# Administration of Telecommunication Company Staff Potential in Ukraine

Iryna Kovshova, Nataliia Dubovyk, Tetiana Zubko

Abstract: The goal of the article is to develop theoretical and methodological guideline and practical recommendations for administration of staff potential by telecommunication companies based on marketing management in the modern conditions. The methodological basis of the research are fundamentals of the modern socio-economic theory, management and marketing grounded on the system-synergistic approach to staff potential administration in domestic telecommunication companies and international corporations in Ukraine. Within the framework of this approach, general scientific and specific methods of cognition have been used, in particular: analysis and synthesis, scientific abstraction, deduction and induction, dialectical analysis, statistical analysis, economic and mathematical modeling. The scientific novelty of the research lies in the development of system-synergetic paradigm of marketing management in telecommunication companies, which provides harmonization of goals of companies with various benefits of interested parties to create a social effect. Conclusions. Implementation of marketing management by domestic telecommunication companies and international corporations in Ukraine is favourable for creating reputation of a reliable supplier of products and services to consumers, popularization of an employer brand, maximum satisfaction of requirements, formation of balanced management system with coordination of actions according to different dynamic cycles for simultaneous achievement of economic and organizational effectiveness and a social effect.

Key words: marketing management, telecommunication company, staff potential, TC company, social effect, employer brand, economic and organizational effectiveness, managerial staff, staff potential administration.

### I. INTRODUCTION

Transformation of the modern social, economic and organizational processes determines the development of new approach to managing domestic telecommunication (TC) companies and representative offices of international corporations in Ukraine based on the joint participation paradigm. The above mentioned paradigm is grounded on the possibility of temporary use of existing resources by a company or investors, intellectual potential of employees and donor funds for various interested parties. At the same time, the scientific and technological progress promotes

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implementation of joint participation paradigm by forming modern innovation technologies, which stimulate the demand for domestic telecommunication equipment, products or services and make it possible to attract investors and partners. Evaluation of marketing environment conditions in TC companies of Ukraine combined with deep analysis of social, economic, organizational, scientific and technological factors helps the managerial staff of a company to expand geographical boundaries of providing services to consumers and to promote a company brand as a reliable supplier and a loyal employer. However, this strategy requires application of innovative approaches to company staff potential administration based on marketing management taking into account the trends in social environment development.

Thereafter, a feature of administration of TC company staff potential in Ukraine based on marketing management is implementation of innovation methodology combining a large number of components into the system in order to set up effective communication channels between hierarchical levels within a company to form its positive brand and promote its products or services. The mentioned innovative approach to TC company staff potential administration provides a combination of creativity of new managerial methods and economic and organizational effectiveness at different hierarchical levels (separate units, definite employees, managerial staff).

## II. ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

Theoretical and applied guideline of company administration in different branches based on marketing management were considered in the works of Kotler F., Keller K. [9], Lambin J.-J. [8], Voichak O. [2], Bilovodska O. [1], Kovshova I. [5; 6], Pekar V. [10]. Though there are various theoretical approaches to marketing management, most scholars view it as a process of marketing department administration. The lack of scientifically justified methodology of marketing management in a TC company as a holistic administration system in conditions of steady market dynamics has determined the urgency and relevance of this research. The goal of the article is to develop theoretical and methodological guideline and practical recommendations for staff potential administration by telecommunication companies based on management in the modern conditions. The theoretical and methodological basis of the research are fundamentals of the modern socio-economic theory, management and marketing.



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It is grounded on the system-synergistic approach to staff potential administration in domestic telecommunication companies and international corporations in Ukraine. Within the framework of this approach, general scientific and specific methods of cognition have been used, in particular: analysis and synthesis to study the content of marketing management in a company, scientific abstraction to justify specific features of a TC company in Ukraine, deduction and induction to select the main factors of the effect on telecommunication companies, dialectical analysis to carry out theoretical generalizations and establish trends of marketing management development, statistical analysis to study the activities of the Ukrainian telecommunication operators and providers, economic and mathematical modeling to create a TC company staff potential administration model.

## III. PRESENTATION OF BASIC MATERIAL OF THE RESEARCH

The marketing management concept is grounded on the theory of individual choice coming out of consumer priority principle and requires a complex system of encouraging all potential participants to make a certain contribution into welfare achievement of general [12]. telecommunication companies realize products or provide certain services and in such a way contribute in satisfaction of the needs of consumers and a whole society. The partners' loyalty increases the basic value of produced products or provided services and makes telecommunication sphere more popular. The rise of company's revenue allows managerial staff to pay decent salaries to their employees and provide bonuses to their partners. Motivated managers and employees implement innovations for effective development of a telecommunication company and realize new more successful products and services at the market. Accordingly, marketing management forms a company staff potential administration methodology and functions in certain dynamic cycles varying depending on established goals.

Nowadays, the managerial staff of telecommunication companies must simultaneously achieve economic and organizational effectiveness and a social effect. Implementation of the first component allows the company to maintain an optimal level of profitability and revenues from products or services. Implementation of the second component helps a telecommunication company to achieve a social effect, that is: to create a definite need or to satisfy it, to give a status or modality to telecommunication projects. This duplication requires clarification of existing paradigms in marketing management development during administration of a company's human resources. The main paradigms are summarized and presented in Fig. 1.

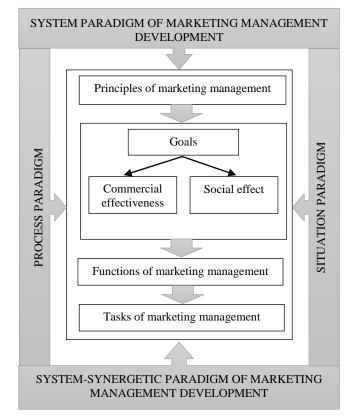


Fig. 1. The main paradigms of marketing management development in TC companies (based on [3])

The system, process and situation paradigms of marketing management development are completed by the system-synergetic one, which is different from the others and provides an optimal combination and harmonization of goals of TC companies having different benefits of interested parties for joint achievement of economic and organizational effectiveness and socio-cultural effect.

In the course of the research the following up-to-date trends were distinguished: companies' finances spent on promotion of telecommunications in Ukraine are increasing, but their effectiveness is falling; in view of globalization of human resources, it is difficult for managerial stuff to keep their employees on site and to find qualified candidates for open vacancies.

It determined creation of a modified system-synergetic paradigm in marketing management of telecommunication companies with the use of the generation theory and the concept of joint participation in projects (Fig. 2).

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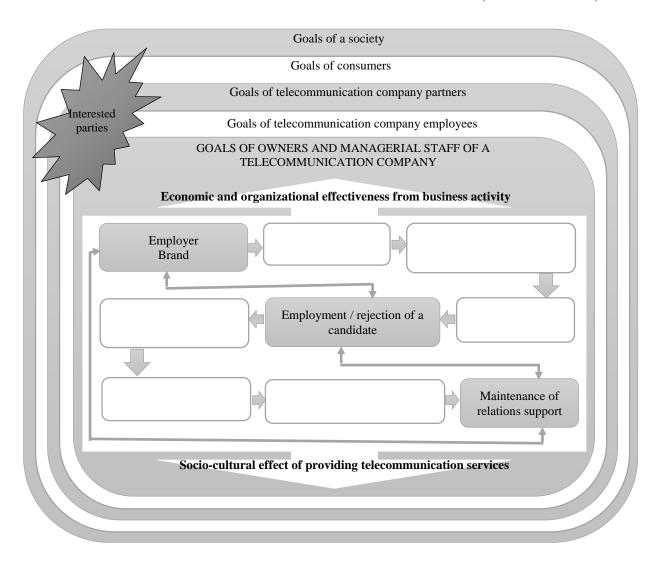


Fig. 2. Levels of marketing management goals harmonization during TC company staff potential administration in Ukraine (based on [5, 6])

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The central place in the dynamic cycles system is taken by block "Goals of owners and managerial staff of a telecommunication company", which closely correlate with block "Goals of telecommunication company employees" [5; 6]. According to the generation theory the social aspect of a society development is an integral part of the human history, which effects on the behavioral model and a type of thinking of a modern individual or a particular community [14]. In compliance with the "multi-colored management" theory the thinking paradigm was typified by definite colors [10]. And today you can observe a gradual replacement of the blue collective paradigm by the individual orange one represented by generations "Y" and "Z". Thus, the managerial staff of a telecommunication company have to focus on the orange administrative culture where decisions are made in specially

created groups or projects and formalities of the working process are gradually disappearing.

Grounding on the generation theory and the concept of joint participation in projects, the progress of telecommunication companies in Ukraine directly depends on staff's career development and a marketing management stage. Communication between the managerial staff and employees who are internal clients of a company, has become a certain translator of internal corporate values, which simultaneously retranslate a brand of a telecommunication company to external consumers and partners.

The features of administration of telecommunication company staff potential in Ukraine grounding on marketing management (MM) were studied based on the data collected at twenty-four TC companies (Table 1) [5]. Having used the method of correlation analysis [3; 11], we revealed a significant correlation between the level of implementing marketing management measures by a telecommunication operator or provider and approaches to staff potential administration.



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Table 1. Database for creating a model of correlation between the levels of implementing marketing management measures by TC companies and approaches to staff potential administration in Ukraine (dated 01.01.2018)

№	TC company name	Level of implementing MM measures by a TC company	Rate (Rmm)	Approach to staff potential administration	Rate (Omm)
1	PRJSC "AO-SVIAZ"	Fragmentary	1	Linear and functional	3
2	PRJSC "Belcom"	Global	3	Democratic	10
3	PRJSC "VF UKRAINE"	Local	2	Regional and divisional	6
4	PJSC "DATAGROUP"	Local	2	Conglomerate	9
5	LLC "ZANET"	Global	3	Matrix	7
6	PJSC "INTERPIPE NTRP"	Fragmentary	1	Linear and functional	3
7	PSC "CABLE TELEVISION SYSTEM"	Local	2	Regional and divisional	6
8	KYIVSTAR JSC	Local	2	Regional and divisional	6
9	PJSC "PODIL TELEPHONE COMPANY	Global	3	Matrix	7
10	PRJSC "POEZ"	Fragmentary	1	Linear and functional	3
11	PRJSC "PROMETEY-TELECOM"	Global	3	Adaptation	8
12	PSC "PROMTELECOM"	Fragmentary	1	Regional and divisional	6
13	PSC "SVEMON-ZAKHID"	Local	2	Matrix	7
14	PJSC "CST-INVEST"	Global	3	Matrix	7
15	LLC "SINET"	Global	3	Segment and divisional	5
16	LLC "SONET"	Global	3	Democratic	10
17	PJSC "SUMYKHIMPROM"	Fragmentary	1	Product and divisional	4
18	PSC "TELECOM SERVICES"	Local	2	Segment and divisional	5
19	PJSC "TELESYSTEMS OF UKRAINE"	Local	2	Regional and divisional	6
20	PRJSC "TOP NET"	Global	3	Adaptation	8
21	PSC "UKRTELECOM"	Local	2	Regional and divisional	6
22	PJSC "FARLEP INVEST"	Local	2	Segment and divisional	5
23	PRJSC "KHARKIV ONLINE"	Fragmentary	1	Functional	2
24	PRJSC "KHARKIVPROMZVYAZOKBUD"	MM is not realized	0	Linear and functional	3

<sup>\*</sup>Fragmentary – realization of MM in a separate subdivision; local – realization of MM in several subdivisions; global – realization of MM in a whole company.

To verify the hypothesis regarding the above mentioned correlation a one-factor model was built based on a linear relations between variables, where  $Y_i$  means the level of MM measures realization in a TC company, and  $x_i$  – the approach to staff potential management process administration:

$$Y_i=a_0+a_1x_i+\varepsilon,$$
 (1)

where  $Y_i$  – the level of MM measures realization in a TC company;  $x_i$  – the approach to staff potential management process administration;  $a_0$ ,  $a_1$  – parameters that have to be estimated;  $\varepsilon$  – unobservable random variable.

The estimated equation of regression of correlation between the levels of implementing marketing management measures by TC companies and approaches to staff potential administration looks as follows:

$$\hat{Y} = 0.313x_i + 0.148. \tag{2}$$

Determination coefficient  $R^2$ =0,609 indicates the existence of close relations between variables. F-criterion according to the model made up 34,2. At significance level  $\alpha$ =0,01 and a freedom degree number n-m=24-1=23 and m=1 value  $F_{tabl}=7,88$ . Whereas  $F_{calc}>F_{tabl}$ , the revealed regression equation is reliable and proposed model

of correlation between the levels of implementing marketing management measures by TC companies and approaches to staff potential administration in Ukraine can be implemented on practice.

Significance of correlation coefficient (*R*) was verified grounding on calculation of Student's *t*-test [4; 7]:

$$t_{\alpha} = \frac{R\sqrt{n-m}}{\sqrt{1-R^2}} = \frac{\sqrt{0.609^2(24-1)}}{\sqrt{1-0.609}} = 4.670817$$
 (3)

Using the data of statistical tables at significance level  $\alpha = 0.10$  and degrees of freedom 23, value  $t_{tabl} = 2.500$ . Whereas  $t > t_{tabl}$ , it proves the hypothesis of correlation coefficient significance. However, to estimate significance of values of pair regression model parameters we have calculated t-criterion:

$$t_j = \frac{\left|\hat{a}_j\right|}{\sigma_{\hat{a}_j}} \ . \tag{4}$$



As a result of calculation, we have received:  $t_0 = 0.44$ ,  $t_1 = 5.848$ . At significance level  $\alpha = 0.05$  and degrees of freedom n - m = 24 - 1 = 23,  $t_{tabl} = 1.714$ . That is parameter  $a_1$  is statistically significant, as  $t_1 > t_{tabl}$ , but  $a_0$  is lower, that is why it is necessary to check if there is a degree correlation between the levels of implementing marketing management measures by TC companies and approaches to staff potential administration. The calculation results are the following:  $a_0 = -0.555$ ,  $a_1 = 0.719$ . Respectively, the degree model gained the following look:

$$Y_{calc} = exp(-0.555) X_I^{0.719} = 0.574 \cdot X_I^{0.719}$$
 (5)

On calculating determination coefficients of the two models, it was established that the most accurate one is the first model built by linear dependence. Summarized results of the research are shown on Fig. 3, where the level of implementing marketing management measures by TC companies in Ukraine is marked on the horizontal axis, and approaches to staff potential administration — on the vertical axis. Using the above mentioned variables, you can define an optimal approach to arrangement of staff potential administration process by a telecommunication operator or provider.

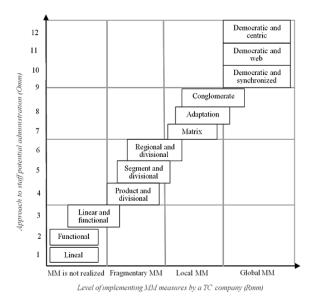


Fig. 3. Correlation between the levels of implementing marketing management measures by TC companies and approaches to staff potential administration in Ukraine (based on [5]).

To avoid interest conflicts between the managerial staff and employees of a TC company, it is necessary to follow the concept of partners' relations. It means that only joint interaction of all participants in dynamic cycles allows to achieve economic and organizational effectiveness from activity of a TC company and receive a social effect.

Respectively, in the course of company staff potential administration managers have to recognize that potential, real and former employees can either improve or worsen reputation of a TC company. To support an employer brand, managers should maintain partnership at all stages of communication: starting from the first meeting with an applicant for an open vacancy up to maintenance of friendly relations on termination of labor relations with this employee.

The most difficult stage is to make a decision on including a candidate in the staff or reject him/her. Regardless of the decision made this stage significantly effects on an employer brand. If a candidate is taken to the position, the process goes on and labor relations start. If a candidate is rejected, managers of a TC company must move to the last stage of the cycle, set up friendly relations with the applicant and maintain them in the future. On termination of labor relations between an employee and a TC company, managers should also maintain relations with him/her. The proposed algorithm of the communication process described above allows managers of TC companies to popularize their brands and involve potential, real and former employees in future activities.

According to the system-synergetic paradigm of marketing management the main goals have specific hierarchy and structure. The economic and organizational goals are closely related to administration, commodity, distribution and price policies of TC companies. The social ones are focused on achieving effect of popularization of telecommunication products and services through establishing by managers friendly partnership with all participants of the dynamic cycles [13].

#### IV. CONCLUSIONS

Implementation of marketing management by domestic telecommunication companies and international corporations in Ukraine is favourable for creating reputation of a reliable supplier of products and services to consumers, popularization of an employer brand, maximum satisfaction of consumer requirements, formation of balanced management system with coordination of actions according to different dynamic cycles for simultaneous achievement of economic and organizational effectiveness and a social effect. A feature of administration of TC company staff potential in Ukraine based on marketing management is implementation of innovation methodology combining a large number of components into the system in order to set up effective communication channels between hierarchical levels within a company to form its positive brand and promote its products or services. The mentioned innovative approach to TC company staff potential administration provides a combination of creativity of new managerial methods and economic and organizational effectiveness at different hierarchical levels (separate units, definite employees, managerial staff). The features of administration of telecommunication company staff potential in Ukraine grounding on marketing management were studied based on the data collected at twenty-four TC companies. Having used the method of correlation analysis, we revealed a significant correlation between the level of implementing marketing management measures by a telecommunication operator or provider and approaches to staff potential administration in Ukraine. Using the correlation model variables, you can define an optimal approach to arrangement of staff potential administration process by a telecommunication operator or provider.



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The scientific novelty of the research lies in the development of system-synergetic paradigm of marketing management in telecommunication companies, which provides optimal harmonization of goals of companies with various benefits of interested parties to create a social effect.

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