



Eco-innovations in the urban regeneration projects



Making the 21st Century Cities

Edited by **Krzysztof Jarosiński**



KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI



**SZKOŁA GŁÓWNA HANDLOWA
W WARSZAWIE**

UNIA EUROPEJSKA
EUROPEJSKI
FUNDUSZ SPOŁECZNY



Reviewer:

Univ.-Prof. Mag. Dr. Josef Windsperger, Department of Management Faculty of Business, Economics and Statistics, University of Vienna

Programme Committee:

Prof. Piotr Ostaszewski – Deputy Rector (Warsaw School of Economics)

Prof. Marek Bryx – Deputy Rector (Warsaw School of Economics)

Prof. Magdalena Kachniewska – Dean of Master's Studies (Warsaw School of Economics)

MSc. Alina Modrzejewska-Kořakowska – Project manager (Warsaw School of Economics)

Prof. Anna Szelaęowska – Project methodological coordinator (Warsaw School of Economics)

This publication was supported by grant funds from the European Union's European Social Fund. The project "Eco-innovations in cities", performed at the Warsaw School of Economics, was commissioned by the Polish National Centre for Research and Development (POKL.04.03.00-00-249/12).

© Copyright Warsaw School of Economics until 31/12/2015

© Copyright NCBiR since 01/01/2016. All rights reserved.

No part of this publication may be photocopied, processed or distributed for any purpose or by any means without the prior written permission of the authors and the publisher of this book.

The CeDeWu publishing company and the authors used their best efforts in order to provide accurate and complete information in this book. Under no circumstance, however, they may be held liable for the consequences of its use or for possible violation of any copyrights.

Photo (Graphics) courtesy of:

Skeleton leaves on blue background, close up; File: #82119159 – Fotolia.com;
Futuristic City; Plik: #74284183 – Fotolia.com

Cover design: Agnieszka Natalia Bury

DTP: CeDeWu Sp. z o.o.

1st Edition, Warszawa 2015

ISBN 978-83-7941-221-1

EAN 9788379412211

Published by: CeDeWu Sp. z o.o.

00-680 Warszawa, 47/49 Źurawia Street

e-mail: cedewu@cedewu.pl

Publisher's office: (4822) 374 90 20, 374 90 22

Fax: (4822) 827 38 89

Economics Bookstore

00-680 Warszawa, 47 Źurawia Street

Tel.: (4822) 396 15 00...01

Fax: (4822) 827 38 89

On-line Economics Bookstore

www.cedewu.pl

www.4books.pl

Made in Poland

Kup ksi k

Contents

Publisher's note	6
Acknowledgments	8
Introduction	9
 Chapter 1	
Creativity and its impact on the development of modern cities	
– Grzegorz Maśloch	13
Introduction	13
1.1. What kind of thinking is creative and what is not?	17
1.2. Creative people – creative cities	19
Literature	22
 Chapter 2	
Innovations in the public sector and their impact,	
on the social-economic development processes	
– Krzysztof Jarosiński	23
Introduction	23
2.1. The essence of innovation in the socio-economic development	26
2.2. Innovations in the public sector	36
Literature	44

Chapter 3	
Management in the public sector – Agnieszka Barańska	45
Introduction	45
3.1. The evolution of the views on the conditions and possibilities to implement new management concepts	46
3.2. Characteristics of the public sector and its place in the economy	49
3.3. Complementarity between the private and public sectors	52
3.4. The management of the public sector to face the challenges of development in the 21st century	54
3.5. Trends in the sphere of managing in the public sector	56
Literature	61
 Chapter 4	
Creativity and innovation in modern cities. Example of the socio-economic development of the city of Vienna (description of case study) – Krzysztof Jarosiński, Grzegorz Maśloch	63
Introduction	63
4.1. Socio-economic characteristics	64
4.2. Finances of the city of Vienna	77
4.3. Vienna as compared to other EU cities	79
Literature	92
 Chapter 5	
Waste management in Vienna in terms of creativity and innovations (description of case study) – Grzegorz Maśloch	93
Introduction	93
5.1. Background	94
5.2. Project description	99
Literature	103
 Chapter 6	
Development of public transport in Vienna according to new trends of innovations implementing (description of case study) – Krzysztof Jarosiński	104
Introduction	104
6.1. Development of the public transport system	105
6.2. Public Transportation Map of Vienna	110
6.3. Public transport in Vienna today	112
6.4. Investment of Vienna City in public transport	114
Literature	120

Chapter 7

Management of public sector entities. Example of the Allgemeines

Krankenhaus der Stadt Wien in Austria (description of case study)

– Agnieszka Barańska..... 121

Introduction..... 121

7.1. The role of the city government in the health care system organization .. 122

7.2. System of health care and the organisation of medical entities in Vienna in comparison to the situation in Austria..... 124

Literature 131

Summary..... 132

Table of Contents 134

Chart of Contents 136

Publisher's note

We're delighted to bring you the book series prepared by the Authors taking part in the "[Eco-innovations in cities](#)" Project (POKL.04.03.00-00-249/12-00). The series, which is available free of charge, consists of six books:

- "[Eco-cities](#)" by Dominika Brodowicz, Przemysław Pospieszny and Zbigniew Grzymała
- "[Green Project Funding](#)" by Hanna Godlewska-Majkowska, Katarzyna Sobiech-Grabka, Paweł Nowakowski
- "[Green Urban Regeneration Projects](#)" by Marek Bryx, Jacek Lipiec, Izabela Rudzka
- "[Planning and Management in Eco-cities](#)" by Stanisław Lobejko, Anna Stankowska, Mariusz Zabielski
- "[New Models of Urban Entrepreneurship](#)" by Marcin Wojtysiak-Kotlarski, Ewelina Szczech-Pietkiewicz, Katarzyna Negacz
- "[Making the 21st Century Cities](#)" ed. by Krzysztof Jarosiński.

The Project was designed and prepared by Professor [Marek Bryx](#), Deputy Rector of the [Warsaw School of Economics](#) (SGH), and Doctor [Dominika Brodowicz](#). The Project has been carried out within the Priority IV "Tertiary Education and Science", Measure 4.3 "Strengthening the didactic potential of universities in the fields of key importance for the aims of Europe 2020 Strategy". In line with the objectives, the Project is conducted from 1st July 2013 until 31st December 2015.

The main aim of this Project was to create at the Warsaw School of Economics a one-year specialisation entitled "[Eco-innovations in the urban regeneration projects](#)". What is more, the Project's aim is to develop the study offer concerning the area of green and socially responsible eco-innovations in cities regeneration. The main objective of this new specialisation is to enhance students' knowledge

about eco-cities, give them sufficient information and discuss case studies on the subject: how contemporary cities should be planned, developed and managed. As most of our communities exist within the urban environment, the provision of eco-innovations is essential for the well-being of society. This unique educational programme for M.A. students provides information on maximising the benefits of making innovative and creative cities to citizens, local authorities, planners, developers, students, researchers and non-government organisations interested in improving the quality of life in cities.

MSc Alina Modrzejewska-Kořakowska – Project Manager
Prof. Anna Szelągowska Ph.D. – Project Methodological Coordinator

Acknowledgments

Project Team under the leadership of Prof. dr hab. Krzysztof Jarosiński would like to thank Ao. Univ.-Prof. Dr. Josef Windsperger for extensive assistance in the organization of the Team arrival to Vienna, as well as thank for the continuous support in the implementation of objectives of the course “Making the 21st century cities”. In addition, the Team consists of Professor Josef Windsperger, heartfelt thanks also for the extensive assistance with co-organizing seminars and active participation. As a result, Professor Josef Windsperger’s contribution of work significantly contributed to increase the merit of the final project results.

The Project Team conveys special thanks to the Dean of Institut für Betriebswirtschaftslehre, Univ.-Prof. Dr. Oliver Fabel on the part of the Faculty Council and raising the profile Project initiated by the Warsaw School of Economics and then realized in collaboration with the Institut für Betriebswirtschaftslehre Universität Wien. The Dean of the Institute, Univ.-Prof. Dr. Oliver Fabel was tremendously understanding and actively participated in the organization of residence for the research Team at the University of Vienna. In addition we would like to thank Prof. Dr. Rudolf Vetschera. for his consultation and the time he spared for us.

We would like to express our gratitude and sincere thanks to the whole Team of the Institut für Betriebswirtschaftslehre Universität Wien, whose staff at any time were available to Scholars and willing to help. The Team would also like to thank the high status in the organizational structure of the University of Vienna, which greatly facilitated the access to infrastructure, as well as all possible resources of the University.

We would also like to thank authors of the Project, Mr Professor Marek Bryx, Deputy Rector of the Warsaw School of Economics (SGH), and Ms Doctor Dominic Brodowicz for substantive page of Project. We also want to thank MSc Project Manager Alina Modrzejewska-Kołąkowska for the professional conduct of the project and the ability to effectively carry out the tasks.

Krzysztof Jarosiński, Grzegorz Maśloch, Agnieszka Barańska

Introduction

As evidenced by modern research carried out in many academic centres, enterprises and public administration, creative thinking and consequently the innovation process is running in the modern world next to the financial capital, human capital and organization, one of the most important factors driving the modern economy. Creativity and innovation implementation are an enormous strength of the development. Many studies indicate clearly on the universality of creative thinking and innovation implementation in many areas, especially in the private sector, but also in the wider public sector. The impact of the factors has been seen both, on the economic and social system of the cities and regions. In practice, this means that innovation processes can be well absorbed by the local environment of the cities and municipalities. Strength and dynamics of these processes is varied and can be determined by the size of the settlement unit, the degree of complexity of the economic and social processes also from funding opportunities. Not without significance historical factors remain relating to modern contemporary settlements. According to studies, contemporary innovative processes find their reference to the state and to the changes recorded in the past. Paraphrasing the state of research it can be argued, that significant quantitative and qualitative changes of an innovative character, find their basis in the evolutionary processes of change observed in the past. This means that a solid foundation to start the innovation process takes place where there is a possibility of appeal to the history, traditions, economy, politics and the ethical and moral patterns formed in the past.

A consistent feature of these changes is to cultivate a new paradigm of development through a gradual transition from the traditionally defined as an as an extensive development of quantitative towards a qualitative paradigm of development. This should be based on a wider reference to the potential of creative thinking and shaping the future with the use of a wide range of

innovations. The authors of the submitted book are conducting wider research into the impact of innovation on socio-economic development and recognize that one of the most important centres has been, for some time, the city and region of Vienna.

The concept of the book is to introduce the reader to the issues of innovative development processes taking place in the modern cities. In particular, the intention of the authors was to present the impact of new methods of management and the quality of life in the cities of the 21st century. The general conditions for the development of an internal but also located in the external environment of the cities results in the fact that the cities meet the expectations of the community and this requires the use of new, advanced methods of management that go beyond the traditionally accepted norms of administering the local government units. Therefore, the authors have set themselves the tasks of defining and exploring the opportunities for a sustainable achievements range of objectives:

- identifying the determinants of theoretical growth on the grounds of significant changes in the approach to problems solved by reference to the creative thinking methodology,
- presentation of the methods of creative thinking and the group problem-solving tools,
- discussing, prepared under the Project, case studies relating to the subjects detailed analysis of selected problem ranges identified as best practices and constituting material for implementation in cities,

support the teaching process in the context of innovative specialisation „Eco-innovations in the urban regeneration projects Making the 21 st Century Cities”. „Eco-innovations in cities”, launched for a selected group of the students,

- development path of theoretical knowledge transfer and practical considerations taken as part of the research at the University of Vienna to a wider audience taking the conditions of the functioning of local government in Poland into consideration,
- construction of a plain of communication in the form of a municipal forum, which brings together public administrations, representatives of the business and academic environment of the country and abroad.

As explained by contemporary research in many academic centres, enterprises and public administration, creative thinking, and thus, innovation processes are in the modern world next to financial capital, human capital and organization, one of the most important factors driving the modern economy. Creativity and innovation implementation are an enormous strength of the pro-development.

Studies indicate clearly on the universality of creative thinking and innovation implementation in many areas, especially in the private sector, but also increasingly in the wider public sector. At the same time, it reveals here the impact of the innovation factors disclosed in the economic and social systems of cities and regions. In practice, this means that innovation processes can be well absorbed by the local environment of cities and municipalities. The strength and dynamics of these processes, however, varied and can be determined by the size of the settlement unit, by the degree of complexity of the economic and social processes that also may be conditioned by funding opportunities. Not without significance are the historical factors relating to contemporary settlements. According to studies, contemporary innovative processes find their reference to the situation and in the changes recorded in the past.

Referring to the studies can be argued that significant quantitative and qualitative changes of an innovative character, find their basis in evolutionary processes of change observed in the past. This means that a good foundation to begin the innovation process takes place where there is a possibility of appeal to the history, traditions, economy, politics and the ethical and moral patterns formed in the past. In conditions such as these there may appear favourable circumstances to the broader absorption effects of creative behaviour and the implementation of innovative solutions that over time created and continue to create norms of behaviour.

A consistent feature of these changes is to cultivate a new paradigm of development through a gradual transition from the traditionally defined as the development of an extensive quantitative towards a qualitative paradigm. With wider consideration of the potential of creative thinking and shaping the future with the use of a wide range of innovative character solutions it will be possible to limit the costs of the settlement units. At the same time innovative solutions will give new opportunities to the management of natural resources, especially in relation to their limitations in this regard.

Please note that creating a good climate for the development of creativity and entrepreneurship, as well as planning and organization of the innovation process is also associated with incurring certain expenditures. These expenses can be implemented at the enterprise level, at the level of public administration research and other centres. In this sense, to generate innovative solutions is not without cost. These costs, however, have a slightly different character, offering no prospects for change in areas considered as traditional, fixed and unchanging. So in this approach, we are dealing with human resource development and capacity building intellectual for change in the future.

The authors have presented the book after examining the impact of innovation on the socio-economic development and recognizing that new solutions have a huge impact. They can be seen, along with capital, as important drivers of change, which will create a positive economic impact. Today there is a lot of pressure on the wider launch of innovative processes in the cities. This stems from the belief that only in this manner is it possible to restore the attractiveness of the location of cities, to the competitiveness of cities and regions as well as to processes deglomeration in cities.

In the cities, named smart cities, it is followed by a gradual reversal of this trend. The first manifestation is renewed population growth. Such a situation can be observed precisely in Vienna. After many years of systematic decline in the number of inhabitants, this has been reversed, which means that in Vienna there is a rapid increase in population. As a result, there is renewed interest in living in cities offering a high standard of living, but in many others follows a systematic further outflow of the population. These processes have become a new paradigm of development. The future, therefore, seems to be extremely dynamic and can bring a lot of changes. Certainly further urban development, will create a new quality in the structure of the settlements and the socio-economic situations in the developed countries.

Prof. Krzysztof Jarosiński Ph.D.

Chapter 1

Creativity and its impact on the development of modern cities

Grzegorz Maśloch

Introduction

Creativity is a universal human feature we are born with. Every child is naturally creative¹ Since the first months of life they acquire knowledge about the surrounding world and use it very often in an innovative manner, solving their problems. But their creativity most often fades.

So far, the analysis of social and economic phenomena has not paid great attention to human creativity and has focused mainly on imitative functions (e.g. education, professional experience, punctuality etc.) Some time ago economists, sociologists and psychologists discovered that a person has some non-measurable features, which are difficult to identify, described in the literature on the subject as creative. In connection with this approach, it has been recognised that the creative thinking of a person is as important as other features. As a consequence, this means that the creativity of a person, from a purely individual function, becomes a social function.

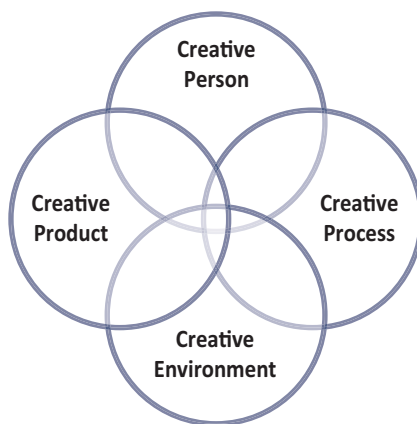
Intuitively, the defined phenomenon of creativity is in fact a very complex process, which in turn leads to a situation when there is no clear definition of creativity. In a different approach, defining the concept of creativity undoubtedly affects the multiplicity of scientific disciplines (education, psychology,

¹ See: E. Albee, *Collecting ideas from the unconscious mind*, in: *Creativity. Unconventional Wisdom from 20 Accomplished minds*, Palgrave Macmillan, New York 2007, p. 24. L.M. Cohen, D. Ambrose, *Adaption and Creativity*, in: *Encyclopedia of Creativity*, Vol 1, Academic Press, San Diego 1999, p. 11; Osho, *Creativity. Unleashing the Forces Within*, Macmillan, 2011, p. 108, S. Wright, *Creativity in Early Childhood*, Sage, London 2010, pp. 1-24.

philosophy, technology, theology, sociology, linguistics, business studies and economics, etc.), that research and describe the phenomenon of creativity.

Owing to the fact that creativity may be defined in a multifaceted manner, there are many definitions of creativity. Particular definitions refer to creativity as a process, or creative people, environment or products (effects) of creativity (see chart 1.1.)². It should be borne in mind that very often particular definitions supplement each other and may contain elements typical of many aspects³.

Chart 1.1. 4P Creativity (Person, Process, Products and Press (environment))



Source: Prepared on the basis of: M.R. Sarsani, *Creativity...*, *op. cit.*, p. 21.

For this reason, for instance, Welsh defined creativity as “... process of generating unique products by the transformation of existing products. These products, tangible and intangible, must be unique only to the creator, and must meet the criteria of purpose and value established by the creator”⁴. P. Johnson-Laird on the other hand, defines creativity as “... mental processes that lead to solutions, ideas, conceptualizations, artistic products that are unique and novel”⁵.

R.W. Weisberg understands creativity as something which “... refers to novel products of value, as in ‘The airplane was a creative invention.’ ‘Creative’ also refers to the person who produces the work, as in, ‘Picasso was creative.’

² M.R. Sarsani, *Creativity in Schools*, Sarup & Sons, New Delhi, 2006, p. 20; H. Fumoto, S. Robson, S. Greenfield, D.J. Hargreaves, *Young Children’s Creative Thinking*, Sage, London 2012, pp. 1-184.

³ M.R. Sarsani, *Creativity ...*, *op. cit.*, p. 20; D.J. Hargreaves, *What Do We Mean by Creativity and Creative Thinking*, in: H. Fumoto, S. Robson, S. Greenfield, D.J. Hargreaves, *Young Children’s Creative Thinking*, Sage, London 2012, p. 17.

⁴ M.R. Sarsani, *Creativity ...*, *op. cit.*, p. 20.

⁵ D.J. Hargreaves, *What Do We Mean by Creativity ...*, *op. cit.*, p. 17.