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Multidisciplinary Skills for Artists' Entrepreneurship / MUSAE



WP1.1. “DATA COLLECTION AND ANALYSIS” Local Report

Toshkent Shahridagi Turin Polytechnica Universiteti
(TTPU) (Uzbekistan)



**TURIN POLYTECHNIC UNIVERSITY
IN TASHKENT**



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1 Brief presentation of the institute: Toshkent Shahridagi Turin politexnika universiteti (TTPU)

Toshkent shahridagi Turin Politexnika Universiteti (TTPU) was opened in 2009 on the basis of a Cooperation Agreement signed with the Politecnico di Torino (Italy). It aims to develop some HE curricula in Engineering in Uzbekistan in accordance with the Italian HE system and acknowledged from both, the Ministry of higher and secondary specialized education of the Republic of Uzbekistan and the Italian legislation.

Politecnico di Torino, Italy created in 1859 and being one of the leading technical universities in Europe, is characterized by an active combination of the educational process with scientific and applied research. It includes 18 faculties and 19 research centers and laboratories, which are the basic research centers of large automotive and other companies. The opening in Uzbekistan of a new institution of higher education on the basis of such a European university in accordance with generally recognized international requirements also fully met the goals and objectives of the National Training Program for the Republic of Uzbekistan.

As of today the total number of students in TTPU has grown from 200 to 1632 including BSc, MSc and PhD students.

TTPU graduates receive double degree diplomas of higher education with the award of the Politecnico di Torino (POLITO) BSc and MSc degree to TTPU students.

TTPU has one General Technical faculty and 5 Department: Natural-Mathematical Sciences, Humanitarian-Economical Sciences, Control and Computer Engineering, Civil Engineering and Architecture, Mechanical and Aerospace Engineering.



2 Results from AREA 1 and AREA 2 survey

2.1 AREA 1: Law framework

The Toshkent Shahridagi Turin Politexnika Universiteti has provided one response to the questionnaire for teachers. The information that emerged is the following:

- 1) The High Artistic Education Division (musical, visual arts, performing arts, etc.) is a part of the University system of the Country.
- 2) Are issued two kinds of educational qualifications: Bachelor of Arts and Master of Arts.
- 3) Students can enroll in a higher artistic education faculty or institution after the end of high school (17-18 years old).
- 4) TTPU uses the same ECTS as in Italy.
- 5) The hours-credits ratio used in the institution is the same ECTS system as in Italy (1 credit = 25 hours).
- 6) The standard evaluation system used in the institute provides that students receive a certain number of credits per subject. For the control work, for each correctly answered test, the student receives a certain number of points. At the end of the subject, the number of points for the entire course is summed up and corresponds to a certain number of credits earned.
- 7) The institute has financial autonomy.
- 8) The Central Agency that monitors and certifies the quality of teaching at local and national level is the State Inspection for Quality Control of Education under the Cabinet of Ministers of the Republic of Uzbekistan.



2.2 AREA 2: Analysis of Institutes

A total of 3 responses were collected from Turin Polytechnic University in Tashkent.

For the TTPU we received responses from 3 teachers. Based on the answers we can establish that:

- 1) The name of Institute is Turin Polytechnic University in Tashkent (Toshkent shakhridagi Turin polytechnic universiteti – in Uzbek)
- 2) Educational qualifications issued by TTPU are B.Sc. and M.Sc.
- 3) The number of students currently enrolled in TTPU is 1632 and the percentage of female students is between 0-20 %.
- 4) Students can choose courses related to artistic disciplines, but without credits (1 out of 3 say 5).
- 5) The salary of teachers and other personnel meets the official standards adopted in Uzbekistan and includes additional allowances and various bonuses as well as participating in local and foreign grants.
- 6) At the moment TTPU currently hosts 8 foreign students
- 7) All courses are taught in English.
- 8) There is a “very good and responsible” international relation office. It works first of all with Politecnico di Torino (Italy) but TTPU has signed MOU and Partnership Agreement with more than 18 organizations including HEI's and enterprises from some foreign countries
- 9) Inside the Institute there is a guesthouse for foreign students or international guest
- 10) It is possible to see training courses (curricula) offered by the institute at this link:
www.polito.uz
- 11) The percentage of historical/theoretical disciplines compared to laboratories based ones is 51 - 70 %.



- 12) At the end of the course of study there is a final report.
- 13) The institute has collaborations with external partners (in particular with automobile manufacturer)
- 14) About 100 students benefit from foreseen training courses, internships, orientation, consultancy and employment systems.
- 15) “Opzione 1” is the most important temporary occasional partnership/project
- 16) TTPU has a sponsor in industry. It is JSC “UZAUTOSANOAT”, the company that controls automobile manufacturing enterprises and automobile localization and auto components enterprises.
- 17) TTPU uses post-graduate questionnaires for the preparation of internal reports on the quality of teaching (degree of satisfaction, opportunity, etc.)
- 18) 1 out of 3 say that about 30-40% of students are professionally inserted into the job's world after three, five or seven years from graduation.
- 19) Some students undertake a teaching career in the same university. Since the opening of the university, 870 students have graduated from it. Of these, about 15% graduates chose the teaching profession.



3 Results from AREA 3 and AREA 4

3.1 AREA 3: The Teaching Staff

Main National Results

The survey was distributed among teachers of the State Conservatory of Uzbekistan, Tashkent Institute of Fine Arts and Turin polytechnic university in Tashkent. A total of 17 respondents took part in the survey by the 15 of September 2020.

Thus, 64,7 percent of respondents obtained their academic training in the same institution where they work, while 35,3 percent in another institution.

Only 41,2 percent of respondents answered that they are involved in other professional activities besides teaching which are the following: playing in a chamber orchestra, being a designer, writing academic articles, business, academic research, and employee at the museum. As for 58,8 percent teaching is the only activity.

Merely 29,4 percent of respondents had a working experience in a foreign country which are Turkey, South Korea, Egypt, and Israel.

Respondents working 10 years and more were 5,9 percent, 11,8 percent had 7 years of working, 5,9 percent worked for 19-24 years, 11,8 percent -5 years, 5,9 for 7 and 2 years respectively.

The strengths of the institute were named:

the only such university in Uzbekistan – 5.9 %

creative potential – 11.8 %

good specialists – 5.9 %

collaboration – 5.9 %

freedom of creativity – 5.9 %

no corruption – 5.9 %

Regarding the major shortcoming and critical issues, the respondents named as followed:

Shortage of laboratories – 41,2 percent

Inadequate study plan – 23,5 percent

Little or no freedom in teaching – 25,5 percent



Regarding the lack of technical or technological equipment, 3,7 percent answered negatively, while more than 70 %.

The largest portion of respondents (47,1 percent) named lack of equipment as the main difficulty they encountered during the teaching process, 17,6 of respondents named inadequate students' skills, 17,6 percent noted that the education planning is outdated, and another 17,6 percent consider lack of classrooms and laboratories as the major issue.

Out of 17 respondents 41,2 percent think that students have difficulties in obtaining experience abroad, 17,6 percent lack determination, 29,4 percent encounter economic hardships, and 11,8 percent consider the studying curriculum as inadequate.

Regarding the profitability 41, 2 percent of respondents named involving companies and territorial cultural realities to fulfil seminars and workshops within the institution, 29,4 percent casted for changing teaching methods according to what companies and territorial realities need, 23,5 percent believe that increasing funding for the institution may have a positive effect.

Most of the respondents believe that familiarization with foreign experience, including with professional retraining in foreign universities and relative institutions, and exchange programs would be the best practices for the development in the professional area.

A total of 76,5 percent believe that knowledge of the economic system is crucial, while 23,5 percent answered negatively. Thus the majority responded that in the contemporary world each and every person not only teachers should be familiar with the basic knowledge of management, as the economy lays foundation for every subject; as science and economy are intertwined; the time demands the all-round teachers, etc. Though some also believe that art and business are inconsistent as you cannot create or perform well if you think only about money.

A total number of 52,9 percent of respondents are provided with up-to-date professional training courses inside their institutions, while 47,1 do it independently by reading academic articles, books etc.

According to 47,1 percent of respondents their institute promotes student's entrepreneurship, via organizing the special courses, and grants for students, including the art marketing subjects in the curriculum, by providing opportunities for the musicians to get places in the international orchestras; the rest 52,9 percent responded no.

Irrelevant answers were provided

The list of respondents (by subjects):

"Oriental manuscript and miniature"



violin

Information technologies

Interior design

Museology, History of World Costume, Museum Pedagogy

Museology

Museum business in Uzbekistan

economic theory

General History of Arts, History of Arts of Uzbekistan

history

Information Technologies, Computer Graphics

Fundamentals of Architecture, Protection and Restoration of Monuments,
Museum Design, History and Theory of Museum Tourism

General history of art

Ecology

Information Technology Lecturer

Violin teacher



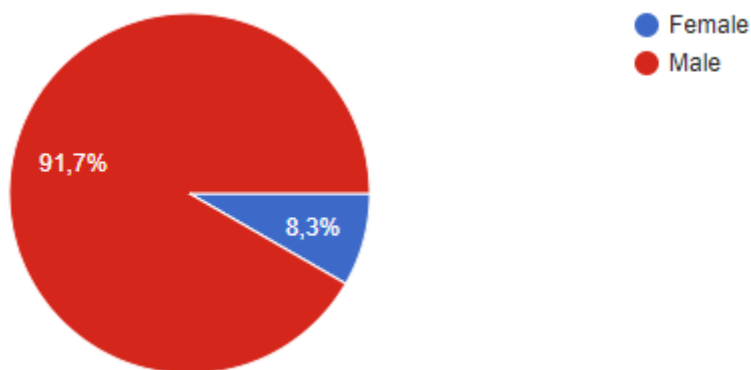
3.2 AREA 4: Students

Survey at 30/09/2020

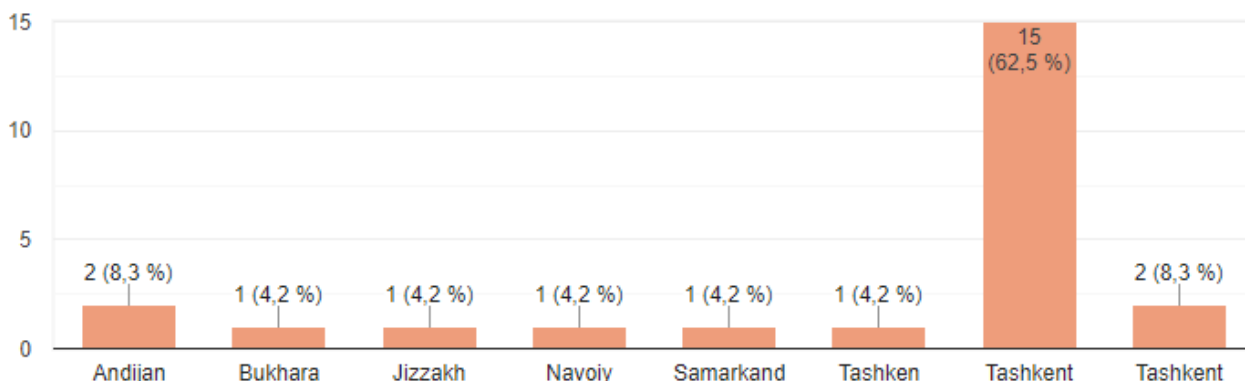
This survey has been conducted among 1632 of which 24 students of Turin polytechnic university in Tashkent expressed their desire to participate in the survey. The survey questions have been distributed among students via official telegram channels.

A total of 24 replies were received from September 29 to September 30, 2020.

Among the survey participants, 91.7 percent of students were male and 8.3 percent were female.



The responding students are enrolled in the course IT (42%), Civil Engineering (8%) and Mechanical Engineering (21%). Their age was from 18 and up to 24 years old, most of them were 18 (29.2%) and 19 (29.2%) years.

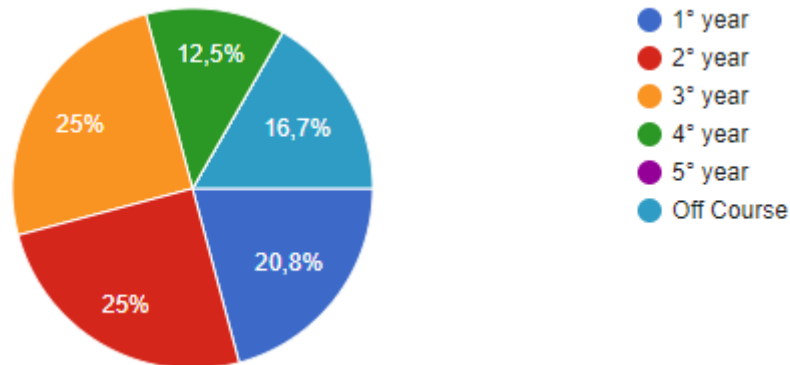


Most of them were from Tashkent (the capital of Uzbekistan) – 75% and others - from Andijan, Bukhara, Jizzakh, Navoi, Samarkand.

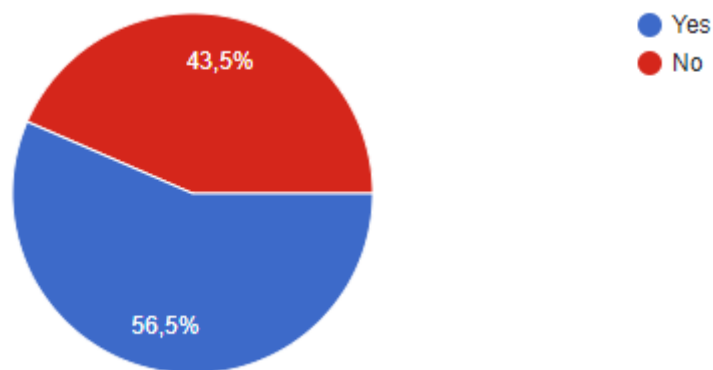
According to the levels of education, the distribution between the 2nd, 3rd and 1st



courses is almost the same (from 20% to 25%), the rest were the 4th year (12.5%) and those who are off course (16.7%).



Those who had parallel work activities were 56.5 percent against 43.5 percent who did not. Students' parallel activities were web programming, teaching, engineering, shop assistant and charity work.



Main part

To the question - **Why did they choose this course**, participants responded that:

- It makes my future life better
- I like travelling to foreign countries
- I want to broaden my horizons in EU and increase my knowledge
- I was interested in this course
- I like programming; I'm interested in learning programming languages in my free time. Moreover, I can create websites.
- I was interested in this field of activity.
- To get more practical experience

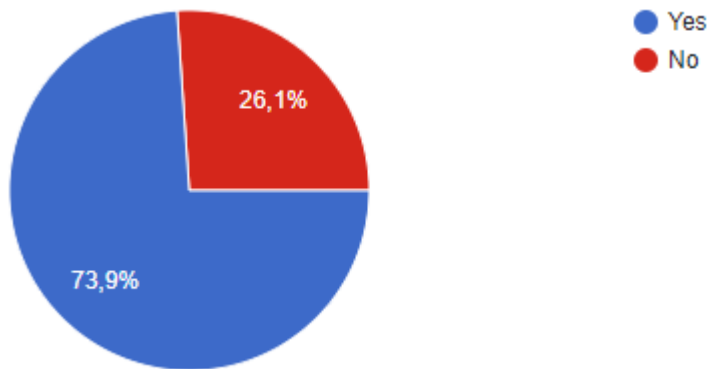


When asked about university full support for students, 56.5% answered positively.

73.9% answered positively about whether they would recommend this university to their friends, since the education they receive is of high quality.

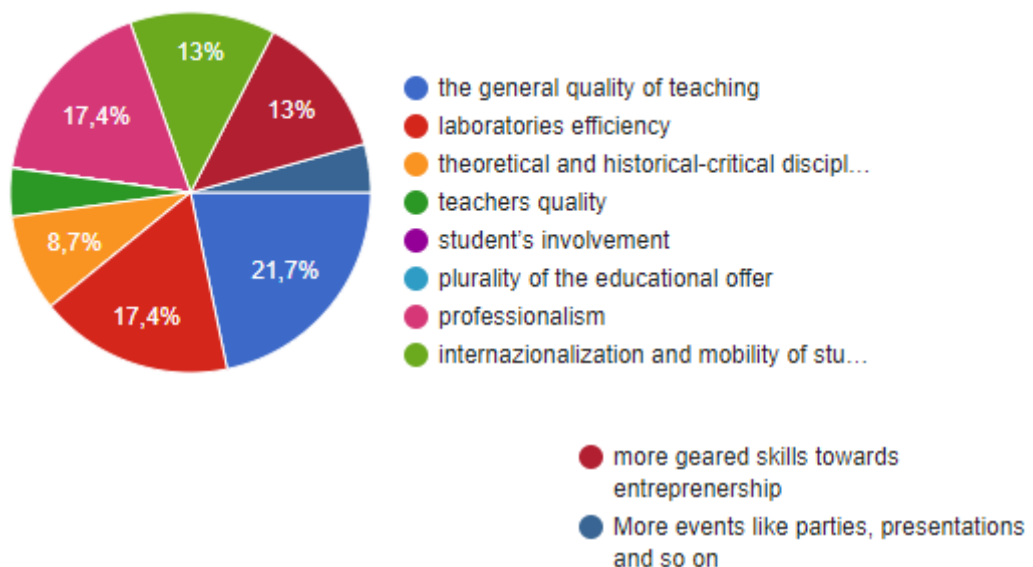
Among the disciplines they would like to study, students named economics, making professional websites, psychology, environmental science, some fine arts and history of art classes, foreign languages, management.

Would you recommend your Institute to a friend?



73% of recipients replied positively.

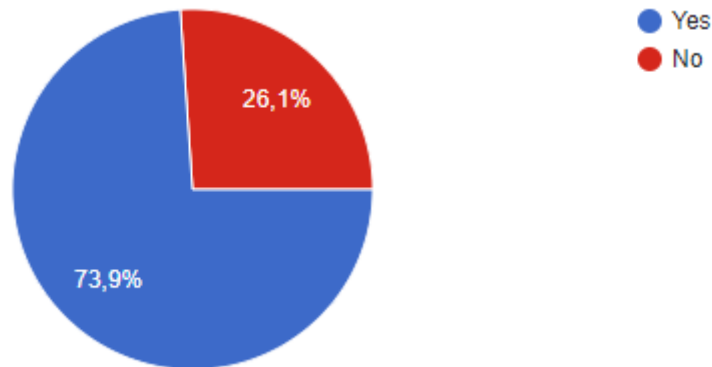
Participants recommended that the university improve laboratories efficiency, professionalism and internationalization and student mobility and the general quality of teaching.



The survey participants were very interested in obtaining a basic knowledge of the



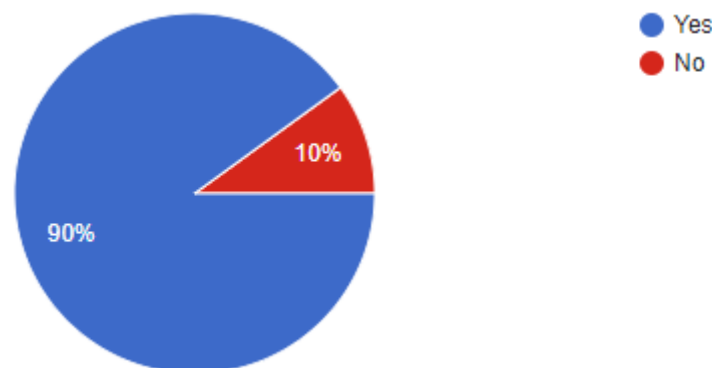
economic system (73.9%) because economics is one of the parts of life and everyone should know it.



Strengths of the university were named by students and the teachers.

Many of the respondents would like to become engineers and programmers as future jobs.

90% of the respondents would like to have their own business in the future



Knowledge of economics and experience was cited as currently required

Out of 12 answers to the question what subjects are needed to answer your questions, 5 (most) answers were about the need for knowledge of economics.

73% of the respondents answered that they already have their own business or business project.

As for the skills that are needed at the moment, most of the answers were related to technical (46.2%), to juridical and advice organization each was 15.4%, and financial, marketing and all skills of them were scored equally by 7.7%.

53.8 percent answered that they work with a team and 46.2 percent are solo



entrepreneurs.

What information would be useful to meet these needs?

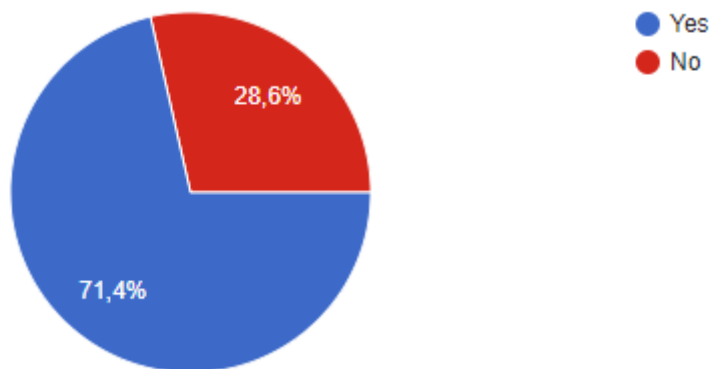
- Educational courses and materials
- More labs
- only Books
- Advanced advice
- study fully any degree of education
- information related to the IT sphere
- there is many information on the internet that are good enough for me
- Economical educational (especially knowledge about the bank system and taxation)
- How to deal with juristic side
- A lot of Internships as a software engineer
- I need more info Working and traveling in foreign
- I would like to know about universities where I can study for free or receive scholarship

Which teaching subjects could provide an answer to your questions/needs?

- Electrical engineering
- Engineering Subjects
- Computer science
- Economy classes
- every subjects needed
- Fine arts or robotics
- Economics and business, Computer engineering
- of course information technology, mathematics and foreign languages
- Economic
- Business management, economic skills, knowledge of laws of our country
- Mobile App Development
- Economic

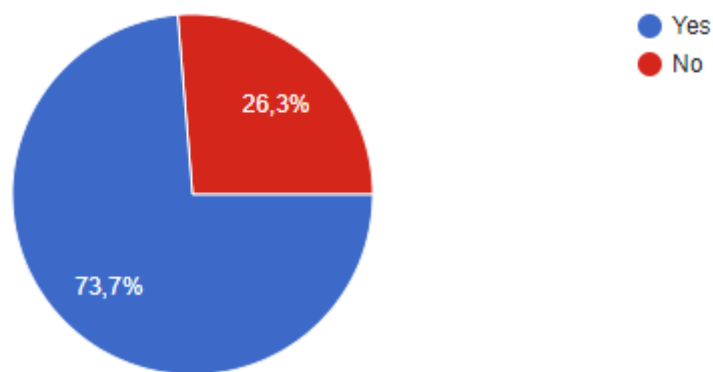
Are some of them already included in your study plan?

14 responses



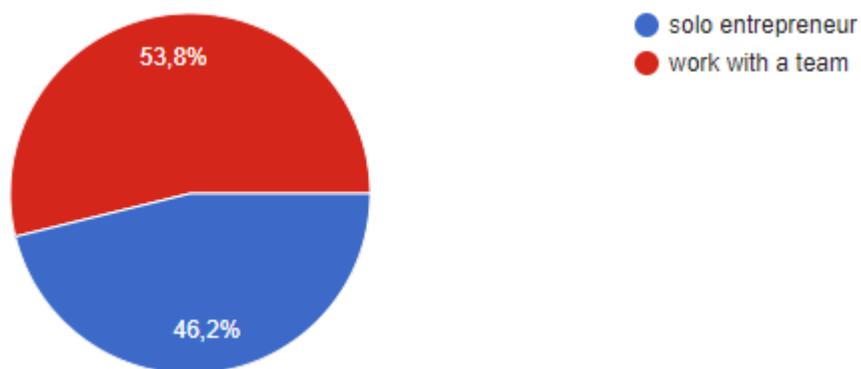
Do you currently have a business (or business idea/project) that you would like to continue (or start) in the future?

19 responses



(IF YES) Are you a sole entrepreneur or do you work with a team?

13 responses





Describe your business idea (product/service):

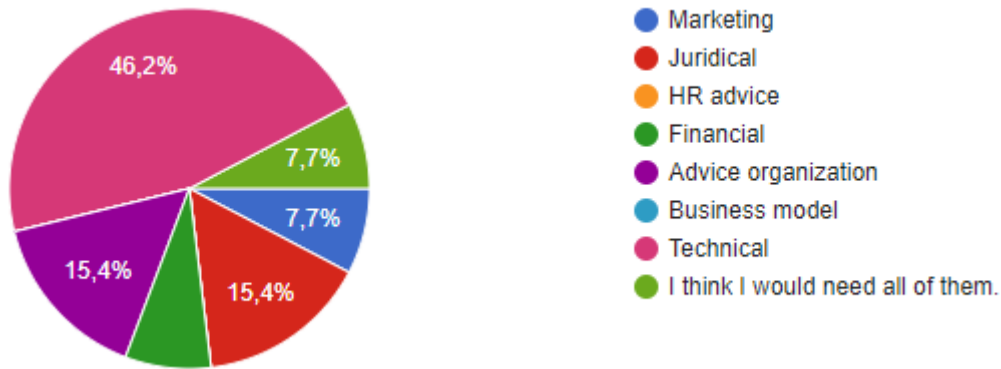
- Create new vision of electro cars
- To open a corporative work where helps to create network system for companies who needs an involvement and improvement of their business
- opening new automobile factory that can hit Uzavtomotors to rubbish.
- One of my many business ideas is to provide online services to citizens, for example, food delivery
- It is perfume e-commerce based on subscription
- IT sphere
- guaranteed placement of all services and product (like alibaba but there has service too) on the mobile device
- It is only an idea for now, so I don't want to expose it for the time being. But it is related to smart devices and software development.
- Medical Platform which is based on Medical Service so Our project won Startup for 2 steps and we are staying acceleration
- It has scientific orientation

What problems do you think will be solved thanks to your product / service:

- Will help save the world
- unavailability of modern and high-quality medicine to everyone low medical literacy of the population lacks of a common and online platform that provides all the medical diagnostic and pharmaceutical services available in the region.
- Improving the protection of people's different online cards.
- monopolism
- Through my service they will change their work system totally, less working days but more profits.
- at first, citizens' time is saved and they get rid of overpayments like a toll
- Architectural, manufacturing processes
- You will not spend time ordering/buying perfume every two weeks (or months or even a year) you will subscribe we will deliver you can change preferences any time.
- I need work experience

Which skills do you need at this moment?

13 responses



How is your product / service innovative? What is its added value?

8 responses

- It will help nature. Because global warming kill our planet
- The i-Tib platform will have a section for medical and all types of consultation with the call-center, a section for information about diagnostic services available in the region, a pharmaceutical section, and an informative section about diseases, healthy lifestyles, and medical advice and services. Special clients will have their own profiles and rates with many features, such as individual control over the patient's health, services of certain medical personnel will be provided.
- I didn't understand the question
- cheap cars
- It is innovative, working with artificial intelligence we can reduce the labour work and increase the productivity of companies who meet the issues.
- this food supplier program is basically a fee for the food products sold
- I personally hate walking in market because you can spend much time and still end up with worse choice.
- the idea is mine and not very perfect, I will put this idea into practice by gaining experience over my life

What are the main strengths about your idea/ of your business?

8 responses

- Make a revolution in world of cars
- Organization of modern and high-quality medicine, accessible to everyone. increasing the level of health and medical literacy of the population. organizing a single platform providing all medical diagnostic and pharmaceutical services available in the region.
- Beneficial for the population
- monopolism



- I will encourage the young people who knows about computer system and amplify the work place where the employees can do their work even online at home, getting the high salary and freedom.
- nowadays people are very busy so there is a great need for such programs
- If we can integrate AI model to our system after couple of choices, we can 80-90% guess which perfume you may like and which you don't
- to adapt to the conditions of our country and, in time, to develop on an international scale

What are the weaker elements and how are you dealing with them?

8 responses

- Time
- Finance and Team members
- I have an idea, but my knowledge is not enough now to execute it.
- finding huge money to investment
- To gather smart employees and involve the customers. In now days through social media or advertising we can attract the customers, persuading to work with us and proving how our work system better than anyone else.
- money
- Our customers are not very loyal. So picking right price is what we need to consider.
- solve that!

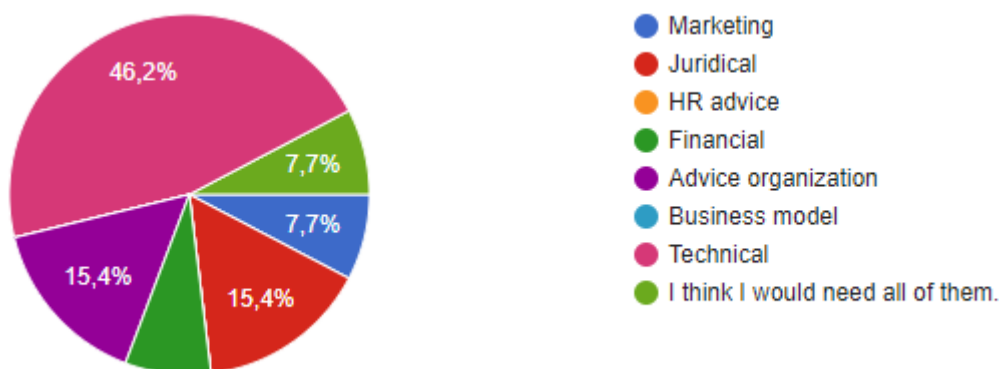
(about your current business/your business idea) What are your needs at this moment?

8 responses

- To study and understand material at the university
- Finance and best team members
- Only knowledge
- team, and government aim
- To graduate the course and get the diploma
- money and "IT" knowledge as I said before
- My friend and I are Junior Developers so we cannot build fully fledged e-commerce platform so we now gaining knowledge in our fields
- Work experience, more knowledge

Which skills do you need at this moment?

13 responses



What teaching subjects are already present in the current curriculum that could best meet your needs?

10 responses

- Web development
- History
- Computer science
- no subject
- Marketing and economics
- math
- Algorithms and programming.
- Manufacturing processes, thermodynamics
- Algorithms and Programming 2 and Object-oriented Programming
- all. There is no specified load weight