Summary report
Regional Workshop
Developing Key Performance Indicators for STP’s in the MENA Region

25-26 May, 2015: El Ghazala Technopark, Tunis, Tunisia

ORGANISED BY:
EUROPEAN INVESTMENT BANK (EIB) THROUGH MARSEILLE CENTER FOR MEDITERRANEAN INTEGRATION (CMI)
ISLAMIC EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANISATION (ISESCO)
U.N. ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA- TECHNOLOGY CENTER (ETC)
El GHAZALA TECHNOPARK
In a joint effort to promote and support Science and Technology Parks (STPs) in the MENA region, the European Investment Bank (EIB), through the Centre for Mediterranean Integration (CMI), the UN ESCWA Technology centre and ISESCO organized in cooperation with El-Gazala Technopark a workshop on Key Performance Indicators (KPIs) for Science and Technology Parks (STPs) on the 25th and 26th of May 2015, in Tunis, Tunisia.

The workshop brought together STP practitioners from eleven countries. The main goal of the workshop was to establish key performance indicators that can help STPs managers and stakeholders in evaluating and assessing their organizations’ impact from a financial, economic and socio-economic perspective. The event aimed at developing a common frame of reference that can be used among STPs in the region, whilst acknowledging that criteria to gauge STPs’ success differ from one park to the other due to specificities like the selected business model and operations (i.e. incubator, business park, technology transfer, conference centres etc.), maturity levels, stakeholder/governance structure and involvement, and the economic mission. The workshop aimed to infuse “best practice” through the contribution of international experts, like the International Association of Science Parks and Areas of Innovation (IASP), and presenting two case-studies of KPIs used by the ODTÜ Teknokent Science Park in Turkey and El Ghazala Techno Park in Tunisia.

The seminar consisted of 2 days. The morning session on the first day included expert statements on the importance of KPIs for the STPs and two case studies. In the afternoon session, participants were divided into five groups to to define possible and preferred KPIs using the business canvas model as a guideline.

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1 Bahrain, Egypt, Jordan, Lebanon, Libya, Tunisia, Morocco, Oman, Palestine, Saudi Arabia and Syria)
In the morning session of the second day, these five groups reported the outcome of their discussions, followed by panel session where four managers highlighted the most important KPIs for their institutions and gave their recommendations for further follow-up. In the afternoon, the participants made a tour in El-Gazala Techno Park were they were introduced to its activities and facilities (start-up facilities, SME’s and laboratories) and had a chance to talk with the Park’s residents about the facilities and procedures in the Park and how the Park helps start up and SMEs in establishing and supporting their business or contributing to scientific research and innovation.

**The importance of KPIs in assessing the performance of STPs:**

Almost each countries in the MENA region has, at some stage, at least contemplated initiatives to create STPs, underscoring the awareness about the prevalent role such parks may play in regional and even national knowledge-based social-economic development. Due to this important economic role and the levels of investment involved, there is a need to evaluate, assess and even “benchmark” the performance and progress of the STPs in the region. Performance measurement by means of a set of relevant and measurable KPIs should provide a comprehensive picture of how the park’s different business activities and operations for the park’s residents are performing. It should inform local decision makers how science parks contribute to the creation and dissemination of knowledge to the local business community, the creation of employment and generation of value added. STPs generate both direct economic impact which is measured as the value of their activities for its stakeholders and residents, as well as indirect economic impact, related to the non-monetary results of their activities. KPIs help to define and evaluate these results and show how they serve a STP’s long term goals.

Thus, relative performance and impact evaluation assessments concern mainly the added value generated through the science parks’ assets (facilities) and resources (operations and services) to incubators and new technology-based firms (NTBFs), resident academic and research institutes, the establishment of university-industry links, science parks’ growth and their regional dimension. There are different models and classifications for developing KPIs for STPs, reflecting the different activities including the participation in economic development, the university and technology development and the income /profit generation, as well as the management of the parks’ physical assets. In the workshop the business canvas model was used for this purpose.
IASP point of view:

“Science parks are valuable tools for the development of knowledge intensive economics” Sten Gunnar Johansson, Senior Advisor to IASP

Dr. Sten Gunnar Johansson added that in order to guarantee the maximum utility and success of this tool, the following points should be monitored and evaluated:

- Business development support - commercialization of innovation and stimulating growth in new and existing Companies,
- Attractiveness- communication to attract talent, ideas, capital, R&D and companies
- Networking - be a facilitator and provide social hubs for academia and Industry,
- Open innovation - adding value to companies by offering a platform for innovation and co-creation,
- Smart specialization - enhancing and facilitating smart specialization processes in key sectors,
- Internationalization - attracting foreign companies as well as supporting the local Companies.

Dr. Johansson also introduced the IASP Strategigram©, a software-based tool that enables STP managers to analyse their park’s strategy, assess its strategic position and evolution and compare it to other parks' strategic profiles. The Strategigram© is available for all IASP members and is also being used with success as a tool to define the most suitable strategic model in the planning of new STPs. The Strategigram characterises STP along seven dimensions: 1) Location and environment; 2) Position of knowledge and technology stream; 3) type of firms targeted; 4) degree of specialisation, 5) the degree of internationalization, 6) type of networking, and 7) the governance model. Finally, Dr. Gunnar referred to the importance of looking for the right balance between academy and industry, which could be achieved through investing in advanced labs, sharpen and refocus incubation targets and pushing for more entrepreneurial training.
Case studies:

During the workshop, two science and technology parks presented their experience and procedures to define convenient performance indicators for their STPs. The first one was an international model for a Turkish science park, ODTU Teknokent, while the second one was El Ghazala Techno Park.

ODTU Teknokent:

ODTU Teknokent originally started as a university-industry collaboration. Today it ranks 1st out of the 52 registered Science and Technology Parks in the Turkish Technology Development Zones Index, and its university — the Middle East Technical University (METU), ranks 1st in the Index of Entrepreneurial and Innovative Universities.

“The Turkish case is based on 20 years history of good business, industries and very strong universities where we worked on narrowing the gap between industry and academia to create smart Jobs” Ufuk Batum - Vice preside of ODTU Teknokent

Diagram; Stakeholder map of Science and Technology Park.
ODTU Teknokent Park successfully developed two sets of Performance Evaluation Criteria to measure and evaluate its performance and achievements. The first set concerns the development of the park’s technology zone and it consists of 6 dimensions:

1. Government Incentives and Expenditures of the Management Company
2. R&D Competence
3. Exports and Company Composition
4. Intellectual Property Rights
5. Incubation and services
6. Collaboration and Interaction

The second set of measures concerns the Entrepreneurial and Innovative University Index, which consists of 5 dimensions:

1. Scientific and Technological Research Competence
2. Intellectual Property Portfolio Dimension
3. Collaboration and Interaction
4. Entrepreneurship and Innovation Culture
5. Economic Contribution and Commercialisation

El Ghazala Techno Park:

El Ghazala Techno Park was established in 1997, as an element of the national development strategy and a concern for the promotion of scientific research, innovation and value-added production, through a network of 10 technology centers each specializing in a different sector activity. The technopark offers an integrated environment for the development of small and medium enterprises (SMEs) and for multinational and major groups in the ICT sectors. Its main vocation is to welcome and support the development of high technologies and activities to promote research and development and technology transfer. More than 250 companies including 10 subsidiaries of global corporations (Microsoft, ST Microelectronics, Ericsson, Alcatel Lucent ...) as well as Tunisian start-ups are hosted in the spaces of Technopark.

With the aim to specify a method of measurement of the Technopark performances, the management defined a list of indicators and divided them into three categories:

- Composite indicators calculated on the basis of metrics collected in the Technopark;
- Qualitative indicators from studies surveys and questionnaires;
- Indicators for metrics or qualitative data.
These indicators measure the park’s performance in terms of **impact on the parks ecosystem**, and the park’s impact on the **financial performance** and the **management of hosted organizations**, with several sub categories for each of the components.

**Which KPI to select?:**

Five groups were formed and asked to define what are the important indicators for each sector to evaluate science and technology parks and to answer the question what a successful science park means to different stakeholders? For this purpose, the groups had to use the business canvas model, a tool which some them actually use for their incubation and management development programmes. Each group involved members from different nationalities and different sectors such as universities, tenant company and parks ‘managers and CEOs to guarantee full perspective and exchange.

The Business Model Canvas is a strategic management and entrepreneurial tool. It help its users to describe, design, challenge, invent, and pivot their business model. It is build-up of nine blocks: **customer segments, customer relationships, key partners, key resources, key activities, channels, revenue stream, cost structure, and value proposition.** Example of the KPIs chosen by two groups of the five can be accessed through the below links:
Main characteristics of selected Key performance indicators

Through the presentation and following discussions, emphasis was placed on key characteristics that need to be taken into consideration when designing a performance measurement matrix with relevant performance indicators:

- It should provide a balanced and multi-dimensional overview of the STP, the matrix should cover the performance in a multitude of park operations and functions;
- It should however remain comprehensive. In order to effectively assess the performance of the STP, a maximum number of data must be gathered and compared with other STP’s and at different time intervals;
- The matrix should be conceptually clear in order to provide its users a concise picture of the company’s performance;
- The performance measurement system is integrated within the company’s management processes;
- It should provide information for monitoring past performance as well as planning future performance;
- The data in the matrix designed should be both financial and non-financial, internal and external, leading and lagging, and contain both short and long-term measures in order to measure the performance and impact of science parks.
Conclusion:

By the end of the workshop the participants recommended that despite differences between the countries policies and science and technology parks’ strategies, it is important to achieve a minimum degree of consensus and homogeneity in the methodology and parameters that can be used in the evaluation of Science and Technology Parks, which has not yet been reached. By introducing the same measures, a degree of consistency within science parks could be achieved.
**Suggested references:**


J. Dabrowska; Measuring the success of science parks: performance monitoring and evaluation; *XXVIII IASP World Conference on Science and Technology Parks*, 2011; download from: [http://www.pmf.sc.gov.br/arquivos/](http://www.pmf.sc.gov.br/arquivos/)