

Structure Determining Factors of Business Organization

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Abstract—This paper presents key factors for organizational structure change of business enterprises that influence the process of successfully change on the global market. The research enabled the author to identify the most important factors for organizational structure change of the Polish business organizations in the period of 2013-2014. On the one hand the research results were in keeping with the assumed hypotheses about domination of the external factors in the process of formulation a new structure in business organization. On the other hand the research also revealed that a significant group of business organization from the sample was paying attention on internal factors, especially: development strategy, type of activity and market, qualifications of employees and managers, inefficient current organizational structure.

Index Terms—Organization, structure, structure determining factors.

I. INTRODUCTION

Changes in management thinking over the last hundred years are making the subject of management one of the more dynamic sciences. However these changes are the consequence of dynamic and turbulent transformations in the economic, technological, political, and social worlds. It is important to understand at this point of our studies that each management approach for organizational change reflects the circumstances of its time, as many scientists have pointed out. The search for theories that match the organization to the current turbulent times applies quite extensively to all areas of economic life, particularly to the theoretical concept of organization. The concept of a *new* organization can be identified as the components through which mutual interactions act as one body or system. In the body of literature, the dominant approach is that the organization is a place where the synthesis process happens: planning, organizing, conducting and controlling the orientation of all the separate elements of the organization for a common goal(s). Such an approach to the organizational idea can be considered as universal and timeless, which fits well with contemporary trends, and is explored by management theorists searching for new ideas of increased efficiency. The overall design concept of the organization, however, does not exhaust the possibilities of creating new, innovative forms of organization or efficiency performance principles which can prove adequate for current and future internal and external conditions. This issue is and will continue to be of great interest not only to the theorists who are permanently investigating this issue, but also to practitioners, mainly due to the unspecified complexity of the rules, what is explored

deeply in the next chapter. Previous theories on improving efficiency in the organization, despite the many different approaches, still seem to be insufficient to meet all the new expectations of the role essential to today's organizations. In addition, the search for new models and concepts of organizational management has distanced itself from the perception of creating individual solutions adaptable to the internal and external environment of each organization, even though scientists suggest that dynamically changing environments create the need to build new management systems, separate from the earlier paradigms theory [1]. The evolution of organizations is, on the one hand, interaction with the environment and on the other, with the introduction of new, original solutions to the internal structure, the ability to exploit opportunities and overcome the risks of environmental change. Without doubt, the science of organization and management also takes into account the issue of establishing a higher level of theoretical fundamental theory, explaining the source and the perception of changes in the organizational approach, namely [2]:

- life-cycle theory — based on the fundamental assumptions of biological science, saying that the next stages of development are a consequence of the previous, and recognizing the development of the organization as a process dependent on the so-called internal genetic code of the originally specified program;
- teleological theory — based on teleological and/or philosophical doctrine, expressing any purpose that provides an overriding reason for the behaviour of the organization. Hence the development of the organization takes place in the intended direction of the designed final state;
- dialectical theory — which explains the growth and efficiency of the organization by the presence in the world of contradictory events (forming opposing values) and the forces vying for supremacy and control over the environment;
- theory of evolution — identified as a system of forced natural changes, without which the organization is not able to survive.

According to reference [2], the presented constitutive theories of evolution clarify the process of change as a series of formal operations (events), which are not entirely consistent with modern economic and social processes, and are characterized by deep complexity. So far, theoretical idealization is limited to theoretical use in only one of the selected theories. On the other hand, none of the theories of evolution undermine the organizational basic assumption that the purpose of organizational change is to achieve a higher level of effectiveness and to ensure progress by adapting to environmental requirements. Given current circumstances, it

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is appropriate to connect specific approaches rather than limiting oneself to only one concept [3]. The problem of dynamic change in the organizational environment was not in the twentieth century such an important issue, as it is now, mainly due to an organization's current ability to predict and incomparably lower dynamics. Changes in today's turbulent environment are characterized not only by high dynamism but also by unpredictability and multi-directional interaction. The dynamics of change in today's times create an extremely difficult barrier to the development of modern organizations. In many cases, independent of the size of the organization, these changes can cause significant difficulties in the survival and the achievement of organizational goals. Hence, the correct approach seems to be that a key determinant of effectiveness is the ability to respond to ongoing environmental changes, enabling the creation of new areas of activity and the use of emerging opportunities [4]. Reviews of this aspect by many organization and management theorists indicate that the increasing *spin* of the environment has resulted in the assignment of particular importance to the creation of new theory models, based on just external factors [5]. Dixon [6], thinks, that this permanent process of seeking a higher efficiency in organization and management theory will continue to be observed in the future and the external environment in which organizations operate will have a continuous and profound effect on their organizational structure.

II. ORGANIZATION'S INTERPRETATIONS

Organization (lat. *organum*) is an object of interest of scientists since the nineteenth century. The very concept of organization can be identified as the components that through mutual interaction are one body or system. A multitude of processes taking place in the organization should, however, be characterized by the synergistic interaction of individual property separate bodies. In terms of McKinsey, the organization is interpreted at least seven variables: structure, strategy, skills, staff, management style, system and procedures, and common values (Scheme McKinsey 7S) [7]. Regardless of the number of variables that determine the organization should be understood as an active process, which is an important feature of all the separate elements focus on the common goal of the organization (or a bundle of targets).

Daft, Murphy, and Willmott [8] defining organizations came to point them out as social entities that are goal-directed, are designed as deliberately structured and coordinated activity systems, and are linked to the external environment. Scholars Katz and Kahn's [9] discovered the theoretical model for the understanding of organizations is that of an energetic input-output system in which the energetic return from the output reactivates the system. Additionally, they suggest social organizations are flagrantly open systems and consist of transactions between organizations and their environments. Furthermore, these scholars postulate all social systems, including organizations, consist of patterned activities from a number of individuals and that these activities are complementary or interdependent with respect to some common outcome. As well, the

activities are relatively enduring and bounded by space and time. As Suddaby, Hardy, Huy [10] observations show, most of the organization concepts used by contemporary management philosophy were formulated several years ago, largely in the 1960s and 1970s, and these theories have persisted, mostly intact, since that time. Finally, an organization may be also understood to be a deliberate arrangement of people to accomplish some specific purpose (see Fig. 1). First, each organization has its own distinct purpose or purposes. This purpose is typically expressed in terms of a goal or a set of goals that the organization hopes to accomplish. Second, each organization is composed of people. It is important to understand management as a human activity, which Grassl [11] recognizes as the concept common in the science and practice and not open to discussion. One person working alone is not able to create an organization and to perform the work that's necessary to achieve its goals. Third, all organizations develop some deliberate structure so that their members can do their work. This structure may be open and flexible, with no clear and precise delineations of job duties or strict adherence to any explicit job arrangements – in other words, it may be a simple network of free relationships - or the structure may be more traditional with clearly defined rules, regulations, and job descriptions.

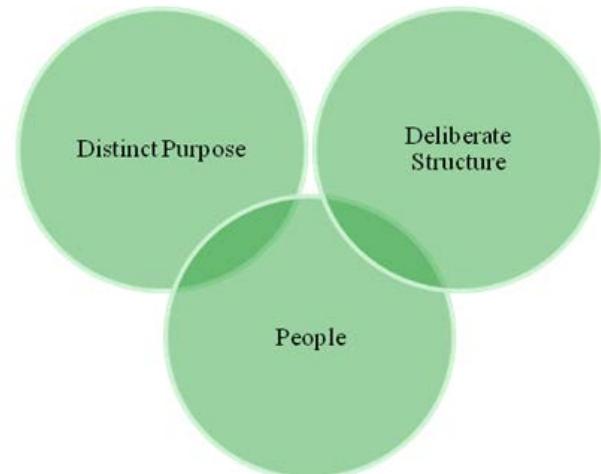


Fig. 1. Characteristics of organization's essence according to Robbins, Coulter [12].

Each of the interpretation of definitions contributes to the evolution of organization theory and emphasizes certain aspects, as well as organization changes. As Dwyer [13] notices, it is somehow possible to combine all of the above mentioned definitions into a single description; however, such an effort may inhibit one's ability to comprehend different viewpoints. In fact, it is better to benefit from a variety of different points of view and find some shared ideas which will bring us closer to understanding organization complexity.

III. CLASSIFICATIONS AND TYPES OF STRUCTURE DETERMINING FACTORS

Over the last hundred years, different rules and guidelines for the design of organizational structures have been

proposed, ranging from the early scientific basis for management to the ideas of the present day. This is due to the existence of various approaches to explain the reasons for structural formation and methods of design and a variety of these factors. Within these approaches, only the effect of factors on the organizational structure and the ways in which a particular factor affects the structure are determined. It should be recognized, as Hannagan [14] rightly pointed out, that organizations have both influences which inspire changes and other influences which act to keep the organization in a state of equilibrium. Change is fundamentally about feelings; companies that want their employees to contribute with their ideas and *hearts* have to accept that emotions are essential to the new management approach. The classic management paradigm stated that, at work, people should only be permitted to feel emotions that are easily controllable, emotions that can be categorized as *positive*. The new management paradigm says that managing people is about managing feelings. The issue isn't whether or not people have *negative* emotions; it's how they deal with them. In fact, the most successful change programmes reveal that large organizations connect with their people most directly through values - and those values, ultimately, are about beliefs and feelings, as Duck [15] observed.

In the literature, we can find a number of classifications and types of structure-factors, the most frequently discussed of which include: organizational strategy, environment, technology, size and age of the organization and organizational culture [16]. Of course, it should be borne in mind that the degree of influence that any of these factors will have on the organizational structure will vary depending on the particular company and industry, and will also be variable over time. It is important, however, in any organization to identify those factors that will be considered during the formulation of the concept of structure. For many researchers external factors have the biggest impact, while for others it is the internal factors that determine the structure of the organization. In both cases, they are the result of situational determinants of the organization, which may be regarded as a system of specific relationships connected with the organization's existence and development in specific ambient conditions, which bring about mutual interactions [17]. A key moment in research has turned out to be the negation of organizational voluntarism and a demonstration that the organizational structure should be in line with the strategy, and then of convex importance to the internal variables [18]. As a result, today we have to deal with the general division of the factors influencing organizational structures into two groups: external factors (exogenous), formed by the proximal and distal environmental organization, and internal factors (endogenous), related to the potential of the organization (e.g., age and size of the organization, its technology, organizational culture, financial conditions, the type of manufacturing process, location, the qualifications of staff, the cultural diversity of employees, the degree of integration of the employees of the organization, the scope of power below management, views, etc.) and strategy, which shows how the organization develops. In addition, among the well-established concepts for the subject of structural factors, which will be applied in this study, I

would like to particularly highlight the approach of Mintzberg [19], who lists four groups of determinants, namely:

- the age and size of the organisation (age, size of the stage of development of the industry),
- technology (level of control over the performance, the complexity of the technical system, automation of execution),
- environment (dynamism, complexity, hostility and diversity of the environment and the degree of diversification of the organisation),
- relationships of power (range of external control over the organisation, the need for power players, the fashion).

Mintzberg, identifying age and size as important factors affecting the structure and operation of organizations, showed how many organizations fail to grow because of their inability to develop a new structure to handle a sudden boost in work, (see also Rees and Porter [20]). The size of organizations directly affects their number of structural levels, which can be determined by the following relationship - the larger the organization, the greater the specialization, the more complicated the procedures, including a more extensive hierarchy, etc. Such a simple relationship includes only organizations functioning on the basis of the classical model of management. Modern organizations either opt for the use of mixed structures or are based solely on the modern formula. Large organizations tend to have a higher specialization of activity, more formalized procedures (a higher degree of formalization) and more control procedures. The literature has revealed that with an increase in the structure of the organization come a tendency towards decentralization and the creation of new forms of coordination. On the other hand, organizations should be treated like living organisms that are constantly changing, and, therefore, their structure also needs to follow the so-called life cycle of an organization. With a shift from the lowest stage of the life cycle of birth to the advanced stage of maturity, the organization significantly increases its size, it becomes more mechanistic and centralized, increasing the need for coordination and formalization; cell organizations become more geographically dispersed and the expansion requires systems of control and supervision. A well designed structure can dominate the development of an organization or a poor structure; can conversely seriously degrade the performance of the organization.

The next constraint on designing and developing an organizational structure is that technology also needs to be recognized. Organizational structure has probably always been influenced by the technology it deploys. The importance of the technological environment, as pointed out by Woodward [21], is particularly valid in the case of organizations operating in the modern sectors. At the centre of the development of current economies are organizations operating in the sectors of Information Technology, Media, Telecommunications and IT, being innovative organizations. The organization can be described as innovative, if it is able and is directed to the exploration and commercial exploitation of cutting edge research, new concepts, ideas and inventions which will lead to increased modernity and

will strengthen the competitive position of the organization or its technical ambitions. There is a lot of other evidence available that technology modifies the structure of the organization and affects its process of production and its services, the best example being the development of information technology. Its purpose is to support various internal processes taking place in the enterprise and to maintain its contact with the environment. Clearly, the development of technology has changed the external and internal conditions and forced revolutionary changes in the structure of the organization. With the development of the Internet and Information Technology contributing to the expansion of a global communications infrastructure, new organizational forms, called virtual organizations, have been developed. Their appearance is associated with openings in the market for new development opportunities arising from the economy's virtualization.

There is another very important factor in determining the organizational structure of the environment and in particular its complexity and dynamics. Any study on the impact of the environment on structural development should begin with attempts to classify the environmental factors, which reflect the bargaining power of individual organizations in relation to their environment. The environment and its rate of change, as has already been established, have a significant impact on organizational structure and its effectiveness. Firstly, contemporary approaches to management confirm that organizational structure must have a high level of flexibility in order to seamlessly adapt to changes in the environment or take a part in determining them. In addition, the more the environment affects the structure of the organization, the more complex and dynamic it becomes. We have already analyzed, in the organizational approach to management, the evolutionary process of the organization which takes into account external conditions, although the rate of change in the environment may not be predictable. In analyzing in detail the strength of influence of the environment and its components on organizational structure, it must not be forgotten that every organization has its own unique environment, so we need to examine this impact through the prism of diversity and the level of integration. In this case, the differentiation may be identified by a variety of interactions that occur between the environment and the organization, whether small, medium or large. In the case of small and medium-sized organizations, these interactions take place in a unipolar way, which determines the structure of the environment. By contrast, organizations classified as large, attempt to impact the components of the environment, according to their needs and objectives. Of course, the strength of these interactions depends primarily on the level of volatility and complexity of the environment, which can be illustrated by the following relationship: in the twentieth century, the functioning of the organization in terms of certainty contributed to the building of formal structures with a clearly marked hierarchy. In turn, some organizations operate under conditions of uncertainty, i.e. they have a current, efficiently functioning structure with a low degree of formalization and a large number of direct interactions with the customers, due to their need to react swiftly to changes in the environment. The dynamics of changes in the

environment now provides organizations with a powerful incentive to make changes in their structure, in turn increasing their levels of flexibility and inter-organizational networking. It may, therefore, be observed that, in the near future, companies will cease to be fortresses, capable of opposing the forces of change. The ability to adapt to new dynamic environments will become a basic requirement for the efficiency of any organization, in the immediate future. As a result, the choice of an appropriate model for changes in organizational structure becomes a priority for any organization.

The factors which determine organizational structure are subject to constant change, resulting from the existence of a dynamically transforming environment. Thus, the correct identification of the determinants that affect the creation and development of organizational structures is one of the most important current issues of organization and management theory. As can be seen from the numerous classifications of structure-factors already presented, organization and management theory continues to seek ways of choosing a universal set of factors for building an effective organizational structure, which relies on outside and internal rotation.

IV. THE ORGANIZATIONAL CHANGE FACTORS IN POLISH ENTERPRISES

Research for the identification of structure-factors in Polish organizations has been done at Warsaw School of Economics, focusing as well on organizational forms of enterprises related to the XXI century, and trends in business management [22]. The study was carried out by questionnaire in September - October 2014 year.

The study began with contemporary forms dominant in Polish enterprises. The most frequently mentioned by the surveyed companies was a model of organization of the classic model - hierarchical, with clearly defined boundaries of the organization, which opted for as much as 43% of the representatives of the surveyed companies. The second place went entrepreneurial model, open to innovation and new businesses (20% of responses), the third model modern - with a flat and able to adapt to changes in the structure (17% of responses), and the fourth model of intelligent - based on knowledge and systems information (10% of responses). Individual companies pointed to other models, i.e. network, or fractal, but there was no virtual model. The results clearly demonstrate a strong commitment to traditional forms of organization of companies, using the classical theories of organization and management. There are no indications of more modern models of organizations in this study formed opinions about the lack of a modern approach to managing the organization.

The vast majority of the surveyed companies confirmed the fact of organizational changes that would allow them to adapt to the continuous transformations taking place in their immediate environment. Such a position of managers to the conclusion that the companies increasingly see the interactions between the nature of the organization and its structure, and the rapid discovery and efficient functioning of the turbulent environment.

In the opinion of the surveyed companies dominate external factors in creating changes in the organizational structures of enterprises to a much greater degree than internal factors, which are the responsibility of the company (see Fig. 2). External factors that indicated 60% of the asked, they can strongly affect the functioning of companies and force them introducing various changes in that organization. Companies must quickly react to signals from the environment and adapt organization in order to meet the new market conditions, as a consequence of eg. the administrative, legal, economic, technological, competitive actions and market expectations.

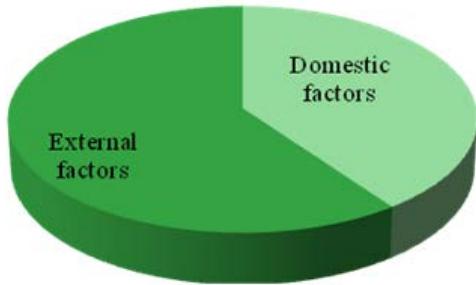


Fig. 2. Factors influencing the formation of (changes) new organizational structures in the surveyed Polish enterprises.

Among the internal factors as critical, which are the most determining changes in the organizational structure, the surveyed companies have recognized: business development strategy (23% of responses), type of business and markets (16% of responses) and the level of technological advancement (11% of responses). Among the surveyed companies dominated two ways to specify the tasks, norms, standards and rules of operation, to do so in the same proportions, ie. the bureaucratic model (43% of responses) and model sociocratic (43% of responses). Least companies pointed to the use of an autocratic model, which may indicate a shift away from the centralization of power in the management, the dominance of single decisions, official orders or restrict the freedom of action of subordinates.

In the case of external factors that determine the changes in the organizational structure, it turned out that the most frequently elected by the surveyed companies were: measures of competition (24% of responses), the activities of customers, ie. the type and number of current and potential (14% of responses) and changes in technology (15% of responses) (see Fig. 3). The following places were: cooperative relations with other entities (10% of responses), changes in the economic environment (9% of responses), and changes in the political and legal environment (8% of responses).

The results point to the dominant role of the proximal factors of the business environment, so that, with whom they come into closer interaction and strong to affect it. Competition, customers, and modern technology is currently the most important elements of the analysis of the competitive environment in which the organization operates (see Fig. 4). Thus, if the company makes changes in its organizational structure under the influence of the market to adapt to the behavior of competitors, to meet the expectations of customers or manufacturers to introduce new technology, these actions should be considered as correct and leading to

the development of modern organizations.



Fig. 3. Internal factors determining the change in the organizational structure of the surveyed Polish companies.

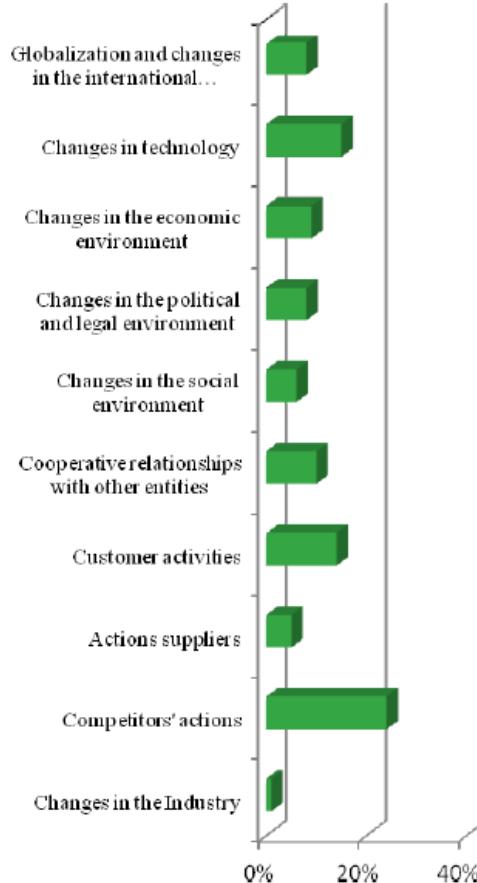


Fig. 4. External factors determining the greatest change in the organizational structure of the surveyed Polish companies.

Analyzing the responses relating to the characteristics of environments that are changing organizational structures, it turned out that the greatest stimulus to the surveyed companies had the potential environment, which has chosen 24% of companies (see Fig. 5). The second position was indicated complexity of the environment (20% of responses), in the third variation and uncertainty environment (17% of responses) and the fourth hostility of the environment (12% of responses). The results show that companies see the variability of the environment in which they operate and the attributes that determine the structural changes in the organizations in terms of adapting to new conditions, to reduce their negative effects and use of the emerging opportunities thanks. It is worth noting that the mere awareness of the relationship between environmental characteristics and changes in the organizational structure of the company is a very important element in the correct formation of the structure and, consequently, the effective functioning of the company.

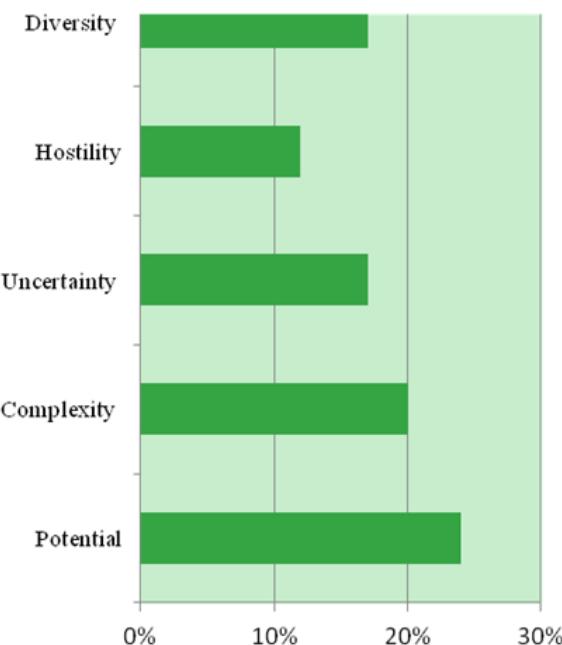


Fig. 5. Characteristics affecting the environment changes in the organizational structure of the surveyed Polish companies.

V. CONCLUSION

Problems of modern management organizations are becoming more complex, augmenting companies both new opportunities and threats. This is primarily due to changes in external environment that have changed behavior of managers, changing the performance style. At the same time, it appears that in the previous era of proven organization and management paradigms may not necessarily be adequate for current conditions, and therefore the expectations of managers in relation to the theory of organization and management are becoming more and focused on the search for the perfect solution, which will equip them with new and effective tools for radically changing conditions.

Conducted among Polish companies research confirms the thesis that the conditions of operation, influence the formation of modern organizational forms. This effect,

however, might be interpreted differently, although examples of companies surveyed indicate that in most cases, active and creative approach to the changing environment is considered desirable. This fact indicates a positive understanding of the essence of the relationship between the environment and the proper functioning of the modern enterprise, which may result in achieving success. Most of the companies recognized external environmental factors as important determinants of organizational structure, indicating among them three basic, namely: competition, customers and technologies. This position is consistent with the current paradigm of the modern approach to business management, commonly presented in the literature.

Restricted to a specified area of research could be assumed that the company decided to adopt modern management model organizations are able to compete on the international market and global levels. Unfortunately, the second part of the study weakens this conclusion, because most companies specify the model of your organization as a classic-hierarchical with clearly defined boundaries of the organization and internal bureaucratic way of linking the organization. The duration of the suspension for the selection of the management of the organization between classic and modern model will not allow Polish companies to build an organization adapted to the new conditions, to reduce the adverse effects of changes or take advantage of emerging opportunities.

In summary, despite the wide awareness of the need for change in the functioning and organization of Polish enterprises, these activities are rather limited to partial modifications that do not allow you to catch up the level of management with foreign companies, which may limit the effectiveness of competition not only in Polish, but also internationally. On the other hand, which is a very interesting observation, a large part of the Polish managers have adequate knowledge of modern management methods, but it also has internal resistance until a full application. Identify the causes of such behavior is not easy, but you can be traced to it in theory describing human behavior to change.

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