



Co-funded by the
Erasmus+ Programme
of the European Union

TEMPLATE OF CROSS-LITERATURE REVIEW RESULTS

beFORE - Becoming-Oriented Entrepreneurs in universities and companies

Project funded by European Commission Erasmus + Programme – Key Action 2
Knowledge Alliances - Agreement n. 2016 - 2858 / 001 - 001 Project n. 515842-EPP-1-2016-1-PL-EPPKA2-KA

for top publications presenting core foresight and entrepreneurial competences excluding domestic publication
Analysis of at least 10 publications

We would like to direct your attention that filling the last page in this questionnaire is obligatory

Guidelines: The aim of this template is to identify core foresight and innovation/entrepreneurship competences in relation to knowledge, skills and social competences that a future-oriented manager should possess. The source of data for the analysis are key books in the field and the other printed works on foresight and entrepreneurship (even popular-scientific studies), as well as peer review articles coming from leading journals such as *Technological Forecasting and Social Change*, *Futures*, *Long Range Planning*, to name but a few. Each partner involved in the task (universities) is free to select at least ten articles/books on the subject matter. The partners are also free to add any relevant articles/books. In the first place, we suggest to work on the publications which deal with the convergence among futures studies, entrepreneurship and innovation. In case of difficulty with the identification of core foresight and innovation/entrepreneurship competences in these sources, we suggest to work on the articles/books from three fields of expertise (namely foresight, entrepreneurship and innovation) separately.

The authors with affiliations	Sirkka Heinonen and Juho Ruotsalainen, Finland Futures Research Centre (FFRC) at University of Turku
Title of the publication	Toward the Age of Neo-Entrepreneurs
Journal title*	World Future Review
Number of journal*/year of publication/pages	<i>Summer 2012</i>
Database of the scientific article's retrieval*	EBSCO
Keywords (or phrases) by which the publication was identified	entrepreneurial competences; innovation; foresight
Main keywords/phrases of the publication	Click here to enter KEYWORDS OF THE PUBLICATION
Core foresight and entrepreneurial competences	<ol style="list-style-type: none"> 1) In a fluxing, holistic, creative, and meaningsbased neo-growth economy especially, general competences and skills are needed. Instead of high specialization, multiple competences will become critical in future work. 2) The workforce will be utilizing more and more the whole range of the human potentials and skills. 3) "Artistic" competences i.e., skills of communication, interaction, and socio-cultural sensemaking will, in particular, gain in importance. 4) The following set of future skills and competences are summarized in the concept of the Futures Competences Diamond, consisting of seven edges (Heinonen 2012). This set can be seen to depict especially the competences of the future entrepreneurs: <ul style="list-style-type: none"> • Interaction Competence • Collaboration Competence • Time Competence • Technology Competence • Environmental Competence • Systems Competence • Socio-Cultural Sense-Making Competence <p>Interaction Competence covers <i>communicational skills</i> (verbal, literary, visual, physical, etc.), <i>linguistic skills</i> (mastering different languages), and <i>cultural skills</i> (knowledge of different norms, values, codes, beliefs, etc.). Due to globalization and multiculturalism, expertise on different cultures, religions, customs, values, and beliefs are needed.</p> <p>Collaboration Competence refers to <i>team working skills</i>, <i>co-learning skills</i> (co-improving of competences), and <i>co-creation skills</i> (co-creativity). In the future, work will be done more and more in teams/networks (consists of different kinds of people, fields, and cultures). Collaboration Competence is also about utilizing service design in collaboration practices.</p> <p>Time Competence refers to <i>time-organizing skills, utilizing real-time, making optimal use of</i></p>

	<p>the diversities of time, appreciation of slow life, developing futures thinking, and futures consciousness. The organizing of work is done in the future according to what's appropriate and reasonable— not by strict commandment and dictation. The work is evaluated by the quality of the results and the well-being and satisfaction of the employee, not by time cards. The most important elements of time competences are proactive futures thinking and foresight capabilities.</p> <p>Technology Competence refers to <i>ICT skills, mastering human-machine interface, living with ease in the more and more technologically ubiquitous environment, and mastering social media, techno-feasibility</i> (it means the importance of considering not only the sufficiency of used technologies but also their appropriateness). Technology Competence is about the ways that humans relate to and take a stand for technology and the mastering of different technologies. This emphasizes the human-machine interfaces.</p> <p>Environmental Competence is about humans and their relations to the nature and the environment. A part of Environmental Competence is <i>individuals' and work organizations' know-how about how to constrain climate change and how to adapt to it. Pivotal</i> in this approach are the identifying and reducing of the ecological footprint and also adopting the so-called cradle-to-cradle approach. Cradle-to-cradle means using the waste produced by one process as another process's raw materials. <i>Tele-practices</i> are another part of Environmental Competence, provided that they simultaneously decrease environmental load. Companies' environmental accountability is Environmental Competence on an organization level.</p> <p>Systems Competence embraces systems thinking and holistic approach: seeing the big picture and the periphery. Accordingly Systems Competence is about understanding competences as a systemic whole consisting of subsystems. In this point of view, it is central to consider working life in relations with other functions of the society: living, transportation, private life, leisure activities, hobbies, societal participation, voluntary work, etc.</p> <p>Socio-Cultural Sense-Making Competence (i.e. Meanings Competence) refers to the ability to understand various cultural contexts, denotations, and— especially—connotations, as well as to the ability to understand different lifestyles and niches. It also includes the general ability to make sense of the increasingly complex and constantly changing environment.</p>
<p>Convergence among futures studies and entrepreneurship</p>	<ol style="list-style-type: none"> 1) Entrepreneurs may be futures-oriented by nature at the outset in their search for viable business strategies and new opportunities. Engaging entrepreneurs in various futures processes might be beneficial by virtue of their general proactivity and their tendency to think differently and probe the unexpected. This could be done by involving and inviting entrepreneurs, no matter what their products or services are, to participate in various futures workshops. 2) there is a growing number of entrepreneurs in the field of futures studies as consultants 3) Anticipation of alternative futures through various foresight techniques and futures research methods is vital to entrepreneurs and enterprises so that they can continuously renew and update their strategies

	<p>4) the role of entrepreneurs in exploring and foreseeing future developments and new opportunities and risks, as well, could be better integrated in the plethora of foresight techniques</p>
<p>Convergence among futures studies and innovation</p>	<p>Click here to enter the examples in the publication related to CONVERGENCE AMONG FUTURES STUDIES AND INNOVAION e.g. <i>the application of foresight in the organization increases innovation capabilities</i></p>
<p>Convergence among futures studies and entrepreneurship and innovation</p>	<ol style="list-style-type: none"> 1) society based the ethos of networks will be strengthened ever more: Individualism, creativity, and exhilarating work communities are best advanced with active, informal, and hierarchyfree interaction—maximally free sharing of ideas, thoughts, and feelings 2) In the constantly fluxing world, it is cru-cial to be able to systematically probe different future paths and alternative outlooks for the future. In addition to possible and probable future alternatives, it is important to define desirable futures. All this should be part of organizations' strategy and vision processes. To realize desirable futures, the next step is to proactively build innovative paths and schemes 3) Every organization should have a futures strategy, but also employers can have a personal strategy for the future. Futures thinking and foresight capabilities could be a subject, or at least a course in schools. In work organizations, foresight training could be part of an organization's training and education programs. 4) The more such entrepreneurial choices will focus on innovative products and services that contribute to building sustainable futures in our world amidst the crises, the better
<p>Main highlights of the article (in bullets, up to 2500 characters including spaces)</p>	<ul style="list-style-type: none"> • The future skills and competences are more generalized; high specialization is no longer enough. Multi-competent neo-entrepreneurs will excel in self-actualization and individual choices, added to enhanced possibilities for co-creation and collective creativity. • Social media solutions will be used within organizations, as well, as a way to communicate with the customer interface. Web 2.0 natives will take participation, bottom-up approaches, collaboration, and sharing for granted. They are motivated intrinsically rather than extrinsically. These attributes do not apply to the employees only, but also to the new generation of entrepreneurs. • Small enterprises with close relations to the customers and with a radically new corporate culture are needed to answer the following needs: oriented toward genuine feelings, personal experiences, and the purpose and meaning of life • we can foresee the emergence of the age of neo-entrepreneurs. The concept of entrepreneurship requires re-thinking: Society is moving away from ascetic Protestant values toward more hedonistic, romantic values, and so are the entrepreneurs. • Flexibility and self-renewal are today's social imperatives for a successful future.



Co-funded by the
Erasmus+ Programme
of the European Union

	<ul style="list-style-type: none">• "Neo-Entrepreneurialism," the swiftly rising startup scene as an epitome, embodies the shift from the information society to the meanings society. The meanings society is driven not so much by information processing but by people's— the producers' as well as the consumers'—search for meanings. The backbone and platform for such a search is the Internet.• We might be shifting away from the information and knowledge society to the "post-informational" meanings society characterized by digitalization and intangible, experience, and transformation services•
Other observations or comments	Click here to enter OTHER OBSERVATIONS OR COMMENTS

*Fill the following fields for the articles exclusively