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UNESCO/EOLLS Chair in Intellectual Entrepreneurship

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*Intellectual entrepreneurship  
(Concept – implications – research agenda)*

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Przedsiębiorczość intelektualna (koncepcja – implikacje – warsztat naukowy)

UNDERLYING PHENOMENA AND PROCESSES

Throughout the developed world two phenomena are radically changing the social and economic architecture of the market. The first one is expansion and diversification of both formal and non-formal education, and the second one – a gradual shift of market composition of products and services away from material and towards intellectual ones. These two phenomena are closely interrelated and affected by changes in broadly understood computer and communication systems.

The growing role of intellectual products is visible on both consumer and industrial markets. On both these markets almost purely intellectual products, often devoid of their material supplement, successfully compete with those which clearly dominated several years ago. Thus, in manufacturing we witness expansion of technical consultancy – a purely intellectual and marketable component contributing to value creation in a client organization through technology development. In tourism or finance the same role is played by consultancy offered by various advisors. The Internet is competing with traditional printed media, often rendering material “wrapping” of intellectual product obsolete. Similar changes are observable in medicine, arts, and education itself. The intellectual component is substantially increasing in all products and services. From agriculture to steel manufacturing new processes of production have radically changed all major industries. The intellectual component of production of crops now involves satellite technology to map precisely the application of fertilizers and water. The production of steel is much more than the application of energy and raw materials by brute force. It involves

sophisticated continuous mill furnaces. While productivity has increased in most industries resulting in less direct labor to produce more goods, this productivity increase is backed by a new generation of computer programmers, computer engineers, process control experts, environmental experts, etc. In short, even in heavy industry, the intellectual component has dramatically increased during the past twenty years.

Growing educational achievement levels and standards contribute towards further diversification of social needs on one hand and to bigger supply of potentially new entrepreneurs on the other. Intellectual products need new intellectual entrepreneurs. And with growing commercialization of all spheres of human life there are more instances of intellectuals turned entrepreneurs. Intellectuals also move towards entrepreneurship in non-intellectual, traditional businesses. There are countless examples of glaring business success of people with academic education and high standing in sociology, physics, mathematics or philosophy. Entering business world, they offer not only new products but also new perceptions, procedures and – as a consequence – new kinds of management processes. All of this is especially visible in the countries under social, economic and political transformation where government support for intellectual life dramatically decreases and market gradually replaces central regulation. The implications for these countries themselves, and for the world community at large are rather obvious. Unless the intellectuals are certain they can create wealth and/or play socially acceptable roles, they will likely use their capabilities and talents in other directions, the non-productive, the non-constructive, and even destructive ones.

The phenomenon of intellectual entrepreneurship is not confined to the countries under economic and social transformation, however. Social and market demand on one hand, and growing education and sophistication of entrepreneurs on the other result in intellectualization of all spheres of economic life. This is an ubiquitous process. More visible in countries under transformation, perhaps. Possibly more profound in developed ones. But also present and increasingly important for developing ones. Growingly important because of both negative consequences of lack of opportunity and challenge to productively utilize intellectual capabilities, and of positive ones, resulting from possible enhancement of endogenous capacities for sustainable development.

Although accelerating and increasingly important, the signalled above processes are still in their initial stage. Hence a unique opportunity of studying intellectual entrepreneurship in almost laboratory situation.

Intellectual entrepreneurship is not only one possible kind of entrepreneurship, but its aspect as well. A study of it involves not only research on entrepreneuring intellectuals but on intellectual features of any successful entrepreneurship. Through studying entrepreneuring intellectuals we detect those features of entrepreneurship which are contemporarily necessary for, or at

least facilitating, entrepreneurial success. We also get an opportunity to better understand the growing intellectual content of economic activity of individual entrepreneurs and of their companies. Thus, exploring the nature of intellectual entrepreneurship, we unravel its potential for improving standard of living and for contributing to sustainable development at both the individual and societal level.

#### POSSIBLE APPROACHES TO MANAGEMENT

Entrepreneurship is part of management theory and practice. It is most often defined as approach to, part, or even dimension of management. Management is an art and science of resource handling. The more resources we have, the more important is their efficient use, their administration. Administration is about already created resources, about accumulated wealth. Entrepreneurship is about resource creation, creation of wealth. Both approaches to resource handling are always present in management. But from the macro (and regional or specific sector) development perspective the very crucial question is which prevails – wealth administration or wealth creation.

The study of entrepreneurship is the study of individuals, systems, environmental factors that result in human activity that creates wealth through satisfaction of human needs in a voluntary market based economy. This definition of entrepreneurship permits the focusing of research energy on those factors that enhance standard of living, promote employment and provide ongoing, legitimate business and income that support sustainable development. Entrepreneurship, in this light, is not the removal of wealth from one party to another, but the creation of new wealth that arises from social and economic synergy.

Most literature on entrepreneurship comes from America, so far the only truly entrepreneurial society of the world. Entrepreneurship was for long time defined in that country as “creation of something of value from nothing”, or – to make this definition more acceptable – “...from practically nothing”. Initial study of intellectual entrepreneurship indicates that this very “nothing” becomes the quintessence of new kind of entrepreneurship.

Both managers and “traditional” entrepreneurs have always dealt with material resources. They administer them and create them; create and administer. The point of business take off of entrepreneuring intellectuals is different, it is not visible material capital, but invisible intellectual one. The resources they use and leverage are personal (often tacit) knowledge and personal networks. They seldom plan their business ventures. They rather embrace business challenge (sometimes out of sheer curiosity) than seize or tap opportunities, which is

typical of vintage entrepreneur. Entrepreneurship is often incidental for them, just an instance of reaction to environment change. But once enacted, concrete venture breeds new challenges, fascination, and both physical and emotional involvement.

#### NEW KIND OF ENTREPRENEURSHIP

Entering business world entrepreneuring intellectuals face the same standards and tests other business actors do. But due to their already achieved social status (they are usually welcome in many places, welcome to perform varied jobs and functions), criticism (openness), and readiness to experience the unknown, they seem to be much less risk averted than traditional entrepreneurs. Their learning mode is also different. They neither adjust to context (single loop learning), nor exploit it (double loop learning). They rather enact context through difficult to comprehend process of learning, overstepping double loop. Present in diversified, multilayer environment (hypertext!), they see what and where others do not see.

The most striking element of this apperception process is acceptance of instability. Entering seemingly ordered and well organized business world entrepreneuring intellectuals bring with (and in) them sensibility to and comprehension of chaos. While anchoring themselves to their own business, they not only continue seemingly chaotic behavior but encourage chaos and teach their partners not to fight it but rather to deal with it.

In any growing and developing venture most tensions are generated by unavoidable conflicts between requirements imposed by resource creation (the very essence of entrepreneurship) and by resource handling (the very essence of administration). Successful intellectual entrepreneurs do not resemble traditional Schumpeterian creative destructors. They are neither necessarily destructive in their creation process, nor are they necessarily to be destructed by their potential successors. They are not "one season winners". They start and continue their business adventure as chaos tamers. Unlike Schumpeterian heroes, they combine social roles and functions of innovators, inventors and capitalists (intellectual capitalists!). Thus, without any doubt, they face personal risk of failure. And, once successful, they learn how to combine the administrative function of resource handling with requirements imposed by the need of continuous innovation. They learn a need of constant change. They seldom destruct and seldom tame people. They manage chaos and thrive on opportunities it opens to the knowledgeable and the courageous.

## PRELIMINARY RESEARCH AND ITS FUTURE DIRECTIONS

The systematic study of phenomenon of intellectual entrepreneurship is only beginning. The term was used in 1996 independently by Robert Chia (University of Essex), and by Thomas Dandridge (Grand Valley State University, Michigan), Bengt Johannisson (Växjö University) & Stefan Kwiatkowski (Leon Koźmiński Academy of Entrepreneurship and Management, Warsaw). During the same year some empirical cases of successful intellectual entrepreneurship were identified by Dandridge in the USA, Johannisson in Sweden and Kwiatkowski in Poland. More intensive and better structured study of intellectual entrepreneurship started in Poland in 1997 under a grant of Polish Committee of Scientific Research. Although still exploratory in nature, it aims at clarification of several hypotheses generated during the very initial stage of research. The underlying assumption is that economic growth, social change, development, and sustainability at the level of the firm, sector or society, require new managerial skills, new kinds of organizational learning, new resources, and also new ways of dissemination and application of scientific and technological advances.

The research is conducted in three societal sectors and at three levels:

- industry – the level of the firm and of its manager/entrepreneur,
- academe – the level of knowledge creator and disseminator,
- school – the student level.

All this research is based on intensive interviews and surveys. Longitudinal studies of individual ventures/enterprises have also been initiated.

Research conducted in the industry clearly indicates broadly perceived need of new managerial skills and new modes of organizational learning. It also illustrates growing product diversification and intellectualization on both industrial and consumer markets. Furthermore, it indicates a glaring business success of people with non-business education. One serious question requiring both longitudinal and cross-cultural studies is to what degree are phenomena observed in Poland general, and typical throughout the world. Are they not simply resulting from deregulation and decentralization, representing a clear example of deferred entrepreneurship, impossible under central planning regimes.

In the academe, leading scientists representing natural and management sciences are asked about the content and goals of their teaching, and also about the reasons of evident business success of non-business graduates. They are also asked about the skills and structures needed for application of scientific advances to successful business ventures. The initial results of this study suggest that in such moderately developed country as Poland natural science education might constitute a very solid base for both understanding development of science and technology, and for practical application of their results to varied businesses.

“Paradigm-shifting mentality” claimed to be necessary for sustained success in contemporary changing world seems to be much more often emphasized by leading natural scientists than by management teachers. Of no minor importance seems to be the fact that contemporary research itself becomes an entrepreneurial and managerial venture requiring orchestration of intellectual and material resources. The very participation in it might then be a good preparation for eventual business ventures.

Research conducted in tertiary and secondary level schools has been so far least conclusive. It is in a very preliminary stage and definitely requires both longitudinal and comparative (cross-cultural) perspective. The basic assumption here is that young people in secondary and tertiary level schools have some orientations, or attitudes towards entrepreneurship and management, and that these approaches can (should?) evolve as a result of formal and informal education, and of social maturation. Four ideal hypothetical types of those approaches have been identified, each with different characteristics of seven features arrived at during a lengthy trial and error process. These four ideal types are:

“Intellectual”, “small business person/bureaucrat”, “entrepreneur” and “intellectual entrepreneur”

The seven features defining those ideal types are the following:

- prevailing motivations and drives,
- perceived barriers to act/venture,
- acquired knowledge base,
- methods of new knowledge acquisition,
- perceived strength and permanence of environment limitations,
- learning mode,
- strength and permanence of ties with immediate environment.

The goal of mentioned above longitudinal and comparative study (when finally undertaken) would be to detect and monitor educational and social impact on broadly understood orientation towards entrepreneurship generally, and intellectual entrepreneurship in particular.

In summary, preliminary research confirmed possible fruitfulness of a systematic study of newly emerging kind of entrepreneurship. Through concentration on wealth creation and reliance on intellectual capital intellectual entrepreneurs develop and introduce new products, and create new jobs. Through diversification of available product mix they enrich their clients not only economically, but first of all intellectually, creating new needs, and new business opportunities. Their business ventures constitute socially least costly means of practical application of scientific advances. Their contribution to sustainable development is thus unquestionable. It takes place through job and wealth creation, through product line diversification, and – last not least – through the development of new managerial skills and new kinds of learning.

The above conclusions are drawn, however, from results of a very preliminary research. A more systematic, longitudinal and cross-cultural research is not only justified but necessary, especially from perspective of more and less developed countries and societies.

#### STRESZCZENIE

Autor jest twórcą terminu „przedsiębiorczość intelektualna” i prezentuje wstępne wyniki badań nad nowym rodzajem przedsiębiorczości. Nowi przedsiębiorcy poprzez koncentrowanie się nad tworzeniem bogactwa w oparciu o swój intelektualny kapitał, wprowadzają coraz to nowsze produkty i tworzą nowe miejsca pracy, natomiast poprzez dywersyfikację dostępnych na rynku produktów wzbogacają klientów ekonomicznie oraz intelektualnie dzięki tworzeniu nowych potrzeb oraz nowych możliwości działalności gospodarczej.

