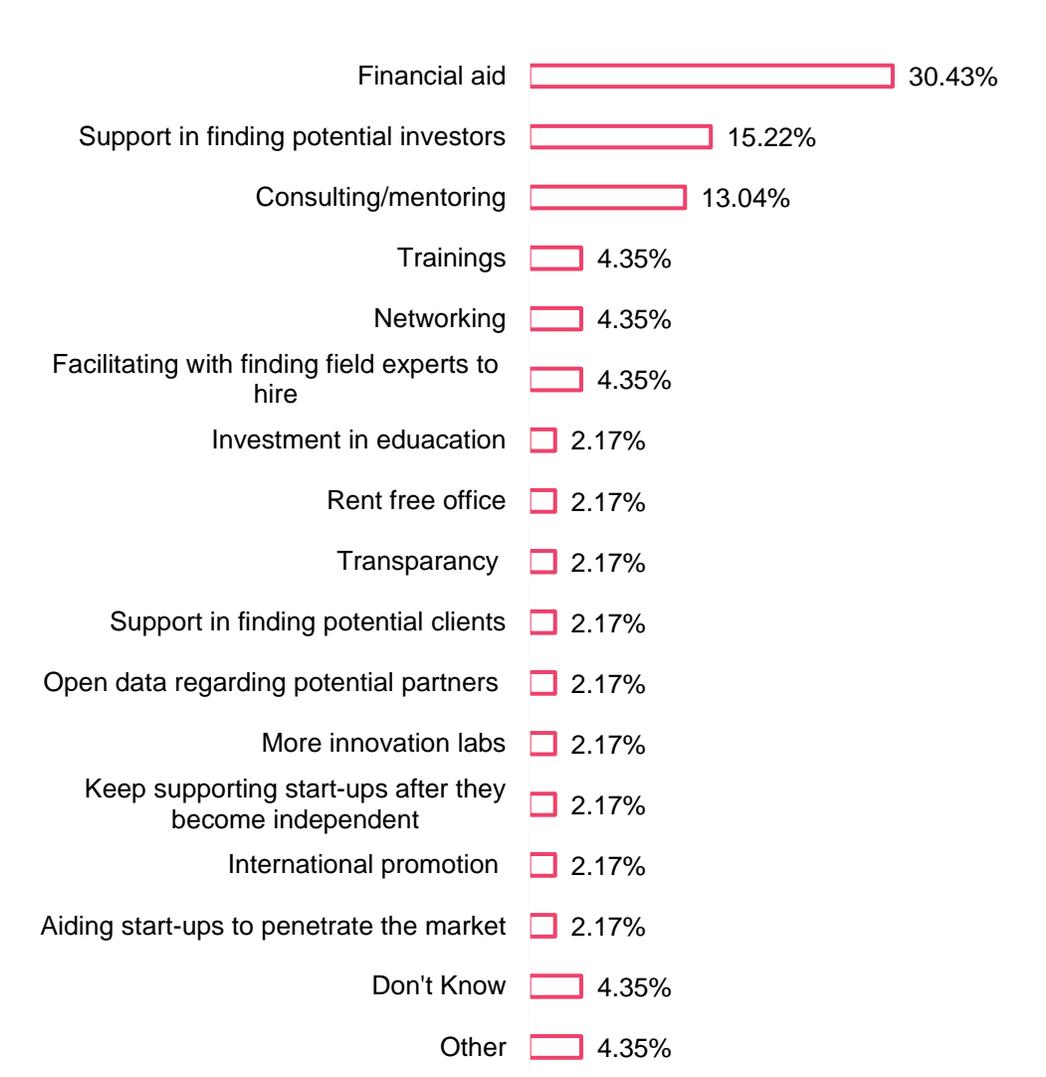


Figure 23: What needs to be done by organizations to further strengthen the ICT sector?

MAIN FINDINGS

The startup environment in Kosovo is fragile and uncertain for many startups as they face many challenges that they find difficult to overcome. Consequently, 93.33% of startups are in need of any external support in order to strengthen their business.

The main challenge for growth for a sizeable part of startups (61.90%) is lack of financial means. Financial means are also considered to be the main reason for previous startup failure in Kosovo. As a result, financial assistance is considered to be the most needed support for 82.65% and is considered the main way to strengthen the ICT sector by the sampled startups. It is important to note that among the startups that have received support, the most beneficial support has been considered to be grants (34.29%). In addition, the number of startups that have received some type of support in the past is lower in terms of being stagnant as opposed to those who have received no help of any sort. In other words, the number of startups who are stagnant is higher for startups who have not received any help. The ones that have received help, though stagnant, their number is lower. Moreover, COVID-19 has increased uncertainties and has weakened the economy which has impacted around 50% of the sampled startups.

Currently, the majority of startups either do not generate revenue (41.90%) or are generating insufficient revenue (45.71%). Only a small percentage of startups (12.38%) are generating sufficient revenue. Adding to this, in terms of startup strategies for business development, the vast majority (72.38%) consider finding new clients and 44.76% finding investors as ways to prompt growth within their business.

