A HOLISTIC PROJECT--KNOWLEDGE SOCIETY AS A CONDITION FOR SOLVING GLOBAL STRATEGIC CRISES

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This article emphasizes the role of projects and project management in mastering global strategic crises to create a new multi-project environment, comprised of projects, programs, and project portfolios. Multi-projectivity has come to characterize modern society and requires an adjustment of organizational solutions, individual competencies of different systems, and changes in understanding the effects of a project. The current global strategic crises are identified; some call for urgent, systemic and global solutions involving the implementation of projects with the awareness that the necessary and project--influenced resources are limited. The article examines the knowledge society in the context of global strategic crises and expands previous interpretations of project-oriented society, stressing its role in overcoming global strategic crises. By expanding and integrating the knowledge society and the project-oriented society, the a uthors propose the establishment of a holistic project-knowledge society that sets the framework for overcoming global strategic crises, thereby ensuring the long--term survival of humankind. The article concludes with a diagram of the process of overcoming global strategic crises through a holistic project-knowledge society.

Keywords: knowledge society, project society, global strategic crisis, holistic project-knowledge society, critical project portfolio

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INTRODUCTION

Humans have historically faced various forms of crises, yet rarely have these crises had global extensions – at least, humans did not understand them as such. When a global crisis emerged, it tended to be a natural and evolutionary phenomenon, not the result of humans' noxious activities. In recent decades, humankind has encountered global crises that increasingly influence life and the future, and these crises may soon pose a serious threat to humankind. We are gradually realizing that the majority of these global crises are the result of humans' previous activities and ways of thinking (Vrečko, 2010).

To ensure humans' continued existence and development in the future, serious globally coordinated and harmonized actions will be necessary in many fields. A number of individuals have researched global crisis phenomena from different perspectives, including sociological (Adam, 2002), political, and macroeconomic (Frenkel and Rapetti, 2009) perspectives. A few researchers have indirectly connected the global crisis with the development of knowledge societies (Robertson, 2008), but they have failed to provide answers for the questions related to future development directions of knowledge societies to master global crises and prevent their emergence and development in the future.

Meanwhile, we are also witnessing the accelerated spreading of different kinds of projects in all fields of human work. The multi-project environment, which refers to a multitude of projects that any international unit of organization carries out to meet its respective needs, is becoming increasingly complex. This environment consists of projects with various purposes and strategic demands in both profit and non-profit entities; these projects have resulted from creative and innovative tendencies and are important for finding solutions to different crises as well as problems facing all humankind.

Mastering this multi-project environment is becoming progressively more important. During the last few decades, new models have been introduced to successfully implement these projects. Among the components of these models, we stress knowledge, in connection with innovativeness, and the general ability to efficiently master projects.

In this paper, we develop a model for mastering global (strategic) crises. Projects are tools for attaining unique achievements – which are certainly necessary for dealing with global crises – and the project management approach has proven useful in dealing with complex crises (Cleland and Ireland, 2006; Kerzner, 2009; Vrečko, 2007). The multi-project environment is a fact of the present time and development while the developed model is strongly designed on the project base and is project oriented. Before developing such a model, in

order not to deteriorate global crisis problems, we have to confront our deficiencies in understanding projects. In doing so, and using a systems approach, we are expanding an understanding of project effects and project success, while also broadening the current definition of project-oriented society.

We are also developing a model based on the pillars of knowledge societies (according to Barić and Jeleč Raguž, 2010) in which we expand the *knowledge* pillar, with the accent on knowledge about projects and project management, and adding the *consciousness* pillar about the need to adopt and implement the necessary measures (projects) for resolving global strategic crises. By integrating expanded views of the knowledge society and project-oriented society, we create a model of *holistic project-knowledge society* needed to successfully cope with global strategic crises and a new, growing multi-project environment, thereby ensuring sustainable development and survival.

The paper is constructed as a theoretical paper, significantly extending and putting together in original form cognitions from past research from various scientific fields (e.g., crisis management, project management, and knowledge society and systems theories). The first section of the paper defines global strategic crisis and identifies the role of projects in such crises. The following section presents multi-projectivity as a fact of the present and future time, referring to the problem of *viewing projects as a whole* and arguing that a *broader systematic approach* is needed in addressing projects. Subsequent sections develop a model of holistic project-knowledge society, expanding the definitions of project-oriented society and knowledge society and integrating these definitions into the proposed holistic project-knowledge society before finally presenting the process of mastering global strategic crises inside such a society.

GLOBAL STRATEGIC CRISES AND PROJECTS

Studying crises helps identify ways and processes to prevent their influences on different levels. Crises affecting a certain spot, influencing particular social environments without being interrelated with other consequential crises, are *local crises*. Solving or preventing influences of local crises is primarily the responsibility of particular social environments, such as the state and organization subjects within it. Local crises usually have no integrated or mutual co-acting of more social environments or the entire world society (Crandall and Mensah, 2008). In order to reduce or prevent the influence of a crisis, each social environment has to accept strategies and implement them through corresponding projects or programs (of projects), which for them represent a multi-project envi-

ronment. Projects, as unique processes with specified goals to be achieved and temporary organizational solutions, are appropriate and necessary tools in mastering crises (Cleland and Ireland, 2006; Kerzner, 2009; Vrečko, 2007).

Yet people – especially those in developed areas – have caused a series of long-term harmful consequences for all humankind during the developmental cycle of the past century, particularly with their projects and projects' exploitation effects and consequences. This is particularly evident in projects related to enlarging production that results in harmful effects on the environment or increased waste material. In such cases, we cannot talk about local crises; rather, we must examine *global crises* – or better, *global strategic crises* – since everything is inter-related.

Global strategic crises have an increasingly damaging influence on the development and survival of the entire world's society (Brown, 2004). They are *strategic* because they do not affect humans' current life, business and activity, but have a great influence on forming a strategy of any system, thereby decisively influencing life, business activity, and development in the near and far future. These crises are *global* because they influence an increasing number of social environments; their consequences are important for the entire world's society, regardless of whether living in developed or less developed countries, specific regions, or particular organizational subjects. As a result of the growing emergence of global strategic crises, many projects governing such crises and projects have been developed to ensure the survival of humankind and the Earth's ecosystems. These projects form a complex global multi-project environment that requires non--conventional organizational solutions, specific knowledge about dealing with projects, programs of projects and project portfolios, and attitude and understanding of the importance of projects in all environments (societies).

To identify the extensiveness and necessity of projects needed for mastering global strategic crises, it is necessary to be aware of possible types of such crises. Hauc (2010) categorizes global strategic crises as follows:

• *Environmental global strategic crisis*, which occurs as a consequence of nature's "resistance" to all harmful human influences in the past, whether directly (during their implementation phase) or indirectly (during their exploitation phase). We are increasingly confronted with this type of crisis as its influences grow.

• *Global strategic demographic crisis*, which stems from the growth of the world's population, predominantly in less developed countries, thereby resulting in greater shortages of food, water, and living space and increases in poverty, the

elderly, and ecological problems. This type of crisis highlights issues related to the protection of human rights as one group can afford the application of any kind of projects, including those of prestigious importance, while others cannot afford even fundamentally necessary projects.

• *Global strategic crisis of permanent competitiveness* stems from society's characteristic of permanent competitiveness (Hauc, 2007), which causes an imbalance in the division of power, capital, and the possibility of winning all necessary resources for economic and other development. This type of crisis has a number of harmful effects as higher competitiveness results in projects with harmful consequences (e.g., environment and sociological problems) while expanding the gap between less and more developed economic environments.

• *Global strategic energetic crisis*, which results from growing energy consumption and shortage of natural energy sources. This crisis is becoming more prominent today and will certainly have a dominant role in the further development of society and in shaping projects' portfolios.

• *Global strategic defense crisis* is based not on the prevention of a new world war, but the defense against all forms of terrorism and the prevention of local wars. The number of social environments endangered by this crisis is on the rise, requiring international cooperation projects.

• *Global strategic ethical-moral crisis* is, to a great extent, a result of other global crises and people's striving for changes in this area. Aberration from universal ethical and moral rules is a serious problem in terms of possible consequences.

• *Global strategic crisis of helplessness* is related to the awareness that the world is becoming helpless to solve certain crises and their influences (e.g., natural disasters, the growth of world population). Humankind is becoming aware that some trends cannot be influenced. From a psycho-social stand, it is necessary to execute projects to analyze and deal with the influence of the crisis of helplessness on an individual basis as well as on the basis of larger social environments.

The stated global strategic crises are mutually dependent right from their start, as well as in their influence on the further survival and development of the world society. Preventing influences of crises and their possible further development requires identifying and agreeing upon strategies and projects in almost all social environments of the world society (Blatz and Haghani, 2006). A global and consensual strategy is necessary and serves as an entry strategy for projects to overcome the crises, regardless of whether these projects relate to a reduction of influence or prevention of further intensification of the crises. All these projects form a multi-project environment of mastering global strategic crises, which ap-

pears in tandem with an already existing multi-project environment, consisting of projects necessary for prevailing processes and current development of the world society.

MULTI-PROJECTIVITY AS A FACT AND CHALLENGE OF THE PRESENT TIME

The World Bank's 2008 data indicate that investments (i.e., investment projects) account for 21% of the world's gross domestic product. In addition, numerous other projects are being carried out that do not have investment significance, but are vital for the survival and further development of business and other systems as well as people's social environments. This has resulted in multiple projects that, according to some estimates, represent close to one third of the world's business and related activities. The number of projects is increasing, and a very complex multi-project environment is being established in all social and business arenas as well as in other environments. In this process, it is becoming increasingly evident that it is necessary to have not only a proper understanding of the role of the projects for a society's future and the concentration of numerous resources for project implementation, but also adequately qualified project owners, project managers, and project team members as responsible drivers in defining and implementing the projects.

Because of the richness of the multi-project environment, numerous questions arise, including whether the entire social environment will be ready not only to accept the necessity of all projects, but also to understand them correctly. This situation highlights the need to create a society that will understand the necessity of projects and treat them holistically, even if such an approach will not be favorable to relatively short--term goals (i.e., financially and profit-oriented goals). According to Canton (2006), such a society is necessary because the significance of projects will grow and be of key importance for the future.

As projects grow and diversify, it is essential to clarify what a successful project is, not only in terms of efficient achievement of the entrance demands, but also in terms of rational and lasting harmless expenditures of all available and limited resources[1] to carry out the project and influence society and Earth's ecosystems during the project's exploitation phase. It is never easy to achieve the required efficiency in a project's implementation phase or effectiveness in the entrance demands (Morris and Jamieson, 2004; Shenhar and Dvir, 2004), particularly when simultaneously implementing numerous projects with different purposes (Turner and Speiser, 1992; Engwall, 2001). It is even more difficult to successfully conclude projects in a holistic way (Vrečko, 2011).

Research into the efficiency of project implementation has questioned whether resources are used and distributed rationally in order to achieve success in reaching project goals. According to Standish Group (2009), almost 25% of all implemented projects are never finished, while 45% are finished but with aberrations from their original goals; only 30% can be described as efficiently implemented. However, if we expand the understanding of successful projects to include the holistic approach previously described, these numbers drop significantly. Such an expanded view of the projects and their influence on the environment and society during exploitation phases leads to the need to mingle strategic processes and projects' formulation and implementation.

During these processes, many decisions have to be made; they must not be accepted subjectively based on an individual's personal experiences and intuitions as, in such decision-making processes, individuals cannot foresee possible alternatives when seeking the best solution. It is necessary to shift to objective thinking, the major characteristic of which is a system approach, directed to independent and non-personal considering of events, phenomena, and ideas (Mulej, 2007). Projects in which the *broader systematic approach* is not used can only be partially successful – namely, successful from one subjective standpoint and completely unsuccessful from another subjective standpoint. We refer here to the problem of *viewing projects as a whole* in assessing and accepting their planned effects. Setting goals precisely is essential for a successful project, particularly if a systematic approach and a corresponding decision-making system are accepted.

Throughout the modern industrial era, humans and especially science did not give particular meaning and attention to the single, goal-directed processes of projects and project management, but rather focused on continuous processes. Neglecting the importance of projects and the need to apply holistic understanding of projects and their long-term influences proved to be dangerous for the Earth's ecosystem and therefore for humankind. Quite recently, the importance of projects and the role of project management have once again started to be interpreted differently. Project management is becoming increasingly responsible for achieving goals, although they are attained only after the project is completed (Vrečko, 2010). Such an approach in understanding projects and project management is necessary for all projects, especially those aiming to solve problems of wider society or remove harmful influences that result from global changes or resolve global strategic crises.

PROJECT-ORIENTED SOCIETY'S INSUFFICIENT CAPACITY TO HOLISTICALLY MASTER THE MULTI-PROJECT ENVIRONMENT

At the turn of this century, findings of many researchers and project management practitioners led to viewing projects and project management in a wider context, particularly their role in the development. Projects and concepts of project management started to be linked with strategies, concepts of strategic management, and development of a certain social environment (Cleland and Ireland, 2006; Hauc, 2007). Tanaka (2011) defines *strategic project management* as a third generation in the development of project management, applied since 2000. He included the need for a systems approach among typical techniques in use in strategic project management (e.g., project portfolio management, program management, modular project approach). The strategic project management model addresses several areas, including the pursuit of innovation and added value from projects and programs; the linking of organizational strategy with projects through project portfolio management, program management, and project management; the structuring of project portfolio management and program management; value feedback and continued utilization of program and project products; and organizational project management maturity models that define various levels of project management development in business and other environments, thereby representing the basis for creating and developing measures to achieve the better and more efficient implementation of projects.

Along with the appearance and development of project management maturity models came the growing usage of the term *project-oriented societies*. This relatively new term emerged at the turn of this millennium. In discussing societal contributions of project management, Cleland (2003) asks – based on the identified projects through human history – whether we can say that project-oriented societies already existed in antiquity, although he fails to define what project-oriented society is. According to Gareis (2002), the first person to scientifically research and define the phenomenon of project-oriented society, it is "a society which (often) applies projects and programmes as temporary originations to perform unique processes of medium and large scope and who use them for its developmental, business and other needs; it is a society which carries out the education, researches, marketing and standardization for the sake of project management. In project-oriented societies, not only traditional industries but also the public sector and non-profit organisations consider projects and programmes as appropriate organisations to perform relatively unique processes." This understanding of pro-

ject-oriented society has remained unchallenged and unchanged in subsequent studies.

Different models have been devised to assess the project--oriented society's level of development and influence on other important social issues. The Vienna University of Business and Economics Austria first conducted such studies in the 21st century in a partnership with the International Project Management Association (IPMA). The research involved six countries – Austria, Denmark, Hungary, Romania, Sweden and the United Kingdom – and highlighted significant differences in the level of development of project-oriented societies in these countries (Gareis and Huemann, 2001; Gareis, 2002; Bodea, 2002; Bargaoanu and Calinescu, 2008). However, existing contributions to project-oriented societies (and project management maturity models) lack explanations for 1) consciousness about the role, importance, and inevitability of projects for dealing with global strategic crises and the need to accept the necessity of particular projects required to master those crises and 2) the need to holistically, systematically, and objectively understand and make decisions about projects.

As awareness grows regarding the need for projects mastering global strategic crises and that projects need to be holistically viewed and systematically treated, it becomes clear that we have to apply a broader criterion in setting the fundamental commitments of the project-oriented society (see Figure 1).

⊃ FIGURE 1
Holistic project--oriented society
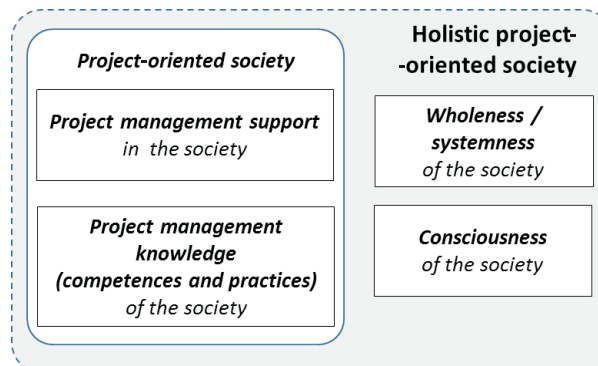
Thus, the definition of project-oriented society must be expanded to incorporate the idea of a *holistic project-oriented society* – a fully aware society that consciously accepts and identifies the appearance of global strategic crises as facts of the future. It is a society that understands what projects preventing influences and spreading global strategic crises mean for the survival and development of humankind, in all its organizational environments. Such a society systemically and holistically sets up and accepts strategies for fighting influences of crises and, in turn, adapts the choice and the pace of implementing projects to them, systematically bearing in mind all

effects and consequences resulting from those projects while securing – despite the ever-present shortage – all necessary resources. It is a society, capable of – with an appropriate level of developed project management knowledge and support – carrying out of projects and ready and willing to implement them.

Since the world is entering a period of permanently present and intensified influences of global strategic crises, we have to find expert solutions to fight the growth of such influences and their further emergence through projects – namely, the development of a holistic project-oriented society. To this end, we need a mastery strategy (the biggest problem here will be homogenizing the powerful factors) and corresponding programs and projects. It is necessary to secure all necessary resources for this purpose and realize that global crisis projects will continue to grow in priority.

Furthermore, research (e.g., Vrečko, 2011) has stressed a strong correlation between the development levels of project--oriented societies (as defined in the presented narrow meaning) and the innovativeness of those societies (defined as one of the four pillars of the knowledge society; see the next section). Qi and Sun (2007) determined that the rising development level of a project-oriented society is a key element in achieving societal innovativeness. Hamel (2006) concludes that the introduction and development of professionalism in project management is one of the twelve most important innovations of 20th-century management.[2]

When discussing project-oriented societies, many authors highlight the importance of *knowledge* and developing *project competences* (e.g., Gareis, 2002; Omazić and Baljkas, 2005) as well as necessary *inventiveness* (e.g., Hauc and Vrečko, 2009; Järkvik et al., 2007; Rebernik and Širec, 2007). They correlate project-oriented society with *culture standards* (e.g., ethics/morals, diligence) (Carroll and Buchholtz, 2008) and the level of organizational development of the environment in which projects are implemented (e.g., project organizational structure, information support, multi-project organization, standardization of project procedures). We will not go into details about such views, but rather focus on the need to raise general knowledge about project management and visibly define its position when speaking about a knowledge society.

KNOWLEDGE SOCIETY'S INSUFFICIENT CAPACITY TO MASTER GLOBAL STRATEGIC CRISES AND THEIR PROJECTS' CHALLENGES

Society is made up of mutually interrelated groups of people, in which a whole exists only through a unity of functions taken up by all participants and each individual is to a great extent defined by his or her belonging to the whole group (Adorno and Horkheimer, 1979). Skledar and Kregar (2003) de-

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fined society as an organized whole – namely, a group of people connected by a joint life system (rules and norms) and social institutions. In each society, regardless of the level of its development, a certain organization of joint living exists and assigns each member with social functions and roles, which they basically have to respect.

Throughout history, societies have passed through several major phases of development, such as *pre-modern* and *modern societies* (i.e., Giddens, 2007; Lee and Newby, 1983), although some sociologists (e.g., Fukuyama, 2000; Haralambos and Holborn, 2002) claim that a new type of society – *postmodern society* – is being developed by transitioning from industrial modernism. According to Barić and Jeleč Raguž (2010), the current world is on the threshold of changing from an industrial society to an information society and a *knowledge society*. The knowledge society is often seen as a new civilization that replaces the dying and hopeless era of industrial capitalism with new forms of social, familial, and labor life (Švarc and Perković, 2011).

Meanwhile, many authors have interpreted the notion of knowledge society differently; although this notion is increasingly used, it still has not been sufficiently defined. It is essential to differentiate the notion of knowledge economy from knowledge society. Knowledge economy is mostly a construct of economic theories based on production, distribution, and use of knowledge; its purpose is to measure to what extent knowledge is present in the national economy (Švarc, 2006, 2009; Švarc and Perković, 2011). Barić and Jeleč Raguž (2010) defined "knowledge society as a society, in which human knowledge, skills and abilities are the most important development resources and initiators of economic and social changes." They further concluded that the structure of the knowledge society "consists of the so-called four pillars: education, the innovation system, the information-communication-technological sector, and the legal and economic framework." Those pillars, with their accompanying elements, are crucial for any country that wishes to be able to participate fully in the society and economy based on knowledge.

Although many researchers emphasize the necessity of building and developing the knowledge society, others warn of numerous problems that result from it. Dahrendorf (2005) stresses that the knowledge society creates new elite of the rich while the poor become even poorer. New conflicts are created as well as social inequity, exploitation, and other social problems. Stiglitz (2009), similar as Beck (2003), focused on negative social and ecological consequences stemming from pursuing narrow subjective interests.

Both supporters and critics of the knowledge society fail to give sufficient consideration to the inter-dependence between

the knowledge society and the rise of a multi-project environment (and changed demands in knowledge, support, etc.) and global strategic crises, much less their resolutions. Establishing a highly developed knowledge society, as understood today, will not be sufficient for mastering multi-project environment and global strategic crises discussed herein. Indeed, according to some of the quoted authors, such crises can appear precisely because of the development of the knowledge society, although we argue it is the non-systemic (i.e., not holistically enough) development of the knowledge society.

In order to master influences of global strategic crises, it is necessary to provide different conditions, particularly to ensure the knowledge and ability to form and implement strategies and projects for mastering global crises. The knowledge required to find solutions for project-oriented society struggles with influences of crises and for achieving holistic knowledge society, which should help raise awareness that crises are present and that a global resolution is necessary. In this respect, a transition to the *project-oriented knowledge society* is needed, while the term knowledge society needs to be further extended (see Figure 2): Knowledge society covers needs for mastering global strategic crises, permanently increasing humankind's general knowledge, based on the development and application of new knowledge from innovativeness and research and development achievements, which can bring about the new, vitally needed solutions for measures (i.e., projects for mastering global strategic crises). Such knowledge further contributes to raising awareness of the need to adopt and implement the necessary measures (i.e., projects to resolve global strategic crises), thereby ensuring further development of humankind and maintenance of its dignity.

⮑ FIGURE 2
Project-oriented
knowledge society
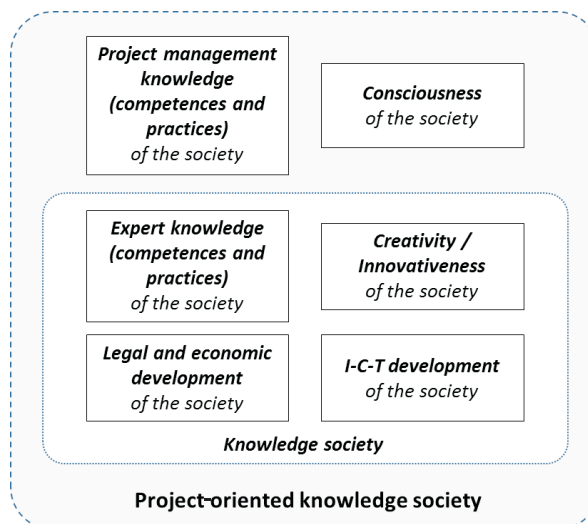
In establishing the project-oriented knowledge society, it is necessary to incorporate the knowledge of mastering multi- -project issues as solving global strategic crises is connected to mastering a number of projects. Here we do not refer only to the narrow, middle section of society, which knows how to plan and implement projects, but to society as a whole, which will have to accept the fact that particular types of projects are needed, although some will demand self-sacrifice for some while creating opportunities for others. Most importantly, society will have to accept the fact that some necessary projects will cause a different distribution of capital, changes in the current power hierarchy, and control over certain world events.

DEVELOPING A HOLISTIC PROJECT-KNOWLEDGE SOCIETY

Because of the great importance of global strategic crises for the survival and further development of the world, it is necessary to unite the project-oriented knowledge society and holistic project-oriented society. Knowledge makes it possible to find the necessary solutions and measures to resist influences of global strategic crises; solutions have to be found to increase awareness of the need for a joint action in resisting global strategic crises. To permanently resist crises' influences, it is necessary to establish a *holistic project-knowledge society* (see Figure 3).

⮂ FIGURE 3
Holistic project- -knowledge society
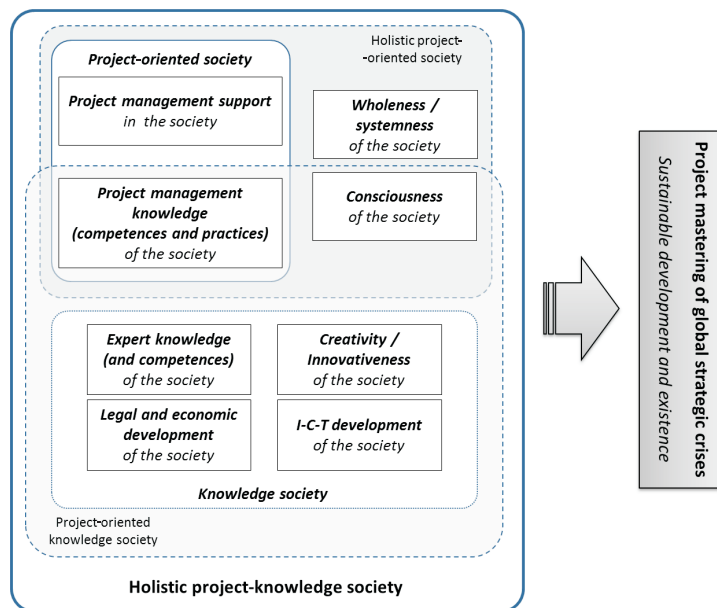
Knowledge society includes the interaction of expert knowledge and competence, creativity and innovativeness, high- -level legal and economic development, and developed informatics/communications/technology to support the establish-

ment of a holistic project-oriented society and vice versa as it is not possible to successfully master global strategic crises through either a highly developed classical project-oriented society or a knowledge society. However, integrating these societies into a holistic project-knowledge society set up the appropriate foundation to successfully meet challenges in resisting influences of global strategic crises.

Developing such a holistic project-knowledge society and its components requires knowing the process for mastering the global crisis. We cannot yet talk of a uniform process of solving global strategic crises and their consequences and/or using opportunities, although much work has been dedicated to this matter, including interdisciplinary research and development. All crises and their consequences and solutions must be identified through scientific research to build the projects necessary to prevent consequences and further spreading of the crises. The complex process of mastering global strategic crises can be divided into the following (sub)-processes (see Figure 4):

Recognizing global crises: This process not only refers to recognizing a crisis, but also unifying diverse standpoints and views on the significance of the crisis and its influence on society. It is also necessary to understand that an inter-relatedness of different crises exists in order to establish potential synergy effects among diverse projects for crisis mastery.

Analyzing influences of global crises: This process primarily refers to scientific and expert analyses revealing real consequences and time periods of the effects of crises, particularly timelines for preparing projects to repel crisis influences.

Forming strategies to prevent further intensification of crisis influences: In addition to establishing a strategy, the identification of projects must be carried out to establish all goals and identify necessary resources. This process requires harmonization between all the crucial participants to facilitate project implementation of the strategy. It is also necessary to develop a crisis project portfolio.

Developing a crisis project portfolio: The portfolio must recognize time periods within which the influences of the crises will cause a real threat to humankind as well as establish a logical dependence among projects and identify all resources needed for implementation. Consensus among all participants must be achieved. The portfolio should be three-dimensional, which is the basis for all decision making. Through the formation of the holistic system of project management, portfolio development will be managed, leading to the execution of the crisis project portfolio, resulting in a strategic program and project plan.

Defining project start-up: Based on the strategic project plan, when consensus is achieved for each project and program, the necessary resources and other conditions have to be ensured, followed by the start-up of the execution of the project.
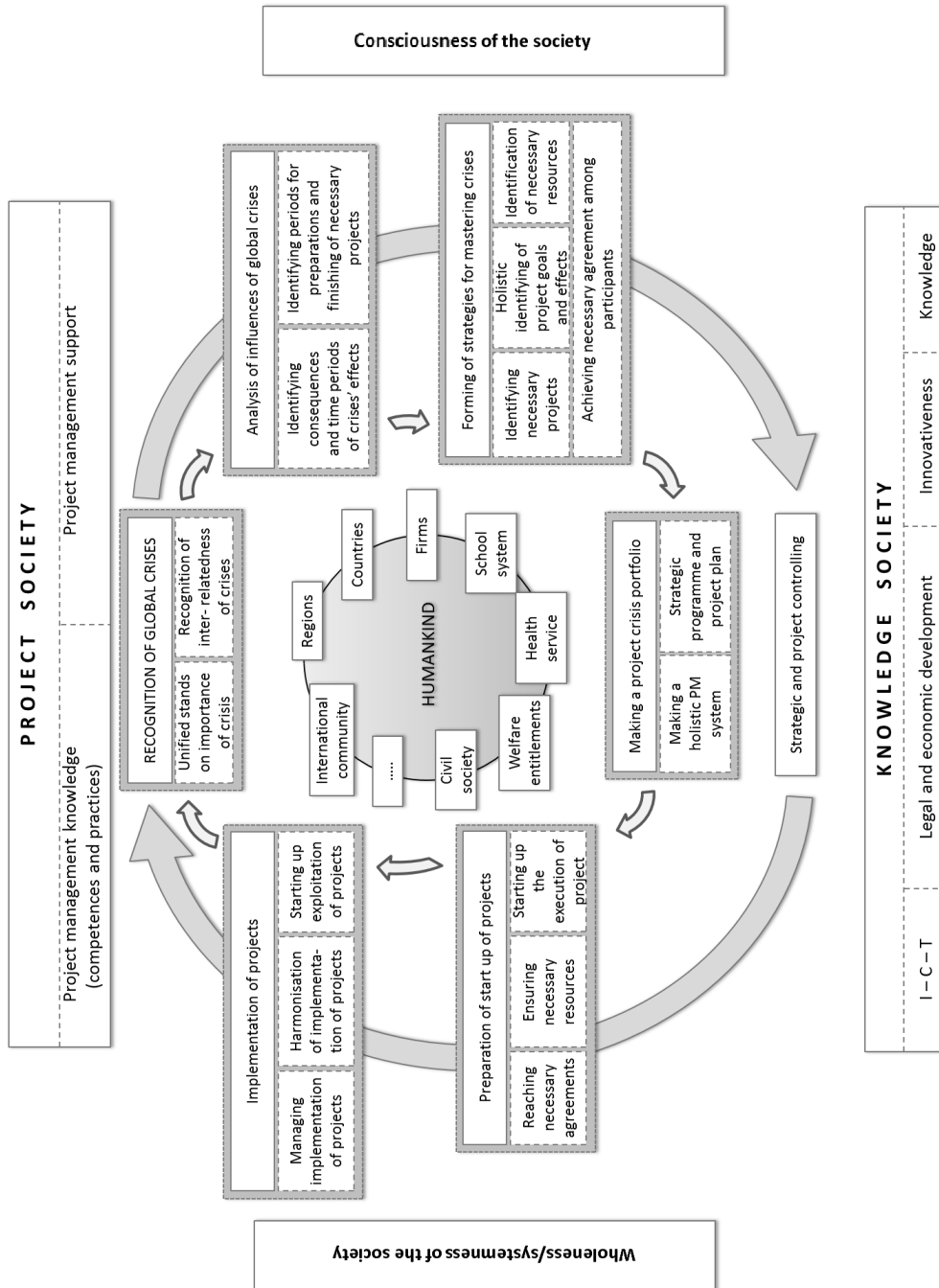
The process of mastering global strategic crises

Executing the project: This stage comprises very complex processes of carrying out the project and establishing all exploitations of results for preventing influences of crises.

Controlling the process of executing projects to prevent crisis influences: Here we refer to strategic and project controlling. With strategic controlling, we supervise to what extent strategies are achieved, which can lead to their reassessment. Project controlling is used in the execution stage in order to reach all project goals. Actually, controlling is carried out in all stated processes.

In the process of overcoming global strategic crises, the knowledge society and project society play significant roles. The former offers necessary solutions for resisting crises based on scientific and expert findings. Models are then selected to achieve full awareness and reach consensus – not only in accepting the strategies, but also for attaining a gradual transition into a project society, which is an essential support in implementing project strategies for mastering global strategic crises.

In the current paper, the process of mastering global strategic crises has been portrayed in its "ideal" form. It is necessary to consider the diversity of global crises in terms of their influences, particularly the fragmentation of all participants and stakeholders – from the most developed to less developed countries – who are involved in financial development, politics, international institutions, financial systems, and other subjects in different ways as this will affect all stages of the process. Naturally it will take quite some time to ensure awareness of the importance of orderly and harmonized action among all participants in the process of mastering global strategic crises. We have to think here also of the role of international associations such as the EU, the UN, the OECD, different world associations, the UAS, and various world societies as these can and must act as influential and decisive agents in this process.

CONCLUSION

The holistic project-knowledge society has to be built because influences of global crises on humankind are intensifying and drawing closer. Some are predicted to start threatening the world within the next few decades.[3] Is the world society prepared to accept this fact and its consequences, or will a global helplessness crisis appear? Is humankind prepared to prevent this, or are uniform strategies and projects already being prepared? Ultimately, this article has sought to warn of the appearance of global strategic crises, present the processes for mastering those crises, and stress the necessity for integrating the expanded view of knowledge society with the expanded view of the project-oriented society into a holistic project-knowledge society.

The holistic project-knowledge society, as presented in this article, has to be understood as the ultimate desired goal

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for humankind, primarily in a social environment that already has the knowledge, competences, resources, and other possibilities to establish the efficient functioning of such a society. Establishing such a society is in principle possible in two ways: gradually and through a generational model.

By gradually, we mean progressively building elements and crossings to such a society by incorporating different measures, projects, and interdisciplinary activities and involving all active participants in receiving and transferring knowledge and competence (particularly via school systems), including the leading participants who can solve society's psycho-social problems that will surely emerge as well as those in governing systems and others. In contrast, the generation mode involves preparing a program for building such a society in all environments where it is essential and needed; it is started at one go, from one preschool generation on. Undoubtedly, both approaches are simultaneously necessary, as is being done in China, for example.

NOTES

[1] Resources include not only material resources, but also people, time, and everything else needed for project implementation. We also refer to resources that are immediately and indirectly affected by project implementation (e.g., expenditure and use).

[2] The Chinese government treated this realisation seriously when it decided to create a project-oriented society aimed at building "a state founded on innovations" and a wider innovation system (Qi and Sun, 2007). For this reason, during the last ten years, the Chinese Ministry of Higher Education has coordinated and financed more than 90 new study programs based on contents related to project management (Bredillet, 2007).

[3] It is a well-known fact that, since 1993, the sea level has risen by 3.1 mm annually. According to the UN, the sea level is expected to rise from 18 to 59 centimetres by the end of the century due to global climate changes; other analysts predict the sea level will increase by one meter. Another example of a global strategic crisis is the growing number of the world's population, which is expected to rise from the current 6.8 billion to 10 billion by 2050 (UN, 2004).

REFERENCES

Adam, B. (2002), Running Out of Time: Global Crisis and Human Engagement. In: M. Redclift and T. Benton (Eds.), *Social Theory and the Global Environment* (pp. 92-113), London, Routledge.

Adorno, T. W. and Horkheimer, M. (1979), *Sociološke studije*, Zagreb, Školska knjiga.

Bargaoanu, A. and Calinescu, L. (2008), Romania as a Project-Oriented Society. *Management & Marketing*, 3 (1): 81-94.

Barić, V. and Jeleč Raguž, M. (2010), Hrvatska na putu prema društvu znanja. *Poslovna izvrsnost*, 4 (2): 57-77.

Beck, U. (2003), *Što je globalizacija?*, Zagreb, Vizura.

Blatz, M. and Haghani, S. (2006), Innovative Crisis Management Concepts – An Up-to-Date Status Evaluation. In: M. Blatz, K. Kraus and S. Haghani (Eds.), *Corporate Restructuring: Finance in Times of Crisis* (pp. 3-22), Springer-Verlag, Berlin.

Bodea, C. (2002), Project Oriented Society: From a Theoretic Concept to a Concrete Economic Reality. *Economy Informatics*, 2 (1): 13-19.

Bredillet, C. N. (2007), Exploring Research in Project Management: Nine Schools of Project Management Research. *Project Management Journal*, 38 (3): 3-5. doi:10.1002/pmj.20001

Brown, N. (2004), *Global Instability and Strategic Crisis*, Oxon, Routledge, Taylor and Francis Group.

Canton, J. (2006), *Extreme Future: The Top Trends That Will Shape the World for the Next 5, 10, and 20 Years*, New York, Penguin Group.

Carroll, A. B. and Buchholtz, A. K. (2008), *Business and Society: Ethics and Stakeholder Management*, 7th Edition, Athens, University of Georgia.

Cleland, D. I. (2003), *The Societal Contribution of Project Management*, IPMA 17th World Congress on Project Management, Moscow, Russia June 4-6, 2003.

Cleland, D. I. and Ireland, L. R. (2006), *Project Management: Strategic Design and Implementation*, 5th Edition, New York, McGraw-Hill Companies, Inc.

Crandall, W. R. and Mensah, E. C. (2008), Crisis Management and Sustainable Development: A Framework and Proposed Research Agenda. *International Journal on Sustainable Strategic Management*, 1 (1): 16-34. doi:10.1504/IJSSM.2008.018124

Dahrendorf, R. (2005), *U potrazi za novim poretkom: predavanja o politici slobode u 21. stoljeću*, Zagreb, Deltakont.

Engwall, M. (2001), *Multi-Project Management: Effects, Issues and Propositions for Future Research*, Fenix Working Paper Series, Stockholm School of Economics.

Frenkel, R. and Rapetti, M. (2009), A Developing Country View of the Current Global Crisis: What Should Not Be Forgotten and What Should Be Done. *Cambridge Journal of Economics*, 33 (4): 685-702. doi:10.1093/cje/bep029

Fukuyama, F. (2000), *Povjerenje*, Zagreb, Izvori.

Gareis, R. (2002), *Management in the Project-Oriented Society*, Wien, Projektmanagement Group, Wirtschaftsuniversität. http://epub.wu.ac.at/814/1/document.pdf (23. 1. 2011)

Gareis, R. and Huemann, M. (2001), *Benchmarking the Project-Oriented Society*, Wien, Projektmanagement Group, Wirtschaftsuniversität.

Giddens, A. (2007), *Sociologija*, Zagreb, Nakladni zavod Globus.

Hamel, G. (2006), The Why, What and How of Management Innovation. *Harvard Business Review*, 84 (2): 72-84.

Haralambos, M. and Holborn, M. (2002), *Sociologija: Teme i perspektive*, Zagreb, Golden marketing.

Hauc, A. (2007), *Projektni management*, Ljubljana, GV Založba.

Hauc, A. (2010), Projektna družba kot pogoj za obvladovanje globalnih kriz. In: I. Vrečko (Ed.), *Projekti in projektni menedžement v vlogi reševanja globalnih sprememb in gospodarske krize* (pp. 14-31), Ljubljana: Slovensko združenje za projektni management.

Hauc, A. and Vrečko, I. (2009), Povezivanje projekta i projektnog menadžmenta s inoviranjem i inovacijskim menadžmentom. In: N. Skledar (Ed.), *Zbornik radova* (pp. 383-401), Zaprešić, Visoka škola za poslovanje i upravljanje s pravom javnosti "Baltazar Adam Krčelić".

Järkvik, J., Berggren, C. and Söderlund, J. (2007), Innovation in Project Management: A Neo-Realistic Approach to Time-Critical Complex Systems Development. In: *Project Research Conference – Projects in Innovation, Innovation in Projects*, The International Research Network on Organizing by Projects (IRNOP VIII), Brighton, UK.

Kerzner, H. (2009), *Project Management: A Systems Approach to Planning, Scheduling and Controlling*, 9th Edition, Hoboken, John Wiley & Sons, Inc.

Lee, D. and Newby, H. (1983), *The Problem of Sociology*, London, Hutchinson.

Morris, P. and Jamieson, A. (2004), *Translating Corporate Strategy into Project Strategy: Realizing Corporate Strategy through Project Management*, Pennsylvania, Project Management Institute.

Mulej, M. (2007), Systems Theory: A Worldview and/or a Methodology Aimed at Requisite Holism/Realism of Humans' Thinking, Decisions and Action. *Systems Research and Behavioral Science*, 24 (3): 347-357. doi:10.1002/sres.810

Omazić, A. M. and Baljkas, S. (2005), *Projektni menadžment*, Zagreb, Sinergija nakladništvo.

Qi, A. and Sun X. (2007), A Research on the Project Oriented Society and Organization for China to Build the Innovation Country and Innovation System. In: *Project Research Conference – Projects in Innovation, Innovation in Projects*, The International Research Network on Organizing by Projects (IRNOP VIII), Brighton, UK.

Rebernik, M. and Širec, K. (2007), Fostering Innovation by Unlearning Tacit Knowledge. *Kybernetes*, 36 (3/4): 406-419.

Robertson, S. L. (2008), Embracing the Global: Crisis and the Creation of a New Semiotic Order to Secure Europe's Knowledge-Based Economy. In: B. Jessop, N. Fairclough and R. Wodak (Eds.), *Education and the Knowledge-Based Economy in Europe* (pp. 89-108), Rotterdam, Sense Publisher.

Shenhar, A. J. and Dvir, D. (2004), Project Management Evolution: Past History and Future Research Directions. In: D. P. Slevin, D. I. Cleland and J. K. Pinto (Eds.), *Innovations: Project Management Research 2004*, Newtown Square, PA, Project Management Institute.

Skledar, N. and Kregar, J. (2003), *Znanost o društvu*, Zaprešić, Visoka škola za poslovanje i upravljanje "B. A. Krčelić."

Standish Group (2009), *Chaos Summary 2009*, Boston, Standish Group Inc.

Stiglitz, J. (2009), *Uspjeh globalizacije: Novi koraci do pravednog svijeta*, Zagreb, Algoritam.

Švarc, J. (2006), Institucionalne pretpostavke tranzicije u gospodarstvo znanja: karika koja nedostaje. *Društvena istraživanja*, 15 (3): 319-344.

Švarc, J. (2009), *Hrvatska u društvu znanja*, Zagreb, Školska knjiga.

Švarc, J. and Perković, J. (2011), *Prilog sociologiji društva znanja*, Zbornik radova "Društvene pretpostavke društva znanja", 4. međunarodna konferencije o naprednim i sustavnim istraživanjima, Odsjek za sociologiju Filozofskog fakulteta u Zagrebu, 12. i 13. 11. 2010., Zagreb – u tisku.

Tanaka, H. (2011), The Changing Landscape of Project Management, *Project Perspectives – The Annual Publication of International Project Management Association*, 33: 10-16.

Turner, J. R. and Speiser, A. (1992), Programme Management and Its Information System Requirements. *International Journal of Project Management*, 10 (4): 196-206.

UN (2004), *World Population to 2300,* New York, United Nations Department of Economic and Social Affairs/Population Division.

Vrečko, I. (2007), Mastering Strategic Crisis with Project Management Usage as a Holistic Invention-Innovation Process. In: M. A. Wdowiak, E. J. Schwarz and M. Mulej (Eds.), *Entrepreneurship and Innovation in Europe* (pp. 33-43), Klagenfurt, Klagenfurt University, Department of Innovation Management and Entrepreneurship.

Vrečko, I. (2010), *Projekti in projektni menedžment v vlogi reševanja globalnih sprememb in gospodarske krize.* Projektni forum 2010, Velenje, Slovensko združenje za projektni management.

Vrečko, I. (2011), *Obvladovanje strateških kriz z uporabo projektnega menadžmenta kot celovit invencijsko-inovacijski proces.* Doktorska disertacija, Maribor, Ekonomsko-poslovna fakulteta.

World Bank (2008), *The Little Data Book*, Washington, DC, International Bank for Reconstruction and Development. The World Bank Development Data Group.

Cjelovito projektno društvo znanja kao uvjet za rješavanje globalnih strateških kriza

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U ovome radu autori ističu ulogu projekata i projektnoga menadžmenta u svladavanju globalnih strateških kriza, što stvara novo multiprojektno okruženje, sastavljeno od projekata, programa i portfelja projekata. Multiprojektnost postaje nova činjenica modernoga društva i zahtijeva prilagodbu organizacijskih rješenja, kompetencija raznih

sustava i pojedinaca te promjene u shvaćanju učinaka projekata. U radu su definirane globalne strateške krize. Neke od njih u aktualnom vremenu zahtijevaju brzo, sistematično i globalno rješavanje, a samim time i izvođenje projekata, pri čemu treba biti svjestan ograničenosti resursa potrebnih u projektima i onih na koje projekti utječu. Autori raspravljaju o društvu znanja u kontekstu globalnih strateških kriza te proširuju dosadašnje interpretacije značenja projektnoga društva, ističući njegovu ulogu u svladavanju globalnih strateških kriza. Autori predlažu uspostavljanje cjelovitoga projektnog društva znanja integracijom društva znanja i projektnoga društva. Na taj način postavljaju se okviri za svladavanje globalnih strateških kriza, a samim time i osiguranje dugoročnog opstanka čovječanstva. Članak završava prikazom procesa svladavanja globalnih strateških kriza uz pomoć cjelovitoga projektnog društva znanja.

Ključne riječi: društvo znanja, projektno društvo, globalne strateške krize, cjelovito projektno društvo znanja, krizni projektni portfelj

Die Wissensgesellschaft als Gesamtprojekt – Voraussetzung zur Lösung globaler strategischer Krisen

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Die Verfasser heben in ihrer Arbeit hervor, wie wichtig die Rolle von Projekten und Projektmanagement zur Bewältigung globaler strategischer Krisen sei. Dies schaffe ein neues gesellschaftliches Umfeld, bestehend aus vielerlei Projekten, Programmen und Projektportfolios. Die Multiprojekt-Realität wird zu einem neuen Faktum der modernen Gesellschaft und erfordert angepasste organisatorische Lösungen, den kompetenten Einsatz unterschiedlicher Systeme und Einzelakteure sowie eine veränderte Sicht auf die Folgewirkungen einzelner Projekte. Die Autoren definieren zunächst den Begriff globaler strategischer Krisen. Bestimmte Krisen erfordern einen prompten, systematischen und globalen Lösungsansatz zum gegebenen Zeitpunkt, ferner eine ebenso zügige Projektumsetzung, wobei der Ressourcenbegrenzung Rechnung getragen werden muss, was sowohl Ressourcen betrifft, die für die Projektumsetzung selbst notwendig sind, als auch jene, die die Entwicklung eines Projekts beeinflussen. Die Verfasser erörtern das Phänomen der Wissensgesellschaft im Kontext globaler strategischer Krisen und erweitern dabei bisherige

Deutungen der Projektgesellschaft, indem sie ihre Rolle bei der Bewältigung globaler strategischer Krisen hervorheben. Sie suggerieren die Etablierung einer Wissensgesellschaft als Gesamtprojekt, das in sich die Merkmale der Wissensgesellschaft und der Multiprojekt-Gesellschaft vereinte. Auf diese Weise wäre nach Ansicht der Verfasser der Rahmen zur Bewältigung globaler strategischer Krisen gegeben und somit die langfristige Existenz der Menschheit gesichert. Der vorliegende Artikel präsentiert abschließend, wie sich der Prozess der Krisenbewältigung mit Hilfe der Wissensgesellschaft als Gesamtprojekt gestalten müsste.

Schlüsselbegriffe: Wissensgesellschaft, Multiprojekt-Gesellschaft, globale strategische Krisen, Wissensgesellschaft als Gesamtprojekt, Projektportfolios bei Krisenbewältigung