

Evaluation of Human Capital Development in Commerce

E R Sharko¹

¹Researcher, PhD in Economics, Laboratory for Institutional Analysis & Research Center for Network Economy, Department of Economics, Lomonosov Moscow State University, Leninskie Gory, Moscow, 119991, Russian Federation

E-mail: ersharko@yandex.ru

Abstract. The article considers the essence and significance of the assessment of human capital development in commerce. The author presents the basic concept of evaluation of the performance of commercial personnel of a commercial company, the calculations of indicators, as well as various scenarios of their normative values, from the standpoint of assessing the development of human capital. The aim of the article is to analyze the existing performance indicators of commercial personnel and build a system for evaluation of human capital development in the commerce according to the selected requirements. The author justifies the choice of a set of indicators taking into account the analysis of management activities of various trading companies, which in retrospect demonstrated the best indicators and results that is why they were chosen as reference. When summarizing the indicators to assess the development of human capital in the commercial sphere, the author has formed some normative values that can be implemented in the system of accounting for the performance of sales personnel, which confirms the practical significance of the study.

1. Introduction

The concept of human capital plays a central role in modern economic analysis. At present, there is an urgent question of developing a unified theory of quantification of human capital. Modern society is a complex socio-economic system and the processes forming the market mechanism in our country filled with new content the concept of "human capital". For modern organizations, the problem of the use of human resources is a difficult economic task, so the attention to the evaluation of human capital, as the most important resource that ensures the competitiveness of modern organizations, has increased significantly in recent decades.

Human capital is the human factor in an organization; it is the combined intelligence, skills and expertise that make an organization distinctive. People are those elements of the organization that can learn to change, to introduce new things and create a spirit of creativity and which, if properly motivated, can ensure an organization's long life. Comparative analysis of definitions in literary sources of "human capital" allows you to highlight its main properties.

First, human capital cannot be separated from the carriers – employees of private organizations or the population of a region or country. Second, the physiological properties and natural abilities of man, obtained by hereditary they are the basic part of human capital, called health capital by individual authors. Another part of it in the form of knowledge, skills, and abilities is acquired as a result of the costs of the person and society. Thirdly, this capital, like other types of capital, can be used in the sphere of social production and is one of the factors of increasing the efficiency of the latter. Fourthly,

this capital is used by its bearers for therefore; increasing income motivates individuals to increase their intellectual potential through education and advanced training. Another word, in order for the process of reproduction of human capital to be complete, a relationship must be established between the value of the acquired part of this capital and income man.

2. Background

The high level of labour productivity, as the main factor of the enterprise efficiency in the context of increased competition, brings to the fore the assessment of the state of the human capital of Russian enterprises and its use with maximum efficiency.

The size of the potential of a commercial company largely depends on its human capital, the total investment in training, knowledge, skills, ambitions, and motivations of employees, their communication skills and commitment to the company.

The official date of human capital birth is related to "The Journal of Political Economy" publication of October 1962 when series of articles on the main problem of related to the human capital theory were included into its supplement "Investment in Human Being". The human capital theory is a modern economy theory concept which analyses problems of formation and quality of the labour power. American scientists S. Becker [1], B. Weisbrood [2], D. Mincer [3], T. Schultz [4], M. Gogitidze [8], Yu. Korchagin [9], E. Denison [10], A. Langley [11], F. Graetz [12] are among the beginners of this theory development. In their works these economists have formulated the basics of the theory and made it the object of scientific research.

The human capital term is based on production skills and knowledge implemented through labour resources, which have a certain service value on economic assets in the future.

Specifically, human capital is the economic worth measuring tool of people's skills, consisting of their knowledge, skills, abilities, attitudes and experience (Becker [1], Heckman [5], Jaw et al. [6], Mincer [3], Schultz [4], Smith [7], V. Dulewicz, M. Higgs [13], B. Palmer, M. Walls, Z. Burgess & C. Stough [14], Y. Stukalina [15], M. Rahim, P. Minors [16]). Later, Schultz (in 1981) defined the human capital as "the features acquired by people are valuable and could be complemented by appropriate investment". The accent of human capital (compared with other forms of capital, for example, material (physical) and financial capital) is that it is a part of human life. The human, because it is implemented by the human, and capital, because it is analysed as the source of oncoming gains, income or both of these components [4].

The author proposes to form the system of performance indicators of sales personnel of a commercial company concept as an important component of the evaluation of human capital development in commerce.

3. Research problem

Evaluation of the contribution of each employee to the overall result of the trading company is designed to distribute in time and space all management tasks and decisions between the management staff of the company and its personnel. It is important to note that, depending on the sphere of activity, the evaluation of human capital will differ both in the accounting processes and in the group of performance indicators.

Today, trading companies are gaining momentum: even state-owned companies are switching to forms of commercial activity to meet modern market conditions. Trade is the engine of the modern economy, and the success of the company in the market depends on how the processes of commercial activity are arranged and how effective they are.

4. Methodology

As the head of direction in a commercial company supervisor acts as an administrator, because it is important not only to motivate sales staff, but also to plan the work for the future and development. In this regard, it is important to organize a competent accounting of staff. First, it will allow the supervisor to correlate the costs of the company to pay sales representatives and find a balance

between effective motivation and the primary cost of expanding the customer base. Secondly, the analysis of dynamics of system of indicators of work of commercial personnel will allow to track correctly growth of qualification of each employee and to correct actions on personnel development in time. Thirdly, the right balance of the personnel indicators system and the development of the client base will allow building the company's work on a strategic scale [18, 19]. Let's focus on the main important indicators of the administrative evaluation system of a trading company in more detail.

Customer base growth dynamics (G_{CB}) – indicator that shows number of customers increasing in certain period.

It is important to note that this indicator will differ for trading companies in two cases.

Case 1. If the company is just starting to develop distribution “from zero”, then there is such a pattern that for the first month of work on the market one sales manager can grow only 10 customers. It means that these 10 customers are satisfied with the cooperation with the new company and will be ready to make subsequent orders with a certain rhythm.

Case 2. If the company works at the market for a long period (more than 1 year), the optimal effective number of customers per sales manager should be considered about 70-90 units. At the same G_{CB} will look as follows (table 1):

Table 1. Optimal customer base growth per 1 sales manager.

Month of work	1	2	3	4	5	6	7	8	9	10	11	12	Total:
G_{CB}	10	10	10	8	8	8	8	6	6	6	4	4	88
N_{LC}	2	2	2	1	1	1	1	0	0	0	0	0	10
C_{errorr}	0,2	0,2	0,2	0,125	0,125	0,125	0,125	0	0	0	0	0	0,09

Table 1 takes into account the number of lost customers (N_{LC}) – the number of customers who were dissatisfied with the terms of cooperation with the trading company and who never under any circumstances will not make more order.

It is important to note that many trading companies choose the strategy of maximum market penetration and intentionally inflate targets for growth of client base, but thereby increasing N_{LC} to 50%, resulting in the further slowing of the development of the company in the market and loss of brand image (or brand). When planning the number of commercial personnel, it is worth considering that it is convenient to divide the new market either into zones (usually 5 zones: North, South, West, East, Center) or into sub-markets (usually 2 sub-markets: City and Region). In the first months of work, it is necessary to proceed from the fact that the company will actually be able to satisfy the market with the goods and ensure its effective delivery [20, 21].

Therefore, it is equally important for the supervisor is the coefficient of the error growth of the client base C_{errorr} for each sales representative – exceeding regulatory values $C_{errorr} \leq 0,2$ indicates the low efficiency of the worker and his problems with communication with customers. Such an employee can harm the company as a whole, so it is necessary to monitor his work and make adjustments.

The client in the client base of a trading company is a counterparty with whom the contract for the supply of goods is concluded and who made more than 2 orders during the reporting period.

For the proper work of the supervisor of a commercial company it is important to analyze the rhythm of customer orders, as the main task of the head of the direction should be considered to maintain the balance of the company's costs for the distribution of goods and profits. Therefore, in the administrative accounting supervisor need to identify the following index – order frequency (F_O) [17].

The ideal customer can be considered one that makes an order every day, but, as a rule, it is possible only for essential goods (bread, milk, fresh meat, etc. – perishable (perishable products), but the distribution costs are as high as possible.

The optimal customer can be considered one that makes an order 1 time in 7 days, then the balance of costs/profit is achieved. Administrative evaluation supervisor can be performed in this way: 1)

schedule by day of the week-the client makes the order on a certain day of the week convenient for both parties-thus the greatest efficiency of logistics is achieved; 2) the schedule of balances – the customer places an order as soon as it reaches a critical level inventory of the item – this achieves the greatest efficiency in the number of customers (according the Pareto principle: 20% of customers (qualitative) of the total number of bring 80% of the profits of the company and vice versa).

An example of the rhythm of “customer A” orders is shown in table 2.

Table 2. Schedule rhythmicity orders of “customer A”.

Days	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Order				X				X								X				X	
Delivery					X				X								X				X

According Figure 1 supervisor must conclude that the customer makes an order 1 time in three days, that is, the frequency is 4 days. If the commercial company is administrative evaluation, according to the schedule fell order on the 12th. This could be due to several reasons:

- 1) *reason of the client*: the client during this period settlements with other contractors (rent, payment of wages, purchase of goods of other direction, etc.);
- 2) *reason of sales manager*: an employee may have forgotten to mention and call to make a visit to the client;
- 3) *cause of force majeure*: circumstances with the outlet (repair, vacation, sick leave, etc.).

Depending on the established reason, the supervisor should provide for a future period of activities to resume the rhythm of orders.

It is worth noting the special conditions of administrative accounting of a commercial company on holidays: in 90% of cases, customers make an increased order for 3 days, which increases the cost of the client, and sales do not reach the desired level. As a recommendation, you should work with customers on the eve of holidays and plan an increased order for the week, so that the goods have time to sell and get the maximum profit.

The next indicator is the average amount of orders for the period ($\overline{O_p}$). This indicator characterizes several key factors:

- 1) potential of the outlet;
- 2) growth dynamics of entering the sales market of a commercial company;
- 3) seasonal distribution.

Let’s consider an example of analysis ($\overline{O_p}$) of “trade point A” (table 3).

Table 3. Example of analysis of the average amount of orders for the period of “trade point A.”

Orders	1	2	3	4	5	6	7	...	O_p
Total sum	5000	5000	5000	5000	???	???	???	...	5000

Assessment and accounting supervisor at this stage allows you to draw the following conclusions: 1) sales manager does not expand the range at the trade point; 2) client is not interested in increasing sales; 3) there is no rotation of positions in the customer’s order.

Rotation of positions in the customer’s order is the replacement of one position with another from the assortment of a commercial company.

It is important to note that periodic replacement of at least one item in the customer’s standing order increases sales growth by 10%. The natural increase in the average amount of orders for the period of the outlet should be at the level of 10-15%.

Based on the analysis of the average amount of orders for the period of the point of sale, you can make sales forecast, but adjusting for the performance of similar outlets in the customer base.

5. Results and discussion

After the introduction of the system of indicators, sales managers for 3 years improved performance indicators by 9%, and 35% of the respondents observed training (training courses, additional education). The results of the study are shown in table 4.

Table 4. Results of researching the influence of indicators system introduction for sales personnel on human capital development in commerce.

Researched companies	Sales managers	Years after last advanced training	Average sales plan performance over the last 3 years	Average sales plan performance over the last researched year
Company A	1	5	0,75	0,95
	2	3	0,78	0,98
	3	4	0,88	0,98
	4	6	0,86	0,86
	5	5	0,87	0,85
	6	4	0,81	0,81
	7	5	0,75	0,95
	8	4	0,81	0,91
	9	3	0,82	0,92
	10	1	0,83	0,83
Company B	1	4	0,78	0,98
	2	4	0,81	0,91
	3	4	0,95	0,95
	4	5	0,67	0,87
	5	6	0,87	0,86
	6	5	0,72	0,92
	7	5	0,71	0,91
	8	3	0,67	0,87
Company C	1	7	0,82	0,92
	2	8	0,85	0,85
	3	6	0,89	0,89
	4	6	0,88	0,98
	5	5	0,83	0,93
	6	5	0,81	0,81
	7	4	0,87	0,86
	8	3	0,80	0,90
	9	1	0,82	0,82
	10	5	0,78	0,98
	11	6	0,68	0,88
	12	2	0,85	0,95
Average		4,5	0,81	0,90

Thus, we have proved that the development of human capital inevitably leads to an improvement in the performance of detail trading company. According to the peculiarities of the commercial sphere, it can be argued that the ability to plan correctly and the skill of strategic management of its activities leads to the development of the trading company as a whole, and at the level of an individual sales manager.

5. Conclusion

Thus, it is possible to summarize the analyzed system of performance indicators of the sales staff of a commercial company and draw the following conclusions: 1) the head at any level of management is

the administrator of management activities, as one of his main tasks is to coordinate and organize the activities of his subordinates - such a line Manager in a commercial company is a supervisor; 2) in order to properly build the work of sales personnel, it is necessary to build a system of performance indicators that would reflect the situation both in the sales market and show the quality of the sales managers' work – changes at the time of analysis should provide information to the head for making appropriate decisions; 3) evaluation of commercial activities today is not only a necessity but also a tool to minimize both labor costs and financial – the more accurate the management accounting, the less financial losses of the company; 4) growth and development of human capital in commerce allow correlating between the ability to plan their key performance trading managers and personal contribution to the overall efficiency of the company.

References

- [1] Becker G 1964 *Human capital* (New York, NY: National Bureau of Economic Research).
- [2] Weisbrod B 1961 The Valuation of Human Capital *The Journal of Political Economy* vol 69 pp 425–436 <http://dx.doi.org/10.1086/258535>
- [3] Mincer J 1958 Investment in Human Capital and Personal Income Distribution *Journal of Political Economy* vol 66(4) pp 281–302 <http://dx.doi.org/10.1086/258055>
- [4] Schultz T 1961 Investment in human capital *The American Economic Review* **51** pp 1–17
- [5] Heckman J 2000 Policies to Foster Human Capital *Research in Economics* vol 54 pp 3–56 <http://dx.doi.org/10.1006/reec.1999.0225>
- [6] Jaw B, Yu Ping Wang, Chen Y 2006 Knowledge Flows and Performance of Multinational Subsidiaries: The Perspective of Human Capital *International Journal of Human Resource Management* vol 17(2) pp 225–244 <http://dx.doi.org/10.1080/09585190500404481>
- [7] Smith A 1937 *An Inquiry into the Nature and Causes of the Wealth of Nations* (New York: Random House)
- [8] Gogitidze M V 2010 The Concept of Corporate Human Capital *Problems of Modern Economic* vol 3 pp 86–88
- [9] Korchagin Yu A 2005 Russian Human Capital: The Factor of Development or Degradation? (Voronezh: LERC) p 252
- [10] Denison E 1962 *The Sources of Economic Growth in the United States and the Alternatives before us* (N.Y.: Committee for Economic Development) p 117
- [11] Langley A 2000 Emotional intelligence – a new evaluation for management development? *Career Development International* vol 5(3) pp 177–183
- [12] Graetz F 2002 Strategic thinking versus strategic planning: towards understanding the complementarities *Management Decision* vol 40 (5) pp 456–462
- [13] Dulewicz V & Higgs M 1999 Can emotional intelligence be measured and developed *Leadership & Organization Development Journal* vol 20(5) pp 242–252
- [14] Palmer B, Walls M, Burgess Z & Stough C 2000 Emotional intelligence and effective leadership *Leadership & Organization Development Journal* vol 22 (1) pp 5–10
- [15] Stukalina Y 2010 Using Quality Management Procedures in Education: Managing the Learner-Centered Educational Environment *Technological and Economic Development of Economy* vol 16(1) pp 75–93 <http://dx.doi.org/10.3846/tede.2010.05>
- [16] Rahim M A & Minors P 2003 Effects of emotional intelligence on concern for quality and problem solving *Managerial Auditing Journal* vol 18(2) pp 150–155
- [17] Sharko E R, Sharko O V 2017 Administrirovanie pokazatelej deyatelnosti torgovogo personala kommercheskoj kompanii *Modern Economy Success* vol 3 pp 86–89
- [18] Epishin N B 2011 Metodika ocenki dvizhenia klientskoj bazy kaka osnova marketingovogo prognozirovaniya i upravleniya sbytom *Indusrtial'nyj i B2B marketing* vol 04(16) <http://www.business-vector.info/download/methods.pdf>

- [19] Dallakyan A 2012 Distribyuciya: 5 jeffektivnyh shagov k bol'shim prodazham *Professional'nyj zhurnal kommersanta "Kommercheskij direktor"* <https://www.kom-dir.ru/article/163-red-distributsiya>
- [20] Garbuzova E V 2015 Upravlenie dilerskoj I distribyuterskoj set'yu *VII Mezhdunarodnaya studencheskaya jelektronnaya nauchnaya konferenciya "Stydencheskij nauchnyj forum" – 2015* <http://www.scienceforum.ru/2015/pdf/17399.pdf>
- [21] Sorokina T 2015 Sistema distribyucii: instrumenty sozdaniya konkurentnogo preimushhestva (Moscow: Al'pina Didzhital) <http://avidreaders.ru/book/sistema-distribucii-instrumenty-sozdaniya-konkurentnogo-preimushchestva.html>