REBUILT CITIES IN THE FUTURE. URBAN FORESIGHT

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Abstract:
For a general definition, urban foresight refers to re-shape and rebuild a city in the future with the collaboration of local actors who are governmental bodies, private sector companies, development agencies, local institutions etc. that they have already identified their both mid-term and long-term visionary plans. These actors are indispensable agents for achievement of some urban development strategies for future, that is, they will shape by anticipating the future of their city. By doing so, for the prosperity of their people, these agents ensure that they will decrease an estimated unemployment which will increase in the future and they will allow to be made suitable investments in their city. It is quite suitable to implement the urban foresight strategies for both newly and rapidly emerging cities having a lot of potential. Thus, these cities will be more remarkable for probable investments and for their city brand values. In this study, there are knowledge about how to rebuild the cities and urban foresight techniques. Various examples can also be given in the related part.

Key words: urban foresight (city foresight), anticipating the future, smart city, sustainability, strategic plan implementations.

Introductıon

Cities have been experiencing various shifts within the years. What is important is that urban growth needs to be sustained. For this reason, it is necessary to have strategical planning and urban foresight practices. It is known that there are a lot of city foresight studies in the literature and most of them have already been investigated for this study. So, it is said that theoretically, the topic of city foresight gathers around the future thinking of generally economic development of a city which is already chosen, but it is understood that cities are also discussed in detail in terms of education, economy, industry, trade, agriculture, mining, energy, transport, tourism, construction and investment. Strategic plan implementations are crucial things for a city foresight. They require an important and critical feasibility study and after this study, in terms of urban foresight, it is needed to decide which investments are prior or which infrastructure works are evaluated later.

It is natural that the urban foresight requires to define the concept of smart city. In this regard, the smart city contains in itself properly implementations of technology-based policies, and both demand-driven and supply-driven methods. Thanks to them, city-dwellers who are more intelligent and participator push the local actors to be more agile, sensitive and productive for their city developments. To be

able to build a healthy city, to have a stronger both economic, innovative and eco-friendly policies and to have more accessible technological-driven things, the smart city strategies should be carefully implemented and thus, sustainable urban developments are fulfilled. A sustainable city requires the balanced harmony of economic, social and environmental factors not only for today's generation but also for future generations.

Sustainable urban regeneration always plays an important role in economic development at local, regional and national levels. It is needed to recognize that designing and developing the built environment does not guarantee to be resilient in the long run that environment. That's why, the sustainable environment should be created and the sustainable urban regeneration investments should be increased.

Cıtıes and urban foresıght

These days many experts and designers carry the concept of eco-city into effect by discussing sustainable urban developments, new sub-divisions, sustainable green cities, environmental management, energy efficiency, sustainable communities etc. In order to be able to explore the structure of the future, we should accurately understand the most appropriate strategy that would be implemented, the rate of change in human affairs being an argument of new thinking, new ways of understanding and looking, the linear time and the linear cause and effect. Also, we should take in consideration that foresight arises from interpretation of the emergent cause and effect with constant occurrences of creations of the past. As for the definition of the structure of the future, we can define that it is a sum of the relationships within a complex adaptive system. Also, it is the relationships between an organism that survives by adapting, the other similar organisms being part of its environment, and the larger systems like industries, economies and communities. Cooperation and competition are important elements of the structure of the future. The changes of the nature of competition, the nature analysis, the nature of projection and the way of strategy being formulated are the outcomes of a shift from prediction to interpretation which is a creative process that goes beyond scenario planning into scenario generation and exploration. (McMaster,1996)

Sustainable urban development requires governance, market and regulatory changes both cities, nations and environmental hinterlands. Global reforms in trade and in environmental standards have an important role for sustainable urban development. Consumers, businessmen and politicians should take the sensitive decisions for environment. People of the sustainable city should be informed and perceive practical and ethical considerations for everyday decisions. Self-reliant cities consist of the intensive internalisation of economic and environmental activities, circular metabolism, bioregionalism and urban autarky. Redesigning cities and their regions include the planning for compact and the energy efficient city regions. Externally dependent cities require excessive externalisation of environmental costs, open systems, linear metabolism and buying-in additional "carrying capacity". Fair shares cities require balancing needs and rights equitably, with regulated flows of environmental value and compensatory systems (Haughton,1997)

The potential for futures tools and skills helps urban and regional policy-makers in finding new approaches for managing change. In terms of future studies, it is needed to examine current perspective works of urban and regional key decision-

makers and to understand how political and structural circumstances effect regional foresight needs and requirement. Also, it is necessary to explore the similarities between all types of future studies at urban and regional levels. (Puglisi, 2002) That's why urban foresight is very important.

The challenge for foresight is to select the portion of the space of possibility to explore and to develop approaches. The structure of the future is a matter of interpretation providing starting point for the approaches which develop and exhibit foresight (McMaster 1996). Foresight can only be reinforced by a more systematic and rigorous knowledge to help learning and improvement. Foresight cannot be evaluated independently from its context (Georghiou and Keenan, 2006).

Foresight may contribute towards renewing the approach to sustainable development by placing greater value on the systemic and holistic approach of this type of development which is one of its founding pillars. This will allow a move away from the simplistic three pillar structure-economic, ecological, social or even its four or five pillars, if you add culture or governance. On the other hand, futurists themselves underestimate the relationship between sustainable development and foresight, even if they are talking about sustainable planning. They remain generally unaware that foresight could be a major tool in tackling sustainability as well as one of the best methods of preparing sustainable strategies and policies (Destatte, 2010).

There are two styles of foresight, first shape the future and predict their outcomes. The second, creative foresight, involves key people in creating an imagined vision of the future they would ideally have and then planning effective means to make it happen. Strategic thinking way has to be creative and imaginative as well as analytical. We have to decide what kind of future that we would like to create, for whom and how we will make it happen. Foresight has to be both predictive and creative. The differences between western and eastern strategic thinking should be recognized very well (Raimond, 1996).

The challenge for foresight is to select the portion of the space of possibility to explore and to develop approaches. The structure of the future is a matter of interpretation providing starting point for the approaches which develop and exhibit foresight. We should develop and adapt interpretations connecting us to a fast changing structure of the future (McMaster, 1996)

One of the most important areas of city foresight work is smart cities. The recent history of smart cities is divided into two large sections: "urban futures" and "knowledge and innovation economy". Urban futures shows that technology plays an important role in forward-looking visions about the city of the future. Knowledge and innovation economy shows that recent technological improvements cause to come into existence of new level of knowledge management and innovation capabilities in the city context. A cohesive smart city strategy must capitalize both on technology (i.e. digital intelligence) and on knowledge (i.e. human intelligence) to achieve spatial development. Smart city strategies play a decisive role in how cities will choose to take advantage of technology to favour the development of innovation networks, healthy societies and dynamic economies (Angelidou, 2015).

Urban foresight practises and examples in the world

A lot of work has been made in recent years for rethinking tomorrow's cities, Futures Studies methods are applied to urban planning. How to define and build a scenario by using strategic foresight tools, many studies have been created this.

It can be said that Lombardy/Italy and West Midlands/UK adopt the rationales of national foresight. They are more business-oriented, they focus on creating new jobs, adoption of longer time horizons in strategic planning and shifts in spending priorities of some key regional actors. As for Grand Lyon/France and Catalonia/Spain, they focus on political issues, with action plans demanding political action, democratic renewal and international relations. On the other hand, all regions analysed have the same purposes and preoccupations, not only with technological, social and institutional innovations, but also with a greater diversity of actors including citizens and social groups, in order to be able to face more complex economic and social context, which is also characterized by introduction of new organizational models (Cariola and Rolfo, 2004)

Ottawa and Toronto case studies show that community engagement needed for regional social learning phenomena may arise. It can be understood from these case studies that the spatial construction of social learning dynamics. Toronto regional foresight study was done by a US consulting firm together with local consultants and Economic Development and Planning Offices of the City of Toronto. Also, another initiative involves in development of Toronto Financial Services Alliance for evidence of civic engagement on key business and community leaders. Key factors are the relative centrality of financial services cluster to the Toronto economy, the concentration of cluster in downtown core of the city, the greater cohesion of firms in the cluster in both social and economic terms. Ottawa's regional foresight study was done by OCRI (Ottawa Centre for Research and Innovation) which helps city's technology community shaping its economic future (Gertler and Wolfe, 2004).

In mid-2004, Ministry of Trade and Industry in Finland established a Foresight Forum and in second phase, this forum was started in Spring 2005 by the Ministry that invited experts from several stakeholder groups to theme-specific expert groups, workshops and seminars. It was expected that these activities contributed to understanding of technological, societal and economic developments over the next 10 and 15 years, allowing participants to act in recognition thereof in their respective organizations. A 6 month pilot project for supporting three theme areas in the forum was initiated by the authors of this paper in cooperation with the forum coordinator. This pilot project was conducted with beyond the some 10-20 named participants and about 60 postgraduate students at Helsinki University of Technology participated in the parallel processes organized in conjunction with a course on decision analysis. An internet-based consultation process was carried out in each theme area. For each theme area, about 50 participating experts were invited from different stakeholder groups (industry, government, research, commerce and non-governmental organizations, technology entrepreneurs and investors).

A collaborative foresight method; RPM Screening, RPM analysis, consensus and disagreements analyses, multi-criteria portfolio analysis, Likert scale, workshops, websites and seminars, Foresight Forum, internet-based decision support tools, internet-based activities were used. The key issue in foresight activities for the fostering of innovation capabilities and activities is "diversity" defined as the condition or quality of being diverse, different or varied. Authors of this paper developed a collaborative foresight method called as RPM Screening (Robust Portfolio Modeling) which consists of distributed generation, mutual commenting, iterative revision, multi-criteria evaluation and portfolio analysis of innovation ideas (Könnölä et al., 2007).

There is a foresight programme in UK. During this programme sub-critical ad hoc studies, some limited external and independent scrutiny. In Germany, Delphi 98 evaluation questionnaire, FUTUR evaluated in 2001 and 2004. In Hungary, sectoral and thematic panels, Delphi survey, macro scenarios and workshops were used (Georghiou and Keenan, 2006).

Iris Futures research Project started in 2004 and built-up 60 futures-oriented activities and 120 organisations in Brussels. Additionally, 82 individual semi-structured conversations were conducted with people from the short-listed organizations and groups. 52 FO and 8 FA were listed and these took place in organizations and institutions of BCR in 2004, 2005, 2006. Conversation partners were asked to formulate a desirable and plausible future for Brussels in 2035. Iris Futures described the following characteristics for each 60 listed activities: geographical scope, time scope, thematic focus, plurality of futures, significance of future(s) orientation, number of people involved, target audience, methods used, outputs, budgeting and sources of funding, partnerships and participants. These characteristics provided an indication of quality, depth and intended uses of FO and FA in Brussels.

Research questions treated with open-ended and experimental approach (in futures conversations, workshops and creative collaborations) alongside a more collaborative approach (with construction of a small database of activities and actors), qualitative interviews, workshops, publications and documents, desk-research, “debate” and “use of expert opinions” were used.

Iris Futures research project conducted for BCR (Brussels Capital Region) authorities’ shows how institutional fragmentation in Brussels affects foresight capacities of different organizational actors and how organizational foresight is adversely affected by a structural organizational fragmentation. In the material collected with Iris Futures, foresight limitations in Brussels are regularly attributed to institutional complexity of fragmentation. The case of the BCR shows that reversely, fragmentation needs to be destroyed for a futures oriented practice to establish itself and foresight capacities to be applied effectively (Leemput, 2010).

Conclusion

The concept of foresight can be divided into itself a lot of things for example; national foresight, regional foresight, organizational foresight, city foresight etc. But, this study is mostly interested in city foresight, in other words urban foresight. To imagine and think a city’s future (especially for emerging cities) is not so easy business. Because, the decision makers’ and even the policy makers’ ideas are so crucial on the prosperity of the people living in that city from the point of economic concern.

To be able to rebuild the cities in the future, it is extremely needed that some approaches should be adopted by both decision makers and policy makers. In this regard, local actors like both governmental bodies’ and private sector’s notables in a city at first, should have a broad vision and then, should carefully form and implement short-term, mid-term and even long-term strategic plans towards their city’s sustainable urban development.

Starting from this point of view, while these plans in question are implemented, the city-dwellers should be involved in the process that is, their opinions should be considered by the local actors. Because, these implementations are directly related to daily lives of these city-dwellers. Thus, local actors should already determine the

priorities of the necessary investments and infrastructure works in the city. By doing this, the participant city-dwellers push them to be sensitive to their demands.

However, at beginning of this article, it is mentioned that a sustainable city requires the balanced harmony of economic, social and environmental factors not only for today's generation but also for future generations. Hence, this harmony should always be stabile so that the sustainable city may serve itself purpose. In order to achieve this goal, it is necessary to give priority to the eco-friendly investments which are one of the main components of a sustainable city. Green investments are primary and also inevitable instruments of the sustainability principle which contains in itself the future-oriented approaches. That's why, when a city becomes sustainable, the next generations will be more safe and have a healthy city and a sustainable environment.

Apart from these, in order to reshape the future, it is a must to support the cooperation of larger systems like industries and societies with smaller ones like the people living in a society, and the relationship between these systems. Briefly, it is needed to rebuild the future cities together.

On the other hand, it is obviously said that the anticipating the future refers to accurately understand and interpret it by blending yesterday's heritages with today's gains in an harmony. In that case, yesterday and today are important temporal elements of the anticipation of the future. Because, they are driving forces of the fundamentals of future expectations.

Knowledge management and innovation capabilities on technology-based developments play an important role to build smart cities. For instance; more intelligent buildings, vehicles, and so on are the outcome of the internet of things (IoT), and thus, via solid technological infrastructure, smart cities can be easily built.

Finally, it is clearly seen that from short-term to long-term strategic plan implementations, sustainable urban developments, designing smart city projects are the complementary elements of the concept of urban foresight.

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