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The Implications of Prospect Theory for Organizational Effectiveness

Abstract: The Implications of Prospect Theory for Organizational Effectiveness. It is necessary that the decision maker(s) bear throughout knowledge of the problems of functioning, that they should give assistance in some situations, and understand the situation, also they have to find a way of insuring information in a form of advising or personal collaboration. The main aim of it is to gain that kind of information or advice, with the help of which, they are able to act appropriately to solve the problems present, and directly or indirectly gain some profit. The forming of judgements relies on some basic heuristic procedure. In complicated and risky decisions participants are inclined to over-simplify the problem. Although, it is a well-know phenomenon, it was summarized by Daniel Kahneman and Amos Tversky, the shared Nobel-prize winners in 2002, in their prospect theory. Prospect theory puts the decision maker with the subjective evaluation of probabilities and with the help of the so-called value function into the process. In our paper we examine the use of prospect theory in relation to organizational effectiveness and counselling.

Introduction

The success, successfulness of organizations has been the subject of evaluation since their establishment. The goal, the prospect of success is prevalent in task-solving. In relation to successfulness align conservative and revolutionary judgements, continents, origins, qualification, and personal suitability that influence not only the judgements, but the work of corporations as well. The success of an organization is partly derived from long term existence, but part of their success comes from their continuous renewal in the quick and global economy. Today, the five hundred most successful companies' age is 18 years. For instance, the Google is an average aged enterprise among the successful ones. Another example of successful businesses is the Hungarian Prezi, which appeared in 2006. These organizations are typically learner organizations, their actions are characterized by instant feedback, prompt alternation of activity. Successful corporations and generally the mechanism of prosperous decision-making have been examined from numerous different aspects. Excellent summaries have been born, which always emphasised as a lesson that the conditions are influenced by the inevitable or compulsive circumstances and personal competencies.

With regard to the efficiency of an organization, one of the determining factors is the learnability of the corporation that stands in connection with the abilities of the human resource allocated into the organization. The requirements and demands formulated in connection with the learnability of the corporation also reflect the quality of the task. It is generally accepted that knowledge is the most important resource of a corporation. It is characteristic to a learning organization that it is able to create independent knowledge on the basis of accumulated experience, and to share it with all the members of the organization. Learning organizations were introduced by Peter Senge in his work titled *The Fifth Discipline*. With the help of it, he formulated its present sense that was brought to perfection by knowledge management. It is necessary that the decision maker(s) bear throughout knowledge of the problems of functioning, that they should give assistance in some situations, and understand the situation, plus they have to find a way of insuring information in a form of advising or personal collaboration. The main aim of it is to gain that kind of information or advice, with the help of which, they are able to act appropriately to

solve the problems present, and directly or indirectly gain some profit. Everything and everybody in the organization is concerned.

The organization and counselling

The expectations that have an indirect or direct impact on the organizations, the turbulent economic environment, the necessary/inevitable adaptation to the constantly changing environment, the state of contention, the rewarding answers to challenges, respectively, for the sake of maintaining and increasing organizational competitiveness, the organizations have recourse to consultation services many times. It is observable that in the circumstances of uncertainty, the organizational decisions (people) sometimes do not or slightly follow the expected predictions of the utility-hypothesis. Scientific achievements of psychology are valid in economics as well, as it has been admitted since the 1960's in Hungary.

In 1968, László Garai (realised that) the decisive motives of the choices of a person are derived from the work as a process, in which (s)he uses some former products of society's activity as tools and its product is the result of the subsequent activity. In economic psychology are psychic phenomena that not only follow economic processes, but also take part in them as active components - corrective or destructive. In a broader sense, he tries to give an answer to how does economy influence personality and vica versa: the person influenced how does affect the economy. Economics, which together with other sciences achieves its results in increasing corporate efficiency, increases its successfulness with prospect theory.

Counselling in organizations

Prospect theory analyses the cognitive aspect of human mistakes and preconceptions, explores the work of heuristic, and points out that we are more likely to follow some heuristic, rule of thumb in our decisions, rather than rational models of utility. Therefore, we are turning our attention to the processes influencing the shaping of conditions.

Global circumstances reproduce cultural changes, which is observable in counselling as well. This contributes to the (internal and external) enrichment of counselling culture, one of the determinants of competitiveness. In globalising economy, counselling takes place in critical situations by taking each case individually on the basis of different strategic viewpoints, by the "settling" of organizational basic activities, and by the outsourcing of supplementary activities. According to some, the attractive force of counselling is incarnated in the feeling that it is able to break in knowledge gaps: the activity of counselling can be accomplished from minimal physical infrastructure practically (one can embark on a business with minimal investment), the general professional competencies and the ability to establish connections easily are enough to be competent.

Many other factors are needed, beside physical capital, to run the counselling successfully. The most important among them are personal suitability, knowledge, social capital and authenticity. Accumulation of considerable knowledge is necessary for counselling activity. A great part of it can be gained and enriched by learning and experiences, by organizational routines. The most valuable capital is knowledge that becomes embodied in counsellors (and their employees). The relation among participants is hierarchical, as in any other sector. The "quality" difference between the participants is defined by the accumulated explicit and tacit knowledge (out of which experiential knowledge is of crucial importance), the advisory independency, secrecy, and social capital.

In addition to the basic differences, counsellors are differentiated by their scholarly background, innovative abilities and creativity. The participants of this sector do their work in a standardized, reproducible manner. Most of them strive after looking for the best solutions, transmitting it, and learning from the past experiences. Due to these features, innovation is a constraint of the market in counselling.

Counselling has to repeatedly face that people, when prediction and stating, do not follow the rules of rational reckoning of expected utility and statistical regularity of prediction. The

forming of judgements relies on some basic heuristic procedure. This heuristic can be described as mental operation or short cuts to decisions. In complicated and risky decisions the participants are inclined to over-simplify the problem and instead of analysing the situation, as mentioned previously, they rely on their subjective feelings, preconceptions and the rule of thumb. Although, it is a well-know phenomenon, it was summarized by Daniel Kahneman and Amos Tversky, the shared Nobel-prize winners in 2002, in their prospect theory. One discernment/recognition of this theory is that if the person follows its own interests, it leads to greater inquiry in the case of understanding the attitude of market, than the attempt to translate the pure model of economics into real, practical situations. Prospect theory puts the decision maker with the subjective evaluation of probabilities and with the help of the so-called value function into the process.

From risk to hazard

Counselling is a hazardous activity. Risk means revealing all the possible consequences of different activities with the definition of their weight and the probability of occurrence. The notion of danger stands for the extent of damage of humans, property, society or the environment. Decision is an elemental part of leading activity – from a professional point of view – choosing from different possible actions. In practice, this function is accomplished by the following activities: identification of the problem, arrangements of the decision, decision-making, realization, and controlling.

Every chosen variety of an action has consequences that are esteemed either as positive or negative and the result of which is supposedly or actually sure. As opposed to it, risk is an uncertain event to be expected, which is evaluated by the decision-maker. At real decisional situations the three possible consequences (positive, negative and risk) appear at the same time. Among the consequences of a chosen variety of an action, various forms of risk can occur simultaneously. Thus, when decide a whole line of advantages, disadvantages and risks has to be considered. It is possible that one type of risk appears to be dominating (e.g. environmental contamination), but this is rather an exception than a rule. Risk in standard language means that the positive or negative consequence of an action has not came about yet, but it is likely to take place.

Risks can be categorized from many points of view. One possible form is the following:

- *Identified Risk* is a kind of risk that can be identified by different analysing techniques.
- A total sum of acceptable and unacceptable risks. *Acceptable Risk* is the part of identified risk, which is permissible without further reduction. *Unacceptable Risk* is a part of identified risk that has to be stopped or diminished.
- *Total Risk* is the total sum of identified and unidentified risks.
- *Unidentified Risk* is a kind of risks that cannot be determined. It is an unknown, real problem, which is not measurable.

The analysis of the results of counselling can reveal further, earlier unidentified risks. To this type belongs, for instance:

- *Residual Risk*, which remains after the whole procedure of risk management. This type of risk is sometimes erroneously treated as acceptable risk. Actually, residual risk is the sum of/ a complex consisting of acceptable risk and unidentified risk.

Everyday decisions of people are charged with risk. Revealing this risk and with taking the human and material factors into account, counsellors endeavour to establish effective decisions. In counselling, one aims at diminish uncertainty and finding rational solution for risk management. We stand for the expected utility hypothesis, the utility of individual consequences are weighted by their probability. On the basis of this, the offers are compared and an attitude in accordance with a rational decision is expected.

Nevertheless, it is not carried out as it is postulated by the rational theory hypothesis, because people are influenced by many factors. When we take human factor into account, we have to face

with a multiple risk factor, and the pure objectivity of counselling has come to its end. The thinking of people, as well as individual and organizational reactions on risk are rooted in culture, so it is less open to improvement, only by publishing more scientific knowledge and training.

The counsellor has to be familiar with the knowledge and experiences, the way of thinking, the durability of task-independent attitude of decision makers, their relation to rationality, their mechanism of activities and their leadership culture. It is also experienced by a counsellor that people do not act “in a right way”, when they have to face risk, uncertainty and haphazard events. People are not acquainted with risk, uncertainty and haphazard event in the same form as the experiences and science has shaped them. Act of people in these situations are illogic, but still, certain normality is observable. Those normalities were examined by Kahnemann and Tversky. They forced people to make decisions in experiential conditions, than described the “rules” of decisions and the influential factors.

Distraction from rationality

What kind of distracting factors should be mentioned at counselling that influence rationality? The certainty effect is one such factor, when the consequences considered to be certain are over-estimated as opposed to only probable ones. In positive interpretation, the certainty effect leads to preferring risk avoiding. Within some limits, “certain” results are preferred as opposed to uncertain ones, even if the certain results’ expected value is undoubtedly less than the uncertain ones. There is an example that stands in opposition to this as a part of human attitude. Within experiential circumstances, the probability of winning was given as very little (1 or 0,5 percent), however, people tend to choose the less probable option, if the premium was more, even though its prospective value was less.

A strong influential factor is the *endowment effect* of things already possessed and the fear of their loss. People tend to value those goods more, which they already have in possession, as opposed to those, which they should obtain. Therefore, giving up something that is already possessed is always harder than abandon the acquisition of something. We are not attached to those things that have not been ours before, even if we find their acquiring desirable.

In the background of this assessment stands *the adherence to the status quo*. Deviation from the status quo is considered to be hazardous by the majority. Experiments proved that some does not hold on to the things/objects possessed, but the previous decisions made. Priority is considered determining by following this logic in business world. Who puts a new product on the market, comes out with a very new technology, or who is the first to step on an unexplored market, get a vantage-point and the rivals simply cannot make up for it. Even if the competitors come up with a much better product or technology, it is very hard or even impossible to oust him. The same is the truth for leaders when it is about their power.

People consistently misinterpret subsequent probabilities in the form of *representativeness bias*. Recent happenings are more influential in decisions than events from years ago, so they are apathetic to the volume of patterns in a statistical sense (that is, to the sampling universe).

Anchoring and adjustment also distract reasoning, when decisions are strongly influenced by accidental external factors because they are stuck in one’s head as thistles and put pressure on choices.

Wrong conjunction of matters can also divert reasoning, which can be examined, for example, in “The Linda Effect” by HR. *The conjunction fallacy* can essentially distract reasoning. For instance, if Linda calls on a headhunter looking for a job, and if his employer is explicitly averse to feminists, in the light of this, it does make a difference how strong probability is attributed to the fact that the unknown job hunter is a feminist or not. If the headhunter overestimates this fact, he will not invite Linda to a job interview, and perhaps, he will introduce a weaker workforce to his employer. Likewise, it does matter, how a target group’s volume is estimated, if it cannot be elucidated by a simple telephone interviewing due to the hidden preferences.

Reflection effect also works against reasoning. Its main point is that in the case of possible positive outcomes (benefits), people tend to avoid risk because they assume a point of view that *a bird in the hand is worth two in the bush*. In the opposite case, when it is about possible negative outcomes (casualties), their attitudes turn to risk taking. Therefore, the orders of preference by the choice of alternatives stand as images reflected by a mirror.

Prospects and the “framing” of advices

In accordance to the knowledge of behavioural patterns deviating from rationality and the circumstances, we know, in which cases is one not able to decide reasonably. At the same time, analysing the prospects, considering the possibilities, we can reach the optimal possibility by using the method, which was called as *framing effect* by Kahnemann and Tversky.

In the case of uncertainty and risky situations, individual decisions are influenced by the way in which the problem of decision is shaped, and by the form of the given information. („framing effect”). It does matter how a decision’s possible outcomes are formed: in a negative or in a positive way. Framing effect can be produced by the different amount of received information before decision-making, the way of presenting the problem and the number of options offered to decision-makers. These conditions –that are external from the point of view of estimating the expected value of offers – can cause differences for participants in the evaluation of absolutely similar results (e.g. gambling, show).

The consequences of framing effect come across not only in a state of uncertainty. They are also observable when a reasonable decision has to be made on the basis of certain parameters. Nevertheless, people are inclined to irrationally give preference to that decision, which is framed in a positively motivating way, as profit. The same business, economic or other phenomena can evoke different reactions, and consequently trigger different results, owing to different framing.

The above mentioned give reasons for thorough knowledge of corporate culture, the appraisal of persons (management, organization), and cultural features in favour of vindicating the framing. Reasoning and prospect theory stand in the crossfire of criticism, partly on descriptive, partly on normative basis, but they are indispensable from counselling.

The counsellor, acknowledging the criticism, focuses on the possible optimal decisions and in the possession of fortunately increasing knowledge, with the help of which he is able to make his work more effective in framing that fits to the prospected results.

Summary

Prospect theory is not the most effective phrase. Its main point is that it puts the decision-maker with subjective evaluation of probabilities (decision weighting function) and with the so-called value function, that is with a double transformation of the function, into the model. The most important recognitions of it rest on the criticism of the utility theory. The double transformation is necessary due to the irrationality of decision makers; they do not bring their decisions according to the probability of occurrence or rather on the grounds of utility. Transformation is necessary because both variables, which are standing for the starting point of limited rationality in utility theory, the resulting probability and utility, are distorted by individuals.

The hypothetical weight function of decision is based on the fact that decision makers are inclined to overestimate the forthcoming events with relatively little probability, but at the same time, they play a sure game in the case of bigger probability of events to be expected. This means that in the domain of probabilities, no matter of more or less, thus, in every decisive situation, decision makers are underestimating. This goes along with that the association of probabilities to events are not conjoined on the basis of utility or the classical Kolmogoroff axioms. We do not believe that some things can happen to us, too. We are inclined to believe that unpleasant things happen only to others. Obviously, it is not reconcilable with the axioms of reasonable behaviour.

The second step of transformation, the conversion of utility into personal value is based on the fact that the ground for decision-makers to compare is the “status quo” rather than the “zero

utility” (Endowment Effect). Taking this into consideration is every movement, caused by new alternatives, evaluated. Therefore, the movement can go into positive or negative ways. It is noticeable that in profit domain decision makers are risk-avoiding, but turn into risk-takers when they step into the domain of loss. It does not meet the rational behavioural axioms, neither the rules of utility-based decision making.

After the transformations, with the knowledge of the weight function of decision and the value function, the optimal alternative can be looked for, which brings the maximum value for the decision maker.

The throughout knowledge of the decision-making mechanism is crucial for counselling to sustain innovativity for small and medium-sized enterprises as one of the conditions for business success. This is established and maintained by the knowledge of prospect theory.

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