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COLLABORATIVE BEHAVIOUR AS A FACILITATOR OF INTEGRATION OF LOGISTIC AND MARKETING FUNCTIONS – THE CASE OF SLOVENE RETAILERS

ABSTRACT

Collaborative behaviour and various aspects of comparing collaboration with coordination and cooperation present the basis for more detailed assumptions concerning the importance of integrating logistic function with the marketing function. The collaborative behaviour dimension of inter-functional integration presents a system of mutual visions, decision-making and collective responsibility to provide results, services or a product. Logisticians often define integration within the framework of the supply chain, yet they neglect the internal integration or the integration between individual departments or functions in a company. Defining internal integration and its level as well as the connection with the level of collaborative behaviour is the basis of the research part of this paper. The quantitative research part studies whether and to what extent collaborative behaviour influences the level of internal integration between logistic and marketing functions. The research is based on a quantitative analysis of results of the survey that was conducted in Slovene retail companies.

KEY WORDS

logistics, marketing, logistic function, marketing function, internal integration, collaborative behaviour, inter-functional relations

1. INTRODUCTION

Increased target orientation and the focus on logistic function can potentially increase competitiveness. This especially refers to globally-oriented manufacturing companies. In a company, logistic functions cooperate with various interconnecting functions, such as production, marketing, procurement [1,2] new product development [1] and the financial function [3]. Each of the said links or cooperation between logistic and its complementary functions can have a critical influence on the company's competitiveness.

The integration of logistic and marketing functions is especially important due to their strategic aspect, as the areas of mutual activities are large in scope and present the system of basic logistic-marketing network, which presents a product, a price, space, promotion and people.

Daugherty et al. [4] found out that marketing and logistics can provide input to customize systems and design output that will be relevant and of practical value.

Marketing focuses on creating demand or needs. This may be achieved either through product, price and promotion as well as through business relationships with consumers (buyers) and by managing supply channels. Logistics on the other hand is more operatively oriented to meet the demand. The functional interdependence between logistics and marketing is evident in all marketing mix elements [2,5]. Typical interfaces between logistic-marketing functions in a company present the customer support and logistic quality [6]. Therefore, the integration of logistic and marketing functions is especially critical for achieving maximum consumer satisfaction at minimal costs of operation or maximum profit. However, this depends on the efficiency of more than one person or an individual function. To this end, integration of logistic and marketing functions is critical for each company that wants to be competitive locally and globally. A systemic approach is needed, as logistics is a system or a network of related activities, which aims to manage the flow of goods and people.

Individual functions cannot be completely efficient in a company if they are working in isolation. Business processes and their implementers in various companies must therefore be designed and implemented in a way that they are actively integrated and adhere to the needs of individual consumers. To this end, companies can no longer afford to have isolated systems of individual functions and departments. From the viewpoint of logistic functions or logistic departments of companies the existing system of isolated function silos and the logistic function need to be connected with other complementary functions in the company.

The functional interdependence between logistics and marketing can be seen in all the components of the marketing network. The typical meeting point of logistic and marketing functions in a company presents the areas of support to consumers and logistic quality.

The world has become customer-centric, in which firms are increasingly aligning their organizations around customers.

1.1 Objectives and assumptions

The main aim is to research inter-functional integration of logistic and marketing functions in a company. Moreover, we aim to research how the level of successful collaboration can influence the level of integration of logistic and marketing functions.

Here, the collaborative behaviour will be researched at the level of employees of both functions that cooperate in overlapping activities. Based on the data on relationships among employees in a logistic and marketing function that were acquired using questionnaires which were completed by the employees of these functions in the selected Slovene B2C (business to consumer) companies, we will learn about the relationships between employees. These will form the basis for understanding the existing level of integration of the two functions and for defining the role that successful collaborative behaviour has in a particular level of integration. We will try to confirm the assumption of connectivity of the level of collaborative behaviour of employees with the level of integration of logistic and marketing functions. The basic hypothesis that we will try to confirm is: *"the level of internal integration of logistic and marketing functions in a company depends on the level of collaborative behaviour of all1 employees in both function areas"*.

The hypothesis will then be confirmed or rejected using statistics data analysis, i.e. a bivariance correlation between both variables that present the level of collaborative behaviour and the level of internal integration. The correlation system will inform us whether the variables are in fact connected or not. In order to find out the level of connectivity, the regression analysis will be conducted.

2. CHARACTERISTICS OF INTEGRATION AND COLLABORATIVE BEHAVIOUR

2.1 Integration

Logisticians often define integration within the framework of the supply chain, yet they leave out the internal integration or the integration between individual departments or functions in a company. Integration presents a central spot in various domains including production management and information systems [7]. The conceptual roots of integration may be found in Fayol's [8] and Lorsch's [9] idea on cooperation.

Integration occurs when specialized functions or departments in a company are interdependent and when processes or procedures are implemented which allow interaction. Integration may also depend on the environment or on the processes which are integrated in terms of internal or external integration. Internal integration presents an integration of primary activities of a company. External integration presents the integration of primary processes of a company with supply chain members of the company.

Integration is important to improve performance of the organization. Richey et al. [10] found out that firms can improve performance under the governance of facilitators to integration, in spite of the realization that barriers to integration also exist.

2.2 Internal integration

Internal integration occurs when specialized functions or departments in a company are interdependent and when operations and procedures occur which allow and call for cooperation.

Internal integration thus researches within a company. It aims to eliminate traditional silo functions and emphasizes better coordination between function areas. Internal integration reflects the fact that at least two (or more) complementary functions of a company act as a unity although they are not integrated into a single entity. Two departments (two functional areas) in a company are complementary when they complete each other and have a certain array of inter-connected functions which need to be complemented with another function of a complementary department.

Certain literature characterizes inter-functional integration as interaction or as communication activity [11], which states that more frequent meetings and information flows between function departments contribute to a more effective integration. Interaction philosophy for managing inter-functional relationships probably stems from a holistically designed philosophy, which is based on many business theories and managerial procedures.

Managers strictly define interactional philosophy as a system of contacts with other functions and departments in form of transactions.

The transactional viewpoint of integration deals with departments as interdependent entities which compete against all resources in a company; contacts between departments are understood as temporary and present financial loss. Due to such competitiveness and costs, managers view this process of meetings and the flow of information as a negotiation system, whereby each department or a function strives to benefit as much as possible from a meeting or data exchange. The interaction aspect of inter-functional integration thus presents a behaviour which includes exchange of information.

Further literature characterizes integration as collaboration [11, 9], which facilitates team-work, sharing of resources and achieving mutual goals between complementary functions; they all contribute to a more effective integration.

The third group of literature, however, characterizes integration as an element of interaction and collaboration [12, 13]. Such an aspect is in a way a very attractive philosophy, as inter-functional or inter-departmental integration is viewed as a multi-dimensional approach.

Souder and Sherman [14] defined integration as a state of high-level values, which are dispersed, common goals and collaborative behaviour. Lorsch [9] defined it as a process of unified investment of efforts between different subsystems when reaching completed tasks of a company. O'Leary-Kelly and Flores [15] stated that integration refers to the level at which separated functions cooperate and thus achieve goals. Based on this definition, integration is a puzzle which depends on the level of cooperation, coordination, interaction and collaboration.

2.3 Collaborative behaviour

Mintzber et al. [16] classified aspects of collaboration through the entire supply chain and thus divided it into managerial inter-organizational collaboration, "downstream" and "upstream" inter-organizational collaboration, lateral inter-organizational collaboration and inter-organizational collaboration, which in our case presents an inter-functional collaboration. Our research area– taking into account its aspects proposed by Mintzberg et al. [16] – can be classified as inter-organizational collaboration.

The dimension collaborative behaviour of inter-functional integration presents a system of common visions, mutual decision-making and collective responsibility for the final outcome, service or product [17]. Collaborative behaviour is based on cooperation and upgrades it. The success of collaborative behaviour is based on individual's competences in interdependent functions which aim to develop important interpersonal relationships. Companies must thus encourage and even reward managers of interdependent functions for proactive thinking and work in the field of comprehensive transactions within a complex system [14]. The collaboration philosophy deviates from the interaction philosophy and is parallel to the philosophy of relationship marketing which appears in the marketing discipline. Bressington and Pettitt [19] emphasize that relationship marketing is an important aspect of added value of a product regardless of market and product type. However, despite the growth and scope of scientific literature, there is only little agreement on the nature of the definition of relationship marketing [20]. In the collaboration philosophy constant relationships between function areas can be stressful. Function departments are therefore dealt with as interdependent, which facilitates common vision and encourages the pursuit of common goals in a company.

Contrary to the interaction and communication approach of managing inter-functional relationships, collaboration is a behaviourist approach. The centre of collaboration is not the establishment of information links, but rather collaboration prefers to focus on the creation of loyalty between different functions [21]. Pursuing a collaboration philosophy can call for dramatic changes in the climate and culture of the company. Such changes may not always be welcomed by the employees in particular functions.

3. RESEARCH METHODOLOGY

The methodology is based on the basic definition of the existing level of internal integration which is further based on interaction and collaborative aspect. The basic independent variables of the existing level of internal integration in analysed companies are also based on some recent researches.

Defining the arithmetic mean of questionnaire findings, which defines the existing level of internal integration, will present the basis for further research. Research will then be undertaken by analysing the findings and independent variables, which refer to the search for the existing level of collaborative behaviour in analysed companies. Means will form the basis for trying to find the link between the level of collaborative behaviour and the level of internal integration. Finding such a link presents a basis for confirming the hypothesis. Research will be pursued using analysis of findings and independent variables which refer to the search for the existing level of collaborative behaviour in analysed companies. These results will form the basis for finding the link between the level of collaborative behaviour and the level of internal integration.

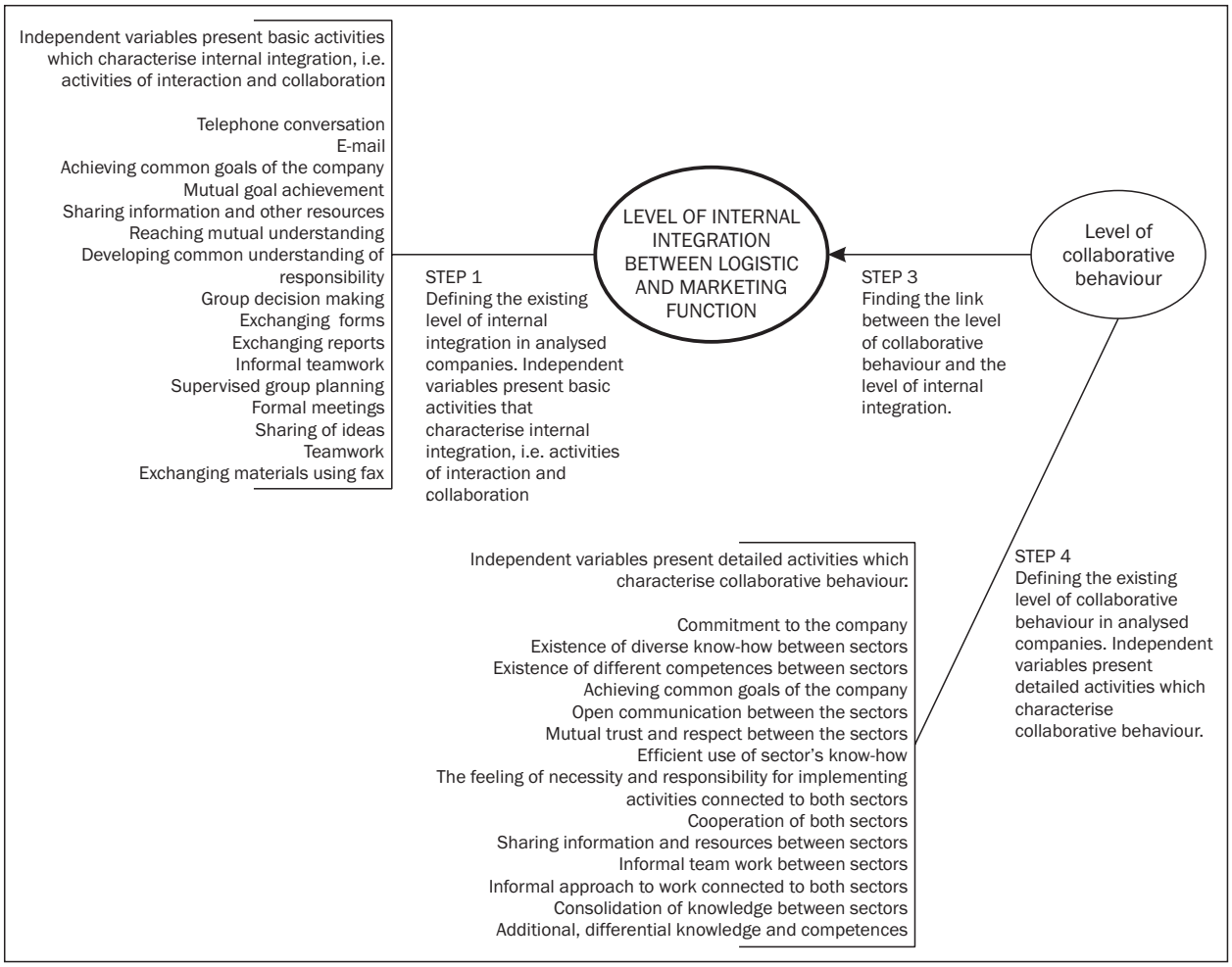

Figure 1 - Research model

3.1 Sampling of selected companies

The sample of companies was based on the previously defined area, which the companies represent, that were classified as *retail companies excluding motor vehicle retailers*. This area was defined so by the Chamber of Commerce of Slovenia and presents the primary source of information on companies included in the research. The entire population of large[2] companies whose activities were in retail excluding motor vehicle retailers was included. The data on these companies were acquired from the Slovene Chamber of Commerce. On 2 April 2009 there were 33 registered large companies in Slovenia, whose activities were in retail excluding motor vehicle retailers.

3.2 Developing the questionnaire

Prior to developing the questionnaire, relevant opinions and facts had to be defined. For research purposes, a partially structured questionnaire was chosen, which includes closed-type questions followed by open questions to which the interviewees provide descriptive answers.

3.3 Methodology of implementing the questionnaire

On 5 June 2009 the questionnaires were sent out via snail-mail to all 33 large Slovene companies, which are defined as "retail companies, excluding motor vehicle retailers". Each company was sent 5 questionnaires including 5 envelopes with post stamps. This way a complete anonymity of the company was assured, as well as the anonymity of the people who filled out the questionnaires. In the letter of correspondence managers of both sectors were asked to fill out the questionnaires and to give them to some other employees, such as representatives, heads of projects, clerks, consultants etc.; that is because integration involves two or more functional areas and collecting data only from one party could limit the possibility to generalize the results [22].

By 3 August 2009, twenty-six filled out questionnaires were returned, fourteen from the logistic sector and twelve from the marketing sector.

Data analysis was conducted using Microsoft Excel and Statistical Package for the Social Sciences (SPSS) for Windows with: Descriptive statistics, Bivariate sta-

tistics, Prediction for numerical outcomes: and Prediction for identifying groups.

4. RESEARCH FINDINGS

In the following analysis the operationalisation and the results of each of the terms or concepts was presented that are referred to in the hypothesis. Then, the hypothesis entitled: "the level of integration of internal logistic and marketing functions in a company depends on the level of collaborative behaviour of all employees in both function areas" was tested.

4.1 Level of internal integration

In order to learn about the connection between the level of internal integration and the level of collaborative behaviour one first needs to determine the existing level of internal integration in the analysed companies. The level of internal integration was operationalized using a set of questions in which various activities (see *Figure 1* and *Table 1*) were set out, whereby the interviewees rated the degree of frequency of mutual cooperation with the compared sector, which means that the interviewees from the marketing sector rated the cooperation of their sector with the logistic sector and vice versa – the interviewees from the logistic sector rated the cooperation of their sector with the marketing sector.

The mentioned set of questions featured 16 different activities such as formal meetings, telephone conversations, e-mails etc. (*Table 1*), in which the interviewees rated the frequency of operations or implementation by choosing one of the following answers: daily, weekly, monthly, yearly or never.

Based on the bivariance analysis, which tests the influence of one or more independent variables on the dependent variables of this set of statements compared to other questions, we found out that the interpretation of results is most plausible, if all possible answers are dichotomised or that they are consolidated into two categories such as: never (0) or at least once a year or more (1). Parts of dichotomised answers are shown in *Table 1*, whereby the results are shown separately for the interviewees from the logistic sector and the interviewees from the marketing sector.

Activities from *Table 1* directly measure the level of internal integration. For the majority of activities, shares are relatively large, as they present a share of the category "at least once a year" or "frequently", which is a relatively wide period of time. The interviewees from the marketing sector rated for 11 out of 16 activities that everyone from this sector (100%) conducted the aforementioned activities at least once a year or more. The interviewees from the logistic sector,

Table 1 - Degree of mutual activities with the compared sector; level of internal integration (N=26)

Activity	Logistic sector	Marketing sector	Fisher's exact test - p. value[3]	Total
Telephone conversation	100%	100%	/	100%
E-mail	100%	100%	/	100%
Achieving common goals of the company	93%	100%	1.000	96%
Mutual goal achievement	86%	100%	0.483	92%
Sharing information and other resources	79%	100%	0.225	88%
Reaching mutual understanding	71%	100%	0.100	85%
Developing common understanding of responsibility	71%	100%	0.100	85%
Group decision making	71%	100%	0.100	85%
Exchanging forms	64%	100%	0.042*	81%
Exchanging reports	64%	100%	0.042*	81%
Informal teamwork	71%	92%	0.330	81%
Supervised group planning	64%	100%	0.042*	81%
Formal meetings	64%	92%	0.170	77%
Sharing of ideas	64%	83%	0.391	73%
Teamwork	50%	82%	0.208	64%
Exchanging materials using fax	57%	60%	1.000	58%
ARITHMETIC MEAN OF ALL ACTIVITIES	73%	95%	/	83
Level index of internal integration [0..100]	73	95	/	83

Note: The scale from 0 to 100 or from 0% to 100%, whereby 100% or 100 means that all interviewees believe that a particular activity is implemented at least once a year and whereby 0 or 0% means that all interviewees believe that a particular activity is not implemented at all.
Source: developed by the authors using an SPSS

on the other hand, rated in only 2 out of 16 activities that everyone from logistic sector (100%) conducted the aforementioned activities at least once a year or more. These activities include most widespread communication activities such as telephone conversations and emails. However, the least implemented activities featured the use of fax machines (58%) and teamwork (64%) if we compare the shares based on the sector. The index of internal integration level is more interesting than the implementation of each activity as such. The former notion is operationalised as a common relative sum of dichotomy variables or activities presented in the previous table (*Table 1*) and amounts to 83. The bottom row from *Table 1* clearly shows that the level of internal integration for employees from the marketing sector is somewhat higher (95) compared to employees from the logistic sector (73).

The last column of *Table 1* refers to Fisher's exact test from which it is evident, that the differences between the reliability of replies logistics/marketing are statistically significant for three activities (marked with *). For these three activities one may assume with high reliability that the differences also refer to population.

Data analysis further defines standard deviation which amounts to 21.19 and indicates normal distribution. Standard error estimate of the mean is 4.15. Within the framework of data analysis One-Sample T-Test was conducted in order to compare sample estimates of the mean and values of the mean, also considered in the null hypothesis. This analysis is regarded as statistically significant as sig. = 0.000 and is less than P-value 0.050.

4.2 Level of collaborative behaviour

As the hypothesis refers to finding a connection between the level of internal integration and the level of collaborative behaviour we will first determine the existing level of collaborative behaviour in the analysed companies which we will then use in order to search for the link with the level of internal integration.

The level of collaborative behaviour was operationalized with the questionnaire or set of questions, whereby the interviewees rated 14 different activities which can be seen in *Table 2*, using the scale from 1 to 5, whereby 1 means "I totally disagree", and 5 means "I agree entirely". The results of the answers or the arithmetic mean to the questions are shown in *Table 2*.

Standard deviations and t-tests for differences between average values are also shown. Where P-value of t-test is less than 0.050 the differences are statistically significant or at such questions one may also assume differences in population.

Due to the connection with the level of internal integration or the index of the level of internal integration, the index of the level of collaborative behaviour was set as a transfer of results of the arithmetic mean from the scale 1 to 5 to the scale 0 to 100.

As seen from *Table 2* the interviewees agree to a great extent that activities such as being committed to the company, diverse knowledge between sectors, diverse competences between the sector, achieving common goals of the company, are largely present in both marketing and logistic sectors. Activities such as transfer of knowledge between sectors, additional, diverse knowledge and competences are the least present.

Based on all 14 activities from *Table 2* a common index of the level of collaborative behaviour can be calculated. The latter was calculated as an average of all 14 variables (at the level of an individual), whereby the values of the said index were subsequently transferred from the scale from 1 to 5 to the scale of 0 to 100. The higher the value of an index, the higher all 14 activities were rated by the interviewees and vice versa: the lower the values of the said indicator, the lower the interviewees rated all 14 activities. The average value of the calculated common indicator of the level of collaborative behaviour is shown in the bottom row of *Table 2* and it is 65.

4.3 Level of internal integration and its correlation to the level of collaborative behaviour

Next, a more detailed analysis between the level of internal integration and the level of collaborative behaviour will be presented, whereby the hypothesis is the following: **the level of collaborative behaviour influences the level of internal integration**.

Both variables from the hypothesis are normally dispersed; therefore the main hypothesis may be tested using Pearson's correlation coefficient (*Figure 2*).

Using the bivariance correlation, the statistics analysis of variables of the level of collaborative behaviour and the level of internal integration showed that there is a link between the variables due to Pearson's correlation coefficient of 0.628 which is statistically significant, with statistics test sig. (sig. = 0.001) being smaller than the maximum value 0.050.

Level of internal integration of logistic and marketing functions in a company therefore depends on the level of collaborative behaviour of all employees in both function areas.

The correlation coefficient as such states that the link between the analysed groups of variables is existent; however, it does not show how they are linked to each other, which can be determined using regression analysis, where models are established, which can be used for predicting or describing links between the de-

Table 2: Presence of the aforementioned activities between sectors; level of collaborative behaviour (N=26)

Activity	Logistic sector	Marketing sector	Total	Std. deviation Logistic sector	Std. deviation Marketing sector	t-test (p. value)
Commitment to the company	4.43	4.50	4.46	0.76	0.80	0.817
Existence of diverse know-how between sectors	4.21	4.50	4.35	1.25	0.90	0.518
Existence of different competences between sectors	4.08	4.58	4.32	1.19	0.67	0.207
Achieving common goals of the company	3.79	4.33	4.04	1.37	0.78	0.233
Open communication between the sectors	3.64	4.33	3.96	1.45	0.89	0.164
Mutual trust and respect between sectors	3.57	4.08	3.81	1.22	1.00	0.259
Efficient use of sector's know-how	3.14	4.25	3.65	1.41	1.06	0.035*
Feeling of necessity and responsibility for implementing activities connected to both sectors	2.92	4.08	3.48	1.44	0.90	0.025*
Cooperation of both sectors	2.71	4.17	3.38	1.38	1.11	0.008*
Sharing information and resources between sectors	2.57	4.08	3.27	1.16	1.00	0.002*
Informal team work between sectors	2.50	3.67	3.04	1.40	1.23	0.035*
Informal approach to work connected to both sectors	2.50	3.50	2.96	1.40	1.45	0.086*
Consolidation of knowledge between sectors	2.36	3.67	2.96	1.39	1.15	0.016*
Additional, differential knowledge and competences	2.50	3.50	2.96	1.29	1.17	0.050*
ARITHMETIC MEAN OF ALL ACTIVITIES	2.75	3.85	3.25	/	/	/
Level index of collaborative behaviour [0..100]	55	77	65	/	/	/

Note: The scale from 1 to 5, whereby 1 means »I totally disagree", and 5 "I agree entirely".

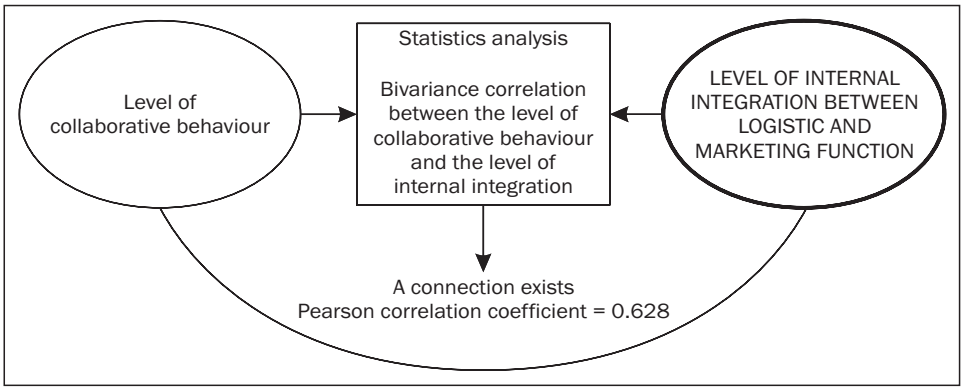

Figure 2 - Correlation between the level of internal integration and the level of collaborative behaviour

pendent variable and the largest possible number of independent variables.

Suppose that the variables are linked in a linear way. This way, based on regression analysis one can determine the following regression model, which in the case of linear connectivity can be defined as $y = a + b \times x$, whereby *a* means the constant of the model and *b* means the directional coefficient of lines. Such regression analysis provides an already known correlation coefficient which is 0.628 (Pearson's corre-

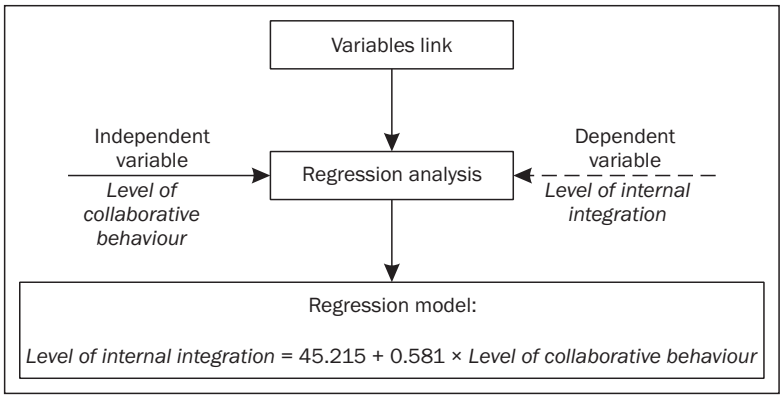

Figure 3 - Regression model of connected level of collaborative behaviour and the level of internal integration

lation coefficient) and determination coefficient which is 0.394. The linear regression model as a whole is statistically significant (F=15.623, sig F=0.001) and the level of internal integration confirms 40% of variability level of collaborative behaviour (determination coefficient R^2=0.396), the directional coefficient of regression line *B* equals 0.581, its positive sign shows a positive link between variables; its value shows the number of units which change the value of correlated variable of the level of internal integration on average if the value of the level of collaborative behaviour increases by one unit. The constant of the model equals 45.215 and presents the value of the level of internal integration if the value of the level of collaborative behaviour is 0. *Figure 3* presents a linear regression model of the way in which the level of collaborative behaviour and the level of internal integration are linked. From the findings of the regression analysis the regression model can be shown, which in case of linear connectivity presents the correlation of the dependent variable from the independent variable:

$$L_{II} = 45.215 + 0.581 \times L_{CB} \quad (1)$$

where:

L_{II} – *level of internal integration,*

L_{CB} – level of collaborative behaviour.

The points in *Figure 3* present interviewees replies. Based on the distribution of these points it may be tested whether the connection between the variables is linear or whether the points deviate too much from the line. The explained variance of the linear dependence of the dependent variable is based on the independent variable and amounts to 39.6 percent, which is acceptable. Using various transformations, such as cubicle transformation, the explained variance may be somewhat increased, i.e. to 46.7 percent. This is not much higher considering that the link is linear (39.5%), as this are only 7.1 percentage points of the explained variance. Apart from the cubicle transformation, logarithmic, inversion, square, exponent and s-curve transformations were also used; however,

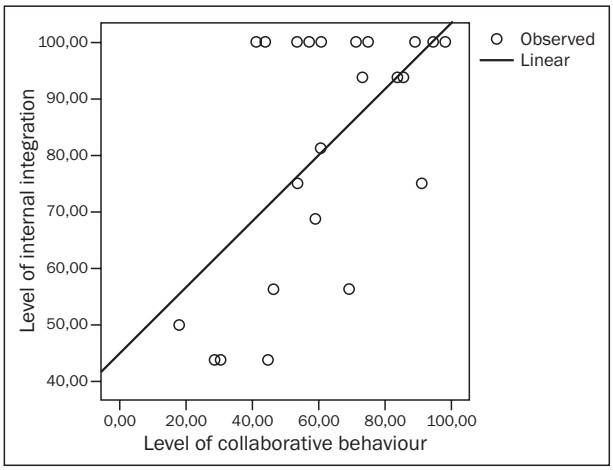

Figure 4 - Scatter graph between the level of internal integration (Y) and the level of collaborative behaviour (X); (Y = 45.215 + 0.581 × X), N = 26)

none of them was the explained variance that would be higher than the one acquired by using cubicle transformation.

By explaining the connection between the level of collaborative behaviour and the level of internal integration we found out that both notions are connected with each other (in a linear way). Therefore, our hypothesis was confirmed.

5. DISCUSSION

The main aim of the respective research was to study the collaborative aspect of internal integration and thus relations between employees from logistic and marketing functions.

The findings have broadened the current part of the research area of inter-functional integration and directed us towards thinking more open-mindedly and to explore the possibility of finding additional solutions. With the research the positive influence of collaborative behaviour at the level of integration was empirically confirmed, which could have been only assumed by the researchers who have been explor-

ing the phenomenon of internal integration. We may further assume that the higher level of inter-functional collaborative behaviour will increase the success of a company. Despite the fact that the findings of this study are defined as research and may not be directly transferred or generalised onto other inter-functional relations of a company, we argue that a general connectivity between the level of collaborative behaviour and the level of internal integration does exist.

The research findings are thus extremely important for those managers of logistic and marketing functions who strive towards implementing strategies of internal integration of logistic and marketing functions as well as for managers of other function areas.

The research findings have thus made a contribution to the theory development in the field of functional organisation of a company, whereby the emphasis was on development of the internal integration theory. Taking into account that a successful internal integration forms the basis for a successful external integration of a company, the findings will also contribute to the development of the theory from the field of supply chains.

6. CONCLUSION

Based on the problem and the set objectives the introductory part included the following hypothesis: *"the level of integration of internal logistic and marketing functions in a company depends on the level of collaborative behaviour of all employees in both function areas"*.

The hypothesis tried to confirm the connection of the level of integration with the level of collaborative behaviour of all employees in a logistic and marketing function. Since the term "all employees" was used from the viewpoint which refers to all employees at senior position levels of both functions, that represent leaders or directors of a particular functional area and representatives, heads of research, consultants, managers and clerks; they exclude other employees such as warehousing operators, drivers etc.

The hypothesis was to be confirmed using Pearson's correlation coefficient. As both variables – the level of collaborative behaviour and the level of internal integration – were normally dispersed, the test was done using Pearson's correlation coefficient, which confirmed the connectivity between variables, as its value was 0.628, which was statistically significant.

To this end, the hypothesis can be confirmed. Based on this we may conclude that the level of internal integration of logistic and marketing function in a company depends on the level of collaborative behaviour of all employees in both functional areas.

6.1 Further research

Despite the fact that this research focuses on internal integration of logistic and marketing functions and relevant collaborative behaviour, a number of unanswered questions have remained that ought to be addressed. Further research could be directed towards a wider definition and analysis of common characteristics of collaborative behaviour and the level of internal integration which would be independent from functional areas. Further research could also deal in more detail with the underlying, already researched phenomenon.

A more detailed research of internal integration between logistic and marketing function can continue or expand on areas such as the level of education on the level of integration or the influence of the period of employment in a particular sector at the level of integration.

However, searching for links between the level of internal integration, which is independent from functional areas and the number of such employees who have also been working in a complementary function, is put to the foreground, as only they are familiar with activities implemented in both functions. This type of research should provide us with data which could defend or reject the plausibility of current reallocation of an employee in a complementary function.

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POVZETEK

KOLABORATIVNO VEDENJE KOT SPODBUJEVALNI DEJAVNIK INTEGRACIJE LOGISTIČNE IN MARKETINŠKE FUNKCIJE; PRIMER SLOVENSKIH TRGOVSKIH PODJETIJ

Kolaborativno vedenje kot osnova tega pojava in različni vidiki vzporejanja kolaboracije s koordinacijo in kooperacijo predstavljajo osnovo za ožje ugotovitve v povezavi s pomenom integracije logistične funkcije z marketinško funkcijo. Kolaborativno vedenjska dimenzija med-funkcijske integracije predstavlja sistem skupnih vizij, skupnega odločanja in kolektivno odgovornost za končni izid, storitev ali proizvod. Logisti pogosto opredeljujejo integracijo v okviru oskrbne verige, pozabijo pa na notranjo integracijo oz. integracijo med posameznimi oddelki oz. funkcijami v podjetju. Opredelitev notranje integracije in njenega nivoja ter

povezava z nivojem kolaborativnega vedenja je osnova raziskovalnemu delu tega članka.

V kvantitativnem raziskovalnem delu se preučuje ali in kako nivo kolaborativnega vedenja vpliva na nivo notranje integracije med logistično in marketinško funkcijo. Raziskovanje temelji na kvantitativni analizi rezultatov vprašalnika, ki je bil izveden v slovenskih trgovskih podjetjih.

KLJUČNE BESEDE

logistika, marketing, logistična funkcija, marketinška funkcija, notranja integracija, kolaborativno vedenje, med-funkcijski odnosi

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1. The term »all employees« refers to employees with lead positions in both functions, that present directors of a functional area and representatives, heads of research, consultants, managers and clerks; however, they exclude other employees such as warehouse operators, drivers etc.
2. According to the Companies Act companies are: micro, small, medium and large sized companies, taking into account the set measures on a balance sheet day of the annual balance sheet: the average number of employees in a business year, net sales, and the value of assets. A large company is a company which meets two or more measures: the average number of employees in a business year is over 250, net sales amount to more than 29,200,000 euro, and the value of assets exceeds 14,600,000 euro.
3. Fisher's exact test is used to examine the differences between two proportions. If P-value is less than 0.05, then the differences are statistically significant (based on population sample one might assume the differences in population), otherwise the differences are significant only for a sample and valid assumptions cannot be made. If variables in both groups are 100% the test cannot be applied.

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