THE ROLE OF GREATER AMMAN MUNICIPALITY IN THE MAKING OF A KNOWLEDGE CITY

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Abstract

    This study investigates the role Greater Amman Municipality "GAM" in the making of a successful knowledge city. Researcher determined the role through activities include: productivity and competiveness, business and enterprises, knowledge and technology, skills and learning, key centers, participants and leadership. To address these activities, a semi-structured interviews and conversations were concerned about raising the crucial issues to have knowledge city in Amman. The results concluded that all above activities applied on GAM and facilitate transform Amman to a knowledge city. It also illustrates how the GAM play a key role in developing Amman as a globally recognized, entrepreneurial and competitive knowledge city.

Keywords: Knowledge, Knowledge city, Greater Amman Municipality

Introduction

    Knowledge cities"KC" are seen as fundamental to the economic growth and development of the 21st century cities. The term knowledge cities' is a new concept that has risen in the recent ten years from Europe and the US as an all-new strategy of urban development. Knowledge city "KC" is one of the motives for knowledge creation and economic growth and development (Dvir, 2006). Ergazaki et al. (2008) defined KC as the city that based on development through the encouraging the continuous creation, sharing, evaluation, renewal, and update of knowledge. Dvir (2006) defined KC as "a city that purposefully designed to encourage the nurturing of knowledge". According to Edvison (2003) KC is a city designed to support the distribution of knowledge. Knowledge city is used as alternative idiom with ideopolis (Garcia, 2004) or techno polis (Dvir and Pasher, 2004). Knowledge city is the interaction between citizens, local entities and other cities citizens.

The success to reach KC will depend on running development on different attitudes of cities life. Yigticanlar (2012d) mentioned different development fields toward KC, these fields include economic development, socio-cultural development, institutional development, enviro-urban development, effective use of social and human capital and management. A KC is a city that is purposefully designed to nurture knowledge (Edvinsson, 1999; Dvir and Pasher, 2006). KC is a city in which its citizenship undertakes a deliberate, systematic attempt to identify and develop its capital system, with a balanced and sustainable approach (Carrillo, 2004). Chatzkel (2004) defined kowledge city as a region that bases its ability to create wealth on its capacity to generate and leverage its knowledge capabilities through knowledge-based extended networks formed by enterprises and people. Knowledge city is a city that uses globally available knowledge from past and present to create a high quality-of-life-environment for its present and future citizens (Simpon, 2002).

This study represents a case study for the largest municipality in Jordan that will measure the role of this municipality in economic development according to the point of view of citizens and investors in different sectors. This study will figure out the real role practiced by GAM role in economic development and how this role can be improved to improve citizens' life quality. The study argued GAM experience as a knowledge city and inspects Amman initiatives on science, technology, innovation, and policies for economic and social development. This study discussed the attributes of a knowledge city according to Yigitcanlar (2012d) and applied to Amman city, then this study identifies key success factors and provides some insights to policy makers of the MENA region cities in designing KC, our results are presented, followed by a discussion and challenges.

Role of Local Municipalizes in Economic Development

Local economic development is a process during which local government improves citizens' quality of life, which creates a new community and stimulates economic progress (Simpon, 2002). Local government attains this goal by:
- Supporting the private sector, as it has a fundamental role in stimulating economic progress.
- Using local resources effectively.
- Promoting the creation of new jobs.
- Managing public funds effectively.

Local economic development is a predictable process, planned and implemented together by the private sector, public sector, and local government from compatible actions and programs (Sarimin and Yigitcanlar, 2013). Local economic development is a process that influences prosperity

of the local government and the community. Therefore, the local government's role is to enable the use existing resources in a variety of fields to foster economic development. Edvinsson (1999) described several factors that increase the probability of a successful economic development strategy:

- Knowledge of strengths and weaknesses in the local economy and its hidden assets.
- Leadership that unites human resources, knowledge and funds of the local government, community and the private sector in order to meet common goals. Local government is not capable to succeed in economic development on its own. Therefore, cooperation among three sectors is required.

Delivery of assistance and/or services in those areas where individual industries and institutions do not meet local government's needs. Public sector efforts should not substitute the private sector in the area where the private sector wants and is capable of undertaking the necessary actions and investments (Ergazakis, 2004). In Jordan, the responsibilities of local municipalities in economic development are very wide. The governmental support for local areas in economic development is restricted. This means that the local municipality should work hard to improve the economic conditions of the area and improve the economic conditions of citizens. The role of local municipality includes planning and management of policies for economic development. Some municipalities in Jordan realize that their role is managerial and their efforts in economic development are restricted because of lack of experience or the lack of financial position that supports such efforts.

Factors Affecting Transforming Amman to KC

The role of local governorates in economic development is very wide and its responsibility is huge in leading the different economic sectors to improve the lives of citizens. Amman activities for economic development are very wide as a responsibility of local governorates. Amman activities include infrastructure, tourism, agriculture, productive projects … etc. Amman infrastructure includes the development of assets needed to supply certain desired services. The physical infrastructure meets a variety of economic, social and environmental needs of people. The availability of infrastructure will increase the efficiency of production and minimize the problems raised through the economic development process. The sufficiency of physical assets of infrastructure depends on available sources of income that allow enough expenses to integrate the physical infrastructure or sustaining it for the future.

The contribution of local governorates in economic development includes both the decreasing of unemployment and decreasing poverty

(Thwala, 2006). Amman care for unemployment and poverty because they reflect the prosperity and the quality of life of citizens. Successful governorates and municipalities succeed in facing these two crucial social problems through long policies. The improvement of local development of some area will help in minimizing unemployment and providing new vacancies that will improve the income and minimize poverty. GAM council and government were commissioned to produce a new long-term knowledge city strategy and action plan for the Amman city sub-region to ensure that it can deliver a step change in knowledge city performance to dovetail with the City's new spatial planning vision. The overarching aim of the strategy is to achieve a significantly improved competitive position for the city of Amman and to transform it into a competitive, diversified, balanced and well-connected economy. A city where strong leadership drives knowledge city success whilst ensuring development remains inclusive and sustainable.

The main characteristics of Amman knowledge city can be summarized in the following:

- It has means to make knowledge accessible to citizens.
- It support network of public libraries.
- It provides access to new technologies for citizens.
- It has many cultural facilities that are available to citizens.
- It has a provision of spaces and resources that enable its citizens with conditions that accelerate knowledge creation, knowledge exchange and innovation.

Materials and Methods
Concept of Knowledge City

The knowledge city concept can be seen as a continuous development with the field of urban development and cluster development as starting points. In contrast to cluster development initiatives not only the triple helix (government, university, industry) but also the people/citizens are involved. This view is also expressed in the shift from 3P-Model (Public-Private-Partnership) to 4P-Model (Public Private-People-Partnership). Yigitcanlar (2007a) see the concept of the KC" a city purposefully designed to encourage the nurturing of knowledge". Yigitcanlar et al., (2008b) described the attributes KC:

- A city that has instruments to make knowledge accessible to citizens.
- A network of public libraries that is compatible with the European standards.
- Access to the new communication technologies for all citizens.
- All cultural facilities and services with a central educational strategy.

- A city that has a newspaper- and book-reading level that is similar to the average European level.
- A city that has a network of schools connected with artistic instruction throughout its territory.
- A city that is respectful of the diversity of cultural practices of its citizens.
- A city that places the streets at the service of culture.
- A city that simplifies, through the provision of spaces and resources, the cultural activity of the community collectivities and associations.
- A city with civic centers that are open to diversity and foster face-to-face relations.
- A city that makes available to citizens from other territories all the tools required for them to express themselves.

Increasing the volume of knowledge intensive economic activity is essential if developed countries are to remain prosperous. This reflects a transition from an economy based on land, labor and capital to an economy where the source of comparative advantage is likely to be found in the production of information and knowledge (Metaxiotis, et al., 2005). Knowledge intensity increases productivity growth and prosperity through innovation. It is important to be clear too that the knowledge economy is not just about science and technology: it is about highly skilled individuals adding value to all industries and about knowledge intensive industries, which are more likely to employ highly skilled individuals.

According to (Yigticanlar, et al., 2008c) KC drives economic success through:

- High levels of economic success;
- High levels of knowledge intensity based on The Work Foundation's definition of knowledge intensity;
- A diverse industry base including distinctive specialist niches;
- A university that has a mutually beneficial relationship with the city, leading to building industries based on research strengths, transferring knowledge to businesses and the retention of graduates;
- Strong communications infrastructure and good transport links within the city and to other cities, including air, rail and road;
- Distinctive long-term 'knowledge city' offering to investors and individuals alike, created by public and private sector leaders;

Strategies to ensure that deprived communities also benefit from the economic success associated with knowledge. Cities matter to businesses in the knowledge economy: they are the places that offer organizations access to highly skilled workers, prosperous consumers and the opportunity to innovate and exchange ideas. The Ideopolis is the vision of a sustainable

knowledge intensive city that drives growth in the wider city-region. It gives cities a framework for developing knowledge-intensive industries that will be economically successful and improve quality of life. Cities benefit enormously from using the Ideopolis framework to increase their knowledge intensity. According to Cannon et al., (2004) "Ideopolises are characterized by:

- High levels of economic success
- High levels of knowledge intensity based on the work foundation's definition of knowledge intensity
- A diverse industry base including distinctive specialist niches
- One or more universities that have a mutually beneficial relationship with the city, leading to industries built on research strengths, transfer of knowledge to businesses and the retention of graduates
- Strong communications infrastructure and good transport links within the city and to other cities, including by air, rail and road
- A distinctive long-term 'knowledge city' offer to investors and individuals alike, created by public and private sector leaders
- Strategies to ensure that all communities benefit from the economic success associated with knowledge".

Cities with more knowledge intensive industries and occupations are more economically successful and can improve quality of life for many local people.

We asked respondents to characterize an ideal KC, The interviews were selectively conducted with authorized personnel who are related to GAM policy, a limited number of interviews were also conducted to capture the practitioner perspective and interviewees were chosen among whom have sufficient knowledge in KC and involved in the development of GAM. The personnel interviewed were chosen from executive departments to cover wider range of responsibilities; Information Technology Centre, Department of Facilities and Public Parks, Environment Directorate, Directorate of Culture, Directorate of Social Services, Directorate of Engineering, and Directorate of Roads.

Sampling Approach

This qualitative preliminary study investigates not only the procedures of understanding of GAM leaders vision but also intends to understand the most critical success factors effect on Transform GAM to KC. It was a cognitive evaluation to check the availability of the research that will lead to the next comprehensive Amman city. The methods of investigation conducted were adjusted from UK's three main procedures (Warren et al., 2008);

- The analysis was referred to relevant legislation and policy – OECD Guidelines, PHIPA no.5 and HIPC no.6.
- The interviews were selectively conducted with authorized personnel who are related to policy practice and data protection in the government and have hands on experience in matters related to GAM privacy and policy.
- A limited number of interviews were also conducted to capture the practitioner perspective and interviewees were chosen among whom have sufficient knowledge in KC concept and involved in the development of Amman city.

Seven semi-structure interviews were conducted in August 2013, where each session took 20 to 30 minutes to evaluate GAM role transformation Amman city to KC. This survey focuses on the level of the transformation in technological, organizational and managerial aspects for making the transition to KC. It does this by focusing on what currently exists, and what does not exist, which would contribute to making the transition to KC. The researcher asks respondents to comment of existing KC environment which are relevant to the adoption of KC. Also, some of information were gathering by telephone, due to they don't have enough time to achieve the interview face to face. After take extensive notes during the interviews and conversations, the researcher determined seven critical success factors that will be essential to bring about knowledge city transformation and success, these are:

- Productivity & Competitiveness
- Business & Enterprise
- Knowledge & Technology
- Skills & Learning
- Key centers
- Participation
- Leadership

These factors are determinants of knowledge city performance in all cities and will become Amman indicators of success over the next decade. Researcher found GAM is a livable organized city that has sustainable knowledge based on knowledge economy so as to be a knowledge city (a city that has been purposefully designed to encourage the nurturing of knowledge). GAM aims at a knowledge based development by encouraging a continuous creation sharing, evaluation, and updating of knowledge, so it is a matter of knowledge-sharing culture as well as an appropriate city design and information technology networks with infrastructure that support it.

Discussion and Conclusion

This study presents the earliest results of the study and shall be an integral part in the development of GAM. A comprehensive research on developing the above shall be conducted in the future and more significant findings will be gathered from a more refined data. The study explores critical success factors effect on transformation GAM towards KC. All of determined factors achieved by GAM through various initiatives including the child-friendly city, road safety, knowledge corner, food bank, women network initiatives, twin city agreement, employee training program, GIS database, Public libraries, and various projects. Useful information is available on services provided for Amman's citizens and visitors: E-Services, public transport, parks, historical sites, and recreational sites, and much more. Basic challenges of GAM growth involve the expansion and management of services, the collection and allocation of sufficient revenues to create infrastructure and to operate services in an adequate fashion, the creation of a coherent planning framework for the city so that increasingly diverse populations can live together civilly and productively, and the costing of Syrian presence in Amman, in addition to the growing phenomenon of begging and unlicensed stalls and increasing numbers of unemployed due to the use of the commercial sector of the Syrian labor.

References:
Cannon, T, Nathan, M. and Westwood, A. (2004) Welcome to the Ideopolis ibid and Westwood, A. & Nathan, M. Manchester: Ideopolis? *Developing a knowledge capital: The Work Foundation*.
Carrillo, F. (2004) Capital cities: a taxonomy of capital accounts for knowledge cities, *Journal of Knowledge Management*, 8(5).
Chatzkel, J. (2004) Greater Phoenix as a knowledge capital", *Journal of Knowledge Management*, 8(5).
Dvir, R. and Pasher, E. (2006) Innovation engines for knowledge cities: an innovation Ecology perspective, *Journal of Knowledge Management*, 8(5).
Edvinsson, L. (1999) IC of nations for future wealth creation, *Journal of Human Resource Costing and Accounting*, Stockholm University.
Ergazakis, K., Metaxiotis, K., Psarras, J., and Askounis, D. (2006a) A unified methodological approach for the development of knowledge cities, Journal of Knowledg*e Management*, 10(5).
Ergazakis, K., Metaxiotis, K. and Psarras, J. (2006b) An emerging pattern of successful knowledge cities' main features, in Carrillo, J. (Ed.), *Knowledge Cities: Approaches, Experiences and Perspectives*, Butterworth-Heinemann/Elsevier, Oxford, pp. 3-15.
Garcia, B. (2004) Developing futures: a knowledge-based capital for Manchester, *Journal of Knowledge Management*, 8(5).

Metaxiotis, K., Ergazakis, K. and Psarras, J. (2005a) Exploring the world of knowledge management: agreements and disagreements in the academic/practitioner community, *Journal of Knowledge Management*, 9(2).

Metaxiotis, K. (2008b) Exploring stakeholder knowledge partnerships in a knowledge city: a conceptual model, *Journal of Knowledge Management*, 12(5).

Sarimin, M. and Yigitcanlar, T. (2013) Knowledge based urban development lessons from a non-western country: the Malaysia experience, In Yigitcanlar, Tan & Bulu, Melih (Eds.) *Proceedings of the 6th Knowledge Cities World Summit, Lookus Scientific*, ˙Istanbul S¸ehir University, Istanbul, pp. 132-142.

Simpon, M. (2002) Community-based economic development strategy, *city of Ijevan, Armenia*, Tax Policy Center. 2003-2006.

Thwala, W. (2006) Urban renewal through labor-intensive construction technology in South Africa: *problems and potentials, African Studies* Quarterly, 8(4).

Warren, A., Bayley, R., Bennett, C., Charlesworth, A., Clarke, R., Oppenheim, C. (2008) Privacy Impact Assessments: International experience as a basis for UK Guidance. Computer Law & Security Report, *Elsevier*, 24, pp. 233-242.

Yigitcanlar,T.(2007a)The making of urban spaces for the knowledge economy: global practices, *In*

Knowledge cities: future of cities in the knowledge economy. I. Al-Furaih, A. Sahab, A. Hayajneh, A. Abdullah, M. Ibrahim and M. Thalha (Eds.). Selangor, Malaysia: Scholar Press: pp. 73-97.

Yigitcanlar, T., O'Connor, K., and Westerman, C. (2008b) The making of knowledge cities: Melbourne's knowledge-based urban development experience, *Cities*, 25(2).

Yigitcanlar, T., Velibeyoglu, K. and MartineFernandez, C. (2008c) Rising knowledge cites: the role of knowledge precincts, *Journal of Knowledge Management*, 12(5).

Yigitcanlar, T. (2012d) Comparing: knowledge-based urban development of Vancouver, Melbourne, *Manchester and Boston In Building prosperous knowledge cities: policies, plans and metrics*, YigitcanlarT. Metaxiotis, K., and Carrillo, J. (Eds.). London: Edward Elgar Publishing.