Determining the Discovery and Delivery Skills for the Romanian Employees – an Useful Method for Organizational Decision-Making

sabina-cristiana necula and daniela popescul

Alexandru Ioan Cuza University of Iasi

September 2012

Online at http://mpra.ub.uni-muenchen.de/51555/
Determining the Discovery and Delivery Skills for the Romanian Employees – an Useful Method for Organizational Decision-Making

Sabina Cristiana Necula, „Alexandru Ioan Cuza” University, Iași, Romania, sabina.mihalache@gmail.com
Daniela Popescul, „Alexandru Ioan Cuza” University, Iași, Romania, rdaniela@uaic.ro

Abstract

Referring (euphemistically) to Romania, the figures from the national reports which depict innovation are not particularly joyful – see Dumitrachi (2006), INS (2010), INS (2011), TBUI (2011), ANCS (2012), and Radu (2012). In this paper, we discuss the situation of the knowledge flows as sources of innovating actions and make some recommendations for the improvement of decision-making in organizations nowadays. The focus is settled on the individual, who is seen as a thinking electron and the main innovating agent. We have chosen to analyze the profiles of the people involved in Romanian public administration and universities, as these are two of the three elements in the innovating propeller proposed by the Swedish Innovation Agency (Filip, Dragomirescu, 2006, p. 21), having an essential role in increasing the innovative level of a nation. Based on the analysis, we draw a series of conclusions and recommendations for the organizational decision-makers.

Keywords: technological innovation, individual agents in knowledge flows, decision-making process in organizations

The individual as the prototype force capable of change in contemporary organizations

If we consider the organizations and nations as sums of knowledge flows, heading directly or indirectly towards innovation, hence progress, we notice the major role played by individuals as generators and consumers of knowledge, capable to increase the innovating potential of the systems in which they activate. The individual is a thinking electron who encapsulates knowledge (seen as a fluid mixture of assumed experiences, values, contextual information, understanding and expertise) thus building a frame for the assessment, undertaking and creating new experiences and information. The receptor relates the received knowledge to his own mental frame and creates his own interpretations, generating new knowledge every time, on a greater or smaller scale. Nonaka, together with Toyama and Konno (2000, p. 7) state that the individuals know as a result of a dynamic process, based on the interaction with other people, in a certain spatial and time context whose importance should not be neglected. According to Jennex (2007, pp. 2-3), the transfer of knowledge finds its place in an organization when its members pass on the explicit and tacit knowledge and an invention appears when an individual succeeds in transforming one undiscovered part of his tacit knowledge into explicit knowledge. Obtaining, using and sharing tacit knowledge by individuals is considered essential for the innovating ability of any organization.

Figure no 1 shows the individuals with dots/circles, as knots in the knowledge flows. Individual agents, as active generators and receptors of knowledge flows, represent the prototype force capable of change; on condition they should be involved in relationships with other agents. In the spirit of the theory of complexity, the micro-level on which the thinking electrons activate is also the place where the most powerful innovating processes emerge, capable of leading the systems they activate in to a liquid, chaordic state, situated between a stable, inert state of order and a gaseous, inconsistent state of chaos. The human agents can work with knowledge artifacts in any degree of abstract form, accomplishing without any help all the operations of knowledge creation, remembering, transfer and use.

The individuals, so as to become innovators and generators of new knowledge, must first of all have some certain discovery skills – as, for example, the curiosity to explore the adjacent possible and to overcome its limits. It is not compulsory to be inborn innovators in order to do this, but to acquire the necessary instruments – in our case, these instruments are wide knowledge, original perspectives in interpreting the problems they face, various heuristics to discover new solutions. Also, it is not
recommended for them to set too higher goals, but to consider the change they can make as incremental, and not radical.

Fig. 1 Knowledge flows at individual, organizational and national level – a fractal representation

According to Jack Welch, CEO of General Electric, quoted in Nicolescu and Nicolescu (2006, p. 64), "a good idea is not necessarily a biotech idea. An idea is taking a process that used to require six days and getting it done in one day. GE obtains increases in work productivity by 6-7% mostly due to this kind of ideas. Each individual should have such a contribution". We can see a good idea coming from an individual, regardless of its amplitude, as a network. A specific constellation of neurons – thousands of nerve cells – are active simultaneously for the first time in his brain and a new idea springs to his mind. The individual owes it to keep it alive, to connect his brain to other networks. So as to make his mind more innovating, it should be placed in environments which have the same defining features: networks of ideas or people who imitate the neuron networks which explore the adjacent possible, environments which spur the natural ability of the brain to make associating links. The brains "are exposed" in this case to the catalysts of creative ideas, such as observations, conversations, questions, new and stimulating experiences. Keeping this spirit, the individual can learn to be creative by:

- practicing associative thinking (which appears when the brain tries to summarize and explain the new things he encounters), especially in interdisciplinary environments. Being open to knowledge flows from different environments increases the individual creative ability. Bringing Cărtărescu into focus, we quote from a work of his, The Brown Eye of Our Love, in which the author says: “I am interested in the world […] the unfinished intelligence in which my intelligence integrates as the pattern in a carpet. I don’t want to lose anything; I constantly take samples from the endless number of layers of knowledge. I do not read more literature books than biology books, physics, neurology or cooking books, history, carpentry, philosophy or everything I come across”. The behavior described here deserves to be copied, considering that it belongs to the Romanian author who is mostly visible on international level;
- formulating and asking questions which oppose the current situation and destroy the local optima models appeared in the process of problem solving – following Einstein’s state of mind, who could be often heard saying "If only I could find the right question...". The whole world should be put under question, to be redefined, but not in a destructive way, in an empathic one. The questions might work when they sound like "what would I do if things went like this?" and if they worked as restrictive barriers which could stimulate the appearance of some of the most surprising solutions;

- noticing without prejudice, with acuity and interest the surrounding world, so that the discouraging contrast between the adults’ weakened mentality nowadays and the brilliant intelligence of the children from the past, as noticed by Freud, should be reduced;

- experiment in a continuous contact with new people, information, staying out of the most taken road because, as Taleb (2010) says, "there are many things that we can do if we concentrate on anti-knowledge, meaning on what we do not know. [...] Almost none of the important discoveries and technologies did not appear following planning – they were all Black Swans".

This behavior should be actively practiced, intentionally, so that it would become a habit. Even more, the individuals should be responsible for their own acts and should not fall into the temptation of self-sufficiency and cynicism, be self-motivated, competent, connected, obsessed by bringing new accomplishments to their resume.

The exploratory behavior traits mentioned above should be doubled by features which would support putting the ideas into practice, making the change from the invention to the innovation state – such as the ability to analyze, plan, carefully implement the details, disciplined work – these all are the delivery skills, which make a person a good performer. There should be a relationship of reciprocity between creativity and its practice and between the traits which support each of these stages there should be a balance, a symbiotic equilibrium. Nevertheless, the equilibrium state should not become permanent or lead to stillness. It is necessary to force new tensions to appear, which would bounce the organizational environment, thus generating new things. According to Nicholas Negroponte, founder and manager of Media Lab., quoted by Peters (2010, p. 422) "creativity comes from unusual juxtapositions. The best way to maximize the differences is to combine ages, cultures and subjects" – thus, the abrasion which appears between the different points of view is creative - Hislop (2005, p. 166).

**The profile of the innovating and performer Romanian employees from the public administration and universities – some theoretical and empirical observations**

In the national literature, there are some attempts to draw theoretical profiles of the employees from the local public administration and the Romanian university environment – see, for example, Popescul (2011, 2012).

Thus, we have discovered that the human agents from the public local administration, a sector which is less than innovating on national level are generally perceived as far from the ideal portrait of a thinking electron, seen as an involved consumer and generator of knowledge flows. Their main characteristics are the following:

- getting involved in everyday activities which do not require creativity and innovation. The employees undertake their tasks mechanically, without giving priority to creating and communicating knowledge. Most of the times technology does not take away tasks but hardens them;

- inhibition, tension related to keeping the work place. The period of crisis which started in 2008 led to massive redundancy and generated a state of barren uncertainty for any transfer of knowledge and/or innovation;

- fear of making mistakes, correlated with guilt. Watching the Romanian media channels for a short period of time shows that public servants are traditionally called incompetent, corrupt, guilty for not
bringing in European funds, so on. Linear thinking, in mechanical models based on cause-effect, discourage innovation, creativity, diversity of point of view. The creation of knowledge in public administration is rather slow. The working environment does not encourage competition; new ideas and learning are considered useless, the employees are happy with their role of wheels in the system and do not try to improve their performance. The great majority of the employees say they have never taken part in any training. The European funds to which Romania has had access since 2007 have been directed in great extent to covering some basic needs (infrastructure, drinking water, waste discharge etc.), little of them have the purpose of training employees.

As regards the transfer of knowledge, maybe as a consequence of their previous experience, the employees do not launch in communicating new ideas as they know they will have to fight with either huge files or with the "saints” who guard the door before getting to the "decisive God". Boștinăru (2009) confirms our observation saying that the communication structures have been conceived improperly and without really consulting the central public and local administration. Brătianu (2011) notices that bureaucracy acquired clear negative connotations as a consequence of its constant use during the communist period. Its excessive rules were implemented to strengthen control and the resulted structures, hardened especially in the public administration, which are still present nowadays, annihilate any interest in innovation, change, new knowledge. The inherited hierarchies, where advantages were proportional to the held position still generate corruption and systems of underground rewards, far from meritocracy.

Nevertheless, in the academic environment, diagnosed as one of the most innovating in Romania, the human agents are considered real knowledge workers. Their main characteristics are the following:

- ability to delegate part of their tasks to technology, dedicating their time and efforts to value generating tasks which require creativity and innovation;

- an overall vision on the way in which their own activity falls into the whole activity of the organization, a correct view on the participation of fulfilling the organizational objectives;

- high degree of responsibility and authority;

- educated, involved in a process of learning during their whole life;

- “forever young” – the infusion of young blood is obvious in universities and the selection of valuable and creative employees is made from the beginning.

In the spring of 2012 we undertook a study based on a questionnaire in order to clarify the traits in the profiles of the innovating and performer employees from Romanian universities, public administration and the private sector. The source for the questions included in the questionnaire was Dayer, J., Gregersen, H., Christensen, C. (2011). The questionnaire was created using the Google applications and the data was collected in a Google form, attached to a worksheet. Further adaptations were made using Microsoft Excel 2007.

The questionnaire was answered by 416 people from the universities, public administration and the private sector. The first observation we can make is that the data presented in figure 2, 10 genes of the performer (depending on the field of activity) confirm the general perception on the public employee, seen as a wheel in the system, efficient in the execution of repetitive tasks, responsible, hard-working. Thus, the employees from the public administration get higher scores in comparison to the ones from the private sector or the university environment for the following:

- detailed planning for the activities to be accomplished;

- fulfilling all the duties and accomplishing all the tasks;

- keep records of the personal contribution to the accomplishment of the work duties;

- watch closely the details from the work place so as to make sure nothing is left out;
- split an objective into smaller duties, necessary for the final accomplishment;
- accomplish a task, regardless of the obstacles;
- analyze all the consequences of a new task before accepting it;
- careful, optimum execution of tasks, keep to the quality parameters;
- good organization at work;
- pay attention not to make mistakes,

namely to all the ten traits of the performer we have analyzed.

Fig. 2 10 performer genes (depending on the field of activity)

But, after having analyzed the data from figure 3, 10 innovator genes (for different fields of activity), things seem to get different lights. Even though we would be tempted to say, considering the portrait made above, that public servants are not innovators, but rather inhibited, tense, paralyzed by the fear not to make mistakes, the study does not confirm these assertions. Even if there can be noticed a certain conformity with the "platoon" they work in – public servants, up to a point, have totally different views from others and do not doubt the way in which things are solved in the present, they seem to be very open towards:

- asking questions such as "what if" in order to explore new possibilities and overcome the current frontiers;
- the trends in their field and in other fields, reading books, magazines, updated blogs;
- discussions with people from different fields in order to find new ideas;
- finding new solutions to problems starting from ideas from other industries, domains, fields of activity or study.
From our point of view, being open to experiments and solutions from other fields of activity which prove an innovating behavior is a reaction to the barriers from the environment in which they work, being not exactly fertile, liquid, relaxed, stimulating, but which forces the employees, due to these constraints to escape by importing good practices from other fields.

The “strong” genes of the employees from the university environment are not the ones from the performer’s profile, where the top positions are only:

- careful, optimum execution of tasks, keep to the quality parameters and

- attention not to make mistakes.

![10 genes of the innovator](image)

**Fig. 3 10 innovator genes (depending on the field of activity)**

Figure no 3, *10 genes of the innovator (on different fields of activity)*, shows us that the employees from the academic environment consider that:

- their ideas and views differ greatly from the others;

- question the way in which things are undertaken in the present;

- notice how the people interact with products and services and new ideas come to their mind.

The main observation we can make after the study is that the collected and empirically interpreted data do not necessarily confirm the theoretical portraits made for the employees from the Romanian public administration and universities. Based on this observation, we consider that will be useful for each manager of an organization to conduct such profiling studies, in order to see the proportions of discovery and delivery skills for the employees and to intervene in order to equilibrate the innovating and executive behaviors.

**Conclusions and recommendations**

On individual as well as on organizational and national level, the existence of a strong cooperative and collaborative culture is a prerequisite and an extremely important request in order to create, remember, transfer and use knowledge. Without the proper mechanisms which would encourage cooperation, the functioning of the structured alteration or technological means of knowledge transfer
is not guaranteed. Nowadays, connecting the ideas is more helpful than the attempt to protect them. When we look at the innovation in nature and culture, the environments which build walls around the good ideas tend to be less innovative on the long run than the open environments. Good ideas want to get connected, to mix up, and to combine. They want to reinvent themselves going beyond the conceptual borders, to complete one another just as much as they want to compete. Moreover, the innovating process is helped a lot by an approach based on discovering and solving problems, by experiments, where failures are not punished, but considered lessons to be learned on the way to success. The more diverse the ideas and solutions for the problems at a certain level, the greater the increase because, after the combination of ideas and old solutions exponentially there are created other ideas and solutions. Mistakes are good because solutions which do not prove efficient can be used later on, that is why they should not be considered wasted money and time, but gains in experience and intangible assets.

On the other hand, it is widely accepted that in such an uncertain and complex approach as innovation, luck plays an important role. It is true, there are cases in which success seems accidental – and sometimes the benefits coming from a lucky approach are sufficient to finance later failures. But real success is seen in the ability to repeat the results, to manage this process in a diligent way, so that success, even if it is not guaranteed, should always have chances to appear. This depends on understanding and managing innovation so that only a small part is left to chance. Reality proves that success is based on the ability to assimilate, to learn and repeat these actions, always gathering knowledge and solutions. Adding in time the gains in efficiency has a more important result than efficiency gained once a radical change is introduced. In other words, the possibility of reaching technological advance of firms, organizations, countries has a cumulative nature, which means that it depends, among other things, on the technical level they have already acquired. Innovating activity is also cumulative, with efficiency increased in time. Previous experience determines future possibilities, except the uncertainty which is specific to the creative process. Thus, supportive innovations are as important as the radical/disruptive ones, for the success of any organization or the well-being of any country.

Following these statements, the decision makers from the contemporary organizations should be capable of balancing the traits of an innovator and those of a performer, so that the creative process should be, as paradoxical as it may sound, a free and controlled one. In order to do this, we recommend making a diagnosis to establish the genetic profile of their employees and interfere in order to stimulate the traits that the organization misses as regards the goals set for innovation.

Acknowledgement

This work was supported by CNCSIS-UEFISCSU, project number PN II-RU code 188/2010.

References

5. Dumitrachi, I. et. al. (2006), Sistemul național de cercetare, dezvoltare și inovare în contextul integrării în aria europeană a cercetării, Editura Academiei Române, București