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## A practical application of allostasis as a remedy for organizational homeostasis devastated by turbulent environment based on chosen example (case study)

#### Summary:

The purpose of this article is to introduce organizational application of allostasis. This is to be used as a very convenient replacement of homeostasis which has been lost due to adverse circumstances created by a turbulent environment. This application is derived by the continuous diagnosis and observation of the chosen sample. The sample has been positioned in various organizational situations represented by FOGT's businesses organization from 1982 to 2014. The situation is determined by a recognized level of organizational effectiveness or potential ineffectiveness caused by dysfunctions created by surroundings. In such circumstances organizational homeostasis based on stability does not exist and it has to be replaced by allostasis. When homeostasis represents the idea of achieving organizational stability through constancy, allostasis represents the idea of achieving stability through change. This article presents a brief summary of the results of the diagnosis based on qualitative, long lasted depth analysis. The author's tool "The business life cycle model of organizational effectiveness influenced by dysfunctions" is based on the research of the organizational situation. The summary interprets all outcomes of the research and expresses the sense of implemented organizational adaptation through changes as allostasis.

Keywords: homeostasis, allostasis, organization, changes, organizational situation, organizational effectiveness vs. ineffectiveness, organizational life cycle, diagnosing, positioning, dysfunctions

#### Introduction

It is rather difficult to imagine the existence of our civilization without the participation of organizations perceived as very specific abstract constructs<sup>1</sup>, created by human mind to achieve all designed goals<sup>2</sup>. Historically, organizations have existed for as long as human beings have worked together interdependently toward some purpose<sup>3</sup>. From this perspective, it is known that "organization is a special part of evolution. From human groupings in tribes to linkages based on shared resources, the ability to organize is one of the most precious achievements. It is an evolutionary achievement that will be deeply needed in the future<sup>#4</sup>.

<sup>&</sup>lt;sup>1</sup> Construct: a complicated idea created by making several simpler ideas fit together.

<sup>&</sup>lt;sup>2</sup> L. Bursiak, *Essentials of Organization Behaviour*, podręcznik akademicki, Wydawnictwo Naukowe Zachodniopomorskiej Szkoły Biznesu, Szczecin 2013, p. 7.

<sup>&</sup>lt;sup>3</sup> S. L. McShane, M. N. Von Glinow, *Organizational Behavior: Emerging Realities for the Workplace Revolution*, (2<sup>nd</sup> ed.), McGraw-Hill Higher Education, Boston, 2003, pp. 4-5.

<sup>&</sup>lt;sup>4</sup> Quoted from G. Litwin, J. Bray, K. L. Brooke, *Mobilizing the Organization*, Prentice Hall, London 1996, p. 281.

At the present time the term "organization" has become an expression used in everyday situations. This expression is widely used but rather loose and as reported by Dick and Ellis "can be used to cover any recognizable system or structure that exists to help or maintain people's ability to achieve something"<sup>5</sup>. What is special, is that an organization can be smoothly recognized by its task<sup>6</sup>. An adequate definition created by Barnard says that an organization is "a system of consciously coordinated activities or forces of two or more persons"<sup>7</sup>. Huczynski and Buchman see organization as a "social arrangement for achieving controlled performance in pursuit of collective goals," where "social arrangements" are interacting groups of people, "collective goals" are shared objectives and "controlled performance" encompasses "setting standards, measuring performance, comparing actual with standard and taking corrective action if necessary"<sup>8</sup>.

In order to gain an insight into the nature of all organizations, an advantage of the perspective created through purposefully chosen metaphors was taken<sup>9</sup>, also known as images of organization<sup>10</sup>. Morgan referenced that organizations, among others metaphors, provides a comprehensive image of organization as an organism embracing principally the following points: living systems, environmental conditions, adaptation, life cycles, homeostasis, evolution, health and illness<sup>11</sup>.

In Yukl's view "organizations move along a life cycle similar to biological organisms, with a birth stage, a maturity stage, and decline or revitalization stage"<sup>12</sup> The fact that the growth of an organization is almost directly linked to the biological process of ageing was ascertained by organizational researchers many years ago<sup>13</sup>. Daft, Murphy and Willmott refer to the organizational life cycle like the human life cycle because, according to them, all organizations usually exist from creation to their possible final termination. They take into account the fact that organizations are born, grow older, and eventually die, going through four key stages such as: entrepreneurial, collectivity, formalization, and elaboration<sup>14</sup>. According to Cole, the business cycle depicts the following stages: embryonic, growing, mature and ageing. He claims that at the last stage, typical life decline end organizational existence or, possibly, unlike organisms, organizations are able to extend <sup>their life</sup> thanks to organizational turnaround, recovery and continued rejuvenation<sup>15</sup>.

However, all presented concepts of an organizational life cycle are rather intuitively appealing constructs<sup>16</sup> consisting of several phases, whose number varies according to the preferences and conceptions represented by their authors. These various models of the organization life cycle have a definite

<sup>&</sup>lt;sup>5</sup> P. Dick and S. Ellis, Introduction to Organizational Behaviour, (3<sup>rd</sup> ed.), McGraw-Hill, London, 2006, p. 2.

<sup>&</sup>lt;sup>6</sup> P. F. Drucker, Classic Drucker, A Harvard Business Review Book, Boston, 2008, pp. 146–147.

<sup>&</sup>lt;sup>7</sup> Quoted from C. I. Barnard, The functions of the executive, Harvard University Press, Cambridge 1938 after R. Kreitner, A. Kinicki and M. Buelens, Organizational Behaviour, (2<sup>nd</sup> ed.), McGraw-Hill Education, London, 2002, p. 508.

<sup>&</sup>lt;sup>8</sup> Quoted from A. Huczynski and D. A. Buchanan, Organizational behaviour, An introductory text, (6<sup>th</sup> ed.), Prentice Hall, Harlow 2007, pp. 6–7.

<sup>&</sup>lt;sup>9</sup> Metaphor: a word or phrase that means one thing and is used for referring to another thing in order to emphasize their similar qualities. Something that is intended to represent another situation or idea.

<sup>&</sup>lt;sup>10</sup> L. Bursiak, *Essentials of...*, op. cit., p. 10, see more G. Morgan, *Images of Organization*, (2<sup>nd</sup> ed.), Sage Publications, Thousand Oaks 1997, pp. 4–5, 347, 349.

<sup>&</sup>lt;sup>11</sup> Ibidem.

<sup>&</sup>lt;sup>12</sup> Quoted from G. Yukl, *Leadership in organizations*, Pearson – Prentice Hall, (6<sup>th</sup> ed.), Upper Saddle River 2006, p. 38.

<sup>&</sup>lt;sup>13</sup> See more D. Lester, J. Parnell, S. Carraher, *Organizational life cycle: A five-stage empirical scale,* International Journal of Organizational Analysis, 2003 11(4), p. 339-354.

<sup>&</sup>lt;sup>14</sup> See more R.L. Daft, J. Murphy H. Willmott, *Organization Theory and Design,* South-Western Cengage Learning, Singapore 2010, pp. 356-362.

<sup>&</sup>lt;sup>15</sup> G. A. Cole, *Strategic Management*, DP Publications, London 1994, pp. 46-47 and R. Schoenberg, N. Collier, C. Bowman, *Strategies for Business Turnaround and Recovery: A Review and Synthesis*, European Business Review, 2013 Volume 25, Issue 3, 243-262.

<sup>&</sup>lt;sup>16</sup> See more D. L. Lester, J. A. Parnell, M. L. Menefee, *Organizational life cycle and innovation among entrepreneurial enterprises,* Journal of Small Business Strategy, Volume1 9, Number2 Fall/Winter 2008/2009, pp. 37-49.

cognitive value. Nonetheless, it is difficult to find a particular application in practice solving real management problems. Equally difficult it is, if at all possible, their direct application to empirical research<sup>17</sup>. Taking into account, all the limitations of presented models, the remainder of this paper will be concentrated on the original "The business life cycle model of organizational effectiveness influenced by dysfunctions". First and foremost, the theoretical aspects of the model are widely considered and then it is used as a specific application for empirical research. All results of the given study will be reflected on the scale of the model. This paper therefore, regardless of the description and discussion of the phenomena, presents a synthesis of the research using the model focused on issues related to homeostasis and allostasis.

It would be rather difficult to exaggerate the influence and significance of organizational environment for proper or improper functioning, and even the existence of any modern organizations. Jones defined organizational environment as "the set of forces surrounding an organization that have the potential to affect the way it operates and its access to scares resources"<sup>18</sup>. A little bit more elaborated definition belongs to Robbins and Judge, "an organization's environment is composed of institutions or forces outside the organization that potentially affects the organization's performance. These typically include suppliers, customers, competitors, government regulatory agencies, public pressure groups, and the like"<sup>19</sup>.

What is particularly interesting and important, from the organizational point of view, is that environment of modern organizations is subject to constant fluctuations in terms of key environmental parameters. A fluctuated organizational environment redefines quality of internal and external factors influencing the organizational situation of given organization. Those factors can substantially affect the organization's ability to perform multiple organizational tasks which run smoothly and accurately. Permanent transformations of the environment occur within irregular and difficult to grasp sequences, which are to be considered as significantly differentiated quantitatively and qualitatively, and regardless of this any of the changes are characterized by their usual pace, frequency, intensity, structure and direction. Moreover, each of the environmental parameters can undergo various types of modifications, turbulences, changes and transformations that already exist in the process of change. Frequent, fast and multidirectional environmental conversions can take place either on a continuous basis and, as is often done, by leaps and bounds, or with a total lack of continuity. In some situations, occurring unique events can completely reconfigure the environment, make radical structural shifts and lead to drastic changes in the conditions of organizational functioning. In such a situation, the organization comes into a very sharp interaction with their completely revised surroundings. Varied and often violent interaction between an organization and its rapidly changing environment leads to almost inevitable direct confrontation.

Organizations predominantly operate in an extremely complex and permanently changing environment. The uninterrupted action of careful watch of the environment helps to recognise and diagnose the changes as well as mobilise adaptive undertakings. In the face of radical changes, that could potentially appear in the environment, organizations ought to be making improvements to streamline everyday operations. The counteraction should be fast, proper and decisive. However, every organizational entity must be aware that this is a strenuous and difficult process, but is of such vital importance to organizations. Together, all current environmental changes can increase levels of ambiguity

<sup>&</sup>lt;sup>17</sup> L. Bursiak, Pozycjonowanie firm start-up na skali modelu cyklu życia organizacji – metoda eksperymentalna [w:] red. A. Zelek Nowoczesna inżynieria finansowa dla firm start-up w Polsce – raport z badań skreeningowych 2011, Wydawnictwo Naukowe Zachodniopomorskiej Szkoły Biznesu, Szczecin 2012, p. 295.

<sup>&</sup>lt;sup>18</sup> Quoted from G. R. Jones, *Organizational Theory, Design, and Change,* Pearson – Prentice Hall, (5<sup>th</sup> ed.), Upper Saddle River 2007, p. 56.

<sup>&</sup>lt;sup>19</sup> S. P. Robbins, T. A. Judge, Organizational Behavior, Pearson – Preantice Hall, (12<sup>th</sup> ed.), Upper Saddle River 2007, p. 557.

and instability throughout the organization. In such circumstances, organizational situations may no longer be fully relevant to the such changed environment that the organizations are facing.

Organizational homeostasis establishes optimal equilibrium facilitating the functioning of any organization, but it requires, for this purpose of organizational well-being, a relatively stable environment. "Many organizational theorists define homeostasis with analogies to heat thermostats or regulation of body temperature, examples in which systems function to return some perturbed factor to a constant, unchanging state"<sup>20</sup>. What is specific for the idea of homeostasis, is that it is "a tendency to maintain itself in its present state"<sup>21</sup>. When thinking about organizational homeostasis it has to be assumed a relatively stable environment. However, the contemporary environmental conditions are very different, because the environment changes significantly<sup>22</sup> and it may be ultimately unknowable and unpredictabl<sup>23</sup>. The occurrence of turbulences in environment destroys organizational homeostasis. Homeostatic organizational balance, within the previous stable environment, has evolved dramatically to permanent loss of equilibrium under the extreme conditions of turbulence.

The unbalanced state of an organization caused by the rapid environmental changes, usually results in deviations in the form of organizational dysfunctions. "When organizations become unbalanced or experience disequilibrium, (...) [they] attempt to return to a steady state, which may differ from the original state of equilibrium"<sup>24</sup>. This new state of equilibrium can be named "allostasis". Homeostasis represents the idea of achieving "stability through constancy"<sup>25</sup>, while allostasis represents the idea of achieving "stability through constancy"<sup>25</sup>, while allostasis represents the idea of achieving "stability through constancy"<sup>26</sup>. "Allostasis is the extension of the concept of homeostasis and represents the adaptation process of complex physiological systems to physical, psychosocial and environmental challenges. (...) Although the concept of allostasis seems very similar to homeostasis, it places emphasis on the flexible adaptation process to changing environments"<sup>27</sup>. According to the original concept (new paradigm) of researchers such as Sterling with Eyer and independently McEwen with Stellar, allostasis can be differentiated from homeostasis, because dynamic and flexible adaptive systems allow for the introduction and maintenance of a new state of equilibrium, in response to the destabilizing environmental changes<sup>28</sup>

Hau *et al.* "discuss the concept of allostasis, maintaining stability through change, as a fundamental process through which organisms actively adjust to both predictable and unpredictable events"<sup>29</sup>. Schulkin drew attention to the fact that the expression "allostasis" was formulated and developed" in an attempt to account for preserving physiological stability amid changing circumstances"<sup>30</sup>

<sup>&</sup>lt;sup>20</sup> Quoted from R. Marion, The Edge of Organization: Chaos and Complexity Theories of Formal Social Systems, SAGE Publications, Thousand Oaks 1999, p. 60.

<sup>&</sup>lt;sup>21</sup> Quoted from W. F. Christopher, *Holistic Management: Managing What Matters for Company Success,* John Wiley & Sons, Hoboken 2007, p. 19.

<sup>&</sup>lt;sup>22</sup> Ibidem, p. 164.

<sup>&</sup>lt;sup>23</sup> Quoted from Ibidem, p. 98.

<sup>&</sup>lt;sup>24</sup> Quoted from I. Rothmann, C. L. Cooper, Work and Organizational Psychology, (2<sup>nd</sup> ed.), Routledge, New York 2015, p. 8.

<sup>&</sup>lt;sup>25</sup> Quoted from P. Sterling, Principles of Allostasis: Optimal Design, Predictive Regulation, Pathophysiology, and Rational Therapeutic, [in:] J. Schulkin, Allostasis, Homeostasis, and the Costs of Physiological Adaptation, Cambridge University Press, Cambridge 2004, p. 17.

<sup>&</sup>lt;sup>26</sup> Quoted from Ibidem, p. 18.

<sup>&</sup>lt;sup>27</sup> Quoted from J. G Logan, D. J Barksdale, *Allostasis and allostatic load: expanding the discourse on stress and cardiovascular disease,* The University of North Carolina, Blackwell Publishing, Chapel Hill 2008, p. 202.

<sup>&</sup>lt;sup>28</sup> P. Sterling, J. Eyer. Allostasis: a new paradigm to explain arousal pathology, [in:] S. Fisher, J Reason, (eds.), Handbook of Life Stress, Cognition and Health, Wiley, New York 1998, pp. 629–649 and B. S. McEwen, E. Stellar, Stress and the individual. Mechanisms leading to disease, Archives of Internal Medicine 153/1993, pp. 2093–2101.

<sup>&</sup>lt;sup>29</sup> Quoted from M. Hau, S. Casagrande, J. Q. Ouyang, A. T. Baugh, *Advances in the Study of Behavior*, Vol. 48, Academic Press, San Diego 2016, p. 58.

<sup>&</sup>lt;sup>30</sup> J. Schulkin, Rethinking Homeostasis: Allostatic Regulation in Physiology and Pathophysiology, A Bradford Book: The MIT Press, Massachusetts 2003, p. 167.

In these circumstances successful adaptation to unexpected uncertainty is required, "because uncertainty pervades life. In the short run, allostatic mechanisms can provide physiological and behavioral resources that help maintain equilibrium"<sup>31</sup>. Allostasis maintains a state of equilibrium to the point of adapting a given organization to the new situation.

## Characteristics of the model used to carry out the research<sup>32</sup>

The organization life cycle model was created as a theoretical construct reflecting a hypothetical, somewhat simplified (but not oversimplified) image of organizational reality, which starts with the premise that true organizational life is a cycle and consists of relatively predictable sequences of successive stages that an organizational entity goes through, from its beginning (creation) to its conceivable closure (liquidation or even bankruptcy). The life cycle model of organizational effectiveness influenced by dysfunctions helps to recognize the way dysfunctions influence the organizational situation within a business entity operating in an increasingly turbulent, complex and demanding environment.<sup>33</sup> The model also facilitates an organizational diagnosis and displays a synthesized picture of organizational situations which are represented by a given organization. In this context, it has to be mentioned that in an unavoidable way "(...) a modern business organization faces many formidable obstacles, caused by substantial changes of its most powerful but turbulent environment"<sup>34</sup>. However, "in spite of these adverse circumstances, every single business exposed to severe environmental changes has to cope with emerging difficulties daily in order to survive and being aware of risk creates better conditions for an uncertain future"<sup>35</sup>. The model seriously reinforces the analysis and assessment procedures.

The concept of the model was originally based on the change of the paradigm which requires to maintain permanent stability of business situations. It had to be replaced by the paradigm of permanent business instability, as an objective and versatile phenomenon in the world of organizations, triggered by fast environmental changes and even faster turbulences. Acceptance of this new paradigm brought about an entire reorientation in organizational priorities. The main aim of organizations stopped trying and believed it to be virtually impossible to obtain and keep the long lasting stability of organizational situations. Instead of these senselessness strains, organizations should put a lot of effort into activities

<sup>&</sup>lt;sup>31</sup> Quoted from Ibidem, pp. 167-168.

<sup>&</sup>lt;sup>32</sup> Own author's work, elaborated from the following previously written sources: L. Bursiak, *Dysfunkcje organizacyjne a sprawność skomercjalizowanych przedsiębiorstw komunalnych funkcjonujących w fazie dekoniunktury*, [w:] (eds) S. Flejterski, A. Szewczuk, M. Kogut-Jaworska, Zeszyty Naukowe nr 628, Ekonomiczne Problemy Usług nr 78, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin 2011, pp. 44-58, a także L. Bursiak, *Egzemplifikacja sytuacji organizacyjnej badanych przedsiębiorstw w modelu sprawnościowo-dysfunkcyjnym*, [w:] (eds) A. Burlita, G. Maniak i A. Zelek, *Przetrwać dekoniunkturę; Przedsiębiorstwa i gospodarstwa domowe wobec kryzysu*, Zachodniopomorska Szkoła Biznesu, Szczecin 2011, pp. 159-175 oraz L. Bursiak, *Organizational effectiveness of Polish small business in years 1982-2015 based on chosen example. Case study*, Firma i Rynek 1/2016, Zachodniopomorska Szkoła Biznesu, Szczecin 2016, pp. 81-90, ponadto L. Bursiak, *Organizational situation of harbour transshipment PH Company in years 1989-2014. Case study*, Firma i Rynek 1/2015, Jak również Retrieved and elaborated from L. Bursiak, *Organizational effectiveness of Polish small business in years 1982-2015*, jak również Retrieved and elaborated from L. Bursiak, *Organizational effectiveness of Polish small business in years 1982-2015*, based on chosen example. Case study, Firma i Rynek 1/2016, Zachodniopomorska Szkoła Biznesu, Szczecin 2015, pp. 81-90.

<sup>&</sup>lt;sup>33</sup> See more L. Bursiak, *Essentials of Organization Behaviour*, podręcznik akademicki, Wydawnictwo Naukowe Zachodniopomorskiej Szkoły Biznesu, Szczecin 2013, p. 7.

<sup>&</sup>lt;sup>34</sup> Quoted from L. Bursiak, *Essentials of...*, op. cit. p. 105 as paraphrase originated from L. Clarke, The essence of change, Prentice Hall. New York, 1994, p. 6.

<sup>&</sup>lt;sup>35</sup> Quoted from L. Bursiak, *Essentials of...*, op. cit. p. 105 as paraphrase originated from J. Bray, K. Brooke. G. Litwin, *Mobilizing the organization, Bringing strategy to life*, Prentice Hall, New York, 1996, p. 277.

reducing deviations from the balance caused by organizational dysfunctions, concurrently trying to maintain optimal level of effectiveness.<sup>36</sup>

Within the framework of the model, dysfunctions measurements are implemented with direct reference to an attained level of organizational effectiveness or ineffectiveness, in harmony with main principles governing the model, regardless of the sources and locations of organizational disturbances. After the evaluation of intensity (the power of influence) represented by detected dysfunctions, adequate measures of positioning procedure are implemented. These procedures consist of cross-distribution of the given business position on the scale of the model, within one of three explicitly dedicated phases (see figure 1). Each of these three phases consists of six distinctive characteristics of intensity (see description directly under figure 1), which allows to place and visualize within the model the reflection of specified organizational situation assigned to the given researched organization.<sup>37</sup>

	THE	ORG	ANIZ	ATIO					-	GANI FUNC			L EF	FECT	TIVE	NESS				
PHASE I							IUCEI	PHA			.110	PHASE III								
COMPLETE ABSENCE OF DYSFUNCTIONS BORDI EFFECTI					CTIONS DYSFUN ES AT ARRIV ER OF BORDE						CTIO ES AT ER OF	NS Γ	D	ESCALATED DYSFUNCTIONS LEADS TO BANKRUPTCY						
Α	В	С	D	Ε	F	А	B	С	D	E	F	Α	B	C	D	E	F			
		INCR	EASE	, ,			ACCELERATION ESCALATION													
							DYS	FUN	CTIC	NS										
	LIMITLESS PROSPECTS FOR ORGANIZATIONAL GROWTH AND DEVELOPMENT WITHIN THE BOUNDS OF POSSIBILITY							CONSIDERABLY LIMITED PROSPECTS FOR ORGANIZATIONAL GROWTH AND DEVELOPMENT						ORGANIZATIONAL SUSPENSION WHICH MAKES SURVIVAL IMPROBABLE WITHOUT UNUSUAL MEANS						
	EFI	FECT	[VEN]	ESS						INE	FFEC	TIVE	TIVENESS							
	WITH DISRUPTIONS							REVERSIBLE						IRREVERSIBLE						
Α	В	С	D	E	F	Α	В	С	D	E	F	Α	B	С	D	Ε	F			
МА	DENOTES     BORDER OF       MAXIMUM OF     APPROVED       EFFECTIVENESS     SURVIVE																			

Characteristics of intensity: A very weak; B weak; C average; D strong; E very strong; F critical

Figure 1. The concept of "The life cycle model of organizational effectiveness influenced by dysfunctions"

Source: Own elaboration based on L. Bursiak, Organizational effectiveness of Polish small business in years 1982-2014 based on chosen example. Case study, Firma i Rynek 1/2016, Zachodniopomorska Szkoła Biznesu, Szczecin 2016, pp. 81-90.

The first phase of the model (see "Phase I" in figure 1) embraces a belt, which symbolically represents an organizational situation as fully effective with relatively small disturbances but with minuscule increasing dysfunctions, having a quantitative character in a wide range of influential power (characteristics of intensity: from very weak to critical). All organizational operations within the belt of effectiveness seem to be safe and are treated as comparatively secure without any grave threat for the existence of researched business. However, when there is a lack of organizational sensitivity to occurring disruptions and, especially, when these problems are not solved as they arise and the

<sup>&</sup>lt;sup>36</sup> L. Bursiak, Pozycjonowanie firm start-up na skali modelu cyklu życia organizacji – metoda eksperymentalna, [in:] A. Zelek (ed.), Nowoczesna inżynieria finansowa dla firm start-up w Polsce w latach 2009-2010 – raport z badań skreeningowych, Wydawnictwo Naukowe Zachodniopomorskiej Szkoły Biznesu, Szczecin 2013, p. 274.
<sup>37</sup> Ibidem.

organization lets things drift, the dysfunctions will gradually increase, cumulate and lead to the critical point, where increased dysfunctions arrives at the border of effectiveness.<sup>38</sup>

When adverse changes create the dysfunctions that go beyond the critical point located at the extreme position of the first phase, the company's organizational situation is classified and enters the second phase of the model (see "Phase II" in figure 1). This exchange brings qualitative change between the first phase where dysfunctions increase and the second phase where they accelerate. In a framework of the second phase, the researched firm enters the area of ineffectiveness which consists of two belts. The first of them is represented by the second phase itself and informs that the organizational situation is ineffective but is still reversible without taking advantage of the unusual (extraordinary) means. The second one of the two mentioned belts, within the area of ineffectiveness, is represented by the third phase (see "Phase III" in figure 1) which is irreversible without an unusual mode of proceeding. Acceleration of dysfunctions within the framework of the second phase brings about crossing the critical point and enters the third phase of the model, in which potential uninterrupted escalation of dysfunctions can lead to the start of liquidation or even bankruptcy proceedings.<sup>39</sup>

Within the scope of the second phase, in contrast to the third phase, diagnosed organizational ineffectiveness can be reduced and reversed exclusively on the basis of one's own management actions and return to phase I (effectiveness) without the use of extraordinary solutions. Therefore, in phase III, identical procedure is not possible without implementation of accessible extraordinary means, which are qualitatively much deeper issues than conventional managerial interventions. These extraordinary ventures may include one of two groups of defensive actions. The first, and the most expanded, corrective and preventive action is undertaken to protect a given company against highly probable bankruptcy which includes: (1) regulated by law (a relevant legal act) insolvency or restructuring proceedings, (2) a merge together with another legal entity (firm), (3) split up into parts, and (4) sale or (5) liquidation. The second corrective and preventive action is performed to create a shield as protection against almost inescapable bankruptcy<sup>40</sup>. Figure 2 portrays a piece of the central part of the model shown in figure 1. Nevertheless, there are some significant changes in the contents located in the middle of the objective depicted in figure 2. These changes in the contents are as follows:

- Within Phase I; the phrase "Limitless possibilities to sustain effectiveness" from figure 2 replaces the phrase "Limitless prospects for organizational growth and development within the bounds of possibility" from figure 1.
- Within Phase II; the phrase "Limitless possibilities to restore effectiveness" from figure 2 replaces the phrase "Considerably limited prospects for organizational growth and development" from figure 1.
- Within Phase III; the phrase "Limited and restricted possibilities to restore effectiveness" from figure 2 replaces the phrase "organizational suspension which makes survival improbable without extraordinary means" from figure 1.

<sup>&</sup>lt;sup>38</sup> Ibidem.

<sup>&</sup>lt;sup>39</sup> Ibidem, pp. 274-275.

<sup>&</sup>lt;sup>40</sup> Ibidem, pp. 275-276, see more S. Wrzosek, *Upadłość i likwidacja przedsiębiorstwa*, [in:] J. Lichtarski (ed.), *Podstawy nauki o przedsiębiorstwie*, Wydawnictwo Akademii Ekonomicznej im. Oskara Langego we Wrocławiu, Wrocław 1995, p. 63.

Α	B	C INCR	D EASE	E	F	Α	B	C CELE	D RAT	E ION	F	Α	B	C SCAI	D ATIO	E	F	
		nver	Engl					FUN					L	benn		511		
LI	LIMITLESS POSSIBILITIES TO SUSTAIN EFFECTIVENESS							LIMIT SIBIL REST ECT	ITIE FORF	б то Г		LIMITED AND RESTRICTED POSSIBILITIES TO RESTORE EFFECTIVENESS						
	EF	FECTI	IVEN	ESS		INEFFECTIVENESS												
	WITI	H DISI	RUPT	IONS			R	EVEF	SIBI	LE		IRREVERSIBLE						
Α	В	С	D	Ε	F	Α	В	С	D	Ε	F	Α	В	С	D	Е	F	

Characteristics of intensity: A very weak; B weak; C average; D strong; E very strong; F critical

#### Figure 2. Central part of the model introduced in figure 1 with some vital textual changes

Source: Own elaboration based on retrieved and elaborated from L. Bursiak, *Organizational effectiveness of Polish small business in years 1982-2014 based on chosen example. Case study,* Firma i Rynek 1/2016, Zachodniopomorska Szkoła Biznesu, Szczecin 2016, pp. 81-90.

All introduced shifts in the contents between figures 1 and 2 are very important from an organizational point of view, because they redirect an organizational perception to the problem of organizational effectiveness<sup>41</sup>. The shifts reflect the way, and extend to which, an organizational effectiveness is under the influence of organizational dysfunctions. Taking this into account, it should not be questionable that within the scope of Phase I of the model, possibilities to sustain organizational effectiveness are theoretically almost limitless. In Phase II organizational prospects are relatively limitless, but only with clear reference to potential restoration of effectiveness. However, the cases where businesses systematically go downhill, are classified as being situated within the scope of Phase III, where restoration to complete organizational effectiveness is extremely difficult and requires compliance with strictly limited and restricted extraordinary means. To sum up this part of the discussion, it can be concluded that the changed and transferred textual contents introduced in the middle of the object depicted in figure 2 defines the extent to which organizational effectiveness can be sustained (within Phase II) or restored (unconditionally within Phase II, but with serious reservations within Phase III - bordering on the impossible).

The necessity, sufficiency and specificity of the research and presentation of synthesized organizational outcomes requires some modifications in the middle of the derived central part of the model introduced in figure 2. For this purpose, the space with textual comments (explanations) is removed and evenly spaced with 33 horizontal rows added in order to symbolize ten consecutive years of the period under the research, from 1982 to 2014. Each individual row are devoted to a specified year and are divided vertically into eighteen columns which create within the row equal boxes - six boxes per each particular phase of the business life cycle. Only one of the boxes within the horizontal space (marked with black background) represents a specified year in the model and points out the diagnosed position of the given company's organizational situation concerning the year. Additionally, two white figures, which are presented upon a black box background, display a specific year. They consist of

two the last figures of the year and are settled within one specific box with a black background. Figures "82" symbolize year 1982 and adequately "83" year 1983, "84" year 1984, "85" year 1985, and so on. Figures "14" symbolize year 2014, the last year of the research. The two digit numbers represent the year covered by the research and are distributed horizontally along a row, which are respectively indicated by one of the

<sup>&</sup>lt;sup>41</sup> Read more about organizational perception and its management in: K. D. Elsbach, *Organizational perception management*, Lawrence Erlbaum Associate, Mahwah (New Jersey) 2006.

eighteen black boxes (cells) that are assigned to each subsequent year. It should be the same number of rows in the model as the number of years covered by the study.

Vertically, the adequate black box (cell) is an intersection of the identified row space of the model for representing consecutive years of the research, with suitable column space which reflects specific level of intensity that is classified as a distinguishing feature (see characteristics of intensity below figures 1 and 2). As it is depicted in figures 1 and 2, each specific level of intensity of definite feature is represented by capital letters arranged alphabetically. The order begins with letter "A and finishes with letter "F". Characteristics of intensity represented by the letters mean adequately: "A" - very weak; "B" - weak; "C" - average; "D" - strong; "E" - very strong; "F" – critical. When intensity of the feature achieves critical level it shows such accumulation of negative quantitative changes (dysfunctions) that can cause qualitative change which goes beyond the critical point and, quite possibly, be classified as the next phase of the model. However, such situation within the third phase of the model may lead to the initiation of liquidation or even bankruptcy proceedings.

In accordance with the model's structure and assumptions, intensity of every definite feature should be symmetrically related to the level of organizational dysfunctions and organizational effectiveness or ineffectiveness. Each year within the model is treated as a one business life cycle from the beginning to potential closure. All consecutive years following 1982 (until 2014 inclusively) are considered to be separate life cycles. However, gathered together within the model all outcomes constitute completion, and there is a clear and integrated picture of organizational situation ascribed to every researched business during the period of time from 1982 to 2014.

#### The procedure of data collection and method employed to obtained results<sup>42</sup>

In accordance with the scope of this research procedure, interviewing was a key method of data collection. The extensive, in-depth interview was held with the owner of the business. The interview was fairly informal and the participant felt like taking part in a form of interactive, spontaneous communication, conversation or discussion rather than in a formal question and answer procedure. The benefits of this approach was that all obtained information and research data were richer, with a deeper insight into the phenomena under-researched areas.

The interview defined as unstructured, contained one single structured element. Each time, immediately after the introduction, a financial situation of a given company based on a financial statement was introduced and discussed. The final evaluation of the financial situation as a first step in the procedure, enables to take another step towards considering the financial position of the researched entity on the scale of the model. This position is the starting point for further considerations because the established financial situation reflects only a part of an overall organizational situation. In many cases, unexpected organizational dysfunctions deteriorate considerably the picture of the general organizational situation, despite satisfactory financial results. This statement is based on the author's own relevant research in this area which was accomplished by combining simultaneously (integrated presentation) the model of a financial and organizational situation of some deliberately selected business organizations. These studies have confirmed the possibility of significant discrepancies between the financial and organizational situation.<sup>43</sup> This is why, the following discussion, during the

<sup>&</sup>lt;sup>42</sup> Retrieved and elaborated from L. Bursiak, *Organizational effectiveness of Polish small business in years 1982-2015 based on chosen example. Case study,* Firma i Rynek 1/2016, Zachodniopomorska Szkoła Biznesu, Szczecin 2016, pp. 81-90.

<sup>&</sup>lt;sup>43</sup> See L Bursiak, Pozycjonowanie firm start-up na skali modelu..., op. cit., p. 313.

interview was focused on all other remaining aspects of organizational performance. Taking into account their validity, all collected data had to be sufficient enough to allow the participants (interviewee and interviewer) to make a conclusive assessment of the entire organizational situation in the business referenced to each year over the period considered (from 1982 to 2014 inclusively). The conclusive assessment is crucial not only for the research purpose, but also for providing potential effective countermeasures against the organizational effects of dysfunctional economic activities.

Proper ordering and interpretation of the obtained qualitative data allows to create a qualitative diagnosis of organizational effectiveness. The overall picture of the phenomenon is obtained by identifying the positioning path on the model scale of all individualized diagnoses assigned to subsequent years of the study. Due to the research method used, the subjective impact of the researcher and the respondent on the results of the research cannot be entirely ruled out. However, the degree of these subjective effects is so negligible, and the degree of generalization is so high that the synthesized results of conducted research correspond to established research objectives.

# Organizational situation of researched entity, considering homeostatic and allostatic perspectives

In the most general sense the term "homeostasis " is commonly associated with the overall stability constant or maintenance of a sustainable balance, as well as a state of equilibrium. As it has already been said, the term "allostasis" has a notably different meaning than "homeostasis". Complementing all previously mentioned definitions of allostasis it particularly "means achieving stability through change of state. At the heart of the concept is the depiction of change in order to maintain (or achieve) a state appropriate to [changing] circumstances"<sup>44</sup> which means, in a nutshell "adaptation to changing environmental conditions"<sup>45</sup>. "Homeostasis implies remaining stable by being the same, while allostasis suggest remaining stable by changing" <sup>46</sup>.

The constant and rapid environmental changes caused permanent homeostatic disruptions and imbalances. In these circumstances the researched FOGT's business organization had to operate in uncertain environmental conditions while striving for its balance through adaptations. This way allostasis replaced homeostasis and implemented changes that guaranteed the viability of the organization between 1982-2014 that is introduced in the following part of the paper.

#### Integrated presentation and interpretation of the results

Beginning its organizational life, FOGT's business organization employment was ranked on the edge of Phase I under a direct threat to the entrance to Phase II of the model (see black box marked "82", year 1982, in figure 3). In years 1983 and 1984 there was a gradual increase in organizational activity and slight improvement in the position within the model (see years 1983 and 1984 in figure 3). At the turn of 1984 and 1985 FOGT identified a new organizational opportunity and immediately arranged a diametrical change in the type of its activity which significantly improved the organizational

<sup>&</sup>lt;sup>44</sup> Quoted from J. Schulkin, Allostasis: a neural behavioral perspective, Hormones and Behavior 43/2003, pp. 21–27.

<sup>&</sup>lt;sup>45</sup> Quoted from Ibidem.

<sup>&</sup>lt;sup>46</sup> Quoted from M. Peskin, G. Zalsman, Genetic Process in Resilience and Vulnerability and the Consequence of Abuse, [in:] M. Hodes, S. Gau, Positive Mental Health, Fighting Stigma and Promoting Resiliency for Children and Adolescent, AP Academic Press, Amsterdam 2016, p. 80.

situation (see year 1985 in figure 3). In 1986 the organizational situation worsened a bit by instantly increased competition (see year 1986 in figure 3) and FOGT decided to change the location of its activities. When FOGT relocated in 1987, its organizational activity was highly diversified. After the changes, the organizational situation improved and remained at the highest possible level for three years (see years from 1987 to 1989 in figure 3).

Therefore, FOGT's business organization entered into transformation thus being in a very good organizational condition.

In 1990, under the pressure of transformation with extreme systemic change, FOGT's business situation deteriorated significantly, which declined its effectiveness to the "strong" level of dysfunctional intensity within Phase I of the model (see year 1990 in figure 3). The year 1991 brought a slight improvement in the level of dysfunctional intensity from "strong" to "average" and remained at that level for three consecutive years (see years 1991, 1992 and 1993 in figure 3). In 1994 a slight deterioration occurred and the level of dysfunctional intensity shifted from "strong" to "average" and maintained this level in the next year (see years 1994 and 1995 in figure 3). The following years were characterized by a gradual improvement of the organizational situation of the business (see years from 1994 to 1998 in figure 3) and in the year 1999 the dysfunctions was reduced on optimal level. This optimal level of organizational effectiveness remained at the same level from this year until 2003.

Since 2004 the organizational situation of researched business had steadily worsened up to 2009 (but still remaining within the first phase of the model). This last year (2009), the increasing dysfunctions (with symmetrical distortion of effectiveness) reached a critical level (see year 2009 in figure 3). The much more rapid organizational failure arose in 2010, when the first phase of the cycle was firmly and rapidly dismissed. What was worse, was the position of organizational effectiveness that was located at the end of the second phase of the model (see year 2010 in figure 3). In view of the way things turned out in year 2010, the FOGT's organization posed a direct threat of leaving the second phase and entering the third phase of the cycle, where the organization could end up in the danger zone under the threat of liquidation or even bankruptcy. However, the threat did not materialize itself because the negative trend had been stopped at the end of the second phase of the model. The mentioned organizational situation had a close relationship with the negative impact of the crisis in the field of the business with critical severity, which was not able to be compensated by the diversification of its activity.

In the absence of the effectiveness based on different counteractions, including diversification, there was a decision on a radical change of organizational strategy. In the case of worsening problems with obtaining orders, the FOGT's business main goals were achieved by reducing its main activity to the role of a subcontractor in construction. The management used to implement the way of doing business as the subcontractor in construction only when the company struggled to survive, during periods of temporary lull in the principal business activity, without ceasing the search of new market opportunities. A more flexible approach to the business, led to a qualitative change showing a broader organizational perspective. This strategy, launched in early 2011 brought very good results that dramatically improved the FOGT's business level of organizational effectiveness (see year 2011 in figure 3). In 2012 and 2013 there were some problems with payments for services performed for Polish companies, causing financial difficulties that worsened organizational effectiveness (see years 2012 and 2013 in figure 3).

The difficulties were largely compensated by the use of prepayments and greater involvement in adequate services in the nearest German towns. In 2014 slight improvement in the FOGT's business position was notice within the model (see year 2014 in figure 3).

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C D Characteristics of intensity: A very weak; B weak; C average; D strong; E very strong; F critical

REVERSIBLE

E

F

A

B

B

Α

**IRREVERSIBLE** 

С

D

Е

F

Figure 3. Integrative model depicting organizational situation of FOGT organization in the years from 1982 to 2014 Source: Own elaboration based on in-depth qualitative research retrieved and elaborated from L. Bursiak, Organizational effectiveness of Polish small business in years 1982-2015 based on chosen example. Case study, Firma i Rynek 1/2016, Zachodniopomorska Szkoła Biznesu, Szczecin 2016, pp. 81-90.

As previously stated, allostasis supports the accomplishment of organizational stability through change. Therefore, allostasis is a special manifestation of changing management in organizations. Table 1 summarizes the relevant proposals, in order to promote best practices connected with the implementation of allostasis in organizations.

WITH DISRUPTIONS

D

Е

F

С

Α

B

Allostasis	Best organizational practices
Phase I	Maintain complete organizational vigilance in detecting even the weakest dysfunctions. Immediately after identification, take measures to neutralize all unmasked dysfunctions. Provide the best possible organizational positioning within the phase. Try to achieve significant and ongoing improvements in organizational performance and competitiveness.
Phase II	Take all available measures to prevent entry into phase III. Focus on reversing unfavourable organizational tendencies. Improve organizational position within Phase II. Provide orientation of all organizational arrangements for prospective transfer to Phase I.
Phase III	Block possible bankruptcy or undesirable liquidation. Concentrate on stopping the threat and reversing dangerous organizational trends. Try to improve your organizational position within phase III. Accumulate and apply effectively all necessary organizational endeavours that are only achievable by extraordinary means in the purpose to return to phase II and even I.

# **Table 1. A set of best organizational practices useful for implementing allostasis**Source: Own elaboration.

The proposals of best organizational practices presented collectively in Table 1 are gathered into three groups. Each group consists of four proposed practices which are tailored exclusively to each phase of the model. It is advisable to follow up these proposed best organizational practices to ensure the effectiveness of the adopted allostatic procedures focused on achieving an organizational stability.

### Conclusion

The integrative model based on "The business life cycle model of organizational effectiveness influenced by dysfunctions" depicts the organizational situation of researched organizational activities (changes recognized as allostatic actions) that was undertaken by the FOGT's organization from 1982 to 2014. During this period (33 years), thanks to permanent allostatic actions, the given organization was never classified as threatened by exclusion from business activities (within the scope of the third phase of the model) but only once within the scope of the second phase of the model (year 2010). In the remaining thirty-two years of the period under the research, the organization was classified as satisfyingly effective and located in the zone of organizational effectiveness represented by the first phase of the model. Despite the turbulent environment and continued lack of homeostasis as a stable phenomenon, there were no serious threats to the researched organizational effectiveness. In light of this research, allostasis properly describes the search for a balance through organizational changes. This statement has been based entirely on the research conducted in this study using the presented model. Confirming the results one should be aware of the limitations of the model and the used research method. Conducting unstructured interviews is a time-consuming process and requires interviewers to have a relatively rich set of skills. First, the interviewer should be well prepared and able to listen carefully during the whole conversation. In addition, the course of evaluation of the research material requires a continuous reduction in the scope of subjectivity.

An important advantage of this model is its ability to be used for the study of a single organization it means separated from other entities, but also grouped in any convenient configuration. The range of applicability of the model is not limited to qualitative research but it may be applied equally to quantitative data analysis. However, in this case, the model requires additional IT support.

This model, supported by appropriately chosen IT, is used to diagnose and visualise the financial situation of researched organizational entities. The diagnosis procedure begins with ratio analysis based on quantitative data from financial statements and finishes with the application of linear ranking methods for positioning of the corporate financial situation on the scale of the diagnostic model. The major point of interest in this procedure is the synthetic valuation of the financial organizational situation in the background of the researched group of organizations. The results of the diagnostic modelling are visualised on the ranging from 1 to 18 based on the financial situation. A significant limitation of the diagnostic capabilities of this version of the model is the lack of ability to analyse a single selected organization that is considered in isolation. An important advantage, however, is the relative ease of access to data from financial statements<sup>47.</sup>

<sup>&</sup>lt;sup>47</sup> L. Bursiak, Modelowanie diagnostyczne sytuacji finansowej organizacji gospodarczych na przykładzie firm start-up w latach 2009-2010, [w:] red. A. Uziębło, Aktywność finansowa w okresie podwyższonej niepewności, Prace Naukowe Wyższej Szkoły Bankowej w Gdańsku, Tom 20, Wyższa Szkoła Bankowa w Gdańsku i CeDeWu, Warszawa 2013, pp. 165-177, see also L. Bursiak, Diagnoza i pozycjonowanie sytuacji finansowej firm start-up oraz spółek z rynku NewConnect w roku 2011, [w:] red. D. Zarzecki Zarządzanie finansami. Mierzenie wyników przedsiębiorstw i ocena efektywności inwestycyjnej, Zeszyty Naukowe nr 760, Finanse, Rynki Finansowe, Ubezpieczenia nr 59, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin 2013, pp. 49-58 and L. Bursiak, Pozycjonowanie sytuacji finansowej firm start-up na skali modelu cyklu życia organizacji – metoda eksperymentalna, [w:] red. A. Zelek Nowoczesna inżynieria finansowa dla firm start-up w Polsce w latach 2009-2012 – raport z badań skreeningowych, Wydawnictwo Naukowe Zachodniopomorskiej Szkoły Biznesu, Szczecin 2013, pp.273-298.