

AN ANALYSIS SUGGESTION FOR TECHNOLOGICAL COLLABORATION OF BALKAN COUNTRIES: TRAKYA TECHNOPARK

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Abstract

Technology is an important concept that deals with human and developed by the human needs. Technology and technological innovation affects society and its surroundings by different ways. Technoparks or Technology Development Zones in the other words, are born by the technological innovation approach and advanced university – industry cooperation model where entrepreneurs and companies come together to offer higher value added products and services under competitive conditions by benefiting the knowledge and the research power of the universities. University & industry technological collaboration gets importance with global world in the aspect of using the restricted resources wisely and transferring the knowledge required for economic development from universities to the companies. Trakya Technopark was founded in Edirne - Turkey for Research and Development (R&D) studies. In this study, an analysis suggestion for technological collaboration of Balkan Countries was investigated.

Keywords: Technopark, Technology Development Zone, Research and Development, Technological Collaboration

INTRODUCTION

Technology is an important concept that deals with human and developed by the human needs. Technology and technological innovation affects society and its surroundings by different ways.

Technology is the usage and knowledge of tools, techniques, crafts, systems or methods of organization. [1] Technology has affected society and its surroundings in a number of ways. In many societies, technology has helped to develop more advanced economies.

Technoparks or Technology Development Zones in the other words, are born by the technological innovation approach and advanced university – industry cooperation model where entrepreneurs and companies come together to offer higher value added products and services under competitive conditions by benefiting the knowledge and the research power of the universities.

Technoparks' aims are to provide support required for the development of high-technology companies. [2]

University & industry technological collaboration gets importance with global world in the aspect of using the restricted resources wisely and transferring the knowledge required for economic development from universities to the companies.

TECHNOPARKS CONCEPT

Technopark is a Technology Development Zone where academic, industrial and social structures are gathered. High-technology companies develop technology and software. A Technopark has to be established in or near a university, a high technology institute or a Research and Development (R&D) center / institute. [3]

A Technopark is an organization managed by specialized professionals, whose main aim is to increase the wealth of its community by promoting the culture of innovation and the competitiveness of its associated businesses and knowledge-based institutions.

Technoparks stimulate and manage the flow of knowledge and technology amongst universities, R&D institutions and companies.

Illustration of Technoparks Concept was given in Figure 1.

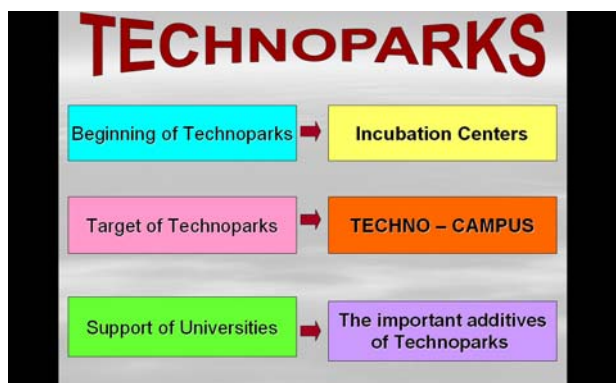


Figure 1. *Technoparks Concept*

TARGETS OF TECHNOPARKS

Targets of Technoparks are to;

- provide the collaboration between University and Industry,
- support entrepreneurship and innovation,
- encourage investment in the technology-dense areas,
- make the information produced at the University commercially available to trade,
- assist and train potential entrepreneurs,
- stimulate the foundation of high-technology organizations,
- help the high-technology companies to enlarge.

TECHNOPARKS IN TURKEY

Development of Technoparks in Turkey was given in turn below.

- The first study about Technoparks in Turkey was started in 1987 with METU (Middle East Technical University – Ankara).
- Technoparks (Technology Development Zones) Law (No: 4691) was enacted in 2001.
- Application Regulation Technology Development Zones Law came into force in 2002.
- 26 operational 12 under development, total 38 Technoparks in Turkey today.

Present position and number of Technoparks in Turkey were given in Figure 2 and Figure 3.



Figure 2. *Present Position of Technoparks in Turkey [4]*

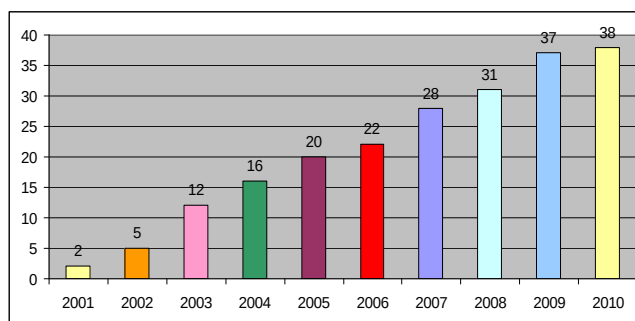


Figure 3. *Number of Technoparks in Turkey [5]*

Number of Projects and Staff (Personnel) at Technoparks in Turkey were given in Figure 4 and Figure 5.

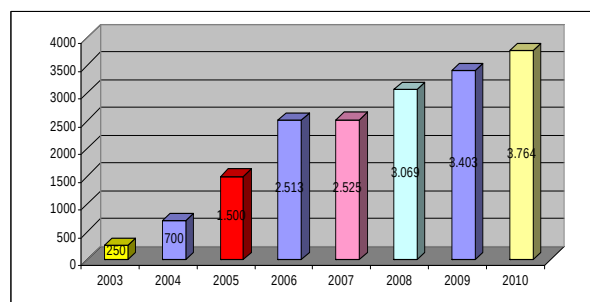


Figure 4. *Number of R&D projects in Technoparks – Turkey [5]*

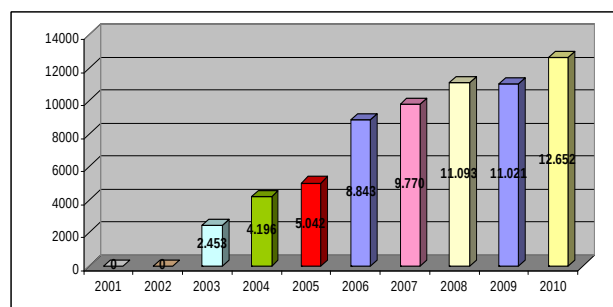


Figure 5. *Number of Staff (Personnel) in Technoparks – Turkey [5]*

TECHNOLOGY DEVELOPMENT ZONES LAW

Technology Development Zones (Technoparks) Law No.4691/Turkey defines Technology Development Zones as: Sites integrating academic, economic, and social structures at or near the campus of certain universities; advanced technology institutes; an R&D centers or institutes; or a Technopark involved in these same areas of work.

Technology Development Zones (Technoparks) Law came into force on July 6, 2001 to regulate the support of R&D activities as sources of innovations in production. Major tax advantages were provided to companies operating in Technoparks.

- The objectives of Technology Development Zones according to this law are to:

- Produce technological know-how,
- Develop innovations in products and production methods,
- Enhance product quality or standards,
- Increase efficiency,
- Decrease production costs,
- Commercialize technological know-how,
- Support technology-intensive production and entrepreneurship,
- Ensure the adaptation of small and medium scale enterprises to new and advanced technologies,
- Create investment opportunities in technology intensive areas by taking on board the ideas of the Science and Technology Supreme Board,
- Create employment for people with research qualifications,
- Assist in technology transfer,

- The supports & incentives (regarding firms)

- Income tax exemptions for R&D staff
- Corporate tax exemptions for companies
- VAT exemption
- Incentives for the academic personnel working for companies with in technology park
- Tax exemptions for management companies

- Foreign investors and companies are eligible for all incentives

- The supports & incentives (regarding academicians)

- Set-up company
- Become shareholder
- Become Board Member
- Revolving Fund Exemptions

TRAKYA TECHNOPARK

Trakya University Edirne Technology Development Zone (Trakya Technopark) was founded in 2007 in order to utilize the R&D studies carried out by the university, industry and other institutions to develop new technologies and transfer them into the industrial production that will contribute to the competitive position of Edirne/Turkey in both national and international levels.

Trakya Technopark's mission is to support innovative ideas and technology development in national and international scale to compete in global area and its vision is to be a focus in development by enhancing regional R&D practices.

Trakya Technopark Management Inc. was established to operate and manage the technology based companies in Trakya Technopark in 2008. Partners of Trakya Technopark Management Inc. are Trakya University, Edirne Organized Industrial Zone, Edirne Chamber of Commerce & Industry, Edirne Chamber of Commodity Exchange and METUTECH – METU Technopark.

ACTIVITIES IN TRAKYA TECHNOPARK

Trakya Technopark has 23 tenants within its body with projects about development of new products in electronics, ICT, medical, agriculture, feed & oil, automotive, energy, environmental, financial and design sectors.

It is expected to be about 50 tenants in different sectors at the beginning of the year 2011.

Sectoral Distribution and Ratio of tenants in Trakya Technopark were given in Figure 6 and Figure 7.

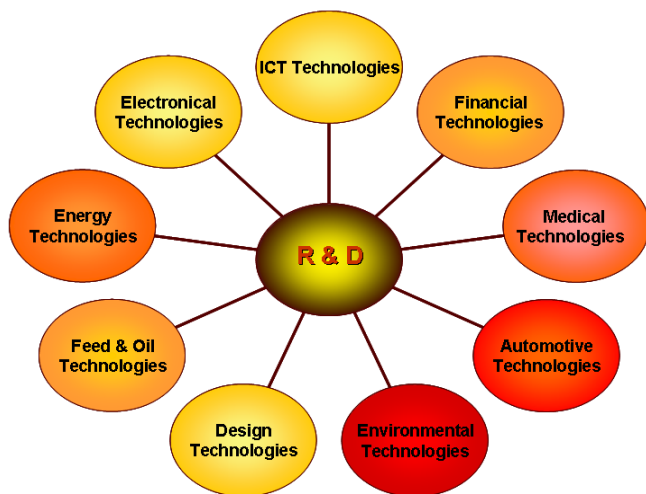


Figure 6. Sectoral Distribution of tenants in Trakya Technopark

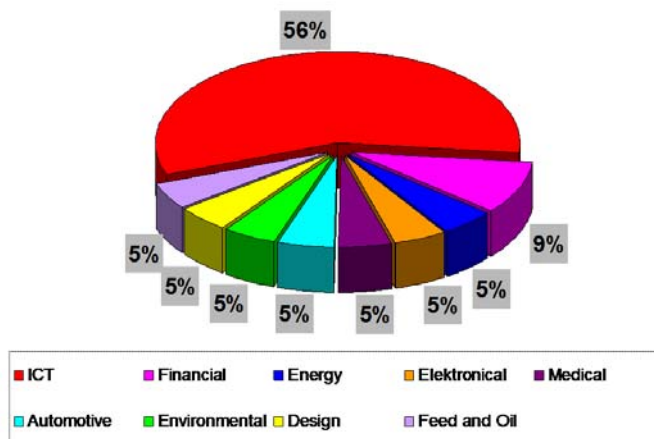


Figure 7. Sectoral Ratio of tenants in Trakya Technopark

TECHNOPARKS AND SCIENCE PARKS IN BALKAN COUNTRIES

In Balkan Countries, the number of technoparks and technology Parks is less than the other regions of Europe and all over the world.

They became dense in Turkey, Romania, Croatia, and Greece. They have thousands of technology-based companies in their constitution.

The other countries in Balkan Region have less than mentioned above and also some of

the countries do not have any technology or science parks in their structure and only have incubators.

CONCLUSION

As it is considered in introduction section, technology is an important concept that deals with human and developed by the human needs then, technoparks or science parks are getting importance in developing world.

To improve and benefit scientific, academic, innovation, technology transfer and international relations between Balkan Countries, new collaborations are getting importance with the described information above.

Trakya Technopark can be an opportunity with its position in Balkans. Trakya Technopark can enhance international collaborations, support to improve entrepreneurship and innovation.

As mentioned above, Trakya Technopark can also create employment for qualified human resources and prepare a suitable environment for technology transfer and foreign direct investment with its structure in Balkan Countries.

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