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Standardization of Decision-Making between Holism and Variety

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ABSTRACT

Business system (BS) ensures its own existence and development by a high quality of its business. Its business results can be considerably improved with standardization of its decision-making (DM). When dealing with business DM (BDM), we face a basic problem of all standardization - to which level, both necessary and sufficient i.e. requisite, can working of the area of standardization be unified. Our experience allows for a general conclusion that standardization of BDM can take place on a level between a total one-sidedness and a total holism. The total one-sidedness enables a big simplification of one's picture of reality. On the other hand, the potential standardization is limited by a total holism, which may enable discovering of all attributes of any single case of BDM. We apply criteria of the requisite variety and requisite holism. The requisite level of unification of BDM may result.

Keywords: business decision making, requisite holism, requisite variety, standardization.

1. INTRODUCTION

Business systems (BSs) can, within globalization, assure their existence and development best by a high-quality operation. However, the majority of BSs do not operate entirely rationally, and their actual business results are, as a rule, smaller than they realistically expect [5; 19]. For this very reason, the goal of a BS is to adequately create a high-quality business operation which will be (1) successful (efficient and effective in economic terms), (2) respected (from the aspect of business behavior), and (3) ethical (morally adequate from the viewpoint of a responsible attitude towards its social and natural environment) [2; 17; 6].

The operation of BS can be improved in various ways (i.e. through the impact on the operation, organizing, factors and relations - internal and external). From all possible solutions we selected, for our discussion, the field of management that determines possible results of business operation and presents a hardly studied field of business operation. This is BDM.

Presentation of the entire research surpasses the framework of this contribution. We shall restrict ourselves to the treatment of starting points for the BDM standardization, on term of the laws of requisite holism and of requisite variety and basic characteristics of standard methodology of standardization of BDM.

2. BDM AND ITS STANDARDIZATION

With restrictedly available production factors and given operation conditions, business operation can mainly be influenced by the improvement of a quite autonomous part of management, e.g. of BDM [16; 17]. BDM presents the central phase of the management process-taking place in all phases of business operation process. The important impact of the BDM on business operation results from its [9; 6]: 1) Integrative role, 2) Interdisciplinary nature, 3) Standardization role, and 4) Important impacts on the BS's relations.

BDM in a BS significantly influences (indirectly or directly) the choice of objectives, goals, processes, and the construction of components and structure of the BS as well as its use of monetary, material, and human resources. Development of BDM determines the adequacy of management and, thus, directly impacts the definition of goals, direction of business policy and, consequently, the achievement of business results. The purpose of our research was, therefore, to create a suitable system of the standardized BDM processes of the operation of enterprises, which shall ensure an appropriate ("optimal") quality of BDM and the base for the methodological unification and comparability of BDM in different BSs [17; 18].

3. LAWS OF REQUISITE HOLISM AND OF REQUISITE VARIETY

3.1. BDM, Standardization, and Holism

There are two laws in literature on system theory, which are concerned with the above topics: the Ashby's law of requisite variety and the rather new Mulej's and Kajzer's law of requisite holism. They may apply to business DM, too. But let us first define general bases to define BDM,

before we consider the link between BDM and both above laws. During the last two decades, the investigators of BDM have been oriented towards the evaluation of concepts, which are supposed to support a holistic definition and corresponding results of BDM [11; 12; 9]. In the creation of different up-to-date concepts, authors start from general starting points that are related to the interdisciplinary, holistic and standardized BDM [16; 17; 19].

- On the base of interdisciplinary approach one creates an approach to research of BDM that links a number of different disciplines in a synergy. The research is based on the interdisciplinary co-operation of mono-disciplinary sciences. The application of such an approach enables the realization of the strength (advantage) of every specialist and of the synergetic interdisciplinary treatment of the issue.

- Holism presents the second important starting point of modern BDM. An adequate / requisite holism is achieved by a systemic consideration of the majority of important sciences included into design, operation, and organization of BDM. Our work is based: 1) on the findings of the DM theory, as well as 2) on other sciences (which are necessary for a specialized DM treatment). Herein, corresponding concepts, approaches, and BDM models are taken into account as holistically as possible and necessary, i.e. on a requisite level.

- Standardization, e.g. (frame-work) unification and a general definition of BDM also present a major starting point of modern BDM theories. For the implementation of standardization, it is impossible to directly apply the well know and frequently used qualitative and quantitative methods of BDM and develop BDM systems. These methods are targeting the individual business operation fields and designed to support the individual management segments. For this reason, a holistic methodology of BDM is planned. It enables the formation of uniformed starting points and the application of the standardized BDM. Thus, it also directly influences the evaluation and performance of the already existing methods.

Experiences from the business practice and theoretical insights allow for a general conclusion that standardization of BDM can take place on a level between a total one-sidedness (a narrow specialization) and a total holism (with no specialization and focus). The interval is, on one extreme, limited by a total one-sidedness, which enables a big simplification of one's picture of reality. This is the basis for a high level of standardization of BDM, but both standardization and BDM are then only fictitiously holistic and usable. Only one viewpoint and

only one set of important attributes of BDM are included, everything else is excluded, no serious consequences being expected, by supposition. Such an approach results in a very simplified BDM, but its user is not provided the necessary knowledge on contents of BDM (i.e. suitable semantic and pragmatic contents). The high level of a one-sided standardization, hence, enlarges the area in which unified findings about BDM can be attained. Such a type of BDM might be applied to very different topics to be decided upon, and they could be found in different settings / BSs. But only a quite limited set of choices in terms of contents of BDM could be contained. This brings a fictitious benefit, but is experienced quite frequently by the rather narrow specialists. Hence, BDM might lack depth; its breadth is fictitious, very probably.

On the other extreme of the interval, the potential standardization is limited by a total holism, which enables - by definition - discovering and covering of all (!) attributes of any single case of BDM. Such standardization can also be found fictitious: it simply cannot be done because requirements for total holism reach beyond human capacities. It would lead to a total depth and breadth of BDM. Therefore, in the practical life, one tries to be as holistic as it makes sense to decision-makers. They may choose the essential attributes to be decided upon. This choice may be narrow or broad, shallow or deep, one-profession based or interdisciplinary, or a combination of them. Thus, one must find a middle ground: the BDM must include a system of criteria and procedures, which is holistic enough in its contents, doable enough in its technology, acceptable enough in its price, excellent enough in its usefulness. Then, BDM would meet the law of requisite holism. It is the decision-makers who are responsible for this system of criteria and procedures. Their responsibility starts with their definition of objective/s, which depends on the system of their selected viewpoints reflecting their subjective and objective starting points. To meet this responsibility the decision-makers define, which level of the actual standardization is the requisite. They usually apply criteria of the requisite variety and requisite holism.

3.2. The Law of Requisite Variety and Standardization of BDM

Ashby's law of requisite variety lets us know that an entity can keep its identity unchanged, if it has on stock responses to all influences from its environment [1; 8; 2]. Not all of them are equally important, not all of them are a burden to the top management of the entity e.g. BS, under

consideration. If top management is democratic enough to let other co-workers, who are responsible for parts of the entity, make their own decisions; the variety of the entire entity can be a lot bigger than the variety of the top management. This may still not be enough, compared to the variety of the environment, e.g. in a business world tackled by the contemporary globalization, division of labor per organizations, regions, countries, growing trading and even more rapidly growing financial trading. Still, the variety of the top management can thus be reduced to the remaining, uncovered, critical issues, which need a lot of co-ordination of several business functions and departments. This is the basis for standardization of BDM in relation to the variety of environment. The other part of the requisite variety of the top management has to do with the division of labor inside the organization under consideration and management. From the viewpoint of the top management as one subsystem, the internal processes are also a kind of environment. This is important to note here: it means that the law of requisite variety concentrates on the relation between an entity and its environment only. In terms of standardization of BDM this is important to take in account.

Consideration of the law of requisite variety in terms of BDM standardization enables decision-makers to unify their responses to outer impacts, which is especially important when they define suitable inputs and outputs of their BDM. But variety is an attribute, which does not allow for much standardization, except in reappearing conditions and with a reduction of standardization from the pragmatic and semantic levels to the syntactic one. **A framework for reappearing situation can be produced on the basis of ones' experiences, and then completed up according the defined current needs, which have to do with the requisite holism in addition to the requisite variety.**

3.3. The Law of Requisite Holism and Standardization of BDM

In general, the law of requisite holism has a broader point: in a reduction from totally all essential attributes, the issue shows up: which part of attributes is essential, and which viewpoints and their relations and resulting synergies are essential?

There may, of course, be very many different judgments, opinions, research-based outcomes and bases of all the different judgments and opinions concerning the issue which viewpoints (and their relations!) are the essential

ones. These judgments and opinions may even vary with the same persons. And it is up to the authors to define what is their frame of references, and how very holistic (in terms put by von Bertalanffy) it is [3; 4]. This opens the door for the Mulej/Kajzer law of requisite holism. Conclusion: a full objectivity of the so-called scientific results does not exist, unless a system of all viewpoints is considered, which cannot be done. Scientific results, which are attained inside a single viewpoint alone, can be even less objective. Which level of holism is the right one? This remains an open issue, which is tackled by the law of requisite holism.

A brief summary of the law of requisite holism may thus read as follows [12; 13]: The law of requisite holism says that one needs always to try and do one's best toward avoiding the exaggeration of both types: 1) the *fictional* holism, which is caused by limitation to one single viewpoint in consideration of complex features and processes, and 2) the *total* holism, which is caused by lack of any limitation to any selection of a system of viewpoints in consideration of complex features and processes. Instead, the middle ground between both exaggerations should be covered, which can be achieved by using a "*dialectical system*", made as a system of all essential and only essential viewpoints. Successful people do so.

If in one way or another, the research or other actions meet criteria of the law of requisite holism, what is attained is satisfaction of information and other needs, that are addressed; They are addressed by the content of the systems in question and from the (dialectical system/s of) viewpoints, selected by those who introduce systems to (re) present the selected attributes of the selected parts of reality [10; 11; 12]. Consideration of the (Mulej's & Kajzer's) requisite holism enables decision-makers to attain a suitable level of insight in and control over the events and processes to be decided upon, including the both forecastable and essential attributes, both internal and external ones. A dialectical system (i.e. one of all essential and only essential viewpoint / systems) is considered, not a total one [10; 7; 13; 14; 15].

Recursive systems allow the requisite variety to be diminished by reducing the quantity of poorly known attributes, so do hierarchical systems by decentralization of BDM to several subsystems. More standardization of BDM becomes possible. Still, the reappearing conditions are easier to decide upon. Mulej's experience with a framework standardization of the creativity-based processes (called

programoteque) enlarges the area in which standardization can support business DM. Thus, the law of requisite variety and the law of requisite holism can be combined in a fruitful synergy making BDM easier and more efficient and effective.

4. CONCLUSION: BDM CAN ONLY PARTLY BE STANDARDIZED

Conclusion from consideration of both the law of requisite variety and the law of requisite holism is clear. Outside the well-controlled routine nothing, not even these two laws, allows for a final answer about which is the requisite level of BDM standardization. BDM can only partly be standardized, and the level of standardization depends on a number of (synergetic) factors. In the case of a BS they include the following factors.

BDM on business matters in BS must meet the BS's specific requirements. In terms of methods, it may have standardized grounds, anyway. They are less possible in terms of content and even less in terms of values and other emotions. To a quite high level of holism, standardization of BDM in BS is possible from the viewpoint of methods, as a system of standardized methods. Partly, standardization of BDM in BS is possible from the viewpoint of contents and values. In this way, a part of subjective starting points, namely the knowledge on methods, may move from the subjective starting points to the objective starting points in their subsystem called possibilities in Mulej's Dialectical Systems Theory. To some extent also knowledge on contents, to an even smaller extent also the values, can do so, too. Standardization of BDM makes some private information public. This may make the BS more open to potential attacks, but also to potential trust increase.

In terms of contents, the level of standardization depends on which level of the organizational hierarchy of BS is under consideration. The very highest level of BDM is closest to BDM on principles with not too many details and can therefore be subject to standardization of BDM in BS. Similar is the situation on the lowest level of the organizational hierarchy of BS, because there the jobs are the most repetitive. Less easy to make is standardization of BDM on the strategic and tactical levels of BS, but there is a chance anyway. Different BSs operate on these levels in the form of equal or similar units of their basic business functions (such as phases of their reproduction process, basic processes, information processes, or

managerial processes). This allows for some level of standardization of BDM of the daily operation of BSs concerning their equal activities and their equal processes (such as production processes of competing products). Though, there is another big share of activities and BDM about them, which cannot be subject to standardization in terms of their contents because they are essentially individual per BSs. In this share of activities, BDM can be subject to standardization in terms of methods, anyway, by application of a framework-standardization and a unified definition of its role and importance in the entire system of BDM in the given BS.

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