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Business Decision-Making in the Era of Intellectual Entrepreneurship

Abstract

Features outlined in previous publications as being immanent to intellectual entrepreneur (drawing on different constituencies, combining information screening and absorption capacities, etc.) actually may be interpreted as some features of decision-making process.

There is a vast body of knowledge concerning different models of decision-making in business environment (including recent contributions by H. Mintzberg and others). We are trying to investigate which model better fits the idea (and practice) of intellectual entrepreneurship. And finally we discuss how to develop in education and training those features and habits in decision making that are most effective in intellectual environment

Intellectual entrepreneurship and decision making (DM) models

Our perspective in the problem of intellectual entrepreneurship is that of studying peculiarities of decision-making in this type of business environment. We depart from the general understanding of DM process and try to identify specific features of business decision-making referring to the notion of intellectual entrepreneurship developed so far in this book series. In other words we will try to find, what is the difference in general approach to business problems between intellectual entrepreneur and his/her less advanced counterpart.

In a 1999 seminal publication by Johannison, Kwiatkowski and Dandridge [1] the attempt was made to relate features of intellectual entrepreneurship with appropriate modifications of the Kolb's learning cycle model. This inevitably brings us to the intellectual entrepreneur's learning mode (or model). At the same time, this puts forward a question whether there exists a specific decision-making model or style immanent to this category of

decision makers. We will try to address this question in full details but first we will try to outline in a narrative form just most general characteristics of decision making by the intellectual entrepreneur which arise from the commonly agreed upon understanding of the latter.

We will start with the idea, which is especially relevant for the countries with emerging market economies. In this type of social environment the concept of economic freedom, the option to have choice, make economic decisions of your own, is one of the most attractive achievements of the otherwise painful and often dramatic reform process. Economically active part of population attaches great value to this option. This is especially true for the intellectual elite of the society, part of which constitutes intellectual entrepreneurship human resource. Necessity to make business decisions is perceived by them not as a burden but rather as a challenge. It is quite similar to the perception of a skilled chess player who definitely enjoys the necessity to make decisions concerning different possible moves. To put it simply *they enjoy making business decisions*.

This idea, no matter how simple it may appear, has rather serious and far-reaching implications. If you really enjoy doing something, you will be less inclined to pass it to anybody else (and thus delegation of authority to make decisions will be inhibited), and also, you will be more opposed to any moves leading to elimination of the decision-making process per se, either through organizational reforms or computer based automation of management.

Another important descriptor of an intellectual entrepreneur is that he or she is typically a newcomer to the business world or at least has an extensive experience outside business community. In other words, intellectual entrepreneurship cannot be a product of the internal development of business. A typical development model - at least in our part of the world - is from academia (or the world of art) to business and not vice versa. Being a newcomer means at least two things. Firstly, you are not so much constrained with existing traditions and practice, it is easier for you to break the rules established long before you have appeared here, and in many cases not known to you. Secondly, intellectual entrepreneur brings with him (with her) the whole wealth of knowledge, skills and attitudes developed outside the world of business. He is to less extent *an economic person* described in the textbooks on economic theory. His (her) interests are wider and behavioral repertoire is richer.

Consequently, *model of decision-making in intellectual entrepreneurship may be different from the general one, and more diversified in its specific implementations called individual decision-making styles.*

This characteristic of intellectual entrepreneurs also affects the way they learn management, acquire managerial skills and may be taught and trained in business school or in-company program environments. If for the businesspersons emerging from business abstract conceptualization (in Kolb's terms) is a skill to acquire, for intellectuals coming to business this is not the case (consider [1]). Thus if we want to be useful teachers for this new type of entrepreneurs, we have to restructure our curricula accordingly.

Finally, *business problems in intellectual businesses are of a nature different to those of traditional areas of economic activity.* In brief the differences may be summarized in the following table 1:

Table 1. Comparison of the Nature of Business Problems in Traditional and Intellectual Entrepreneurship

Main Characteristics of Business Problems	Traditional Entrepreneurship	Intellectual Entrepreneurship
Type of Management	Reactive	Pro-Active
Type of Problems	Typical, Repeating	Unique
Main Motivator	Profit	Realization of Creative Ambitions
Type of Choice	Based on Criteria and Expert Estimates	Holistic
Structure of the Problem	Good, Known Before	Ill, Unknown, Complicated

In general, it means that in intellectual business environment we are dealing with much more complicated problems. Due to the fast changes in the environment we cannot simply react to it. This would lead to falling back. We have to pro-act, that is to foresee the incoming changes and to develop the appropriate course of actions based on forecasts. We are facing not typical but unique, ill-structured problems. We are pursuing not only profit, but also implementation of our creative ambitions. In many cases we are not able to describe our preferences in a limited number of criteria and strongly insist on the holistic (and, consequently, subjective) assessment of alternatives.

What does it all mean for the DM process? Definitely it should be modified in order to fit the characteristics of the problems considered.

We draw from the idea of Henry Mintzberg about the existence of three distinctive modes of DM, which he labels “Thinking First”, “Seeing First”, and “Doing First” [2], and which are presented in Figures 1-3 below.

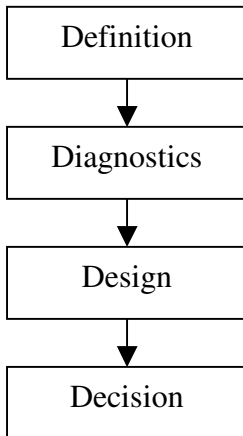


Figure 1. “Seeing First” model.

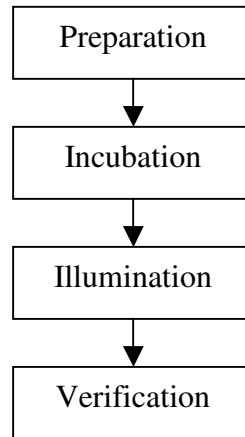


Figure 2. “Thinking First” model.

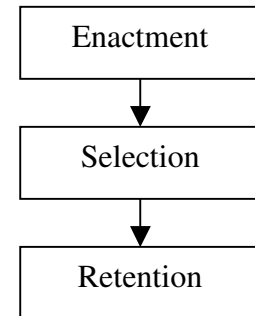


Figure 3. “Doing First” model.

Which one of these models fits best DM process of an intellectual entrepreneur? Probably, the most logical way to answer this question would be to quote H. Mintzberg who himself has suggested a framework for comparing different models. In this framework “Thinking First” model is linked to science, “Doing First” – to craft and “Seeing First” – to art. If we think that our intellectual businesspersons come from academia, land of science and logical reasoning, we could presume that they should stick with the “Thinking First” model. But in our view this is not so simple.

First of all, our intellectual entrepreneurs come as well from the world of art and previous books of this series provide plenty of examples of this kind. Second, even if they are former academics, they actually have left academia. And we should ask why. Of course, there may be quite different reasons in every particular case, but we cannot by any means exclude such a reason that the person’s potential could not be fully utilized in the land of research and logical reasoning. Our practice shows that usually managers with educational background in science and academic experience usually tend to underestimate the

applicability of logical reasoning to business problems. They see world of business as so different from their academic past that it appears impossible for them to apply methods and ideas of the first to the latter. But genesis of intellectual entrepreneurs not only inhibits the use of certain approaches. On the contrary, it enables the use of them.

In our view it is possible to establish certain relation between characteristic features of intellectual entrepreneurship outlined in [1] as enablers and stages in different DM models described in [2]. This is done in the following table 2, which has been compiled with the maximum direct use of wordings from [1] in order to demonstrate how close is the link in question.

Table 2. Features of Intellectual Entrepreneurship as Enablers

Stage of DM Process	Intellectual Entrepreneurship Feature as Enabler
Preparation	Broad and diversified knowledge base
Definition	High ability to abstract conceptualization, combination of information-screening and absorption capacities
Diagnostics	Ability to find alternative images of a certain phenomenon
Design	Intellectual is fascinated with problem-solving
Incubation	Integration of professional and private life
Illumination	High creativity potential
Enactment	High ability to identify action fields which are “enactable”. Interest in materializing concepts as contrast with pure intellectual
Decision	Entrepreneurial capabilities provide for resolute actions
Verification	Unattached behavior
Selection	Critical mind
Retention	High ability to abstract conceptualization, creation of a theory-in-use

In short, the contents of the table tell us that intellectual entrepreneur is more or less evenly well equipped to pursue any of the three concurrent paths for DM outlined by H. Mintzberg. That is why in our understanding it would be a mistake to link mode of DM in intellectual businesses exclusively or even predominantly with one of the models stipulated by H. Mintzberg. On the contrary, one of the strengths of intellectual entrepreneurship is *high degree of diversification of DM modes*, rich toolset for dealing with a great variety of real

business problems. Being formulated this way this statement is nothing else but a hypothesis based on theoretical concept analysis, which has some endorsement in a number of case studies but still has to be proved in the course of the appropriate statistical field research.

Educating intellectual decision-makers

Management education may be regarded as a process of development of two types of skills and knowledge areas: one of vertical (subject or application specific nature) and another of horizontal (instrumental specific) type. Financial management is an example of vertical area whilst communication skills fall into the second (horizontal) category.

A well-designed educational program in management, especially one aimed at intellectual management, should provide for a proper balance between these two. This is not an easy task. If vertical component is overemphasized, the whole body of managerial knowledge will be divided into loosely linked chunks and the trainees will exercise lack of systematic (real versus academic) approach to real life problems. If on the contrary the horizontal component is the one that dominates, the techniques will outplay the ultimate business objectives, which cannot be formulated in terms of the «horizontal» disciplines. What makes achievement of this balance an even more challenging task is that some areas display tendency to move from horizontal to vertical (a good example is IT).

Decision-making is one of the most challenging disciplines of the horizontal type. Its unique feature is that unlike other managerial courses it intends to teach not what decision has to be taken under particular circumstances, but rather how to organize decision-making process. Sometimes this is called “meta-decisions” (decisions about decisions). Speaking about positioning of the course in a management training curriculum we can see at least basic foundation courses serving as prerequisites for a course in DM: Quantitative Methods, Psychology, Organizational Behavior, General Management. DM is in certain sense *based* on these four but evidently *does not consist* of them. Otherwise there would be no sense to have it as a separate course and even research area. Our consulting and teaching experience shows that most interesting applications and most useful training arise from the situations in which it is not possible to separate mathematical side of analysis from the psychological, economic and managerial. In terms of so called hard and soft management training courses DM in our

understanding lies exactly in between, which is quite a challenge for the faculty teaching it, as far as it requires a wide variety of competences and skills to provide effective training.

The importance of DM and its role in creating intellectual entrepreneurs may be easily derived from the analysis of the notion of intellectual entrepreneurship as described in [1]. In short we may put it like this: intellectual entrepreneur is a different (more intellectual) business decision maker!

The subject of DM as a training course is DM process, and training objectives of it fall into three broad categories:

- Development of diagnostic skills based on certain classification of decision problems in business and appropriate classification of approaches and techniques of DM
- Providing a flexible and realistic toolset for dealing with real life business problems
- Serving as a mirror to ensure better understanding and appreciation of student's own approaches to DM and DM practices existing at his/her company.

Decision making as a training course has attracted a lot of attention in recent years in Russia, which resulted in a big number of publications (including textbooks) with relevant titles. Some of them are original Russian publications, other are translated from Western originals. Unfortunately their content is in many cases irrelevant. They are either an easy to read (adopted) versions of books in operations research or abridged management compendiums having no specific subject. At the same time DM appears to be a specific set of skills, which may be trained and developed both in academic and real life environments. Our experience developed through series of seminars and non-degree programs for Russian managers shows that development of DM skills may be successfully implemented provided that the following considerations are taken into account.

Decision-making has to be regarded primarily as a skill, not as a technique. The differences between two include:

- Technique may be taught and literally explained whilst a skill may be only developed and trained;

- Technique is of unilateral (for example mathematical or organizational) nature whilst a skill is holistic;
- Technique is more or less standardized, whilst skill is practiced in a specific personal style.

Decision-making has to be regarded not only as individual but also as a group activity including interaction between different decision-makers, and between superiors and subordinates.

Emphasis has to be made on meta-decisions. Special attention has to be paid to the time management in decision-making process and to casting (allocation of roles) in DM group. Methods and approaches well known in group-dynamics (moderation process) may be successfully applied here.

New information technologies undoubtedly influence DM process but in many cases not in a straightforward way. E-business realities may both catalyze and inhibit DM process. Anyway, course participants have to be exposed to contemporary IT environment and the necessity to both accommodate for the new opportunities created by IT and lead the necessary change in DM processes.

Graphic representation of information, although enjoying a great success in IT (Windows™ GUI), is definitely underestimated in DM textbooks and related courses. A graphical representation of problems is a must and has to be trained via special exercises.

Our experience has shown that style of decision-making typical for Russian managers is substantially influenced by a number of culture determinants and differs from that of their Western counterparts. Consequently we have to adjust the content and mode of delivery of our training programs. We have been studying differences in DM styles as described by Alan Rowe [3] between Russian and American managers and professionals. According to suggested methodology, four DM styles are distinguished: directive, analytic, conceptual and behavioral. Each decision style reflects domination of a certain need: directive style is associated with a need for power, behavioral style – affiliation, analytical – achievements, and conceptual – recognition.

There is a questionnaire called “Decision Style Inventory” which is used as a tool for measuring individual characteristics and comparing data with average for the reference group. It provides four coordinates corresponding to every style mentioned above. Along with standard deviation (1/2 standard deviation is added and subtracted from the respective score) average score creates backup range that helps to identify dominant style (with score higher than upper limit) and least preferred (avoided) style (with score lower than lower limit). We have undertaken the same experiment with Russian managers. Table 3 gives comparative scores for Russian and American groups:

Table 3. Comparative Decision Style Scores for Russian and American Groups

Scores	Min	Max	Average
Directive – USA	68	82	75
Directive – Russia	74	87	80
Analytic – USA	83	97	90
Analytic – Russia	82	96	89
Conceptual – USA	73	87	80
Conceptual – Russia	66	75	70
Behavioral – USA	48	62	55
Behavioral – Russia	56	68	62

Certain differences in this table are noteworthy reflection – especially with respect to conceptual style. It happens that Russian group is considerably different from the American one in that it is comprised predominantly of middle managers in their thirties with higher education, mostly in science and technology. (American group is drawn from general population). So Russian group corresponds to different educational standards and in general possesses more limited entrepreneurial experience. These Russians may be described as young technocrats recently promoted to managerial positions. From this point of view it becomes understandable why scores for directive and behavioral styles in Russia are higher than in the US at the expense of conceptual one. Young Russian managers typically have short to mid range internal focus with regard to their company which may be to a great extent explained by the turbulent environment of the Russian business, preventing from looking far into the future and far beyond company boundaries. They prefer brief oral information and look for acceptance or power. Authors of [3] suggest that perfect mix for a leader (not simply a manager) includes emphasis on directive, behavioral and conceptual styles at the expense of the analytical. This precludes that analytical task actually may be performed by a

professional consultant, not a manager. Russian group is interestingly similar to American male engineers which should not be considered unexpected.

So how should we develop intellectual (entrepreneurial) decision-makers? It seems that the answer depends on the starting point. In Russia there is an evident deficiency in conceptual approach. In the USA it may be useful to concentrate on behavioral side. This conclusion may be supported by another research result.

Table 4 presents results of comparative study of training needs of American and Russian managers. The first are published by American Management Association (results of 2001 query) and the latter – obtained by questioning Russian managers using same set of questions (translated into Russian). Comparison of these results brings interesting insight into the problem of different driving points in training intellectual managers. Although in terms of categories there is a pretty good match between Russian and American results, if we go further into details we see that there are certain differences and they are not unexpected. Where do we find them? First, listening and asking questions as well as coaching and mentoring is definitely valued by Russians not as high as by Americans. Why? May be because it is already in place. It is worth reminding that respondents are assessing not the importance of the certain skill but the gap between its availability and demand for it. Credibility among colleagues is not a problem in Russia as well. On the other hand, networking outside organization including setting standards for business partners is in far greater demand and deficit in Russia. It is in perfect correlation with the previous finding of certain domination of directive and behavioral decision style among Russian managers as compared with Americans: both these styles are inward oriented. It is clear from this that as far as starting points for our educational and developmental effort are different so should be our paths to the intellectual DM. Russian managers need broader orientation and networking skills as compared with American standard syllabus.

It may be equally useful to think not about developing all the abovementioned features of one and the same decision-maker, but about creating diversified teams of personalities possessing all these valuable capacities as a group. This may be done on two levels: either for training purposes (creating appropriate learning environment) or in real business live (educating together people to be employed as team members).

Table 4. Comparative study of training needs of American and Russian managers

CONCEPTUAL SKILLS	Gap - Russia	Rank - Russia	Gap - USA	Rank - USA	RD
Ability to use information to solve business problems	1,02	10	1,12	3	7
Identification of opportunities for innovation	1,19	3	1,12	4	-1
Recognizing problem areas and implementing solutions	1,10	5	1,21	2	3
Selecting critical information from masses of data	0,88	14	0,97	11	3
Understanding of business uses of technology	0,90	13	0,93	13	0
Understanding of organization s business model	0,95	11	0,92	15	-4
CATEGORY AVERAGE	1,01	1	1,05	1	0
COMMUNICATION SKILLS					
Ability to transform ideas into words and actions	1,17	4	1,09	6	-2
Credibility among colleagues, peers, & subordinates	0,67	24	0,89	16	8
Listening and asking questions	0,49	27	1,11	5	22
Presentation skills: spoken formats	0,78	19	0,56	26	-7
Presentation skills: written and/or graphic formats	0,64	25	0,64	24	1
CATEGORY AVERAGE	0,75	4	0,86	3	1
EFFECTIVENESS SKILLS	Gap - Russia	Rank - Russia	Gap - USA	Rank - USA	RD
Contributing to corporate mission/departmental objectives	0,81	17	0,92	14	3
Customer focus	0,85	16	0,86	18	-2
Multitasking: working at multiple tasks in parallel	0,62	26	0,78	21	5
Negotiating skills	0,76	20	0,72	22	-2
Project management	1,05	7	0,94	12	-5
Reviewing operations and implementing improvements	0,79	18	0,99	9	9
Setting & maintaining performance standards:self & subordinate activities	1,24	1	0,97	10	-9
Setting & maintaining performance standards:vendors, suppliers, business partners	1,21	2	0,82	19	-17
Setting priorities for attention and activity	0,69	23	0,87	17	6
Time management	1,07	6	1,04	8	-2
CATEGORY AVERAGE	0,91	2	0,89	2	0

Table 4. Comparative study of training needs of American and Russian managers (continued)

INTERPERSONAL SKILLS	Gap - Russia	Rank - Russia	Gap - USA	Rank - USA	
Coaching & mentoring skills	0,69	22	1,24	1	21
Diversity skills: working with diverse people & cultures	0,86	15	0,68	23	-8
Networking within the organization	0,71	21	0,53	27	-6
Networking outside of the organization	0,90	12	0,6	25	-13
Working in teams	1,05	8	0,81	20	-12
Cooperation & commitment	1,05	9	1,08	7	2
CATEGORY AVERAGE	0,88	3	0,82	4	-1

Conclusion

Having considered different sides of intellectual entrepreneurship, models of decision-making immanent to it, and ways do develop ability to be an intellectual decision-maker, we have come to interestingly similar conclusions. In all cases diversification seems to be the key word.

In order to be effective in the business world based on knowledge, our students have to be flexible and to have a diversified behavioral repertoire. And in order to achieve it, we have to provide a diversified learning environment. “No standards” seem to be a needed standard of quality.

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