

THE CONCEPTION “AN ENTERPRISE AS A MICROCIVILIZATION”

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Received: December 17, 2010

Abstract

BLAGODIETIELIEVA-VOVK, S. L.: *The conception “an enterprise as a microcivilization”*. Acta univ. agric. et silvic. Mendel. Brun., 2011, LIX, No. 2, pp. 35–42

The world crisis actualized the problem of brittleness of the society and the vulnerability of a human being. The Government intervention through the strengthening of the regulation of the enterprises and the markets are considered by many experts as a method of indirect solution of the above mentioned problem. However, the effective management must be based on the knowledge of features and unique characteristics of each economic entity. Universal in its essence the system of government does not fit to it. Therefore, we speak about the creation of the direct control concept of the environment of the human life – “an Enterprise as a Microcivilization”. Its core is the Culturological paradigm and the Civilizational approach. The structure of the concept includes such models: the Contextual model of civilizational entities, the Complex model of a human, the Growth and the development model of microcivilization, the Model of civilizational entity “human – community – society”, and the applied Method of identifying microcivilization, the Assessment of values and the civilized Profile of microcivilization's citizen. The conception of “an Enterprise as a Microcivilization” was tested on a group of the Ukrainian food industry enterprises. From the set of 162 enterprises was allocated 9 pretenders for the status of microcivilization. Three of them - identified as a microcivilization. In one of them have been started the formation of the Institute of Cultural Leadership.

civilizational approach, enterprise-microcivilization

The universal character of scientific knowledge is assuming of getting of the universal information about the of environment's condition. The versatility signifies universality, omniscience; i.e. scientists are focusing on the most outstanding features of large objects, or sets, processes, relationships between them.

The problem areas of the universalist approach is the absence of an effective, inner connectedness with each part of the social reality, as they all are summarized in a single model (series models), easy to operate but cannot exercise effective influence, since ignoring the peculiarities inherent to the subject, object, environment, process, etc. Therefore, to eliminate managerial inefficiency of universalism will have to found adequate alternative.

It is a civilizational approach, which develops the opposite process – a unique knowledge of the ex-

istence, nature of business environments and features. First of all, human and his world – culture, materialized in the form of civilization. This implied humanized micro-, macro- and meta- fragment of reality, with cultural and civilizational features, that is for certain signs of human existence are different.

Mastering the peculiarities of civilized entities could be working out the unique methods, models, management techniques that are relevant only for those environments. Them could be effectively used for solving the accumulated socio-economic problems of the prerequisites of development and growth of civilization some subjects, especially micro - enterprises, cities, area of residence of small nations and nationalities (microcivilizations) because they are essentially those that could be manageable.

MATERIALS AND METHODS

The aim of research is creating the human centric conception of “an Enterprise as a microcivilization” which will solve the problem of economic development and increases growth.

The subject of research in a broad sense, are the processes of civilization changes. In applied terms this is a transformation of enterprise to the new civilizational entity – microcivilization, through the implementation of institute of active citizenship and cultural leadership.

Methodological platform of the author defines the culturological paradigm, which is inherently humanistic, pluralistic, largely indeterministic, dominated by qualitative research methods of complex, dynamic of reality. It becomes relevant due to changes in ideological accents, which is due to understanding “anthropic principle” set back in 70 years of XX century by cosmologists B. Carter. According to the anthropic principle feature of the content of our universe is the origin and condition of human existence as an observer (Bostrom, 2002). Thus, the human has treated science as a central, uniting, defining link of all levels of the Universe.

The research method was civilizational approach. In economic science the civilizationism somewhat has a limited use because culturological paradigm only paves the way among economists.

In article also used methods of financial analysis, economic-mathematical methods.

Civilization – a form of existence of human kind in the dimensions of spirit, matter, society, characterized by the headship of man and realized through the cultural, economic, technological and other features of the effect on reality. Human – is a generic

feature of all civilizations, i.e. all kinds of civilizations having a common denominator – the person as a value. Based on the contextual principle, they can be compared so as to detect a co-dependence from one another (see the Fig. 1).

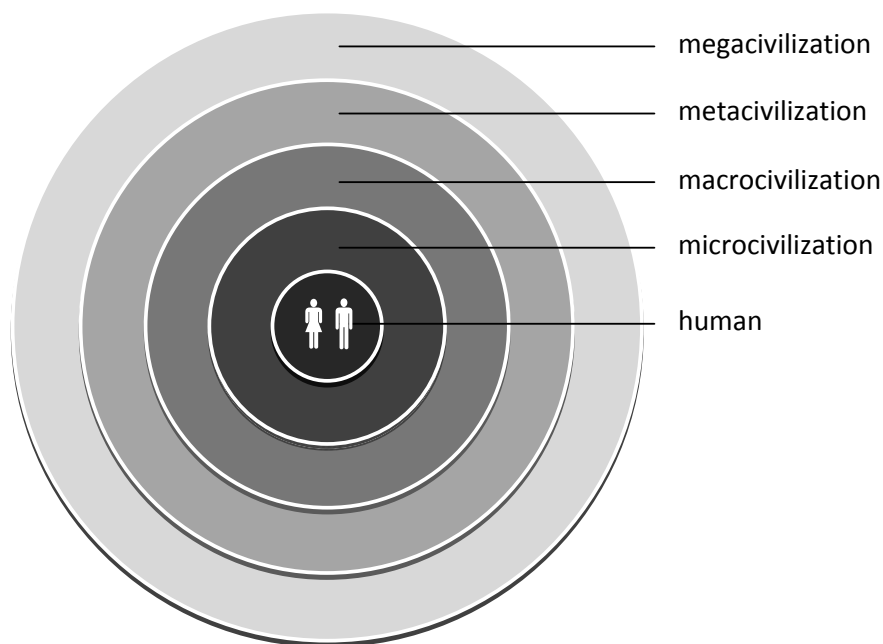
Societies exist in the forms of civilization and non-civilization. In order to practically determine the type of social groups was developed a model of binary oppositions, which includes seven pairs of concepts, such as: “center/periphery”, “own/alien”, “mutuality/alooness”, “communion/population”, “self-organization/chaos”, “unity/conflict of aims and values”; “development/survival”.

Continuation and strengthening of society’s differentiation to the deepest levels is a feature of modernity, then some microsocieties with signs of cultural, historical, economic, and technological community can be considered as a microcivilizations.

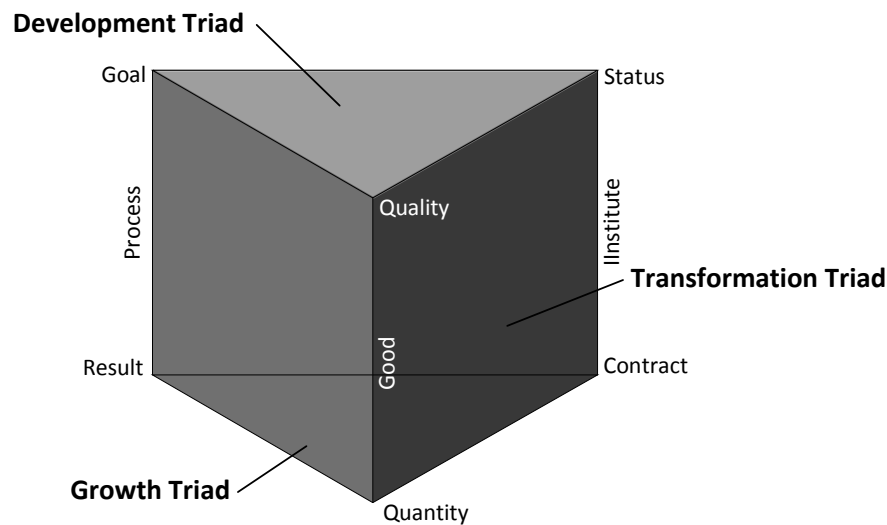
The enterprise-microcivilization it’s human-centric form of enterprise, which integrates the economic and cultural functions to provide economic development and growth, the release of personality, diversification of forms and complications of habitat, increasing the completeness of individual and collective fullness of being.

Graphical interpretation of the development and growth model of an enterprise-microcivilization shown in the Fig. 2.

Everyone has certain specific of nature. They can be displayed by using a Complex model of human – set of models, in which reflected the state and the change of personality evolution and society. Created under the influence of «The emergent, cyclical, double-helix model of the adult human biopsychosocial systems» by Clare Graves (Graves, 1981).



1: Schema of the contextual model of civilizational entities



2: Schema of the development and growth model of an enterprise-microcivilization

The complex consists of six models: *homo naturalis*, *homo barbarius*, *homo tradicionalismus*, *homo oeconomicus*, *homo institutius*, *homo culturius*. Two models – *homo naturalis* and *homo barbarius*, are non-civilized. Four models – *homo tradicionalismus*, *homo oeconomicus*, *homo institutius*, *homo culturius*, are civilized.

They are manifesting in the individuals, through the distinctive system of values and behavior, in-

cluding economic and forms of cognition (see Tab. I).

In practical use this Complex model has to be transformed to application tool for research the citizens of the microcivilizations. The author's understanding of microcivilization citizenship associated with ideas of B. Manville and J. Ober (*A company of citizens*, 2003) and L. Gratton (*The democratic enterprise*, 2004).

I: Description Complex model of human

Parts of the complex model and basic values	Behavioral characteristics	Forms of cognition
<i>homo naturalis</i> Nature, survival, instinct, taboo	Satisfaction of the needs of survival in the natural environment. Mutual, sincere, direct relationship. Equal access to goods	Totem consciousness
<i>homo barbarius</i> Power, action, domination, control	Conquest of the natural context by developing agriculture and cattle breeding. Relations based on the cult of force, domination active individuals and families in groups. Inequality in access to goods.	Sensual perception at all levels, including intuition, which is transformed into myth, belief
<i>homo tradicionalismus</i> Hierarchy, status, law, land	Strict regulation of life, limiting behavior laws and strict control over their maintenance. Private ownership of the goods. Economics of donation and the equivalent exchange	Religion as a top sensual forms of cognition, philosophy as a Mother of science
<i>homo oeconomicus</i> ratio, freedom, equality, wealth	Detachment, atomization of the individual. Competition. Unequal exchange. Accelerate expansion of individual nation-states in the external natural and social environment, initiating processes of globalization. Satisfaction of the needs of most economic way - producing and selling goods. Building foundations of a society of consumption	Abstract thinking, the emergence of modern science
<i>homo institutius</i> The right, responsibility, justice, public good	Solidarity. Overcoming alienation and its effects by combining the interests of participants in the socio-significant projects, including environmental. Implementation of legal equality of subjects of different levels, including human and the state through a network of institutions. Economics of public sector (knowledge)	Abstract thinking, reflection, evaluation, interdisciplinary science
<i>homo culturius</i> Cognition, creativity, humanity, the fullness of being	Search for new forms of experience, life, existence. Economics as a basis for producing a variety of human centric worlds	Combining sensual perception and abstract thinking, New Age era

To meet this need we have introduced the concept of “the Civilized profile of microcivilization’s citizen”. The Civilized profile of microcivilization’s citizen is a method of revealing the features of complex model in a particular person, or display of the civilized structure of personality. Using of civilization profile allows detect the level of civilized/non-civilized members of the group, the structure of different models in a complex, the features of their values and priorities.

Individual, community and society are interrelated parts of the human world. In a model of social reality they should be treated as a set – civilizational formation. The structure of model will include components of several layers, where the center is the principle of anthropocentrism. In other words, the Model of civilizational entity consist the models of its components – a model of human, a model of community and a model of society. It named the Model of civilizational entity “human – community – society”. It has a stochastic character to change the state of its components. The parts of the model are described through a set of statuses in which they may be under the inherent features.

The model of human we represented as a set of “me like me” and “me like another” – features that are in continuous formation and are influenced both internal (self-discovery, disclosure, self) and external factors.

Enterprises, which really recognize and realize the priority of human are microcivilizations and other enterprises, which focus on other values – non-civilizations. Thus, the enterprise will be in two statuses – microcivilization or non-civilization.

Experts in social dynamics usually define two states of society: evolution – with a stable, progressive, predictable development and revolution – with a volatile, crisis, unpredictable, explosive character development. Thus for the modeling of society in our models use only these two states.

Possible statuses of a composite model of civilizational entity “human – community – society” presented in Tab. II.

The total number of combinations of statuses for the Model of civilizational entity “human – community – society” is equal to 8. In the Tab. III we can see the possible variants of statuses of the Model “human – community – society”.

The initial status of model consist statuses of components based on quantitative and qualitative research.

The possible variants of statuses of the Model “human – community – society” described based on the mathematic method of Markov chain. At any moment it can be in one of the states:

$$S_1, S_2, S_3, S_4, S_5, S_6, S_7, S_8. \quad (1)$$

Changes of the model’s state can be represented as stages or steps of a Markov process through the function argument 1, 2, 3, ... k (step number). For any step is one of the events, which corresponds to result in a transition state with the full group of states, which are described as:

$$S_1^{(k)}, S_2^{(k)}, S_3^{(k)}, S_4^{(k)}, S_5^{(k)}, S_6^{(k)}, S_7^{(k)}, S_8^{(k)}. \quad (2)$$

There is some probability model’s transition from this state to another for the k-th step:

$$\begin{aligned} p_1(k) &= p(S_1^{(k)}), p_2(k) = p(S_2^{(k)}), p_3(k) = p(S_3^{(k)}), \\ p_4(k) &= p(S_4^{(k)}), p_5(k) = p(S_5^{(k)}), p_6(k) = p(S_6^{(k)}), \\ p_7(k) &= p(S_7^{(k)}), p_8(k) = p(S_8^{(k)}). \end{aligned} \quad (3)$$

This is the transition probabilities of a Markov chain. Transition probabilities do not depend of the number of steps, so our model is a homogeneous Markov chain.

Total probability for each step will be equal 1, because events are not compatible, including:

$$\begin{aligned} p_1(k) + p_2(k) + p_3(k) + p_4(k) + p_5(k) + p_6(k) + p_7(k) + \\ + p_8(k) = 1. \end{aligned} \quad (4)$$

II: The statuses of parts of the Model of civilizational entity “human – community – society”

Human	Community	Society
1. “Me like me”	1. Microcivilization (a human-centric enterprise).	1. Stable, gradual, predictable development.
2. “Me like another”	2. Non-civilization (a human- periphery enterprise)	2. Instable, unpredictable development (crisis)

III: The possible variants of statuses of the Model “human – community – society”

	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8
Human	Me	Me	Another	Another	Me	Me	Another	Another
Community	Micro-civilization	Micro-civilization	Micro-civilization	Micro-civilization	Non-civilization	Non-civilization	Non-civilization	Non-civilization
Society	Stable development	Unstable development	Stable development	Unstable development	Stable development	Unstable development	Stable development	Unstable development

Overall, the transition probabilities form a vector:

$$P^{(k)} = (p_1(k), p_2(k), p_3(k), p_4(k), p_5(k), p_6(k), p_7(k), p_8(k)). \quad (5)$$

Determining the model of “man-community-society” as a square matrix (matrix of transition states):

$$P = P_{ij} = \begin{pmatrix} P_{11}, P_{12}, P_{13}, P_{14}, P_{15}, P_{16}, P_{17}, P_{18}, \\ P_{21}, P_{22}, P_{23}, P_{24}, P_{25}, P_{26}, P_{27}, P_{28}, \\ P_{31}, P_{32}, P_{33}, P_{34}, P_{35}, P_{36}, P_{37}, P_{38}, \\ P_{41}, P_{42}, P_{43}, P_{44}, P_{45}, P_{46}, P_{47}, P_{48}, \\ P_{51}, P_{52}, P_{53}, P_{54}, P_{55}, P_{56}, P_{57}, P_{58}, \\ P_{61}, P_{62}, P_{63}, P_{64}, P_{65}, P_{66}, P_{67}, P_{68}, \\ P_{71}, P_{72}, P_{73}, P_{74}, P_{75}, P_{76}, P_{77}, P_{78}, \\ P_{81}, P_{82}, P_{83}, P_{84}, P_{85}, P_{86}, P_{87}, P_{88} \end{pmatrix}, \quad (6)$$

where, P_{ij} – probability of transition in one step with a certain status (i) to another (j) of a certain state.

The amount of items each time the matrix is equal 1, because the probability of conflicting events that form a complete group.

In the first step the model can move from state S1 to state S2, S3, S4, S5, S6, S7, S8 or stay S1 with a human at the center of P11, P12, P13, P14, P15, P16, P17, P18 (see matrix):

$$\begin{aligned} p_1(1) &= P_{11}, p_2(1) = P_{12}, p_3(1) = P_{13}, p_4(1) = P_{14}, \\ p_5(1) &= P_{15}, p_6(1) = P_{16}, p_7(1) = P_{17}, p_8(1) = P_{18}. \end{aligned} \quad (7)$$

Transition probability the initial state (zero step) are described as follows:

$$\begin{aligned} p_1(0) &= 1, p_2(0) = 0, p_3(0) = 0, p_4(0) = 0, p_5(0) = 0, \\ p_6(0) &= 0, p_7(0) = 0, p_8(0) = 0. \end{aligned} \quad (8)$$

Or in vector form:

$$P^{(1)} = (p_1(1), p_2(1), p_3(1), p_4(1), p_5(1), p_6(1), p_7(1), p_8(1)). \quad (9)$$

The probability of state after the second step is formalized by means of the expression:

$$P^{(2)} = (p_1(2), p_2(2), p_3(2), p_4(2), p_5(2), p_6(2), p_7(2), p_8(2)). \quad (10)$$

We write the formula for determining the probabilities of events after the second step:

$$\begin{cases} p_1(2) = p_1(1)P_{11} + p_2(1)P_{21} + p_3(1)P_{31} + p_4(1)P_{41} + p_5(1)P_{51} + p_6(1)P_{61} + p_7(1)P_{71} + p_8(1)P_{81} \\ p_2(2) = p_1(1)P_{12} + p_2(1)P_{22} + p_3(1)P_{32} + p_4(1)P_{42} + p_5(1)P_{52} + p_6(1)P_{62} + p_7(1)P_{72} + p_8(1)P_{82} \\ p_3(2) = p_1(1)P_{13} + p_2(1)P_{23} + p_3(1)P_{33} + p_4(1)P_{43} + p_5(1)P_{53} + p_6(1)P_{63} + p_7(1)P_{73} + p_8(1)P_{83} \\ p_4(2) = p_1(1)P_{14} + p_2(1)P_{24} + p_3(1)P_{34} + p_4(1)P_{44} + p_5(1)P_{54} + p_6(1)P_{64} + p_7(1)P_{74} + p_8(1)P_{84} \\ p_5(2) = p_1(1)P_{15} + p_2(1)P_{25} + p_3(1)P_{35} + p_4(1)P_{45} + p_5(1)P_{55} + p_6(1)P_{65} + p_7(1)P_{75} + p_8(1)P_{85} \\ p_6(2) = p_1(1)P_{16} + p_2(1)P_{26} + p_3(1)P_{36} + p_4(1)P_{46} + p_5(1)P_{56} + p_6(1)P_{66} + p_7(1)P_{76} + p_8(1)P_{86} \\ p_7(2) = p_1(1)P_{17} + p_2(1)P_{27} + p_3(1)P_{37} + p_4(1)P_{47} + p_5(1)P_{57} + p_6(1)P_{67} + p_7(1)P_{77} + p_8(1)P_{87} \\ p_8(2) = p_1(1)P_{18} + p_2(1)P_{28} + p_3(1)P_{38} + p_4(1)P_{48} + p_5(1)P_{58} + p_6(1)P_{68} + p_7(1)P_{78} + p_8(1)P_{88} \end{cases} \quad (11)$$

or

$$p_i(2) = \sum_{j=1}^n p_j(1)P_{ij} (i = 1, 2, 3, 4, 5, 6, 7, 8). \quad (12)$$

or in vector-matrix form:

$$P^{(2)} = P^T \times P^{(1)}, \quad (13)$$

where P^T transposed matrix of transition states.

Probability of state after the third step will have the formal appearance:

$$p_i(3) = \sum_{j=1}^n p_j(2)P_{ij} (i = 1, 2, 3, 4, 5, 6, 7, 8), \quad (14)$$

or in vector-matrix form:

$$P^{(3)} = P^T \times P^{(2)}. \quad (15)$$

In general terms the probability of events after the k-th step is determined by the formula:

$$p_i(k) = \sum_{j=1}^n p_j(k-1)P_{ij} (i = 1, 2, 3, 4, 5, 6, 7, 8), \quad (16)$$

or in vector-matrix form:

$$P^{(k)} = P^T \times P^{(k-1)}. \quad (17)$$

It is inappropriate to predict more than three steps, since each state is actually achieved, the transition probability which is lower than in other of the vectors can lead to significant changes in the character of transition.

Applied methods of management concept “An Enterprise as a Microcivilization” tested in 2007–2010 years on a group including 162 enterprises of Ukrainian food industry.

RESULTS

Practical detection of the microcivilizations occurred among the Ukrainian food industry enterprises in two stages.

In the first stage with using methods of financial analysis determined financially successful enterprises, the results of which correspond to the indicators meaning of leading companies from developed countries (See results in Tab. IV). To do this was used financial information about 162 enterprises for 2004–2008 years from the “System of disclosure information on stock market” and data from 200 companies worldwide by Ciaran Walsh (Walsh, 2006). Pretenders for the status of microcivilization were 9 enterprises.

IV: *The financial indicators of USA, EU, Japanese and Ukrainian enterprises*

Name of indicator	For USA enterprises		For EU enterprises		For Japanese enterprises		For enterprises-pretenders
	Total	Food industry	Total	Food industry	Total	Food industry	
Return on equity (ROE), %	26	50	12.5	12	9	6	12.7
Return on total assets (ROTA), %	16	16	7	7	7.5	5.1	6.08
Current ratio	1.3	0.9	1.7	1.85	1.75	1.45	2.29
Sales to total assets, times	1.5	1.55	0.75	0.7	1.1	1.25	2.74

V: *The results of applied the identification microcivilization method, that is based on binary oppositions*

Name of binary opposition	The range for civilization/ for non-civilization	Boguslav food factory	Tetiiv food factory	Shpola food factory
"center / periphery"	7-0 / 0-(-7)	3.94/-1.56	4.15/-1.35	4.82/-1.7
"own / alien"	7-0 / 0-(-7)	4.33/-1.22	4.2/-1.28	4.52/-1.19
"mutuality / aloofness"	7-0 / 0-(-7)	3.64/-1.87	3.8/-1.55	4.22/-1.79
"community/ population"	7-0 / 0-(-7)	3.63/-2.04	3.65/-1.53	4.15/-1.78
"selforganization/ chaos",	7-0 / 0-(-7)	4/-1.59	4.03/-1.48	5.21/-1.41
"unity / conflict of aims and values"	7-0 / 0-(-7)	3.48/-2	3.43/-1.85	3.72/-2.3
"development/ survival"	7-0 / 0-(-7)	4/-1.66	4.05/-1.65	5.08/-1.33
Civilization/ non-civilization	7-0 / 0-(-7)	3.86/-1.71	3.9/-1.53	4.53/-1.64

VI: *The Status of the Civilized profile of microcivilization's citizen*

Type of model	Max profile	For micro-civilization's citizen	For employees	For workers
Homo non-civilis	32 %	18.13 %	18.84 %	17.48 %
homo naturalis	16 %	9.47 %	9.69 %	9.28 %
homo barbarius	16 %	8.65 %	9.15 %	8.20 %
Homo civilis	68 %	38.96 %	41.02 %	37.12 %
homo tradicionalismus	16 %	11.54 %	11.96 %	11.16 %
homo oeconomicus	16 %	11.58 %	12.22 %	11.00 %
homo institutius	16 %	8.95 %	9.47 %	8.48 %
homo culturius	20 %	6.90 %	7.38 %	6.48 %

In the second stage of identification of the micro-civilization among revealed successful enterprises was conducted in-depth research of the activities, management and corporate culture. Author used qualitative approaches, including in-depth interviews with managers, staff surveys, and direct observation by the author during a personal visit to them in 2007–2008 years. Overall, 185 people were interviewed, in which 66 top- and middle-managers and 119 workers (about 20% of total amount of workers).

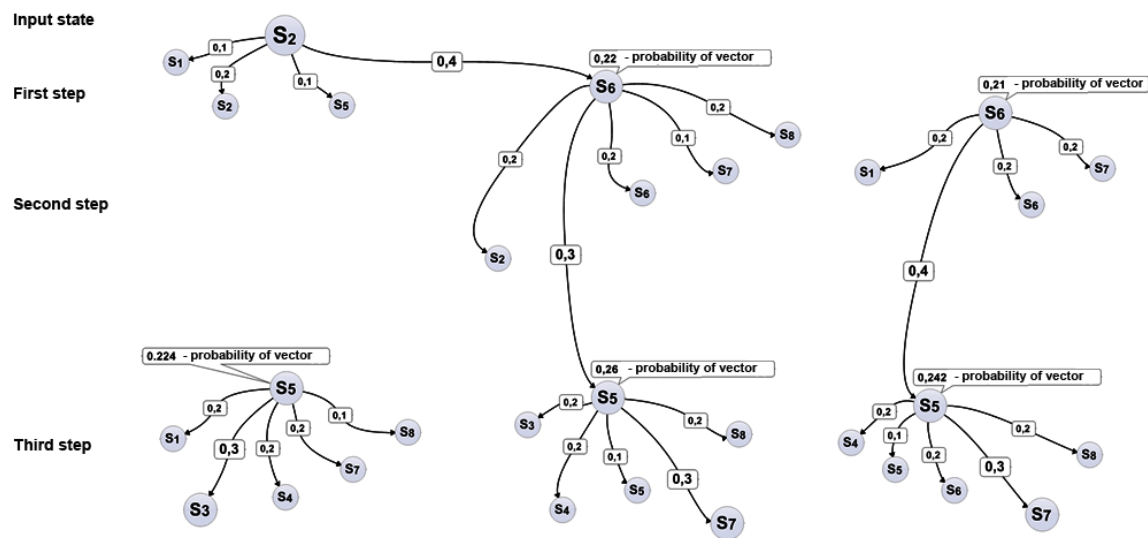
Were found that three of the nine companies are the human-centric enterprises, i.e. they can be considered as microcivilizations. Below are the results of applied the identification microcivilization method, that is based on binary oppositions (see Tab. V).

The Civilized profile of microcivilization's citizen was determined for Shpola food factory based

on survey of the 95 people, including 45 representatives of management and 50 workers. See the results in the Tab. VI.

Also we build the branching of transition probability for social entity "human – community – society" (see the Fig. 3). On the graph presented three steps of civilizational changes for our object. On the connection lines showed the probability values.

For the object of research the starting point for forecast is a "me like me" human status in the context of functioning microcivilization in unstable society. With high probability the enterprise will change the vector of development from human centric and will become non-civilization. Although after the third step there is also a potential return to the microcivilization but with changed of human status.



3: The branching of transition probability for social entity “human – community – society”

SUMMARY

Created the management concept of “an Enterprise as a Microcivilization” according to which enterprise-microcivilization is the human centric social entity, combining the economic and cultural functions to provide economic development and growth, the release of human, diversification of forms and complications of environment and improve the individual and collective fullness of being.

Formed the model of enterprise-microcivilization as a source of economic development and growth. The structure of this model includes a development triad, a growth triad, and a transformation triad. Formed the applied method of identification of microcivilizations, which consists two phases: quantitative and qualitative. The first stage consists of quantitative assessment, by determination of the financial status of groups of companies – members of “Ukrprodspilky”, determined candidates for the status microcivilization. It is 9 enterprises, i.e. 5.55% of the general set (162 companies). In the second phase of research – qualitative assessment of applicants, found three enterprises-microcivilization.

Created the Complex model of a human, which consists of six components and displays the status of individuals and groups according to their degree of civilization, extending the possibilities for analysis of socio-economic phenomena. In practice, the civilizational structure of personality is fixed by civilization profile. The Assessment of values and civilized Profile of microcivilization's citizen to determine of level civilized / non-civilized of citizens in the context of enterprise-microcivilization. In the Shpola Food Enterprise, a Closed Joint-Stock, the employees are both more civilized and more non-civilized than the manual workers. In the civilized Profiles of employees dominate the model “homo oeconomicus”, and in the civilized Profile of manual workers – “homo tradicionalismus”. These two models are the base for the citizens of the whole enterprise.

Formed the economic-mathematical model “human-community-society” that allows predicting the likely conditions, the vectors of development and conversion of civilization formations. The model tested in the context of the object of research.

Author sees the prospects of the future research in the diversity of research objects, including applying civilization approach to the city and development of the conception “City as a Microcivilization”. The new methodology of economic science must be created, which will form the ideology that will be able to preserve, protect and develop human beings, society and nature in today's dynamic world, which is characterized by complex local and global contradictions, problems and paradoxes. The subject of economic science on new stage of development should be a human in its indivisible unity of society and nature.

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