

Human Capital as the Market Value of a Geomarketing and Transport System



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Abstract The paper defines the main types of capital as market value in the field of geomarketing—financial and intellectual. Geomarketing is presented by the authors as a detailed study of the territorial features of market formation, consolidating both marketing instruments and geography in transport systems. The stages of the development of geomarketing—the emergence, formation, and popularization—are summarized. The purpose of the research is to develop a system of balanced marketing and geographical indicators that ensure the formation of the human capital of the geomarketing system. Methods of scientific research are: abstraction, analysis and synthesis, induction and deduction, bibliographic, graphic, statistical estimates and economic analysis, preferences, analogies, information technologies. The geomarketing system includes intellectual (human, structural) and financial capital in the market value in transport economy. The human capital in the geomarketing and transport system includes qualified management, contracts with specialists in the field to which the business belongs. Human capital in a geomarketing system also includes know-how that is inseparable from a particular individual. It is determined that the human capital of geomarketing is not reflected in the company's asset, as it does not directly belong to the company. The authors identified the key types of balanced indicators of the social and economic geomarketing and transport system—finance, customers, internal business processes, and personnel development.

Keywords Geomarketing · Human capital · Social capital · Geomarketing research · Transport system · Transport economy · Transport sector · Transport company

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1 Introduction

Geomarketing appeared first in foreign and national methodology as a visual and marketing study of the market features of the territory, including both marketing and geodigital instruments. From the point of view of terminological formation, geomarketing exists in the scientific field of a number of national synonyms: “geography of sales markets”, “market geography”. At the same time, the foreign methodological field designates geomarketing as a combination of geo-market-digital factors.

We will outline the key stages of the development and formation of geomarketing as a scientific and methodological field of research transport systems:

- emergence (30–50s of the XX century): the emergence and origin of geomarketing research (USA), the basic concepts were defined, and the fundamental issues to be solved in the field of geomarketing methodology. The concept of geomarketing research, the formation of a conceptual and methodological apparatus, the analysis of the placement of real and potential trading companies, the use of geomarketing instruments mainly in the field of trade is reflected in the scientific works of W.A. Applebaum and Ch. Harris (2014);
- formation (60–70s of the XX century): as the external and internal conditions for planning the company’s activities become more complex, the mathematical and analytical apparatus of geomarketing is formed in the works of many foreign scientists. Geomarketing is widely used in the transport, banking, and manufacturing sectors. At this stage, additional areas of scientific research were identified, among which one can distinguish the analysis of potential trade zones for the sale of goods/products, the study of the configuration of trade locations, the presentation of scientific results in the form of cartographic and marketing maps.
- popularization (since 70s of the XX century). Geographical tools are actively used for advertising, improving distribution networks (GIS technologies, geomarketing maps).

In the mid-90s, the focus of scientific research shifted to the area of regional markets. Some geomarketing studies are conducted on the territory of the CIS. The priority of fragmentary geomarketing schools belongs to Russia and Ukraine. Initially, this was formed as economic and geographical research of a separate territory, and later the development of the scientific direction—territorial marketing, in the focus of scientific attention—increasing the investment attractiveness of the territory [1, 2]. Aspects of scientific attention include the creation of the most positive image and business reputation of a particular territory in geomarketing studies of this period.

Until the XXI century, geomarketing, mainly, had a narrow scientific direction of research in fundamental marketing. The main emphasis of geomarketing is geosegmentation and geo-positioning of goods and services that can be produced and sold in a particular territory. F. Kotler (2010) in the mid-90s proposed a scientific direction in the form of the concept of “place marketing” as an instrumental challenge to

external (public policy, reforms) and internal (development of effective, sustainable strategies) global processes transport economy.

Currently, geomarketing, as a symbiosis of geo-market-digital factors, is a priority instrument of the marketing mix 4P concept, contributing to the selection of the optimal sales location and the formation of a competitive advantage.

According to the scientific research of L. Edvinsson (2011), the market composition of the geomarketing system includes both intellectual and financial capital. Intellectual capital includes:

- human;
- structural: client and organizational.
- From the point of view of market and customer value, the key focus is on customer capital. It is associated with marketing research of the potential target audience of the geomarketing and transport system. Organizational capital, in turn, consists of:
 - innovative: intellectual property (patents, know-how, license agreements), copyrighted business ideas, brands, trademarks;
 - process: geoinfrastructural conditions of the company's development (business processes, information technologies).

2 Materials and Methods

The scientific field of geomarketing includes the instrumental apparatus of spatial analysis, visual and digital construction of models in the structure of human capital formation. Geomarketing research examines comprehensively large-scale, regional, spatial socio-economic processes and phenomena in transport sector. It is this advantage that forms the marketing instrument of human capital. The exclusivity of geomarketing lies in the combination of functional features of geographical conditions and marketing research in order to solve the strategic problems of opening companies in the context of digitalization of human capital.

In the paper, the authors used the following research methods:

- abstraction, analysis and synthesis, induction and deduction—for evaluating, diagnosing and predicting results;
- bibliographic—for the analysis of basic economic categories of strategic marketing planning;
- statistical estimates and economic analysis—for calculating the level and dynamics of geomarketing research parameters;
- preferences—for systematization and selection of the most optimal geographical infrastructure objects;
- analogies—for selecting spatial data and building a regression model;
- information technologies—for IT support of scientific research, registration of results.

3 Results and Discussions

Let us take a closer look at the structure of the company's market value. Structural capital is the arrangement of the working space, comfortable working conditions. Human capital in the geomarketing system is the intangible conditions for opening a company (Fig. 1) [3].

Structural capital in the content concept is close to social capital. In particular, A.V. Latsman in scientific research confirms this by the classification of human capital in the geomarketing system.

Let us denote the forms of the structural capital of the geomarketing system: economic, human and social capital.

Social capital “finds its expression in the establishment and maintenance of special relationships with other economic agents. This relationship is linked to the expectation that other agents will fulfill their obligations without sanctions. Unlike human capital, social capital is not an attribute of an individual. Its basis is formed by social networks. On the basis of social networks, which often tend to be relatively closed, the institutional basis of social capital is formed—belonging to a certain social circle or membership in a group. Social capital obeys the logic of self-growth” [3].

A.V. Lantsman includes such indicators as the involvement of employees in the work process and space, the level of trust in the team, the process of intra-group interaction, social conditions and activities in social capital. With this combination of social indicators in the geomarketing system, a cultural symbiosis arises, including the assessment of professional behavior or the level of working relationships.

The structured view of geomarketing capital can be presented in Fig. 2:

- economic capital (including financial one);
- intellectual capital;
- social capital.

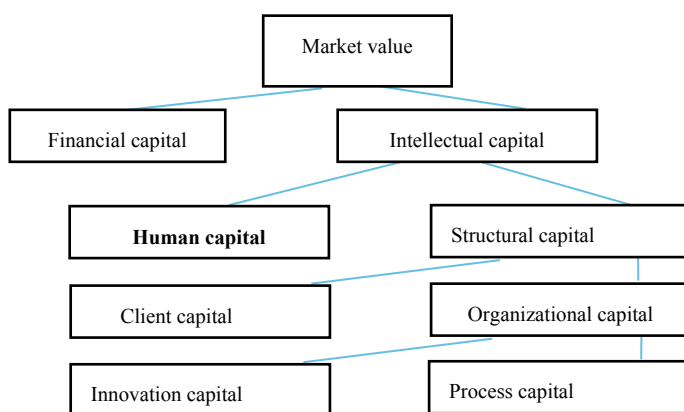


Fig. 1 The market value of an economic entity according to L. Edvinsson

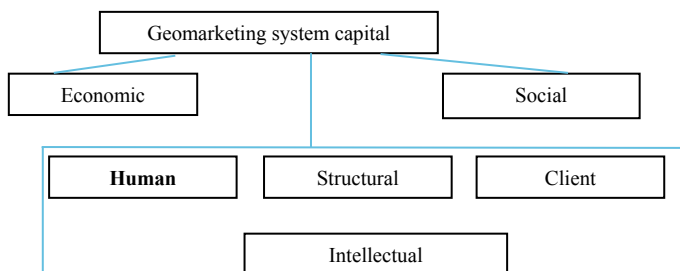


Fig. 2 Structured representation of the capital of a geomarketing system

R. Kaplan and R. Norton suggest using a generalized system of indicators that include intangible assets, elements of intellectual and social capital of the geomarketing system.

The author's model has the following form:

- financial justification;
- customer focus;
- internal business processes;
- staff development and training.

Social and intellectual capital includes customer focus, internal business processes, and personnel directly. Figure 3 presents the author's scale of trust relationships as a stage of applied assessment of the company in market conditions [4].

Trusting relationships are the formation of strategic goal-setting, the company's profit indicators, the value significance of the purchase and the development of a unique value proposition, and the effects. The human capital of the geomarketing system is a fundamental platform, as it contributes to the formation of effective market relations, the exchange of goods/services [5]. The key indicators of the human capital are the experience and technological qualifications of the staff, the health and social security systems.

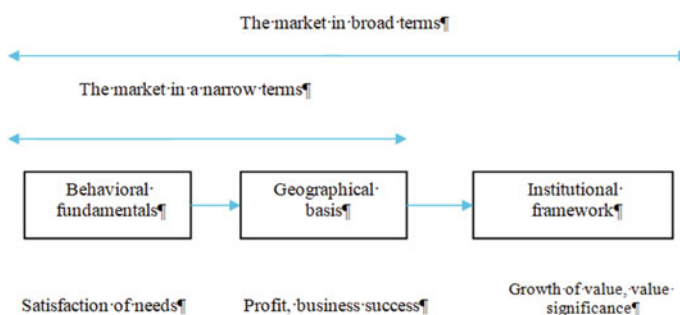


Fig. 3 The basis of segmentation of trust market relations from the perspective of geomarketing

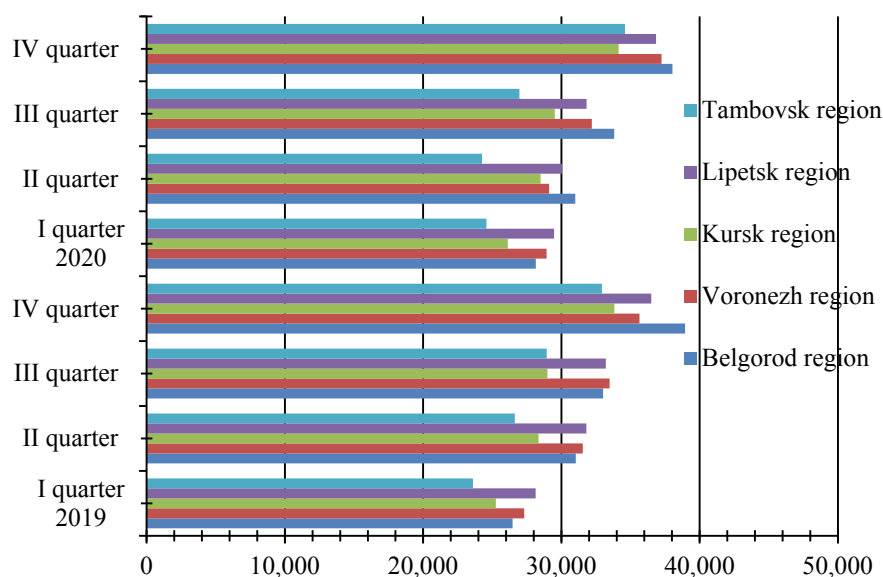


Fig. 4 Average per capita monetary income of the population in the subjects of the Central Chernozem Economic Region, thousand rubles (2019–2020)

Among the basic indicators of the development of the geomarketing system, the real income of the company can be distinguished. On Fig. 4 shows income data for the Central Black Earth Economic Region (TsCHER).

Positive dynamics of increase in cash income in the fourth quarter of 2019–2020 is observed in the Belgorod and Tambov regions. In general, we can observe an increase in clients' cash income by 2–2.9% per 2019–2020, indicating the sustainability of human capital in the geomarketing system in this economic region. Thus, the territorial differences of the subjects of the TsCHER are reflected in the indicators of the human capital of the geomarketing system. These differences are reflected in the formation of the market and business space, geomarketing conditions for business development. The key tasks of forming the human capital of the geomarketing and transport system are the introduction of innovative, intangible assets, improving the working conditions of personnel and production conditions. The synergetic effect of the implementation of this task is to ensure effective business and the development of human capital [6–9].

4 Conclusion

The analysis of human capital as the market value of the geomarketing and transport system allowed us to draw the following conclusions:

1. The current stage of geomarketing development is characterized by a combination of marketing, geographical and digital factors. The market value of the geomarketing system includes intellectual and financial capital. In turn, intellectual capital is divided into human and structural capital.
2. The structure of the geomarketing and transport system is established in the form of the selection of elements and certain relationships between these elements. First of all, we are talking about a geomarketing model consisting of a core, a contour, and internal and external effects.
3. The instruments of the geomarketing and transport system are spatial analysis and digital modeling as a process of forming human capital.
4. The system of geomarketing indicators is formed through a combination of intangible assets and a combination of intellectual and social capital.

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References

1. Vinogradova NP (2018) Essential presentation of geomarketing from the perspective of an evolutionary approach to the economy of managerial decision-making. *Probl Econ Legal Pract* 3:27–32. [https://doi.org/10.15405/epsbs\(2357-1330\).2020.10.5](https://doi.org/10.15405/epsbs(2357-1330).2020.10.5)
2. Strachkova MV, Luk'yanenko VA (2017) Geomarketing in the context of informatization of sociogeographical research: the essence, stages of development, scope. *Scientific notes of the Crimean Federal University V.I. Vernadsky* 3(1):97–107
3. Lantsman AV (2007) Social capital as a factor in improving the efficiency of management activities. Ph.D Thesis, Moscow
4. Kaplan RS, Norton DP (2008) The balanced scorecard: translating strategy into action. OlimpBiznes Publ, Moscow
5. Donichev OA, Beskrovnykh AS, Markova IS (2014) Human capital as a factor in the development of the innovative economic space of the regions. *Univ Bull* 6:27–33
6. Unified Interdepartmental Information and Statistical System (EISS) <https://fedstat.ru/indicator/57039>
7. Tkhorikov BA, Lomovtseva OA, Gerasimenko OA, Sablina OM, Titova IN (2020) Geomarketing—a new concept or an applied business tool? *Bulletin of Tomsk State University. Economy* 49:199–213. <https://doi.org/10.17223/19988648/49/14>
8. Moiseev VV, Tselyutina TV, Avilova ZhN (2019) Assessment of the human capital of the region in the conditions of transformation of economic processes. *Int J Interdisc Soc Sci Stud* 2:61–70
9. Tselyutina TV, Vlasova TA, Timokhina OA, Maslova YV (2019) Convergence of institutes of functional representation of group interests under transformation of social processes, quality of life, and human capital. *Humanit Soc Sci Rev* 7(6):111–117. <https://doi.org/10.18510/HSSR.2019.7624>