

# **Entrepreneurial track at the Tomsk Big University (TBU)**

## **(University Corporation)**

Abstracts for the report

**“Seven levels and**

**Seven steps of the entrepreneurial track”**

### **1. University 3+. The "third role" of the university**

When approaching the solution of the problem of creating a University 3+, it is necessary to understand and divide into components and components in the complex structure of building an entrepreneurial track in universities - “the third role in universities”.

At universities 3.0 and higher, a third component should appear - the upbringing and education of entrepreneurial thinking in students and, upon leaving the university, the graduation of specialists-entrepreneurs and specialists-managers. The task of the "3rd track" is not just the appearance of new teachers at the university, but a complex and multifaceted work to create new models of activity and, at the same time, work to create an infrastructure to support young entrepreneurs. And not only mentoring, but also financial support is a compulsory "practice" for student entrepreneurs - a kind of practical training that is required to acquire skills. Appendix 1 offers and presents the structure of the classification of university types "Classification of University types in the scale of development in the NTI".

The minimum **sufficient infrastructure of the university and the model of activity in the creation** of a track for the education of entrepreneurs at the university are necessary and obligatory in the complex. The presence of one component, no matter how well it is developed, will not be a sufficient condition for an ecosystem of entrepreneurship to form inside the university and then go beyond the boundaries of the university.

### **2. Seven levels of the entrepreneurial track**

Business education for students should become a compulsory discipline. And there should be no difference in the basic format to whom knowledge is given: **humanitarian or technological** specialties. This issue should not be left with questions and disputes - social or technological entrepreneurship - at its basic, fundamental level is based on the same principles of the formation of demand and supply. Further, at higher levels, they develop according to their own tracks, but it is very important that all students, 100%, receive business education in universities.

This is the **first, basic level**. The Faculty of Economics of the University can and should form the basis for this.

It should be noted that at each level of the university's activity in the entrepreneurial track, its own practices and approaches are possible, and division into more levels is possible, but it is important to observe the seamless acceleration of students from the first stage - the stage of involvement to the launch of the startup product on the markets.

**The second level** is very important - the selection of those willing or potentially willing to acquire entrepreneurial knowledge and skills. In this activity niche, it is necessary to show possible cases as much as possible and motivate students to enter the entrepreneurial track, because desire, abilities and opportunities can open up and unfold in those who did not even suspect such opportunities in themselves.

**The third level** is teaching students entrepreneurship, meetings with entrepreneurs and businessmen, immersion in the responsibility of an entrepreneur to employees, the state, contractors and partners. During this period, the student's worldview of an entrepreneur is formed, and it is important to realize that a person has tried on and assumed the whole complex of an entrepreneur as a set of knowledge, responsibility and rules of behavior / interaction in the markets.

**The fourth level** is the level of continuation of the second or third levels, where the ideas and ideas of the business are formed and at the third level, students are already theoretically practiced by internal reflection on how and how their project / product will be positioned on the market. At the fourth level, students / teams with projects are selected - the formation and vision of the projects / future products themselves takes place. Not every idea or hypothesis of a product / project is able to be brought to a formed project - this is normal. It is important at this stage to formulate a project / technology with a description of the future market product / service.

**The fifth level** is project acceleration. Time and stage when a student or a team, together with a mentor from a university / business, "refines" the project and product / service to the theoretical feasibility with the calculation of the feasibility study, time frame and required resources. The competence of mentors - market experts is important here. The higher the support and involvement of mentors, the greater the percentage of future products / services on the market.

**The sixth level** is the selection for venture financing of projects and testing on the real market of created products / services in pilot batches. This is the level when students / teams create their startup as a legal entity and the GP team with an investment committee selects projects for real funding. This is the period when students, in practice and through their experience, acquire skills and abilities to work in the entire spectrum of an entrepreneur - from tax laws, rigid market

relations, dependence on limited resources and “product window of opportunity” to GR.

**The seventh level** is the real work of teams in the market. Gaining real entrepreneurial experience of bringing a product / service to market. Working with investors and investment funds about the next rounds of investment or sale / takeover of a company by large companies.

Unfortunately, usually in universities above the fifth level in the proposed scale of activities in the entrepreneurial track, they do not work, and this leads to the formation of a "glass ceiling" for both students and teachers, staff, and university scientists.

### **3. Technological and social entrepreneurship**

In the entrepreneurial track at the university, it is necessary to maintain an entrepreneurial spirit as the basis of initiative and enterprise. It is to cultivate a spirit of restlessness and healthy adventurism in all areas. It is at the student age that a basic awareness of a person's capabilities as a creator, a creator of something new and unknown, is formed.

**Technological and social entrepreneurship**, although by their nature, are the same at the core: in terms of the novelty of the offer of services / products, in working with the demands of the market and society, in working with resources for the implementation of projects, they differ greatly in at least two things:

- **a social entrepreneur** works with a consumer of a service / product and provides him with a new service / product (or expands the coverage area), but, as a rule, receives income not from the recipient of the service, but from third parties (the state or benefactors);
- **a social entrepreneur** is interested in broad coverage of his service / product and the maximum possible replication of his experience, in contrast to **a technology entrepreneur** who provides and is interested in copy protection (patents, know-how, market capture, priority).

At the university, it is important to support all forms of entrepreneurship and foster the spirit of innovation in all available ways: schools, interiors and exteriors of space design, motivational tools and programs.

### **3. Seven steps to an entrepreneurial university. Infrastructure and Activities.**

**Seven reference step** of an entrepreneurial track Leader at the TBU - **Seven reference component** for creating sustainable and massive student and employee engagement in the entrepreneurial track at Universities. Based on the implementation of these at least seven activities, the university administration will

be able to launch, organize and manage the entrepreneurial track, create innovations at the university, and introduce innovative products on the markets.

1. The first component. It is necessary to create an inter-university space for finding start-up teams and industry leaders. Within the range of "short range" and "fast team assembly".

2. The second component. It is necessary to create an Interuniversity Venture Fund as an instrument of financial leverage for startups, as an educational element for students and employees to gain experience in real business, to get an image of a successful perspective and to actually translate a scientific idea into real income.

3. The third component. It is necessary to create an "Innovation Fund" and tools for motivational (financial and non-financial) impact with its use for employees and teams, experts of indirect participation outside of project teams engaged in innovative products and services at the university.

The "innovation fund" should become the third element, along with two: endowment fund and venture fund, in a coordinated policy and ecosystem supporting scientific, research and implementation activities at the Big University.

4. Fourth component. It is necessary to create mechanisms for participation and tools for attracting industrial partners at all stages of development of innovation in innovation.

5. The fifth component. It is necessary to create a "regional agenda and requests" for universities - a regional policy in the "triple helix of innovation".

6. Sixth component. It is necessary to ensure the presence of the main development institutions and vigorous activity in the region in the entrepreneurial activity of universities / research institutes to ensure continuous support for entrepreneurs at all stages of product development.

7. The seventh component. It is necessary to create and maintain a permanent format for discussing models and products of the near and medium-term future of world markets with the involvement of futurologists and directors of IDPs of large Russian and world corporations to provide a forecast guideline for entrepreneurs with "future demand" for products, technologies and services.

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## Appendix 1:

### "Classification of University types in the scale of development in the NTI"

- **University 1.0** - "German University of Göttingen". Forge of personnel, the creator of high-class specialists and graduate students for science.
- **University 2.0** - "Classic Humboldt University". University of Knowledge Economy. Direct communication with industrial partners. Continuing education.
- **University 3.0** - University of Technological Excellence. The track of entrepreneurship, the generation of projects for embedding a new technological paradigm and advanced technologies into the economy is added to the tracks for the graduation of high-class specialists and the track of creating graduate students in scientific development. Foresight of the demanded specialists of the future. The university is a creator of talents, new markets, new technologies, new services.
- **University 3+** - University of Innovations (teaching the ability to implement and embed), as the University of generating the knowledge-skills-skill-experience value chain.
- **University 3.1.** - University 3.0. as a generator of project commands. Growing up, forming complete project teams as development units (scientist + engineer + economist + entrepreneur) or (author + STO + CFO + CEO).
- **University 3.2.** - University 3.1. as the assemblage point of regional proactive development - QuadroHelix-QuintaHelix. Social and regional dimensions are added to the triple helix (Environment of life and development).
- **University 3.3.** - University 3.2. HUB University. Network University. A network generator of economic and non-economic entities of the technological order.

As special cases:

- **University-Human-Brand.** Already today, one person who has his own experience, his own method or methodology of development in a certain area is able to collect and train tens and hundreds of thousands of listeners through media channels.

- **University at breakfast.** The speed of technological development and social transformation of society will soon reach the level when the sleep time at 8 o'clock for the average person will become critical, so that in the morning it becomes vital for a person to acquire new knowledge, to raise his level of knowledge to a level in order to "understand others". The person will become a regular customer of the "University for Breakfast" so as not to become a marginal.

- **University 4.0** - University Temple. In the period of time from 2025-2030, it is expected that technologies will become common: neurointerfaces with the ability

to "upload" directly into the brain or added memory any knowledge and any amount of necessary knowledge for a person necessary in a certain period of time; neurointerfaces with neuro-performers-stimulators capable of "pumping" into the "human neurosomatic system", in addition to knowledge, also skills and abilities. During this period, it will be extremely relevant to teach a person "humanity", the spiritual and humane foundations of Mankind. The university will become the basis of spiritual education. University - Temple.

## Appendix 2:

### Structure of the University Ecosystem of Project Support

