

# The Use of Modern Technologies in Entrepreneurship and Production

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**Abstract:** Today the door to all opportunities for people who are passionate about becoming entrepreneurs in our country is wide open. A favorable business environment is created and the necessary legal guarantees for business entities are established, only knowledge and effective use of these guarantors is the main factor in the development of business.

This article explores innovation in entrepreneurship and production, as well as important aspects of the use of modern technologies.

**Keywords:** entrepreneurship, entrepreneurial culture, entrepreneurial activity, entrepreneurial environment.

### INTRODUCTION

The development and formation of innovative entrepreneurship of our country provides for the systematic integration of Agriculture with the scientific and technical sphere. This requires accurate and effective network management, development of the scientific and technical sphere and ensuring the sustainable entry of effective innovations into agricultural production.

In the address of the president of the Republic of Uzbekistan to the Supreme Assembly, it was recognized that our country has entered the stage of innovation development in order to achieve a modern rise. "Innovation means the future. We build our great future... it is on the basis of innovative ideas that we must start. It is not for nothing that we move on to the path of innovation development and the digital economy. Because who will win in the current era, when the times are developing rapidly? A new thought, a state relying on a new idea, innovation, wins"[1, 18-20].

# **RESEARCH METHODOLOGY**

It is necessary that Uzbekistan has a well-thought-out, scientifically based strategy for the development of its innovation. The strategy for the development of innovation of our country is developed and implemented in order to carry out a unified state policy in the field of intensive development of human capital, the country, innovation activities on the basis of modern achievements of world science, innovation developments and technologies. Innovative development strategies determine the complex goals and objectives facing the state and society, target indicators for the corresponding period, as well as action plans for their implementation. These projects are developed by an authorized state body on the basis of proposals of state and economic authorities, local state authorities, scientific organizations, business entities, NGOs and experts.

In recent years, Uzbekistan has undergone a number of positive changes in the creation of a favorable businesss environment and the rapid development of entrepreneurship. At the same

time, comprehensive economic reforms are being carried out aimed at strengthening the rights and guarantees of business entities, state support.

The issues of ensuring the economic stability of enterprises engaged in entrepreneurial activity are now becoming more and more relevant. The variability of various factors in the development of entrepreneurship, in turn, can significantly affect the effectiveness of economic entities. In particular, to varying degrees, decisions made, regulatory legal acts and certain aspects of the economic reforms carried out directly depend on the stability of the activities of business entities. Therefore, great attention is paid to the development of business entities all over the world.

The application of digital innovation technologies in entrepreneurial activity and production, especially modern 3D printers, is such a wide and large-scale issue that even to illuminate it a little, much more pages would be needed than in this book. That is why we will briefly dwell in this section only on the scope of application of one modern innovation technology -3D Innovation Technologies, which is currently developing rapidly. Often when it comes to this, aksari people begin to remember 3D-glasses. But at the moment, the concepts of 3D scanner, 3D audio, 3D video, 3dshuter, 3D sound, 3D image or image and 3D printer have also entered our lives with intensity. The term 3D is English for 3D - Three dimencional (three-dimensional).

The principle of operation of 3D printers means that they create (make) a copy of any object on a printer in a floor-to-floor way using some material. That is, as a result of the operation of a 3D printer, a physical copy of any object will appear, and it will be possible to capture it or use it for some purpose. The idea of a three - dimensional pechat was told in the 80s of the last century, and the first results in this direction were obtained in the late 90s. The initial 3D printer was developed at the Massachusetts Institute of technology of the United States, which now also includes a large number of its types and home-based ihcham types of models. Prices also go from \$ 600 to \$ 20 million, depending on what type they belong to. The possibilities of ordering them from the internet are also a trap. The principle of etching on a 3D printer is also very simple: the raw material (e.g. ABS-plastic or plaster) required for the object to be created passes through the etching head (cathridge) and is heated to the desired level and placed on the platform where the object is made into computer control in accordance with the 3D-information model of the object.

The object's 3D-information model, on the other hand, can be derived from a global Internet network or easily generated by means of digital 3D-scanners. So, for this work to happen, any pechatable object will be divided into several floors by a 3D printer using its informational model and software (for example, the 3d Max program). After the calculation, it will be possible to find out what the weight of the object will be on a 3D printer monitor, how long the pechat will last and what the object will look like, and take a 3D picture of it. After the 3D printer starts up, after a while, it will be possible to get exactly the physical copy of the object on its platform. The most necessary fist for us is to obtain an informational model of an object that must be made on a printer, or to structure it using the necessary software. All the rest of the work is done autonomously by the 3D printer itself. Informational models needed for 3D-pechat can be found on the internet and downloaded or created using special 3D programs.

#### **RESULTS AND DISCUSSION**

The reasons why digital 3D printers become increasingly popular are as follows:

- ✓ abundance of raw material;
- ✓ relative ease of use of printers;
- $\checkmark$  reliability and strength of the objects being created;
- $\checkmark$  compliance of the work performed with environmental requirements;
- $\checkmark$  the fact that the cost of the process of creating a physical model is not so expensive.

Just like that, the cost of objects made in 3D printers will be several times cheaper than in other methods. Thanks to this, 3D printers are increasingly widely used in the following directions:

- $\checkmark$  in Mechanical Engineering and in the creation of prototypes of objects;
- $\checkmark$  architecture-in construction and design;
- ✓ when modeling and designing machines and aggregates of different types;
- $\checkmark$  when creating and testing various organs in medicine and Dentistry;
- $\checkmark$  when generating copies of equipment and objects of various types in engineering work;
- $\checkmark$  when creating various interiors and spare parts necessary for construction and for it;
- $\checkmark$  creating characters and filming them in the production of movies and cartoons;
- ✓ in the development and testing of various spare parts in the automotive, aircraft and Space Industries;
- ✓ in the manufacture of jewelry of different types and looks;
- $\checkmark$  in health and pharmaceutical;
- $\checkmark$  in the production of various toys for children, etc.

That is why 3D printer technologies have evolved year after year, and the field of application is becoming more and more extensive. The scientific staff is also conducting scientific research on the creation of various human organs on a 3D printer. The NASA Space Agency, on the other hand, was conducting scientific research on the creation of a 3D printer of various types of food needed by astronauts. A number of automotive firms and aircraft companies are making a number of parts of the cars and aircraft they produce in 3D printers as early as now, and have a great economic effect. A huge number of parts of the Boing aircraft are created on a 3D printer. In the Netherlands, however, there are preparations to build houses based on 3D technology.

From the above, it can be noted that digital 3D technology makes it possible to increase the efficiency of any production process several times, and allows you to produce a variety of industrial products at affordable prices on an individual order. Just like that, it can be said that the wide application of such technologies to production in the conditions of Uzbekistan will have a great economic effect. An example of the use of 3D printers in the food industry is the Solid Freeform Fabrication technology, developed by scientists from Cornell University in the United States. In this case, hydrophilic polymers used in the food industry were used as raw materials, through which it became possible to form artificial chocolate, biscuits, apples, cheese, marshmallows, bread and other products using a 3D printer. Currently, there are also 3D printers that can make different models from plastic, plaster, wax, photopolymer and metal. As an example, we will give an image of a 3D printer below:

# CONCLUSION

3D scanners of different types and models can be used to quickly generate 3D models of objects that are needed for the operation of 3D printers. From the above, it can be noted that the importance of 3D technologies in the development of digital innovation of the Republic of Uzbekistan is very significant, and this action can bring a huge economic benefit. This necessitates the need to introduce subjects dedicated to 3D-technologies in professional colleges, technical universities and universities and accelerate the training of personnel in this direction.

The implementation of entrepreneurial activity is based on a clear business plan, and on its basis the initiative of activity and deeply thought-out innovation can fully cover the production of the underlying entrepreneurial idea, as well as one or more individual parts of it.

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