

International Journal of Sales, Retailing and Marketing

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Editorial



Dear readers,

The current issue of the IJSRM is once more dedicated to the best research papers from the area of sales, retailing and marketing that have been presented on our annual 15th CIRCLE international conference that took place between April 4th and 7th, 2018. We are

proud to present thirteen original research papers from the U.S.A., Pakistan, Great Britain, Germany, Poland, Russia, Austria, Croatia, Nigeria, and Bosnia and Herzegovina. The contributing authors published next interesting results of the examining:

- the cases and possibilities using of Game Theory in practice of sales, retailing and marketing,
- the relationships between communication, conflict, a franchisee's economic and social satisfaction, and a franchisee's performance in the franchise systems,
- the effects of customer delight and brand reputation on brand love, and the influence of brand love on word of mouth from a retail chain store perspective,
- the ability to exploit the achieved level of information technology development, and examining the factors to increase economic development and stopping the outflow of young people and reducing the negative demographic trends,
- of small and mid-sized enterprises in the medical technology industry of developed country and investigating the antecedents and the effects of organizational capabilities on their strategy regarding international ventures,

- assessing the influence of new market trends and the emergence of the sustainability concept on the mission statements and goals of micro, small and medium-sized enterprises operating in selected European countries according to the size of the company,

- how the international roofing company has entered well-defined markets with structured competition and instead of direct struggles against major players in the market, invented and introduced new marketing techniques and tools not used by competitors,

- the aspects of salient beliefs of individuals towards individual and shared vehicles,

- the effect of European Emission trading system on oil prices and stock exchange,

- the areas of globalization process where are evident its effects on the sovereignty of national countries, like radical changes in perception of economy, law, politics and modern entrepreneurship,

- to develop and validate a model of the impact of online communication tools on building relationships in the segment of young consumers and that undeniably and dynamically affect marketing,

- of sales effectiveness of domestic and international trade shows - from the perspective of furniture manufacturers, and

- of comparisons the purchasing behavior of consumers in selected European countries in the context of changing traditionalists and ecommerce channels.

Thank you for taking interest in publishing and reading The International Journal of Sales, Retailing and Marketing. Hoping that it would be of great use in your professional and academic career, I thank you for reading it and encourage you to continue sending us your papers so that we could maintain our high quality published papers.

Editor in chief

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GAME THEORY IN SALES, RETAILING AND MARKETING PRACTICE

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Summary

Game theory is an analytical basis for the study of decision-making under conditions of risk, conflict or cooperation between players. Strategic relations between two or more players can be modeled by methods of game theory with the goal of finding the best possible payoff for all players. The game theory is used in a series of human interest spheres, but is extremely popular and applicable in the economy. Modern business is characterized by aggressiveness, determination and timely decisions, all in order to create profitability. Game theory helps to create and choose the best decision as quickly as possible so that businessmen can manage their profitability in the aggressive markets of the 21st century. It analyzes the decision-making in conflict situations where each of the participants in the game is trying to promote its own interests, while respecting the rules of the game and using different strategies to make themselves secure a favorable outcome of the game. The paper analyses numerous examples of the application of game theory in which we want to examine the fact that theoretical settings and models of game theory can improve strategic decision-making, the successful conduct of business and the achievement of the desired goals in contemporary business. It is described and explained the essence of the analytical apparatus, the conditions to be met by the problems that it solved and the method of finding the break point in the matrix game-so cold Nash equilibrium, with typical problems of conflicting strategic decision making situations in the sales, retailing and marketing.

Key words: conflict, decision making, game theory, Nash equilibrium, strategy

INTRODUCTION

Game theory is a complex field of study that deals with strategic decision-making in different situations in which there are more decision makers with different interests. Game theory is the science of strategy, the study of math and logic behind conflict and cooperation. It is a powerful tool for analyzing situations in which the decisions of multiple players affect each player's payoff. Mathematician John von Neumann¹ and economist Oskar Morgenstern² (1944) are credited as the fathers of game theory³.

1 John von Neumann (1903–1957) was a Hungarian-American mathematician, physicist, inventor, computer scientist, and polymath.

2 Oskar Morgenstern (1902- 1977) was a German-born economist. In collaboration with John von Neumann, he founded the mathematical field of game theory and its application to economics. Companies he served as founder/co-founder included Market Research Corporation of America.

3 However, John von Neumann published his first works in the game theory in 1928 until he lived in Germany. It's

Through their book `Theory of Games and Economic Behavior` they have summarized the basic game theory concept and for the first time explicitly linked the theory of games to economics. Game theory has since enjoyed an explosion of developments, including the concept of equilibrium by John Nash⁴. Although developed as a tool for economic research, it is the study of mathematical models of conflict and cooperation between intelligent rational decision-makers it quickly came to fruition in many other areas, such as international relations, evolutionary biology, political sciences, and military tactics and strategy.

about his work "Zur Theorie der Gesellschaftsspiele" (eng. About Theory of Social Game).

4 John Forbes Nash Jr. (1928-2015) - was an American mathematician who made fundamental contributions to game theory, and with two other Americans, Reinhard Selten i John C. Harsanyi, shared the 1994 Nobel Prize for Economics. In 1950-1953, John Nash with four contributions on the game theory introduced the strategic balance, which would be the case for non-cooperative games and presented his program, which should be resolved through a cooperative game of non-cooperative (Annals of Mathematics, Vol. 11, No. 1, September, 1951).

The game theory has application in both operational research, collective behavior and psychology. In recent years, however, it is increasingly used in a wide spectrum of problems in computer science and in telecommunications systems, for example in automatic negotiation.

DEFINITION OF GAME THEORY, BASIC ELEMENTS AND KEY ASSUMPTIONS

By some definition game theory is a branch of mathematics dealing with formal aspects of rational decision-making - the activity of players in so-called 'game theory', 'strategic situations', and while by others is a tools for rational decision-making in conflicting interactive situations. Conflict situations are part of everyday life, both in private and public life. The game theory with its theoretical approach tries to objectively describe, explain and solve every conflict. Game theory analyzes interaction among a group of rational players who behave strategically. In this definition, attention should be paid to several key words: group, interaction, rational player and strategic behavior.

Each group in the game consists of two or more players. Interaction implies that whatever one player does has a direct impact on at least one of the remaining players in the group. Rational player is the one who chooses his best strategy depending on his own expectations of the ultimate outcome of the game. So a rational player will never knowingly take a bad move, ie choose a strategy at his own expense. Strategic behavior, on the other hand, implies a decision on the choice of moves in view of the interdependence of the moves of other players.

Basic elements of game theory

The situations dealt with in game theory have the following characteristics: At least two players must be involved. The game is any situation in which player or players making strategic decisions, which take into account the actions of the other players and their responses. Players are the key of a game since they are the main decision makers and they influence the entire game. The game begins with a description. The key and central motive of the game theory and the most important thing in the description of the game is to 'gain', in a game matrix called payoff, which each player gains at the end of the game. The payoffs of the game are generally taken to represent the utility of individual players and depending not only on what one player is doing, but also about the strategy of other players. In economics, this is the realization of some cash gain or loss (in war or in elections, victory or defeat, but by type of game). The most common form of mathematical presentation of the game is payoff matrix for defined strategy, in which one player's strategies are shown in the matrix

rows, and the other one is displayed in the columns. The move is 'pulled' by one or more players choosing between a numbers of options (alternatives), here called the strategies. In the case of two players, the activities of the first player are rows, and the activity of the second player are column. The entry in the matrix is the two numbers that represent the benefit or the payoff to the first and second players respectively.

After the choice of moves, as a result, a certain situation arises; this situation determines who should make the next choice (move) and what options are 'open'.

Everyone uses some sort of strategy to approach life as for example: the algorithm, or logical set of steps, that determines how they make their choices. Some strategies are effective for winning, others for maintaining an equilibrium, and some create losses. The player's strategy is a set of rules that determine the choice of variants that the player will choose at a particular time. In other words, this is an action plan for playing games. For example, for a company that needs to determine the price of its products, the possible strategy is 'maintaining a high price as long as my competitors are acting like this, but when some of the competitors lower the price, its price drops even lower.'

The main goal of the game theory is to determine the optimal strategy of each player. An optimum is the strategy that provides the player with the maximum expected winnings. For example, game theory helps determine which strategies can best take. If it is possible to choose a winning strategy, in the situation when a competitor chooses his best strategy, at least a minimum gain can be expected.

In order for the game to be mathematically analyzed, it is necessary to have clearly formulated rules of the game that determine the behavior of the player. If we assume that we have two players, A and B, who have conflicting interests, the rules of the game determine:

- possible actions or variants of each player's performance,
- the manner of informing each player about the actions and conduct of the other party, and
- the result or outcome of the game to which each brings a set of actions or effects.

There is a so-called ending rule - a rule that determines the conditions under which the game is completed.

Each game ends with a certain situation; each of these situations defines the payoffs of each player who: (a) makes a selection, and (b) receives the payoff.

WHAT THE GAME THEORY DEALS WITH AND DOES NOT DEAL WITH

Game theory is one of the most interesting interdisciplinary methods determining possible outcomes, gains or losses, determining possible strategies and doing so similar, which is universal, is equally valid for all scientific disciplines with minor modifications, for all countries, for all markets. The rules are always the same, and it makes it fascinating - it is applicable always and everywhere. Yet there are a few exceptions to the foregoing. Although many philosophers, comedians and similar readily agreed that everything in life is a game, in the terminology of game theory, the following situations are not games:

- one-sided decision - in case the decisions affect only the one who brings them, there is no interaction, so it's not about the game. Typical examples are decisions about going to the cinema, choosing a restaurant, and the like.
- too much influence - decisions affecting too many entities (people, companies, etc.).

Typical examples are price regulation by large (often monopolistic) companies, buying shares of multinational companies, and the like. In the case of such problems, it is simply impossible to take account of all the players, the links and the consequences of certain actions.

TYPES OF GAMES

Games, naturally, can consist of two players and more than two players (n-players). They can be zero (or fixed)-sum (the sum of benefits is fixed and whatever gains made by one of the players are lost by the others). Zero-sum means that any money Player 1 wins (or loses) is exactly the same amount of money that Player 2 loses (or wins). That is, no money is created or lost by playing the game. For to be a zero-sum game it is valid next practical rule: if we add up the wins and losses in a game, treating losses as negatives, and we find that the sum is zero for each set of strategies chosen, then the game is a `zero-sum game`. If there is even one strategy set for which the sum differs from zero, then the game is nonzero-sum. In less formal terms, a nonzero-sum game is a game in which the amount of benefits to all players can increase or decrease. Games can be cooperative, where some of the players or all of them form coalitions – or noncooperative. Then, games can be simultaneous and sequential. Simultaneous game is where both players move simultaneously, or if they do not move simultaneously, the later players are unaware of the earlier players' actions. Sequential games are games where later players have some knowledge about earlier actions. Depending on whether the payments are known in advance or not we distinguish between games in normal form, when

there is a well-known payoff matrix, and games in extensive form, when the result of all the moves is calculated only at the end of the game. In the normal form players choose strategies simultaneously. Actions are adopted after strategies are chosen and those actions correspond to the chosen strategies. With the extensive form actions are chosen only as needed, so sequential choices are possible. As a result, players may learn information between the selections of actions, in particular, a player may learn which actions were previously chosen or the outcome of a random event. There are also some other games classification.

NASH EQUILIBRIUM AND THE PRISONER'S DILEMMA

One of the key and most recognizable concepts of game theory in general is Nash equilibrium and the Prisoner's dilemma - we can call them `brand names of game theory`. Nash theory is one of the most acclaimed models within the game theory and is used in non-cooperative games.

Nash equilibrium

One of the most important and probably the most popular concepts of game theory is Nash equilibrium. Two players are in the `Nash equilibrium` if each has the best possible decision, taking into account the opponent's decision. Precisely, more players are in the Nash equilibrium if each of them has made the best possible decision, taking into account the decisions of all other players. Nash equilibrium may not be the best solution for an individual, but it is certainly an optimal solution for all those involved in the conflict. This concept has been used to analyze antagonistic (noncooperative) situations likes of Prisoner's dilemma and the outcomes of the strategic interaction of several decision makers.

Prisoner's dilemma

The Prisoner's dilemma has become a standard metaphor for conflict between mutual aid options and selfish appearance of interactive players. It optimizes how the prisoner will behave and whether he will plead guilty, faced with various police or investigative judges, but also dependent on the behavior of his accomplice. There are various cases of game theory such as Prisoner's dilemma. All they are a game of noncooperative and nonzero-sum type, showing why two completely `rational` individuals might not cooperate, even if it appears that it is in their best interests to do so.

Our story on the Prisoners' dilemma game is next: Two criminals, the A.A. and B.B., being arrested during a burglary attempt. During the investigation finds that both of them are the likely perpetrators of a series of burglaries the past few months. Solid

evidence, however, does not. The investigating judge therefore placed A.A. and B.B. in separate rooms, and both of them say the following: 'If you confess with previously committed a burglary and your partner refuses to do, you'll get a prison sentence of one year and the partners, since he refused to admit it, waiting for a prison sentence of eight years. Recognized if both will be sentenced to four years in prison.'

Prisoners, of course, know that if any one does not recognize previously committed burglaries may be due to lack of evidence, convicted for burglary last. In this case, both expected penalty of two years imprisonment. A rather complex situation since A.A. and B.B. they can not communicate, and probably do not have much reason to trust each other. Each has to choose whether or not to confess and implicate the other. If neither man confesses, then both will serve one year on a charge of carrying a concealed weapon. If each confesses and implicates the other, both will go to prison for 10 years. However, if one burglar confesses and implicates the other, and the other burglar does not confess, the one who has collaborated with the police will go free, while the other burglar will go to prison for 20 years on the maximum charge.

This situation may be modelled as a strategic game with:

Players: Two prisoners (suspects).

Actions: Each player's set of actions is {Confess, Don't confess}.

Payoff matrix: We can represent the suspects' preference orderings with a payoff function and represent the game compactly with the payoff matrix:

		Prisoner B.B.	
		Confess	Don't
Prisoner A.A.	Confess	(10, 10)	(0, 20)
	Don't	(20, 0)	(1, 1)

Table 2. Payoff matrix

The table is read like this: Each prisoner chooses one of the two strategies. In effect, prisoner B.B. chooses a column and prisoner A.A. chooses a row. The two numbers in each cell tell the outcomes for the two prisoners when the corresponding pair of strategies is chosen. The number to the left of the comma tells the payoff to the person who chooses the rows (A.A.) while the number to the right of the column tells the payoff to the person who chooses the columns (B.B.). Thus (reading down the first column) if they both confess, each gets 10 years, but if B.B. confesses

and A.A. does not, A.A. gets 20 and B.B. goes free.

In a prisoner's dilemma game, in case of 2 players with 2 strategies each game, there exist unique optimal solution of the game in so called „dominant strategy`. A dominant strategy of one player is one that will have the absolute best effects, no matter what other opponents do, and he will choose that. What has happened here is that the two prisoners have fallen into something called a `dominant strategy equilibrium.` That is while in a game where each player has a dominant strategy, and each player plays the dominant strategy, then that combination of (dominant) strategies and the corresponding payoffs are said to constitute the dominant strategy equilibrium for that game. In example of prisoners' dilemma game showed in Table 2 a dominant strategy is to confess, and when both prisoners confess, that is a dominant strategy equilibrium, for which the payoffs are (10,10). When in some game there are no dominant strategies, we often use Nash equilibrium conception, in which we are allways when each player chooses the best strategy, given the strategy chosen by the other participant.

In the prisoner's dilemma game the values in the payoff matrix presents the years of imprisonment. These are cardinal values, because they have been imprisoned for two years exactly twice over one years. In many other payoff matrix, the values given are ordinal. This means that payoff is not twice the payoff, but only that is higher. So, the payoffs we find in most payoff matrices do not show any monetary value that players get if they cooperate or do not cooperate (though they might be expressed in that way), but only the fact that some action is worth more than the other.

SOLVING THE GAME – SADDLE POINT

The value of a game is the value of its saddle point. The value of a game is the payoff that can be won with both players playing well. If it is positive then it is the value Player 1 should, on average, win, if it's negative then it's the value Player 2 should win and if it's 0 then the game is fair. Saddle point is equivalent to the existence of optimal strategies for the players in the two-person zero-sum game. Strictly speaking, a normal form of a game shows the strategies available to each player along the top and left side of the bi-matrix and the payoffs in each cell. This matrix is modified slightly to show varying levels of the strategies in each cell. Saddle point in a pay off matrix is one which is the largest value in its column and the smallest value in its row. This is also termed as equilibrium point. In a game having a saddle point, the optimal strategy for both players is to pay the column or row having the saddle point. It means that in a game having a saddle point optimal strategy for a player A.A. is always to play the row containing saddle point and for a player B.B. to play the column

that contains saddle point. If in a game there is no saddle point the players will resort to what is termed as mixed strategies.

The first step in solving the game matrix is to check if there is a saddle point. If any, the game is resolved. If it does not exist, it is necessary to continue with the analysis. Checking the existence of a saddle point is usually performed so that the row below the last row of the table prints the maximum value from each column, and to the right of the last column is printed the column with the minimum values of each row. Then, the maximum is determined by the minimum values (maxmin) in rows and the minimum between

the maximum values (minmax) in the columns. In symbols, Maxi [Min] = Mini [Max]. The strategies followed by both the players are called 'optimal strategy'.

Use gives you a look at the following example: The game matrix of two players, A.A. and B.B, is shown in table 3. Player A.A. has available three strategies: A1, A2, and A3 while player B.B. has available four strategies: B1, B2, B3, and B4.

Strategies of player A.A.	Strategies of player B.B.				Minimum of the row	
	B1	B2	B3	B4		
A1	100	50	20	10	10	$\alpha = \max(\min)$ $\alpha = \max\{10,50,20\}$ $\alpha = 50$
A2	60	80	50	60	50	
A3	20	40	50	80	20	
Maximum of the column	100	80	50	80	$\alpha = \beta = 50$ $W=50$	
	$\beta = \min(\max)$ $\beta = \min\{100,80,50,80\}=50$					

Table 3. Game Matrix with additional row with Max of column values and additional column with Min of row values

Saddle point of the game shown in Table 2. is T (A2, B3). Therefore, the optimal strategy for player A.A. is A2, and for player B.B. is B3. The optimal value of the game is $W = 50$. The value of game is the maximum guaranteed gain to the maximising player if both the players use their best strategy. Translated this on our case, means that the value of a particular game is the effect of the choice of action A2 by player A.A. and action B3 by player B.B.;

There may be more than one saddle point or may not be the saddle point in the game. In case where are more than one saddle point there exist as many optimal points or solutions of the game. But, such situation is rare in the real life. When there is no saddle point, we have to use algebraic methods for working out the solutions concerning the game problem. In this case, the value of the game can be determined with the help of probabilities p_i, q_j , where p_i and q_j represent the frequency of the use of particular strategies by player A.A. or player B.B. in the optimal case.

SOLVING THE MIXED STRATEGY PROBLEMS

Computing Nash equilibrium is not an easy business in general. The two reasons why it is so hard are: Nash equilibrium may not exist in pure strategies, and they're only guaranteed to exist in mixed strategies. In a game player can choose a particular strategy or can choose to randomly select from among a set of strategies. A mixed strategy is a method of playing a game where the rows or columns are played at random so that each is used a given fraction of the time, or the probability of using that strategy. In these games both players use different strategies with certain probabilities to optimise. Mixed strategy problems are cases where in game matrix row minima is not equal to column maxima.

An optimal mixed strategy for the row player is a mixed strategy for which the lowest expected payoff (over all possible column player mixed strategies) is as large as possible. An optimal mixed strategy for the column player is a mixed strategy for which the highest expected payoff (over all possible row player mixed strategies) is as small as possible.

The process of finding optimal mixed strategies for both players is called solving the game. There exist different methods to solve the different types

of mixed strategy problems. Any of the following methods can be applied: ODDS method (only for 2x2 matrix game without saddle point), Dominance method, Sub Games method (for (mx2) or (2xn) matrices), Equal Gains method, Linear Programming method - Graphic solution, Algebraic method, Linear Programming - Simplex method and Iterative method.

GAME THEORY PRACTICE IN ECONOMICS AND BUSINESS

Game theory allows economists to view economic processes as a complex and dynamic game, which is largely unpredictable to numerous market players, and not as a `machine` whose behavior is relatively straightforward to justify, repeat, and as such predictable. The best known application is certainly in the field of oligopoly, but the model of game theory can be successfully applied in areas such as finance, accounting, human resource management, operational management, and so on, respectively, employment and promotion of employees, auction, the prevention of market entry and incorrect takeover, investment and price wars. In this chapter we surveys the applications of game theory to analysis of optimal decision making in conflict situation focuses on concepts that are particularly relevant to sales, retailing and marketing and, perhaps, already found their applications in the literature and in practice.

The benefits of using game theory in sales, retailing and marketing practice

Despite the necessary generalizations and assumptions that limit the use of game theory in practice, its use brings us other benefits in addition to the raw result, as through a detailed analysis of all variables and their relationships in the situation, we usually obtain a clearer idea of the problem and possible solutions. In addition, through the process of game theory we can understand how intuitive decisions based on feeling and experience are actually optimal and how wrong decisions the organization can cost (Lipson 1962). Some authors believe that the greatest challenge of formal decision-making systems in marketing is to `promote the interconnection of research based on a psychological and economic basis` (Johnson 2006). By learning through the concepts and models of game theory, such as the prisoner's dilemma, decision makers increase their awareness of possible dilemmas in different situations, in this way they will approach the problems more rationally (Gibson 2003).

Application of game theory to a specific marketing problem can offer us at least a deeper insight into the possible strategies that we can use and the strategies that the likely situation in the given situation is likely

to be used by the opposite side. In any case, game theory offers a `different approach to marketing problems and fresh methods of analyzing these problems` (Herbig 1991).

Restrictions on the use of game theory in marketing discipline

The application of the theory of games to marketing discipline is possible and useful, but it has certain limitations. The theory of games is similar to the other economic theories regarding the advantages and disadvantages of usage, and is similar to the neoclassical theory, which is very general (Horowitz et al., 1996). With it, we can solve only certain types of problems, which are usually relatively narrow-oriented. The key problem of using the theory of games in marketing is that the theory of games usually analyzes the behavior of rational players whose choices can be predicted (Chowdrey 2014). Everything is therefore predictable and computable, which of course often does not apply to marketing problems. Gandolfo. Dominici (2011), exploring the use of game theory in advertising, pricing, product decisions and distribution, where he provided several examples of how it can work, said: the main issue with using game theory in marketing is that the consumer doesn't make product choices by considering tangible costs and benefits, but by thinking and choosing according to the emotional and symbolic value of the goods. This defies logic and, therefore, defies game theory. But, such restrictions are partially disappearing, since in game theory are increasingly used models with limited rationality and incomplete information, such as Rubinstein (1998), Colman (2013) and Jehiel and Koessler (2008).

Monopolistic competition

A typical example of prisoner's dilemma in the economy is the struggle of large firms in the monopoly competition market. Monopolistic competition implies a controlled entry of new entrepreneurs into the market and a smaller number of companies struggling among themselves to market dominance by defraying the price of products or services in favor of consumers. Unwanted investing and scrambling games are happening on these markets every day. We take for example a market match between telephone companies in the US market¹. Since Deutsche Telekom² entered the US market, it has threatened the dominant position of Verizon³ and AT

1 Source: Pavlović, Dušan, Teorija igara - Osnovne igre i primena, Fakultet političkih nauka Univerziteta u Beogradu, 2015.

2 Deutsche Telekom AG is a German telecommunications company headquartered in Bonn and by revenue the largest telecommunications provider in Europe.

3 Verizon is a global leader delivering innovative communications and technology solutions that improve the way

& T⁴ operators. For simplicity, we will only consider the game between AT & T and Deutsche Telekom. To attract new customers in the United States, Deutsche Telekom invested huge amounts of money in his affairs in America, especially in advertising, in order to sell mobile packages at discounted prices. This enabled him to attract 1.3 million new users in the first three months of 2014. To take a step, AT & T had to follow this activity. His investment in discounted packages brought him new 1.2 million users in the same time period⁵.

The game between AT & T and Deutsche Telekom (hereafter DT) can be played in the following way. Each operator has the ability to drop or not to drop the price. For both of them, it's better not to drop the price, because they can hope for monopoly profit (3, 3). Let's imagine, for example, that AT & T, expecting DT to react, keeps the price higher. What would the DT do? It would use it immediately and down the price of mobile packages in order to capture all consumers from the market. So we would end up with the outcome (1, 5). And vice versa: If DT kept the price higher, AT & T would use it to scratch its mobile packages (5, 1).

		DT		Minimum of the row
		Drop prices	Don't drop	
AT & T	Drop prices	(2, 2)	(5, 1)	{1}
	Don't drop	(1, 5)	(3, 3)	{1}
Maximum of the column		{5}	{5}	$\alpha \neq \beta$

Table 4. Game Matrix - Case of monopolistic competition

From the data for extra row and extra column shown in Table 4 we conclude that there does not exist any saddle point of the game ($\alpha \neq \beta$), and that is game of prisoner's dilemma type where exist dominated strategy which is at the same time optimal solution of that game. The prisoner's dilemma equilibrium is indeed specific. It is not only non-cooperative, but is at the same time a dominant strategic equilibrium.

of customers live, work and play.

4 AT&T Inc. is a world leader in communications, media and entertainment, and technology.

5 The New York Times about this report in the text of 08.05.2014. (<http://nyti.ms/1hKeuug>);

A dominant strategic equilibrium exists when both players have a dominant strategy. Prisoner's dilemma is such a game that both players always have a dominant strategy. In our case dominant strategy is that both player have selected strategy „dropping the price`. Dropping the price is hence a dominant strategy for both players. It means that particular strategy dominates every other strategy in the game and rational players will choose that. So we come to the equilibrium payoff of this game (2, 2).

Oligopoly market competition

Oligopoly is one of the forms in which the market appears small number of providers - oligopolists, who dominated the entire market. It is a market structure with only a few sellers (occupying majority of the market share) offer a similar or identical product. Market of soft drinks is a good example in which major players in USA are Pepsi Cola and Coca Cola. Since few companies compete with each other, each decision any one of them a significant impact on the operations and profitability of competitors. This is an important characteristic of oligopolistic competition, also known as interdependence among competing firms. Every company is required to carefully anticipate the possible reactions of competitors when it comes to the cost or investment strategy. Many people likes studying oligopolies a lot because they don't have any formulas to remember and no mathematical tools, just pure strategic⁶ thinking and applying simple concepts of Game Theory. The game that oligopolists play in trying to achieve monopoly profit is similar to the game that prisoners play in `prisoner's dilemma`.

Problem of determining the price of a firm

The development department has proved that Procter & Gamble (P & G)⁷ should expect competitors to charge a price of \$ 1.40 and that P & G should also do the same. But from further analysis it is learned that P & G would be profitable if he and his competitors were charged a price of \$ 1.50. They analyzed this dilemma by the theory of games.

6 If a player always chooses the same strategy, then uses a pure strategy. Oposit of it, mixed strategies are those in which players randomly choose between two or more pure strategies, depending on the range of probability.

7 Multinational manufacturer of product ranges including family, personal and household care products.

		Unilever and KAO	
		Price of \$1.40	Price of \$1.50
P & G	Price of \$1.40	(12, 12)	(29, 11)
	Price of \$1.50	(3, 21)	(20, 20)

Table 5: Payoff matrix of the competition price problem

We've proven that P & G should expect competitors to charge a \$ 1.40 price and should do the same. But P & G would be on the winnings if he and his competitors paid a \$ 1.50 price. Why do not they then charge \$ 1.50? Because these companies are in prisoner dilemma. No matter what Unilever⁸ and Kao do, P & G earns more if it charges \$ 1.40.

Auctions

A special view of the competitive situation is participation in the bid for job, concession, rights and licenses. A major conflict in the situation of offering is as follows: how much the bids increase the chance of gaining a job (lower bidding prices) so much at the same time reduces the amount of the expected profit and vice versa. The problem is, therefore, to achieve the best balance between the opportunity to bid on one hand and the achievement of a satisfactory level of profit on the other.

Game Theory and Advertising

In this example we consider two firms in the market of soft drinks, and how they play strategic game in which firms play with one another trying to maximize profits (Narula 2017). In doing so, we keep in mind very simple and effective definition of the Game Theory, as the study of how people behave in strategic situations. One has to consider how others might respond to the action he takes and how will the actions of others, affect the outcome. Consider this matrix in which we have some numbers/points for each firm taking a particular decision.

		Coca Cola	
		Advertise	Don't advertise
Pepsi Cola	Advertise	(5, 5)	(13, -2)
	Don't advertise	(-2, 13)	(8, 8)

Table 6: Payoff matrix

The numbers in payoff matrix means that the payoff for Coca Cola to advertise when Pepsi Cola doesn't advertise is 13, it might be million dollars or anything, but it is just a payoff, the gain which Coca Cola gets by advertising and Pepsi Cola not advertising.

If Pepsi does not advertise, Coca Cola is better off advertising (13 > 8) and if Pepsi Cola advertises, Coca Cola is again better off advertising (5 > 2). This means that no matter what Pepsi Cola is doing, Coca Cola is better off advertising, so it will advertise.

The same is the thing with Pepsi Cola also. If Coca Cola does not advertise, Pepsi Cola is better off advertising (13 > 8) and if Coca Cola advertises, Pepsi Cola is again better off advertising (5 > 2). This means that no matter what Coca Cola is doing, Pepsi Cola is better off advertising, so it will advertise.

So, if both will advertise, the equilibrium outcome of this game is (5, 5).

Now, we can see that the profit maximizing condition is when they both don't advertise (8, 8) and each would gain 8 million dollars in revenue that year. So, they would meet and form a verbal contract that they both won't advertise and will gain 50-50 market share and will dominate the market.

But, the key feature of the oligopoly market structure is tension between cooperation and self-interest. Both Pepsi Cola and Coca Cola have an incentive to cheat as both would think that if they advertise, they would gain 13 million dollars and would be better off. That's clearly not the case.

If they both advertise, then they will land on the outcome (5, 5), in which they would be worse off than the previous case.

This particular game, as each Prisoner's Dilemma game says, that two rational people won't cooperate even if it's good for their self-interest. They won't cooperate because they have a strong incentive to cheat, so they land on the outcome which is worse off for both of them. Here lies also an answer to the question of why do companies in oligopoly cannot maximize their individual profits. Because they won't cooperate and hence they cannot maximize their profits. Each firm is tempted to raise production and capture larger share of the market. As each of

⁸ British-Dutch transnational consumer goods company. The world's largest consumer goods company measured by 2012 revenue.

them tries to do so, total production increases, but price decreases, hence individual profits decrease. In this case, most of the loss in revenue would be from money spent in advertising.

CONCLUSION

The theory of games is potentially and really everywhere around us, in all spheres and everyday life, alike both business and private. The environment in which we work is changeable and dynamic, and we meet individuals or groups whose activities and decision-making activities are relevant and sometimes crucial to our decisions. Only, we do not see these situations as formal as the game theory, the mathematical discipline that developed in the mid-20th century.

Theory of games is used in all those situations in which there are partially or completely conflicting strategic interests between the participants in the game or in all those situations where the final outcome depends not only on the actions and decisions of one participant but also on the actions taken by all the other participants in game. Game theory allows economists to view economic processes as a complex and dynamic game, which is largely unpredictable to numerous market players, and not as a `machine` whose behavior is relatively straightforward to justify, repeat, and as such predictable.

Reflecting on the state of economic science, we can conclude that many problems and processes within economic science are better explained by the use of analytical apparatus of game theory than by some other classical methods.

The paper summarizes the basic concepts and techniques of game theory: game, participants / players, moves, strategies, rationality, usefulness and given is the general and most common classification

of games. Then, in a practical example, certain aspects of game theory as an analytical tool are demonstrated in the process of strategic decision-making. Some examples of the game describe and explain how to solve problems as a model of game theory written in matrix form. At the end of the work, the importance and possibility of applying game theory in the analysis of complex problems, above all economic. The great potential of game theory's applicability lies in strategic management, where the various economic problems and problems of company development and organization (strategic investment, production plan, and marketing combination), transport problems, price policy, competitive market structure and situations and bilateral negotiations can be modeled.

Game theory is a powerful framework that enables managers to analyze systematically the relationships between actors in a market and to develop appropriate competitive strategies. However it is helpful if the executives expect a tool that helps them make informed decisions based on a range of market actions by each player, not a single answer that solves the whole riddle.

Reflecting on the state of science, we can conclude that numerous problems and processes within the sciences are better explained by the use of analytical apparatus of game theory than by some other classical methods. Because of this, the theory of games can be classified as potent analytical tools without which any scientific area and scientific decision-making would be considerably poorer. However knowing the theory of games does not, by itself, make a decision maker, a `player` (a business man, a military strategist, or a business strategist or manager), which is far superior to other players, but he certainly helps to make it better.

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PREDICTORS OF FRANCHISEE PERFORMANCE: THE ROLE OF COMMUNICATION, CONFLICT AND SATISFACTION

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Abstract

This study examines the relationships between communication, conflict, a franchisee's economic and social satisfaction, and a franchisee's performance in the franchise systems. Surveying 141 franchisees in Texas, the author found that communication has a significant negative effect on conflict and has a significant positive relationship with economic and social satisfaction as expected by previous research. However, conflict has a significant positive effect on a franchisee's social satisfaction, a reversed effect from what has been reported in previous research. This implies that some level of conflict can be positive and harmless. There are nine hypotheses, five of which are supported.

Key Words: Franchise, Economic and Social Satisfaction, Communication, Conflict

Category: Research paper

INTRODUCTION

In the franchisor-franchisee relationship, communication is particularly challenging and crucial since franchisees operate independently and are located across the nation. When the franchisor ignores the importance of communication with the franchisee, the franchisee's overall satisfaction may generally decrease (Chiou, Hsieh, & Yang, 2004; Mohr & Spekman, 1994). From the structural perspective, franchising is unique because the relationship between the franchisor and the franchisee is under a contractual agreement. The fact that the franchisee plays the role of both the customer and the employee of the franchisor makes the communication more complex and challenging. When the franchisor views the franchisee as a customer, the franchisor is motivated to enhance the competitive advantage in order to remain attractive to the franchisee (Chiou et al., 2004). In other words, the franchisor has to appeal to the franchisee so that the latter finds reasons to commit to a long-term relationship. In this case, the former treats the latter as a customer in the selection process. Although the franchisee is always treated as an internal customer throughout the life of the contract, the franchisor has to treat him or her as an employee as well. A franchisee is obligated to follow the

contractual procedures to make guaranteed profits and, in return, expects to receive training and support, especially during the crucial start-up period. Organizations have considered communication to be a vital factor in developing and enhancing trust and commitment within the workplace (Chiou et al., 2004; Kane, 2001) and developing smooth distribution channels (Mohr & Nevin, 1990). Communication continually develops and expands the mutual trust and also lessens conflict in the franchisor and franchisee relationship (Anderson & Narus, 1990).

The franchisor's attitude toward its franchisee may change once the franchisee joins the franchise system and moves from being a customer to working as an employee. The transformation of the franchisee's role during interactions with franchisors would potentially influence the franchisee's satisfaction and more importantly, the franchisee's overall performance. Hence, continuous and high-level communication is more than necessary to improve the contractual relationship between two parties.

The purpose of this research is to address a gap in the literature by examining the mediated effect of franchisor-franchisee communication on a franchisee's performance. Prior research on inter-organizational

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issues examines direct relationships between power, conflict, satisfaction, and performance (Gaski, 1984) without focusing on communication as a predictor and also examines the direct relationship between satisfaction and performance. The present research examines the franchisee's perspective related to how effective top-down and bottom-up communication influences a franchisee's perceived conflicts and economic and social satisfaction. This, in turn, will tend to affect the franchisee's performance.

The remainder of this paper is organized into four sections. In the first section, a review of pertinent literature leads to the identification of a conceptual framework and a set of hypotheses. We then present the methods and techniques by which we collected and analyzed the empirical data. Next, we present and discuss the results and draw out the key managerial implications and limitations of the findings.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Previous research has recognized the importance of communication within organizations (Mohr & Nevin, 1990), and practitioners have attempted to provide solutions for these types of problems (Kane, 2001). The match between a franchisor and its franchisees is a key factor because in this marriage-like relationship, franchisees will expect the franchisor to be sensitive to their unique needs, consider their opinions and ideas, and factor some of those into executive decision-making (Baucus, Baucus, & Human, 1996).

If the franchisor is not receptive to its franchisees' opinions, negative word-of-mouth may diminish the franchisor's reputation over time. The more the franchisor allows the franchisee to participate in the decision-making process, the more likely the franchisee is to develop more loyalty to the franchise system (Chiou et al., 2004).

Relationship marketing plays a crucial role in the development and success of a franchise system. A franchisor has to manage relationships with its franchisees through a collaborative process (Chiou et al., 2004). The success of communication relies not only on the communicators' characteristics but also on relational and contractual ties between franchisors and franchisees. The mechanism used by the franchisor to communicate to its franchisees can influence their performance. Kane (2001) suggests that franchisors should routinely conduct face-to-face meetings with their franchisees to solve front-end problems. Such interactions can reduce the communication gap between the parties.

Previous studies address the issue of size as one of the inhibitors of effective communication. When the franchisor expands, it becomes more challenging to control and maintain the quality of communication (Kane, 2001). Dividing communication into formal and informal, Anderson and Narus (1984) warn that quality is more crucial than quantity. Figure 1 presents the conceptual model that depicts the manner in which communication affects franchisee performance.

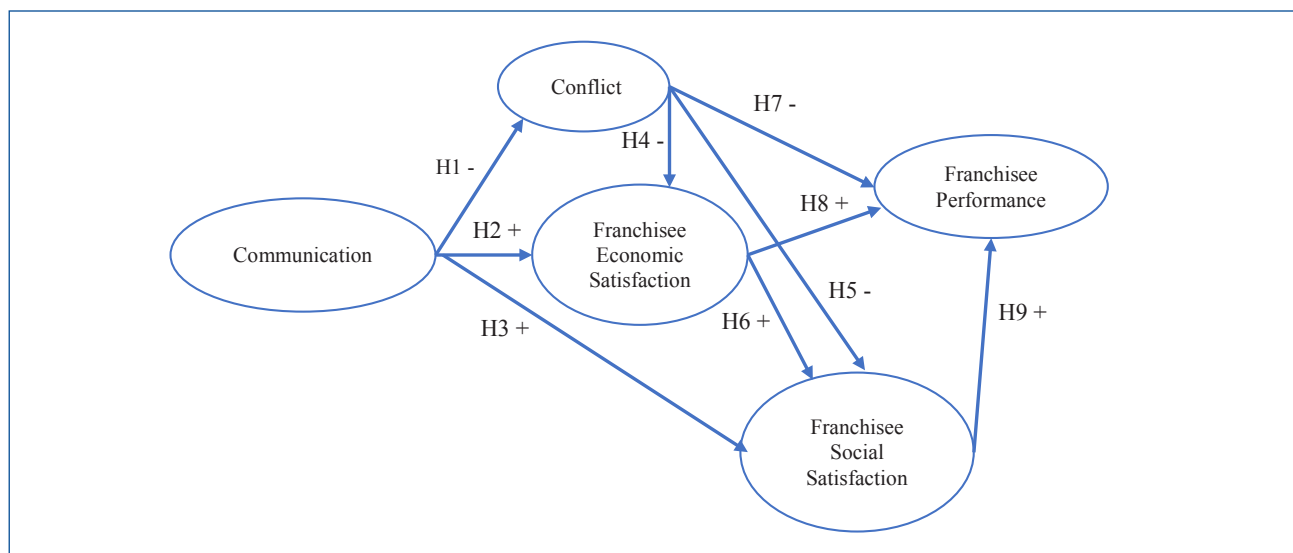


Figure 1. The Conceptual Framework

The Effect of Communication on Conflict

Lim and Frazer (2002) suggest that franchisors reduce conflict with their franchisees when they employ strategies of information exchanges and avoid requests, threats, and legalistic pleas. This style of communication can not only help achieve a common goal but also reduce the number of incidents and magnitude of conflicts. According to Anderson and Narus (1984), the absence of effective communication often leads to conflict. Previous studies have examined the impact of several types of communication on reducing conflicts in franchise systems (Lim & Frazer, 2002; Tikoo, 2005).

The characteristics of effective communication include two-way communication capabilities, high frequency of interaction, reliance on policies and process, and emphasis on mutual goals (Mohr, Fisher, & Nevin, 1999). According to Chiou et al. (2004), effective communication needs to be a two-way franchisor-franchisee dialogue. Two-way communication is comprised of interactions initiated from franchisor to franchisee and vice versa. There are several communication channels in a franchise system. For example, the franchisor may use newsletters, mailings, field visits, videotapes, meetings, and electronic devices to reach its franchisees (Chiou et al., 2004). Corporate networks such as intranets and extranets are particularly common in supporting electronic communication (Dickey, 2003). Through two-way communication, the franchisor and its franchisees can better understand one another's problems, reduce conflicts, and work together toward a win-win situation. Therefore, we hypothesize:

- H1: Two-way communication is negatively associated with conflict.

The Effect of Communication on Economic and Social Satisfaction

Geyskens and Steenkamp (2000) stress the importance of distinguishing between economic and social satisfaction, and warn that a channel member's activities may, in some cases, increase (decrease) the economic satisfaction but decrease (increase) the social satisfaction perceived by others. Economic satisfaction is the perceived economic viability of the relationship indicated by the income generated by partners, turnover, margins, and discounts (Geyskens & Steenkamp, 2000). Social satisfaction is an effective method of evaluation related to the non-economic socio-psychological aspect of the relationship (Rodríguez, Pére, & Gutiérrez, 2005). Channel members can augment social satisfaction by valuing personal and commercial friendships with their partners and demonstrating an attitude of respect, sharing of concerns, and the willingness to exchange ideas (Geyskens, Steenkamp, & Kumar, 1999).

The Anderson and Narus (1984) study of the distributor's view in distributor-manufacturer relationships underscores the effect of communication on satisfaction. Further support for the positive effect of communication on franchisee overall satisfaction comes from the Chiou et al. (2004) study of the Taiwanese convenience-store industry. The literature suggests that communication leads to positive economic outcomes (Rodríguez et al., 2005) and positive social satisfaction (Anderson & Narus, 1984; Selnes, 1998). In order to specifically examine the relationship between communication and these two dimensions of satisfaction, we hypothesize:

- H2: Two-way communication is positively associated with franchisee's economic satisfaction.
- H3: Two-way communication is positively associated with franchisee's social satisfaction

The Effect of Conflict on Economic and Social Satisfaction

Conflicts can occur when participants in a relationship do not have effective communication channels to rely upon when making sense of each other's actions. Since the mutual objective of both the franchisor and the franchisee is to achieve profitability, conflict can be perceived as one element which may contribute to reduced profitability. The literature on channel relationships has documented the negative effect of conflict on economic outcomes (Lusch, 1976; Rodríguez et al., 2005) and social satisfaction (Anderson & Narus, 1990; Skinner, Gassenheimer, & Kelley, 1992; Rodríguez et al., 2005). The more the manifested conflicts in a distribution channel, the less the social satisfaction experienced by partners (Anderson & Narus, 1984). Therefore, we hypothesize:

- H4: Conflict is negatively associated with franchisee's economic satisfaction.
- H5: Conflict is negatively associated with franchisee's social satisfaction.

The Relationship between Economic and Social Satisfaction

Economic satisfaction is influenced by the performance of the franchise system, but social satisfaction is an evaluation of the way one party has been treated by others (Geyskens & Steenkamp, 2000). When economic satisfaction is high, channel members are more willing to attend to and resolve differences, and this further increases their social satisfaction. Social satisfaction can help increase a franchise system's survival and growth even when economic satisfaction is low (Geyskens & Steenkamp, 2000). The economic outcome is associated with survival and growth (Lewis & Lambert, 1991). Since the mutual goal of both franchisor and franchisee is to maximize

profits, the franchisee's economic satisfaction is often achieved prior to social satisfaction. Rodríguez et al. (2005) suggest that economic satisfaction may lead to social satisfaction. Based on the conflicted results in the literature, the two dimensions of satisfaction are important and their relationship should be examined. This research hypothesizes:

- H6: Economic satisfaction is positively associated with social satisfaction.

The Effects of Conflict and Satisfaction on Performance

Lusch (1976) evaluates the relationship between conflict and performance as measured by two ratios (return on assets and asset turnover) among 25,000 U.S. automotive dealers. The results point to a negative relationship between conflict and operating performance in a study of Ford and Chrysler-Plymouth dealers. Lusch's finding is consistent with the results of Schul (1980), who has shown that a low (high) level of conflict has a positive (negative) impact on performance in different franchise organizations. Since the level of conflict is usually captured through subjective measures, it can be argued that a conflict places a negative effect on performance (Rosenberg & Stern, 1971). Therefore, we hypothesize:

- H7: Conflict is negatively associated with a franchisee's performance.

A franchisee performs as the franchisor's employee in the contractual relationship. If the franchisee is satisfied with his job, the level of satisfaction will generally be reflected in the output. For example, Walker's 1971 work (as cited in Morrison, 1997) shows that satisfied franchisees have a tendency to earn a higher annual income and have greater total sales while those who are relatively dissatisfied achieve a lower annual income and lower total sales. In addition, Morrison (1997) found a positive and strong correlation between a franchisee's job satisfaction and performance. Once the franchisee is economically satisfied with his working relationship, then social satisfaction will likely follow and, in turn, contribute to the franchisee's overall performance. We hypothesize:

- H8: A franchisee's economic satisfaction is positively associated with his/her performance.
- H9: A franchisee's social satisfaction is positively associated with his/her performance.

METHOD

Measures of the Constructs

This study used established scales for all constructs except performance for which a new scale was developed (scale items are reported in Table 1).

Communication:

*Franchisees are encouraged to provide input into standards and policies.
 *Your franchisor's interface with your franchisee organization is excellent.
 Your franchisor explains why changes are occurring in the franchise system and their effects on local outlets.
 Your franchisor keeps you informed of expansion projects and new stores in your market.
 You are encouraged to directly share ideas with other franchisees.
 Formal mechanisms (e.g. newsletters or annual meetings) allow franchisees to share ideas. Good ideas from a franchisee often don't get passed along to franchise management. RC

Conflict:

The relationship with the franchisor has gone through some unstable and conflicting stages.
 A great quantity of conflicts exists between you and your franchisor.
 The franchisor and franchisee often differ substantially in relation to important questions, creating tensions in the relationship.
 When situations of potential and manifest conflict arise, the franchisor doesn't do anything to find solutions to the problems.
 The conflicts that arise are solved satisfactorily with goodwill on both sides. RC

Economic Satisfaction:

Marketing policies of your franchisor allow you to do your work efficiently.
 The initial information that your franchisor has given you is enough to run the business. You are satisfied with the advertising support and the promotional efforts that the franchisor carries out.
 The expectations of the benefits have been fulfilled.
 The sales that have been obtained correspond to what was expected.
 *The expectations about the number of customers have been fulfilled.

Social Satisfaction:	Performance:
You would recommend this brand to other potential franchisees. You would be willing to renovate your franchise contract when it is concluded. You feel happy belonging to this franchise. If you had the opportunity, you would change to another franchise brand. RC	This franchise unit is a profitable business. This franchise unit outperforms other competing brands in its market. This franchise unit has shown healthy economic performance. The financial standing of this franchise unit is satisfactory. This franchise unit has been successful. * Item was eliminated during exploratory factor analysis.

Table 1. Scale Items.

Sales, income, return on assets, market share, etc. are measures of a franchisee’s performance. However, due to their private and competitive status, franchisees are usually reluctant to disclose such information (Gassenheimer, Baucus, & Baucus, 1996). This research used perceptual measurements instead of financial data. The scales for communication, conflict, and economic and social satisfaction were adapted from previous research (Gassenheimer et al., 1996; Frazier & Rody, 1991; Anderson & Weitz, 1992; Skinner et al., 1992; Baucus et al., 1996; Geyskens & Steenkamp, 2000) and were all measured using a five-point scale from 1 (strongly disagree) to 5 (strongly agree). Finally, six demographic questions captured respondents’ profiles including the age of the franchisor’s and franchisee’s businesses, numbers of franchisee units and numbers of employees per unit, and the industry distribution and franchisee unit’s annual net profit (see Table 2 for sample profile).

Age of Franchise Unit	# of units	Age of Franchise System	# of Employees Per Unit
< 6 months (10.6%)	1 (4.3%)	0-1 year (7%)	< 3 (23.4%)
6 months to 1 year (16.3%)	2 (20.6%)	2-5 years (15.6%)	3-5 (41.8%)
1-2 years (29.8%)	3 (39%)	6-10 years (49.7%)	6-10 (22.7%)
3-5 years (29.1%)	4 (24.8%)	> 10 years (27.7%)	11-15 (7.8%)
> 5 years (14.2%)	> 5 (11.3%)		> 15 (4.3%)
Distribution of Industries		Franchisee’s Annual Net Profit	
Quick service restaurants (20.6%)	Business services (5.6%)	< \$50,000 (9.4%)	
Retail products and services (14.9%)	Real estate (4.3%)	\$50,001-\$60,000 (28.5%)	
Personal services (13.5%)	Automotive (3.6%)	\$60,001-\$70,000 (45.5%)	
Commercial and residential services (12%)	Lodging (2.8%)	\$70,001-\$80,000 (12.2%)	
Retail food (10.6%)	Other (4.3%)	> \$80,001 (4.4%)	
Table/Full service restaurants (7.8%)			

Table 2. Sample Profile.

Sample and Sampling Procedures

Recruitment was carried out in collaboration with a franchising consulting firm in Texas that routinely offers educational seminars and specialized services to prospective and ongoing franchisee businesses. Due to the difficulty of obtaining a random sample, a purposive sampling method was used to obtain an acceptable number of usable responses (target = 150). A total of 184 questionnaires were printed and distributed to individuals in attendance at eight seminars and these were collected at the end of the meeting. A total of 141 questionnaires were deemed usable (response rate = 77%). Excluded from analysis were 11 completely blank questionnaires, 23 partially completed, and nine completed by prospective (as opposed to ongoing) franchisees.

ANALYSES AND RESULTS

The data were analyzed through EFA and CFA, and the hypotheses were tested through SEM using AMOS 19. We first used the principal component method in an exploratory factor analysis to observe the underlying structure of the scales. Since each of the five scales is unidimensional and prior research suggests they are

distinct constructs, we ran two EFAs: one setting the number of factors at five, and the other freeing this specification. The number of factors and pattern of loadings was highly similar in both EFAs. While keeping an eye on scale reliabilities, we dropped two communication items and one economic satisfaction item due to strong cross-loading in the face of weak main loading and considering the criteria of communality: undesirable when lower than 0.5 (Hair, Black, Babin, Anderson, & Tatham, 2006). Next, we ran a CFA to confirm the observed underlying structure of the scales (Table 3). Then, we paired up the constructs to reexamine the feasibility of a model fit to carry on to the next stage. Subsequently, we examined convergent validity by calculating the average variance extracted (AVE) against composite reliability (Table 4). Discriminant validity was verified by ensuring that the AVE of each factor was higher than all of the squared inter-factor correlations associated with the other four factors (Hair et al., 2006). For the structural model, we used path analysis. After initial model fitting and an inspection of modification indices, we freed the error covariance parameter between three pairs of error terms (i.e., within communication, conflict, and performance) to reach a significantly better fit.

Measurement Model Results and Confirmatory Factor Analysis

Item		Construct	Standardized Loading	Unstandardized Loading	SE	t-value	p	Cronbach's Alpha
Communication								0.959
Com1	<---	COMM	0.83	0.83	0.05	16.06	***	
Com2	<---	COMM	0.87	0.84	0.05	18.30	***	
Com3	<---	COMM	0.82	0.81	0.05	15.52	***	
Com4	<---	COMM	0.96	1.00				
Com5	<---	COMM	0.99	0.97	0.03	36.25	***	
Conflict								0.959
Conf1	<---	CONFL	0.88	0.91	0.05	17.60	***	
Conf2	<---	CONFL	0.95	1.01	0.04	23.40	***	
Conf3	<---	CONFL	0.82	0.85	0.06	14.66	***	
Conf4	<---	CONFL	0.91	0.89	0.04	20.21	***	
Conf5	<---	CONFL	0.94	1.00				
Economic Satisfaction								0.969
Eco1	<---	ES	0.93	1.10	0.05	20.95	***	
Eco2	<---	ES	0.94	1.09	0.05	22.24	***	
Eco3	<---	ES	0.94	1.00				
Eco4	<---	ES	0.92	1.04	0.05	20.64	***	
Eco5	<---	ES	0.92	1.07	0.05	20.30	***	
Social Satisfaction								0.959
Soc1	<---	SS	0.85	0.94	0.05	17.76	***	
Soc2	<---	SS	0.98	1.00				
Soc3	<---	SS	0.96	1.01	0.03	32.06	***	
Soc4	<---	SS	0.90	0.94	0.04	22.11	***	
Performance								0.948
Per1	<---	PERF	0.91	1.05	0.06	16.75	***	
Per2	<---	PERF	0.90	1.00				
Per3	<---	PERF	0.90	1.02	0.06	16.19	***	
Per4	<---	PERF	0.82	0.91	0.05	16.87	***	
Per5	<---	PERF	0.89	0.94	0.06	15.79	***	

*** Item is significant at the 0.001 level (two-tailed).

Table 3. CFA Results.

Constructs	Mean	SD	1	2	3	4	5
1. Communication	3.436	1.163	0.805	-0.413**	0.729**	0.664**	0.453**
2. Conflict	3.226	1.239	-0.596	0.813	-0.336**	-0.299**	-0.375**
3. Economic Satisfaction	3.543	1.151	0.977	-0.479	0.865	0.729**	0.498**
4. Social Satisfaction	3.508	1.321	1.020	-0.490	1.108	0.855	0.458**
5. Performance	2.403	1.092	0.575	-0.507	0.626	0.661	0.778

** Correlation is significant at the 0.01 level (2-tailed). N = 141. Correlations are above the diagonal, average variance extract are on the diagonal and covariance are below the diagonal.

Table 4. Means, Standard Deviations, AVE, Correlation, and Covariance Matrix.

Measurement models

Before proceeding to a structural model, we tested the measurement model on each construct to assess goodness-of-fit. Once the model fit was verified, we combined the entire five constructs to run the overall measurement model. The CFA model fit was acceptable based on Bollen's (1989) recommended fit indices ($\chi^2 = 463.86$, d.f. = 238, $p = 0.00$, the minimum discrepancy divided by its degrees of freedom [CMIN/DF] = 1.94, incremental fit index [IFI] = 0.95, Tucker-Lewis index [TLI] = 0.94, comparative fit index [CFI] = 0.95, and the root mean square error of approximation [RMSEA] = 0.08). The standardized loading estimate of each item (Table 3) was above the threshold value of 0.7 recommended by Hair et al. (2006). The AVE value of each construct ranged from 0.77 to 0.86, which satisfies the threshold value of 0.5 (Hair et al., 2006). Composite reliability measured the shared variance among the set of observed variables aggregated as an indicator for a construct. Our results of composite reliability of each construct ranged from 0.94 to 0.96, well above the recommended cutoff (0.7). Based on these assessments, the constructs demonstrated convergent validity.

We examined discriminant validity as recommended by Hair et al. (2006). The estimate of AVE for every factor should be higher than the squared inter-factor correlations related to that factor. Table 4 shows the AVE and correlations of each construct; we can conclude that the constructs meet the criteria of discriminant validity

Structural model

The structural model exhibited the causal path among the exogenous variables (communication, conflict, economic satisfaction, and social satisfaction) and the endogenous variable (performance). Table 5 shows the hypothesis testing results at $\alpha = 0.05$. The model fit of the structural model was acceptable ($\chi^2 = 464.199$, d.f. = 239, $p = 0.00$, CMIN/DF = 1.94, IFI = 0.95, TLI = 0.94, CFI = 0.95, RMSEA = 0.08). The path coefficient corresponded to the majority

of the proposed hypotheses based on the literature. Communication and conflict were found to be significantly negatively related ($\beta = -.4$, $p < 0.01$). In contrast, communication was positively related to economic satisfaction ($\beta = .64$, $p < 0.01$) and social satisfaction ($\beta = .26$, $p < 0.01$) in support of H1, H2, and H3. Based on the literature, we hypothesized that conflict would have a negative impact on a franchisee's economic satisfaction. However, we found that H4 was not supported ($\beta = -.08$, $p > 0.05$). Interestingly, conflict was positively associated with social satisfaction ($\beta = .6$, $p < 0.01$), going against our H5. Economic satisfaction was assumed to have a positive impact on social satisfaction. However, we found that the causal impact was not significant ($\beta = .04$, $p > 0.01$); hence, H6 was not supported. Conflict was negatively related to franchisee performance ($\beta = -.24$, $p < 0.01$) in support of H7, whereas economic satisfaction had a positive impact on performance ($\beta = .29$, $p < 0.05$) in support of H8. Finally, the positive relationship of social satisfaction on franchisee performance was not significant in our study ($\beta = .103$, $p > 0.01$); H9 was not supported. Overall, five out of nine proposed hypotheses were supported in the structural model.

Causal Path	Hypothesis	Proposed Sign	Path Coefficient	t-value	Result ($p < 0.05$)
Communication → Conflict	H1	-	-0.40	-4.96	supported
Communication → Economic Satisfaction	H2	+	0.64	8.53	supported
Communication → Social Satisfaction	H3	+	0.26	3.23	supported
Conflict → Economic Satisfaction	H4	-	-0.08	-1.08	not supported
Conflict → Social Satisfaction	H5	-	0.60	7.52	not supported
Economic Satisfaction → Social Satisfaction	H6	+	0.04	0.57	not supported
Conflict → Performance	H7	-	-0.24	-3.02	supported
Economic Satisfaction → Performance	H8	+	0.29	2.42	supported
Social Satisfaction → Performance	H9	+	0.19	1.63	not supported

IMPLICATIONS AND LIMITATIONS

This study gathered responses from Texas franchisees attending informational or consulting sessions/seminars. Responding franchisees had an established relationship with the event holder in the area. The survey results showed high reliability and concentrated answers with little variance. The data revealed homogenous samples: franchisees attending these repeat events regularly were likely to have similar thoughts toward their franchisor. In future studies, data could be gathered from various regions to have more heterogeneous data. This study aimed to examine a franchisee's perspective regarding the relationship between communication, conflict, a franchisee's economic and social satisfaction, and a franchisee's performance in the franchise system. Based on the hypothesis-testing results, the conflicts between franchisor and franchisee had no impact on a franchisee's economic satisfaction. Since the ultimate goal of both parties was to maximize profits in a guaranteed successful business model, the franchisee is less likely to sacrifice their earnings and perform poorly just because of conflicts with

the franchisor. Since the franchisee is economically independent from the franchisors, franchisees have the economic power to escape the negative influence of the internal disagreement. In addition, a franchisee's economic satisfaction failed to have a positive impact on social satisfaction. That is, social satisfaction is independent from the franchisee's economic satisfaction. Finally, the most interesting finding in this research was that conflict had a positive impact on a franchisee's social satisfaction. This indicated that even when the conflict soared between the two parties, the franchisee remained loyal and committed to the franchise system. A plausible reason for this result was that a franchisee joined the franchise system under a long-term contract; when the conflict was high, that implied frequent contact between the two parties. Even though the occurrence of conflict may seem to be negative, the franchisee may consider the goodwill from the franchisor who is willing to spend time and communicate with them to have their opinions heard. When the franchisee is given channels to express their issues, their social satisfaction will be more likely to increase.

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BRAND LOVE- SOME ANTECEDENTS AND CONSEQUENCES: AN EMPIRICAL STUDY OF THE RETAIL INDUSTRY

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Abstract

Customers look for brands with long lasting experiences, which makes it important for practitioners to build brands that can help capture customer value. Customers have started developing strong relationships with the brands they love. This creates an opportunity for marketers to explore the construct of brand love, particularly from developing countries perspective. The present study attempts to examine the effect of customer delight and brand reputation on brand love, and the influence of brand love on word of mouth from a retail chain store perspective in Pakistan.

Data was collected through use of self-administrated questionnaire. Two hundred valid questionnaires were collected from retail customers using convenience sampling technique. Descriptive statistics along with reliability analysis are carried out. Pearson correlation and regression analysis are applied as a statistical tool to test the hypothesis.

The results confirmed all three hypothesis developed to be tested in the study, showing that it was revealed that customer delight and brand reputation have a positive influence on brand love and brand love has a positively effect on word of mouth.

Primarily the study focused on brand love, its antecedents and consequences in Pakistan's retail context. The study adds value to the existing literature as much research is not available on brand love and its retail perspective in Pakistan.

Brand managers should try to understand the role of customer delight and brand reputation and its effect on brand love. Based on policy implication, marketers can design strategies to strengthen and increase brand love among their retail customers.

Keywords: *customer delight, brand reputation, brand love, word of mouth, retail.*

INTRODUCTION

To compete in this fast and competitive business world just satisfying customers is not enough, organizations have to go a step beyond and create long lasting profitable customer relationships. A satisfied customer may continue buying from the organizations or switch to competitor's brand. To ensure that customer builds a strong brand relationship and continue buying the same brand, marketers need to create an emotional bond for their brands, i.e. brand love (Robert 2005, Karjaluo et al., 2016) Academicians and practitioners are interested to study the customers' attitudes, their interest, liking and disliking towards certain product types and brands. It helps them to understand how customers think, feel and select the brands (Solomon, 2013).

Robert (2005) explained and provided detailed information on brand love. According to the author, brand love can be defined as the emotional attachment a satisfied customer has with a specific brand. It may also be explained as the passion for a brand, positive emotions, positive attachment or positive evaluation of a brand (Ahuvia, 2005). The notion of love is not restricted towards human beings only as Branden (1980) highlighted that love can be developed for anything we care about and feel excited including products and brands. Brand love is still in infancy stage in the marketing literature; there is dearth of literature available and needs to be investigated further due to its relevance and potential for a better understanding of consumer behavior (Unal & Aydin, 2013; Ahuvia et al., 2013; Yasin & Shamim, 2013; Keh & Peng 2009).

Batra et al. (2012) suggested that there are different type of interpersonal love, such as parental love, romantic love and sexual love. Similarly, there might be different types of brand love and research needs to be conducted to explore different type of brand love. Pang et al., (2009) conducted a study to investigate the effect of advertising strategy on consumer-brand relationship and suggested that there is some connection between advertising strategy and brand love. It is suggested that rational advertising is more effective for utilitarian products and emotional advertising for hedonic products. In a later study on brand love and its influence on word of mouth, Karjaluo et al. (2016) found that the antecedents taken for explaining brand love were self-expressive, brand trust and hedonic product. The study indicated a positive relationship among these variables.

In order to form an emotional bond with the brand, customer delightful experience with the brand becomes important (Almeida and Nique, 2005) and in an empirical study it is found that customer delight fosters brand love (Carroll and Ahuvia, 2006). Hence, research in customer delight has gained popularity

due to the benefits that organizations are enjoying. In the service firms, employee effort is one of the strongest factors that results in customer delight (Branes, Ponder & Dugar, 2011). The current study focuses on customer delight in the retail context, as there is lack of literature in this area. A study conducted by Chamola and Tiwari (2014) attempted to examine a new dimension of retail delight and revealed that mood states induced by retail setting at point of purchase influence customer delight. Brand love is an outcome of many antecedents, one that is examined in this study is brand reputation. Creed and Miles (1996) recognized that brand reputation or standing creates positive outcomes in the market; for instance, if a customer contemplates that other customers also thinks optimistically and trusts a brand, than it has a positive influence on their buying decision. The same is corroborated by Afzal et al., (2010) showing a positive influence of brand love on customers' brand trust.

RATIONALE OF THE STUDY

Karjaluo et al. (2016) studied the influence of self-expressive, brand trust and hedonic product on brand love. However, the study proposed that future research should be carried out by adding more factors in order to improve the explanatory power of brand love. It also suggested that it would be interesting to research how a typical user of a brand affects the formation of brand love. This research is an attempt to expand the work of Karjaluo et al. (2016) and augment by adding more factors of brand love.

SIGNIFICANCE OF THE STUDY

There is a tendency today towards brand love as it is still in its infancy stage (Unal & Aydin, 2013) and because of a dearth of literature on brand love, its antecedents and consequences, and retail brand (Jara and Cliquet, 2012). This study provides a theoretical contribution on how customer delight and brand reputation affect brand love and how brand love affects word of mouth in retail context. Literature shows that there is lack of research on customer delight (Arnold et al., 2005). Recent empirical research in the service sector has shown the benefits of providing customer delight thus opening doors for potential research in service industry (Branes, et al. 2011).

PROBLEM STATEMENT

Every market comprises of many organizations competing with each other resulting in countless number of products and services. This means that the customers have a lot of choices when it comes to selection of brands. According to Pang et al. (2009), investing in consumer brand relationship

has become “Holy Grail” for organizations that desire to build long-term profitable relationship with their customers. Organizations should market their products through traditional and unconventional means to create brand familiarity. There exists a need to investigate what is the result of creating brand reputation and how it benefits the companies and the customers. Keh et al. (2009) investigated the effect of rational and emotional advertising on brand love and concluded that rational advertising is more effective for utilitarian products while emotional advertising is more effective for hedonic products and services. Karjaluoto et al. (2016) suggested that study should be carried out by including additional factors to enhance the explanatory power of brand love. Hence this study will attempt to take the work of Karjaluoto et al. (2016) one step ahead and try to examine the antecedents and consequences of brand love. Unal and Aydin (2013) also suggested some factors to be investigated in order to find their influence on brand love such as brand equity, trust, satisfaction, brand personality, brand reputation, perceived value and perceived quality.

RESEARCH QUESTIONS

- What is the influence of customer delight on brand love? Does intensity of customer delight affect the level of brand love?
- Does brand reputation influence consumer’s love for brand? Does there exist a positive relationship between brand reputation and brand love?
- Does brand love affect word of mouth? To what extent brand love has influence on word of mouth?

LITERATURE REVIEW

Brand love is different from brand loyalty and it can be considered while formulating marketing strategy (Abhigyan, 2011). According to Carroll and Ahuvia (2006) brand love is a predictor of brand loyalty but all brand loyal customers do not love their brands. It may be correct to say that brand loyalty is one of the outcomes of brand love. The concept of brand love has emerged from interpersonal love according to previous literature (Shrimp & Madden, 1988; Carroll & Ahuvia, 2006; Keh et al., 2007). The present study has adopted two dimensions to measure brand love, one is brand intimacy and the second is brand passion (Alnawas & Altarifi, 2015). According to Stenberg (1986), romantic brand love does not consist of brand commitment but it consists of intimacy and passion, as they are highly interactive.

According to Berry (2000) and Morhart et al., (2009), for a service object the factors that contribute to brand love include primarily interactions with service employees. The findings of Long-Tolbert, (2012) are also in line with the previous studies that suggest

that social support from employees have significant impact on brand love in service industry.

The outcome of brand love in the retail environment is increased commitment, higher customer satisfaction, and high profitability for retailers. To achieve extreme loyalty in retail setting, a key antecedent to focus is brand love as it results in an emotional bond between the customer and retailer and leads to customer’s preference for that specific retailer over others (Ortiz & Harrison, 2011).

CUSTOMER DELIGHT AND BRAND LOVE

There is an emerging interest of marketers on customer delight (Torres, Fu and Lehto, 2014). According to Kumar (1996) customer delight is defined as an emotional level achieved by high level of joy in connection with any consumption. According to Chandler (1989) an unanticipated level of satisfaction that a customer experiences leads to customer delight. Some scholars such as Crofts and Magnini (2011) and Ma et al. (2013) argue that customer delight is still new in marketing literature and must be further investigated to find out its association with other concepts such as loyalty and satisfaction.

According to Carroll and Ahuvia (2006) brand love has strong affective focus, hence customer delight has positive influence on brand love. According to Almedia and Nique (2005), customer delight has many dimensions such as positive surprise and personalization etc. Ahrholdt et al. (2016) focused on service industry and suggests that service quality must be taken into consideration in order to improve customer satisfaction and delight in travel and tourism industries. Improving the satisfaction and delight of experienced employees is more challenging as they are more discerning in evaluating the services that they consume. Based on the available literature, the following hypothesis is proposed:

- Hypothesis 1: Customer delight has a positive influence on brand love

BRAND REPUTATION AND BRAND LOVE

Due to health, food taste and food safety, brand trust is considered as an important factor in restaurant industry, hence customer based on trust chooses reputable restaurants (Han, Nguyen, & Lee, 2015). In order to reduce risk related to restaurant industry, customers take into account the restaurants reputation and overall brand equity (Lacey et al., 2009). Another study by Herrera and Blanco (2011) supports the same finding that in restaurant industry perceived risk can be reduced by increased brand trust when choosing a service. In service industry, service quality is associated with brand reputation

meaning that service quality is used as an indication of reputation (Wirtz et al., 2000). Ambiguous quality has a negative effect of brand reputation in service industry (Selnes, 1993).

Reputation is the cumulative view of outsiders on the company's' or brands' prominent features (Bang, Odio & Reio, 2014; Shin, 2016). To achieve success and profits, brands require positive reputation and hence it is believed by academicians and practitioners that brand reputation is becoming extremely important (Sengupta, Balaji & Krishnan, 2015). Brand reputation is developed mainly through information flow from one customer to another (Morgan-Thomas & Veloutsou, 2013). Brand reputation is earned over time and depends on how customers assess the brand. Retailers focusing on increasing brand reputation focus on keeping their customers more than satisfied. Positive brand reputation ends up in attracting greater number of customers (Han, Nguyen & Lee, 2015; Chang, 2013), however if the brand continually fails to live up to its stated intentions it eventually develops a negative reputation (Han, Nguyen & Lee, 2015).

To compete and to be more powerful, retailers strive for brand reputation knowing that it will ultimately result in higher sales (Loureiro & Kaufmann, 2016). Brand reputation gains competitive advantage to the retail store and gains customer loyalty (Chang, 2013; Garg, R., Mukherjee, Biswas & Kataria, 2015). Hojmoose, Roehrich and Grosvold (2014) also found that there exist positive association between brand reputation and strength of customer relationship. Hence, the findings revealed that retail brand awareness and retail brand image can explain the value created by retail brands, whereby perceived quality, price image, personalities of the brand, brand service and store service plays an important role. It might be proposed that:

- Hypothesis2: Brand reputation positively affects brand love

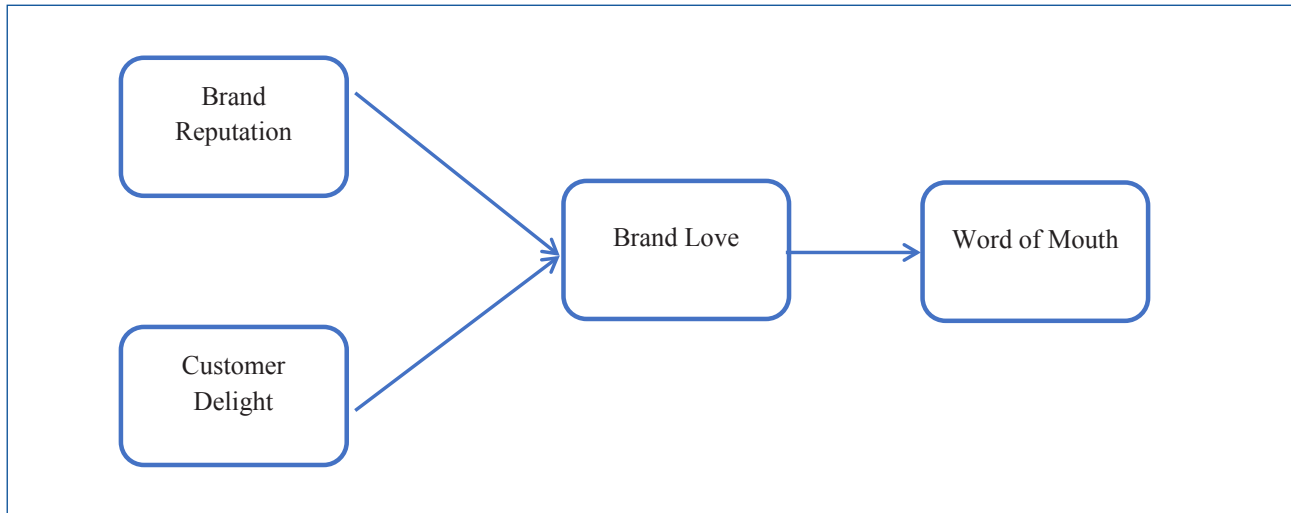
BRAND LOVE AND WORD-OF-MOUTH

Practitioners and academicians are paying much attention to customer-brand relationship as it can be linked to organizational profitability. Therefore, it becomes important to study all the factors that influence brand love and all those factors that can be affected by brand love. Researchers have attempted to find out the relationship between brand love and its antecedents and consequences. There are several desirable outcomes of brand love, among which one key outcome is word of mouth. According to Henning-Thurau et al. (2004), word of mouth can be expressed as any positive or negative statement about a product given by an actual or potential customer. Word of mouth is of great importance for the marketers as it can affect the brand reputation, image and purchasing of brands.

Literature empirically shows that brand love has a positive influence on word of mouth (Carroll & Ahuvia, 2006; Ismail & Spinelli, 2012; Karjaluoto et al., 2016) showing that when a customer is in love with a brand, he will spread positive words about it. Additionally, Nito (2016) examined the relationship between brand love and word-of-mouth and the moderating effect of experience and price on it. The study tested if consumer price and consumer experience strengthens the positive relationship between brand love and word of mouth. The study revealed that brand love has a strong influence on offline and electronic word of mouth. It also showed that price and experience has a moderating effect on the relationship between brand love and word of mouth. However the study suggested gathering larger samples from different market segments in order to investigate the cultural variations and individual differences. Ranaweera and Menon (2008) also supported the same by investigating that greater satisfaction leads to increased word-of-mouth. Walsh et al. (2009) suggested that word of mouth is also positively influenced by good reputation. Keeping in view the available literature on brand love and word of mouth, it can be hypothesized that:

- Hypothesis3: Brand love has positive influence on word of mouth

CONCEPTUAL FRAMEWORK



***Source: Prepared from Literature Review

Figure 1: Antecedents and Consequences of Brand Love

METHODOLOGY

The study followed positivist paradigm, deductive approach and quantitative techniques as adopted by few other studies in the similar domain (Nito, 2016). The purpose of study was to examine the influence of customer delight and brand reputation on brand love and the influence of brand love on word of mouth in the retail stores of Pakistan. Hence keeping the purpose of study in view, population was carefully selected. Target population for this study was customers of retail stores in Pakistan.

For research in business, sample size of 30 to 500 is considered enough (Crimp & Wright, 1995). Considering comprehensiveness of results as well

as time and budget constraints, the sample size determined for this study was 200. In order to ensure representation of multiple retail of Pakistan, responses were collected from different retail stores (e.g Metro, Cosmo) consumers. Convenience sampling technique was used for identification of sample.

For the purpose of data collection, a 28 items questionnaire was prepared using scales for measuring selected variables adapted from reliable and validated sources (refer to table-1). Three questions were related to demographic information like age, gender and qualification. Twenty-five items were adapted from established scales to measure independent and dependent variables.

Variable	No. of Items	Items Source	Recently Validated
Brand Love	16	Sternberg (1997)	Alnawas and Altarifi (2015)
Brand Reputation	3	Veloutsou and Moutinho (2009)	Han, Nguyen and Lee (2015)
Customer Delight	3	Finn (2005)	Ali et al. (2016)
Word of mouth	3	Zeithaml, Berry and Parasuraman (1996)	Eisingerich, Auh and Merlo (2014)

Table 1- Variables, no. of items, sources, and recent validation

DATA COLLECTION METHOD

Data for the present study was collected using a structured questionnaire distributed through convenience sampling technique to retail consumers of Pakistan. Consumers of different retail stores from Pakistan were considered for data collection. Survey approach was selected for gathering responses

since it is better than many other methods in terms of saving time and cost. The nature of this study also made it feasible to opt for survey strategy. Self-administered questionnaires were distributed to retail consumers until the desired 200 useable responses were collected. Participation in the survey was voluntary and no monetary or non-monetary benefits were offered. Participants were able to fill

the questionnaire only once and no changes were allowed to be made in their response after returning the questionnaire. Data was then analyzed using SPSS (version 21) software.

MEASUREMENT

Table-1 shows number of items for measuring each variable and sources of these items and which recent studies have validated these scales. The variables were accounted for by using 5-Point Likert scale indicating: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree.

The data was statistically treated using SPSS, for inter-item consistency, Cronbach Alpha was calculated for all variables. Descriptive statistics including mean and standard deviation was calculated for the data

obtained. Sample profiling was done using frequency distribution and to test the relationship among the identified variables Pearson correlation and regression was used.

DATA ANALYSIS AND FINDINGS

The present study intended to investigate the impact of brand reputation and customer delight on brand love. For this purpose, several tests were executed and implemented. The results of these tests were assembled and summarized in tables.

Demographic and Descriptive Analysis

In order to determine the trustworthiness of the instrument used, reliability analysis was conducted.

S.No	Variable	Items	N	Cronbach's Alpha
1	Brand Love	16	200	0.912
2	Brand Reputation	3	200	0.769
3	Customer Delight	3	200	0.887
4	Word of Mouth	3	200	0.787

Table-2 Reliability Analysis of Variable Instrument Measures

Table-2 shows the values of Cronbach's Alpha for all variables used in this study. Nunnally (1978) explained that when the value of Cronbach's Alpha is more than 0.7, the reliability of data can be accepted. Table-2 indicates that Cronbach's Alpha values for all independent and dependent variables are more than 0.7 indicating reliability of the data collected for the present study. The values are 0.912, 0.769, 0.887 and 0.787 for brand love, brand reputation, customer delight and word of mouth respectively.

Demographic	Characteristics	Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	86	43%	43%	43%
	Female	114	57%	53%	100.0%
	Total	200	100.0%	100%	
Age	16-20	13	6.3%	6.3%	6.3%
	21-25	85	42.5%	42.5%	48.8%
	26-30	39	19.8%	19.8%	68.6%
	31-35	31	15%	15%	83.6%
	36-40	23	11.6%	11.6%	95.2%
	41+	9	4.8%	4.8%	100%
	Total	200	100%	100%	
Educational Level	Intermediate	33	16.4%	16.4%	16.4%
	Graduate	74	37.2%	37.2%	53.6%
	Masters	52	25.6%	25.6%	79.2%
	MS/M.Phil.	37	18.8%	18.8%	98.1%
	Ph.D	4	1.9%	1.9%	100.0%
	Total	200	100.0%	100.0%	

Table 3 -Frequency Distribution with respect to "Sample Profile"

The frequency of gender, age and educational level was determined through a sample of 200 respondents, which means total number of observations (N) for this study was 200, as shown in table-3. Talking about gender, most number of observations came from female respondents. 114 female respondents comprised 57% of the sample while 86 male respondents comprised 43% of the sample. When it comes to age bracket, table-2 depicts that maximum number of respondents belonged to age group of 21-25 years, with a frequency of 85 and percentage of 42.5. Least number of observations came from age group of 41 and above years, with a frequency of 9 and percentage of 4.8. Other age groups, 16-20 years, 26-30 years, 31-35 years and 36-40 years constituted 6.3%, 19.8%, 15% and 11.6% of the total sample respectively. The statistics of table-2 with respect to educational level indicate that maximum number of observations came from graduate level students. 74 graduate students comprised 37.2% of the sample. Least number of observations came from Ph.D. scholars where 4 respondents constituted 1.9% of the sample. Respondents from other educational levels, namely, Intermediate, Masters and MS/MPhil comprised 16.4%, 25.6% and 18.8% of the total sample respectively.

Variable		Brand Reputation	Customer Delight	Brand Love
Brand Reputation	Person Corr.	1		
	Sig. (2-tailed)			
	N	200		
Customer Delight	Person Corr.	.402**	1	
	Sig. (2-tailed)	.000		
	N	200	207	
Brand Love	Person Corr.	.472**	601**	1
	Sig. (2-tailed)	.000	.000	
	N	200	200	200

**Correlation is significant at the 0.01 level (2-tailed).

Table 4-Correlation Matrix (Brand Reputation, Customer Delight and Brand Love)

Table-4 illustrates that there is a positive correlation between the independent variables, Brand Reputation and Customer Delight with the dependent variable Brand Love at 1% level of significance.

The value of Pearson correlation for brand reputation and brand love is .472 and its p value (.000) is significant. This identifies a moderately positive relationship between the two variables. For customer delight, the Pearson correlation value is .601 and its p value (.000) is also significant. There is a relatively stronger positive relationship between customer delight and brand love. Table-4 demonstrates that the stronger correlation is between customer delight and brand love.

Variable		Brand Love	Word of Mouth
Brand Love	Person Corr.	1	
	Sig. (2-tailed)		
	N	200	
Word of Mouth	Person Corr.	.583**	1
	Sig. (2-tailed)	.000	
	N	200	207

**Correlation is significant at the 0.01 level (2-tailed).

Table 5 - Correlation Matrix (Brand Love and Word of Mouth)

Table-5 illustrates that there is a positive correlation between Brand Love and Word of Mouth at 1% level of significance. The value of Pearson correlation for brand love and word of mouth is .583 and its p value (.000) is significant. This identifies a moderately positive relationship between the two variables.

REGRESSION ANALYSIS (BRAND REPUTATION, CUSTOMER DELIGHT AND BRAND LOVE)

Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Brand Reputation	.472 ^a	.223	.221	.85769
Customer Delight	.601 ^a	.361	.359	.76735

Dependent Variable: Brand Love

Table 6- Model Summary

Regression analysis was applied to check the extent to which brand love is influenced by all the independent variables considered in this study. Linear regression tests were executed for every single variable included in this study. The findings of regression analysis are shown in table-6 that indicates that 22.3% variation in brand love is caused by brand reputation and 36.1% variation is caused by customer delight.

Variable	Standardized Coefficient Beta	t value	F value	Sig
Brand Reputation	.472	8.950	80.095	.000
Customer Delight	.601	12.295	151.169	.000

Dependent Variable: Brand Love

Table 7- Coefficients

Table-7 indicates positive and significant association between all independent and dependent variables. The t values for all variables are more than 2, depicting significant influence of the variables. F values for all variables are more than 4 which specifying statistical significance of the overall regression model. Table-7 supports the proposed hypotheses that brand reputation and customer delight have a positive relationship with brand love. The stats shown in table-7 indicate that all of the hypotheses are upheld.

REGRESSION ANALYSIS (BRAND LOVE AND WORD OF MOUTH)

Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Brand Love	.583 ^a	.339	.336	.70126

Dependent Variable: Word of Mouth

Table 8- Model Summary

Regression analysis was applied to check the extent to which word of mouth is influenced by brand love. The findings of regression analysis are shown in table-8 which indicates that 33.9% variation in word of mouth is caused by brand love.

Variable	Standardized Coefficient Beta	t value	F value	Sig
Brand Love	.583	9.125	56.765	.000

Dependent Variable: Word of Mouth

Table 9- Coefficients

Table-9 indicates positive and significant association between brand love and word of mouth. The t value is more than 2, depicting significant influence of the variables. F value is more than 4 which specifying statistical significance of the overall regression model. Table-9 supports the proposed hypothesis that brand love and word of mouth have a positive relationship. The stats shown in table-9 indicate that this hypothesis is upheld.

S.No	Hypothesis	Statement of Hypothesis	Accepted/Rejected
1	H1	There is a relationship between brand reputation and brand love.	Accepted
2	H2	There is a relationship between customer delight and brand love.	Accepted
3	H3	There is a relationship between brand love and word of mouth.	Accepted

Table 10- Results of Hypothesis Testing

The results for hypothesis testing have been summarized in table-10. All of the proposed hypotheses were accepted in the light of data collected and correlation and regression analysis. This signifies the importance of this study as well since the proposed model has a positive influence over online repurchase intention. These variables can be considered as influential factors in studying consumer behavior in traditional purchase environment.

DISCUSSION

The results of present study have confirmed statistical and significant association of all determinants of proposed conceptual framework with brand love. This research work is among rare contributions in traditional consumer behavior from Pakistani context specifically focusing on experienced consumers rather than concentrating on intentions of inexperienced buyers. Lack of prior literature regarding impact of brand reputation and customer delight (with their unique dimensions being considered for this research) on brand love leading to positive word of mouth makes it unviable to relate findings of present study with previous researches. This signifies importance of brand reputation and customer delight as they result in pleasant purchase experience that might act as a stimulus of brand love resulting in word of mouth. This study has identified a significant and positive relationship between brand love and word of mouth thus filling the gap in literature since prior studies have primarily targeted factors affecting brand love only and not focused on resultant effect of brand love (Roy, Khandeparkar, & Motiani, 2016). Brand reputation saves time of visitors and gives them a sense of affiliation with the vendor thus encouraging long term buyer seller relationship and brand love. Customer delight has been found to be strong determinant of brand love. This finding supports few other studies that investigated relationship of customer delight with brand love in other countries (Fraering & Minor, 2013; Unal & Aydin, 2013; Kohli, Melewar, & Yen, 2014; Drennan et al., 2015). Traditional store owners should opt for effective approaches to generate brand love instead of targeting new clients only.

CONCLUSION AND RECOMMENDATIONS

Consumer behavior is sophisticated in nature; therefore it is essential for marketing academicians and practitioners to consider all factors that directly or indirectly result in formation of purchase patterns. The enhanced understanding about presence of emotional component in consumer decision making process has enabled marketing professionals to work under the new paradigm of brand love. The present study provides empirical evidence from perspective of retail chain stores of Pakistan to support significance and practicality of brand love construct. Marketers are always interested in increasing the number of sales in stores and one of the key contributors towards total volume of sales in traditional context is brand love. It has been depicted in the present study that brand love is a meaningful mode that is linked to desirable post consumption behavior when it comes to generating positive word of mouth. Numerous research studies have investigated influential factors that affect brand love but rarely a comprehensive study is found in consumer behavior literature that identifies the effect of an important element of consumer's personality that is customer delight. The present study has attempted to present a comprehensive analysis of the relationship between all facets of customer delight, brand reputation and brand love in offline purchase environment. The present study has identified moderate positive correlation between brand reputation, customer delight and brand love. The impact of all proposed variables is significant which indicates that their individual affect in stimulating brand love among consumers cannot be ignored. Since most of the purchases made by consumers in Pakistan are planned, the consumer market of Pakistan is found to be more inclined towards the brands they have more

emotional attachment with. This makes designing marketing strategies to enhance brand love even more challenging. The concept becomes even more complicated and needs further elaboration when it comes to generation of positive word of mouth by consumers who actually love the brand since a number of factors play important role in shaping up their post-purchase behavior.

PRACTICAL IMPLICATIONS

The current study has aimed at positively inferring some truth in the domain of marketing. Targeting only those consumers that have low level of brand love to stimulate one time purchase might result in loss of a massive potential segment of the market. Consumers with high level of brand love are expected to make repeated purchases, it is therefore suggested that while designing effective marketing strategies to enhance brand love in traditional stores, special focus must be given to product attributes and specifications and describing how much the product would be successful in meeting the requirements of the consumers. Targeting consumers with low and high brand love level through cognitive and affective messages is more likely to result in long term customer loyalty in offline context. Sometimes, cost of retaining customers might be on the

higher side but as the results of the present study suggest, brand love leads to positive word of mouth which brings in more business for the brands and compensates for incurred additional cost. The study also have managerial implications for Marketers. Brand managers should try to understand the role of customer delight and brand reputation and its effect on brand love. Based on policy implication, marketers can design strategies to strengthen brand love among their customers.

LIMITATIONS AND FUTURE RESEARCH

In the present study, the effect of customer delight and brand reputation on brand love; the effect of brand love on word of mouth were investigated. The participants in this study belonged to urban areas of the country, it may be useful to extent the study and include suburban areas and investigate if there exist some level of brand love in retail context there. In future studies additional dimensions of brand love such as 'user type' can be examined. Brand love can be examined on a broader scope by including other business sectors and a comparative study may be conducted to see how customers' brand love varies across industries. Furthermore, qualitative study can be carried out to explore customer insight in connection to the variables understudy and a model may be proposed showing antecedents and consequences for retail context in developing countries.

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FOCUS ON THE INFORMATION TECHNOLOGY SECTOR - A CHANCE OF ECONOMIC DEVELOPMENT OF BOSNIA AND HERZEGOVINA

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JEL Classification: O1, M1

Abstract

Bosnia and Herzegovina is amongst the last countries in terms of the success of the economy and business conditions in Europe. The reasons for this are war destruction, inadequate privatization and incomplete transition and great political disagreements. After the war, development strategies focused on the SME sector, which would dynamise the economy that large companies were not destroyed, and that the SME sector functioned as a cooperater. The SME sector is currently weak due to inadequate economic policy and exposure to the impact of globalization. In addition to economic ones, there are problems in the demographic and social sphere. Unemployment and low wages "force" migration to the younger population. The education system is not harmonized with the labor market. The human resources needed for the development of globally propulsive branches of economy are not produced. This limits the use of modern technologies and slows down economic development. This is a logical question to which sectors need to be focused in the future. The authors see the IT sector as a development opportunity for B&H. It is suitable for smaller, open economies because it does not require large infrastructure investments. By creating a more favorable environment for this sector, B&H could export "knowledge" in the form of different IT products and services. These theses are trying to explain based on the available information on the performance and correlation of the IT sector and the overall economy. In the period 2014.-2016., trends in the development of IT industry and the economy as a whole were compared. The aim of the paper is to show that even in an unfavorable market environment, the IT sector records more profitable growth. It should be a signal that it is considered as a serious strategic option. The perception of IT sector as a "profession of the future" will attract a greater number of young people. This would also eliminate the current demographic problems.

Key words: IT sector, economic development, unemployment, Bosnia and Herzegovina.

INTRODUCTION

Bosnia and Herzegovina, according to most macroeconomic indicators of the success of the economy and business conditions, occupies one of the last places in Europe. The consequences of war destruction, a bad privatization model and a transition that has not yet been completed, with political disagreements at all levels of government, led Bosnia and Herzegovina to be positioned as one of the poorest countries in Europe. Before the last war, its economy was relying on large companies and conglomerates, mainly in the manufacturing sector. After the war, the economic development strategy focuses on the SME sector, which should be the generator of development of Bosnia and Herzegovina's economy. Such an approach would be realistic and economically logical only in the case of

large and powerful companies that would link the SME sector as subcontractors and which should become the main bearers of exports of goods and services. However, large companies have disappeared, and the SME sector has become relatively weak due to inadequate support from the government and economic policy makers, and at the same time exposed to the growing impact of globalization and foreign competition. Sometimes highly successful sectors, especially heavy industries, have been replaced by a sophisticated supply of processing industries from the low value added accumulation area, such as the wood or textile industry.

In addition to economic ones, Bosnia and Herzegovina has problems in other spheres of life, especially in the demographic and social sphere. Chronic unemployment, lack of jobs and low wages,

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and an extremely poor standard of living, affect the migration of a large proportion of the population, especially young people, "forcing them" to leave the country. The system of secondary and higher education is not harmonized and harmonized with the labor market and is not compatible with the needs of the economy for specialized experts and adequate human resources. Although the unemployment rate is high, the system does not produce the personnel needed to develop globally propulsive branches of the economy. This limits the use of modern technologies, which explicitly influences the slow economic growth and development of Bosnia and Herzegovina. Bearing in mind all this, questions are raised as to how can the economy of Bosnia and Herzegovina move more rapidly and faster. And given the permanent crisis in the post-Dayton period and the current state of the economy, the question is also raised on which sectors should put the primary focus in the future? Authors put their focus on the information technology sector (IT sector) as a development opportunity for Bosnia and Herzegovina. The second question that arises, can Bosnia and Herzegovina become the second Ireland if it were to focus more on the IT sector? Observed globally, this sector is suitable for smaller, open economies because it does not require large infrastructure investments, which are required in other sectors of the economy. If a favorable business environment would be created, the state could, instead of goods and services, export "knowledge" in the form of different types of information products and services. Given that this is a profitable and highly globalized sector of the economy, Bosnia and Herzegovina, in addition to improving macroeconomic indicators, increasing the efficiency and effectiveness of business operations, could partly solve some of the demographic problems, such as; "exodus of the brain", emigration of the young population and aging of the workforce.

The authors try to explain the justification of the focus on the IT sector on the basis of the available information on the participation of the IT service sector in the total economy. Combining data on the success of companies from this sector, collected from available databases, with basic macroeconomic indicators from official statistical publications in the period 2014-2016, comparisons of trends in the development of information service activities have been made with trends in the movement of gross domestic product and the economy as a whole. The aim of this paper is to show that even in the relatively unfavorable market environment that is present in Bosnia and Herzegovina, service activities from the IT sector record faster and more profitable growth than the economy as a whole. The three-year period is relatively short, but the databases, from which the data obtained, presented in the paper, do not currently give the possibility of extending research into trends before 2014.

The results of the comparison should be a signal to the national development strategies to take the IT sector as a serious strategic option in the development of the domestic economy. The primary focus on the IT sector will raise global competitiveness of Bosnia and Herzegovina, aggregate higher added value than the existing one, and a higher employment rate in this area. Given the current global perception of information technology activities as "the interest of the future," this will attract a large number of young and educated people. This will indirectly alleviate the current migration and demographic problems. To reach the level of development of the least developed countries of the EU, Bosnia and Herzegovina, according to projections, it needs several decades. If the growth strategy is based on innovation, knowledge society and IT sector, this period can be significantly shortened.

ECONOMIC DEVELOPMENT OF BOSNIA AND HERZEGOVINA IN THE PERIOD OF 2014-2016

Bosnia and Herzegovina's economic development is based on a neoliberal pattern based exclusively on macroeconomic, especially financial stability. Reduced market transformation of Bosnia and Herzegovina (hereinafter B&H) to a very narrow number of elements, which are carried out, first of all, to macroeconomic stabilization, whereby the country enjoys exclusively stability alone, nominal indicators, namely the stability and convertibility of the domestic currency, the fixed exchange rate and the low rate of inflation. As the guarantor of monetary stability, the Central Bank of Bosnia and Herzegovina operates according to the rules of the currency board. Since its existence, the currency board has shown certain advantages: (1) creating conditions for maintaining macroeconomic stability, (2) ensuring the convertibility of the domestic currency with a fixed exchange rate, (3) installing an automatic balance adjustment mechanism, (4) preventing or restricting monetization fiscal deficit and (5) strengthening the credibility of economic policy. However, he also exhibited certain shortcomings:

- 1) Tied the hands of the state with regard to discretionary monetary and fiscal policy
- 2) High unemployment is maintained
- 3) Devaluation cannot be carried out (with devaluation foreign exchange rates, domestic production abroad can be cheaper and more competitive)
- 4) He could not play the role of the ultimate lender (if the commercial banks become illiquid and insolvent, the currency board cannot help them to avoid liquidation)

Monetarist misconception ignores the structural characteristics of the real economy - economic growth, current account and unemployment, and for economic success, it overestimates the role of low inflation. The above case was confirmed on the example of B&H, in which any macroeconomic

stability is fragile if there is no dynamism of the economy, that is, of increasing productivity, and hence the competitiveness of the country. Therefore, it can be concluded that Bosnia and Herzegovina is at the turning point and in the face of the big challenges of self-sustainable economic development with the application of a more efficient (and in any case unsustainable neoliberal model based on the so far

implemented "Washington Consensus" model used in Bosnia and Herzegovina) models of economic development and structural reforms on the path of real convergence to the European Union.

The movement of GDP of Bosnia and Herzegovina and its components in the period 2008-2016 is given in Table 1:

YEAR	Final consumption expenditure	Households	Government	Gross capital formation	Exports of goods and services	Imports of goods and services	GROSS DOMESTIC PRODUCT	YEAR
	1=2+3	2*	3	4	5	6	7=1+4+5-6	
2008	27,541,410	21,902,675	5,638,735	6,908,991	6,851,447	15,136,742	26,165,106	2008
2009	26,899,589	21,085,602	5,813,987	4,905,673	6,201,956	12,086,332	25,920,886	2009
2010	27,324,906	21,461,605	5,863,301	4,143,473	7,532,260	13,005,289	25,995,350	2010
2011	28,117,400	22,058,555	6,058,844	4,915,744	8,403,440	14,637,143	26,799,441	2011
2012	28,606,834	22,505,058	6,101,777	5,039,414	8,481,929	14,635,943	27,492,234	2012
2013	28,970,223	22,860,496	6,109,728	4,864,652	9,035,823	14,496,377	28,374,321	2013
2014	29,313,354	23,057,028	6,256,326	5,229,688	9,299,204	15,477,350	28,364,896	2014
2015	29,665,144	23,381,597	6,283,548	5,332,896	9,884,363	15,216,480	29,665,923	2015
2016	30,042,257	23,776,124	6,266,133	5,867,947	10,587,840	15,635,760	30,862,284	2016

Source: Agency for Statistics of Bosnia and Herzegovina, Economic Statistics, National Accounts [downloaded from http://www.bhas.ba/saopstenja/2017/NAC_04_2008_Y8_0_BS.pdf, accessed 24.02.18]

Table 1: Gross domestic product-GDP, by expenditure approach, current prices (in 000 BAM)

If 2014 is taken as the base year, in 2016, changes in these macroeconomic indicators were recorded: GDP growth of 8.8% and exports with a growth of 13.9%:

Elements of GDP	2014	2016	Index 2016/2014
Final consumption	29.313.354	30.042.257	102,5%
Gross investments	5.229.688	5.867.947	112,2%
Export	9.299.204	10.587.840	113,9%
Import	15.477.350	15.635.760	101,0%
Total GDP	28.364.896	30.862.284	108,8%

Table 1-a: Elements of GDP (in 000 KM/BAM)

Based on data from Eurostat, GDP growth in 28 countries in Europe was 6.1% in the observed period, while export growth was 8.3%. From this, it could be concluded that Bosnia and Herzegovina has somewhat higher growth rates than the countries of the European Union. On the other hand, the current level of development of Bosnia and Herzegovina is far lower than the EU average, and therefore significantly higher growth rates should be brought closer to the level of EU development. Obviously, Bosnia and Herzegovina has to accelerate its development, however, there is no clear vision and strategy to do so. From economic theory, it is known that economic growth and development (or

productivity) are determined by four factors, which comprise human capital, natural resources, physical capital, and technologies. Bosnia and Herzegovina's increase in productivity should focus on two of the four listed factors, namely:

1. Human capital, knowledge and skills that workers gain through education (skill, knowledge and motivation of the workforce); usually it is taken as the most important factor of economic growth and
2. Technology (technical-technological progress, innovation) implies the best / fastest

technological methods for the production of goods and services.

High rates of economic growth can be achieved in fast-growing sectors of the economy. One of them, of course, is the information technology sector, which is mostly based on the strengthening of human capital and the application of technology.

This sector serves as an accelerator for the development of all other sectors of the economy, which is why all EU countries strive to develop as much as possible and invest in this sector. Due to the rapid development of the IT sector, there is a growing demand for IT professionals and engineers. According to recent media reports, estimates are that

by the year 2020, there will be two million software engineers in the world missing, and currently in Bosnia and Herzegovina they are missing about 6,000.

PERFORMANCE INDICATORS OF THE COMPANY IN THE PERIOD OF 2014-2016

Taking into account all the above stated conclusions on the economic development of BiH, which is focused primarily on monetary stability, it is necessary to explore the trends in the real sector of the economy. The main indicators of the success of Bosnia and Herzegovina companies in the period of 2014-2016 are given in Table 2:

Category	Bosnia and Herzegovina - all activities			Index 2016/2014
	2014	2015	2016	
number of companies	24.148	25.510	26.060	107,9%
total number of employees	403.486	498.581	523.069	129,6%
average number of employees	17	20	20	120,1%
total sales revenue (BAM)	53.701.574.000	61.311.480.000	61.876.319.000	115,2%
export revenue (BAM)	8.681.742.000	8.987.314.000	9.416.616.000	108,5%
average sales revenue (BAM)	2.223.852	2.403.429	2.374.379	106,8%
income per employee (BAM)	133.094	122.972	118.295	88,9%
average cost of salary per employee (BAM)	15.761	14.033	13.721	87,1%

Source: Edited by authors on the basis of Business Statistics of the Agency for Statistics of Bosnia and Herzegovina, [downloaded from http://www.bhas.ba/saopstenja/2017/SBS_00_2016_Y1_0_BS.pdf, accessed 24.02.18]

Table 2: Success indicators of B&H companies in the period of 2014-2016.

The table shows that a significant increase in the number of employees in companies (+ 29.6%) and total sales revenue (+ 15.2%) is evident, however, revenues per employee (-11.1%) and costs pay per employee (-12.9%). This implies that the state of Bosnia and Herzegovina continues to have negative trends in the productivity segment, and that wages and wages are reduced, which further negatively affects total consumption.

It has already been stated earlier that according to the authors of this paper, Bosnia and Herzegovina's economic development should be based on the focus on the IT sector. Therefore, it is necessary to see what the results of the companies that operate in this sector are. To view performance indicators of companies from the IT sector, data were taken from the credit rating company LRC d.o.o. (limited liability company). It was established in 2000 and operates on the principles and model of modern business support companies around the world. It is the oldest and largest credit rating company in Bosnia and Herzegovina that has a significant database of all registered domestic businesspersons.

Data on the success of companies in the IT sector in the observed period are given in Table 3. It should be noted that only two key activities from the IT sector are included in the analysis, according to the current classification of activities from 2010:

1. Sector 62 - Computer programming, consulting and related activities and
2. Sector 63 - Information service activities.

Category	Branch 62			Branch 63			Total of both branches		
	2014	2015	2016	2014	2015	2016	2014	2015	2016
number of companies	415	461	508	87	100	110	502	561	618
total number of employees	2.870	3.283	3.806	671	678	993	3.541	3.961	4.799
average number of employees	7	7	7	8	7	9	15	14	16
total sales revenue	331.549.654	314.540.115	346.427.275	33.824.113	43.222.540	63.190.996	365.373.767	357.762.655	409.618.271
export revenue	60.375.561	87.609.174	114.696.374	6.943.101	10.718.161	18.899.584	67.318.662	98.327.335	133.595.958
average sales revenue	798.915	682.300	681.943	388.783	432.225	574.464	727.836	637.723	662.813
total profit	43.469.270	47.693.052	51.661.136	3.674.063	3.935.734	8.060.512	47.143.333	51.628.786	59.721.648
number of companies up to 500,000 BAM of revenue	313	350	382	68	79	88	381	429	470
number of companies up to 5,000,000 BAM of revenue	91	98	111	19	21	21	110	119	132
number of companies over 5,000,000 BAM of revenue	11	13	15	0	0	1	11	13	16
income per employee	115.523	95.809	91.021	50.409	63.750	63.636	103.184	90.321	85.355
average cost of salary per employee	26.691	27.740	27.898	20.951	22.119	20.617	25.603	26.778	26.391
number of profitable companies	318	353	394	59	58	74	377	411	468

Source: Author's processing based on data from LRC d.o.o. Sarajevo.

Table 3: Success indicators for companies in the IT sector in the period of 2014-2016.

By comparing the data from Table 2 and Table 3, higher growth rates in the IT sector are seen in relation to the companies as a whole. This claim can be supported by the following comparisons:

1. The number of companies providing different types of IT services increased by 23.1% in the observed period. In the same period, the total number of companies in Bosnia and Herzegovina increased by only 2.2%.
2. Out of the new 1,912 companies, the newly opened IT companies have 116 or 6.1%. This implies the conclusion that an increasing number of new entrepreneurs are interested in the IT sector and that the number of companies is growing rapidly.
3. Analyzing trends in the number of employees, it can be noted that the number of employees in the IT sector has a relatively small share in the total number of employees. In 2014, this share was 0.9%. After two years, this share remained the same. It should be noted that the number of employees in the IT sector increased by 35.5% compared to base year 2014, while at the level of all companies this growth was 29.6%. And in the sphere of employees, there is evidently a faster increase in the number of employees in the IT sector compared to companies in general.
4. Sales revenue of IT companies in the observed period amounted to 0.7% of total company income and has a tendency for a stable share. New 44.24 million KM of sales revenues were generated, which is a growth of 12.1%. Unlike IT companies, the revenue of all companies grew 8.5%. And here it can be seen that the IT sector has better growth indicators than the average of all companies in Bosnia and Herzegovina.
5. Focusing on foreign markets, an impressive growth in revenues from export of IT companies was achieved. In 2014, it participated with 18.4% of their total revenues, so that two years later this share significantly increased to 32.6%. Practically, the growth of revenues from foreign markets increased from 98.5%.
6. If the export data is compared with all companies as a whole, where the share of export earnings fell practically from 16.2% to 15.2% and where in the 2014-2016 period this growth was only 8.5%, it can be concluded that the IT sector in Bosnia and Herzegovina one of the generators of export growth from Bosnia and Herzegovina.

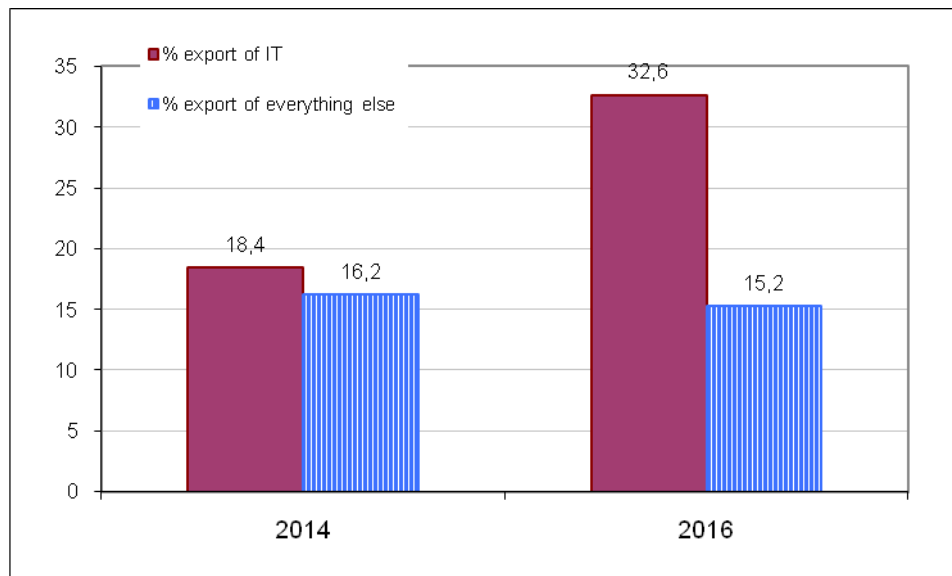
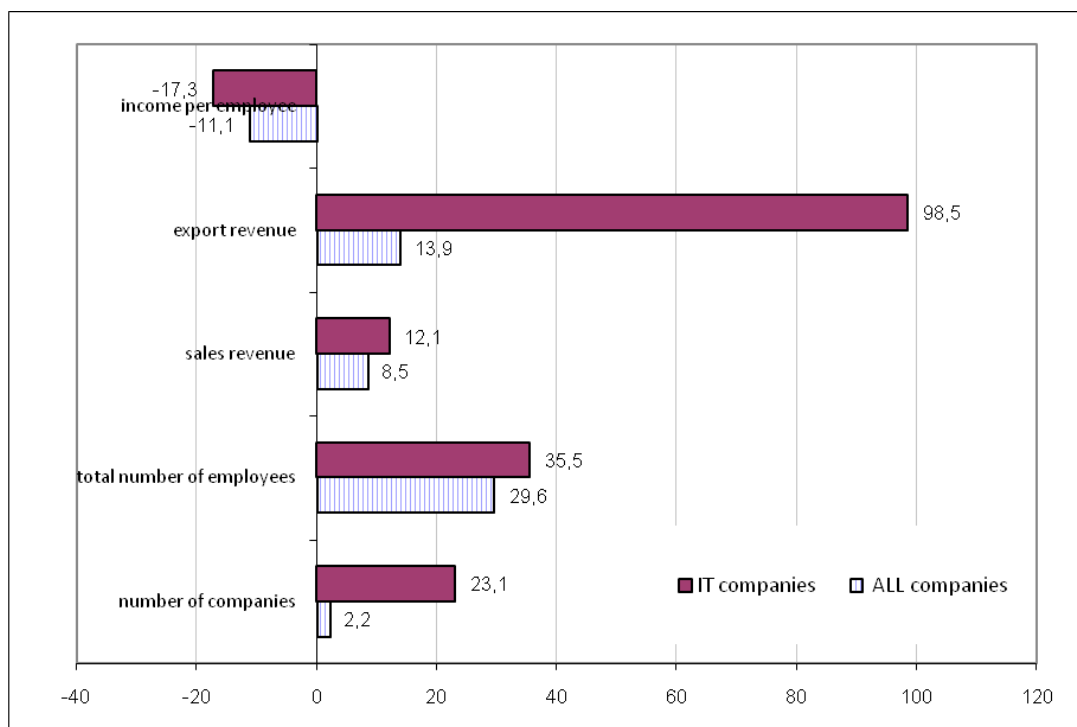


Diagram 1: Change in the share of exports in total revenues

7. It is true that IT sector participation in this category of income is relatively small and amounted to only 0.8% in the base year. However, after two years, this share almost doubled to 1.4%.
8. The increase in the number of employees is not in linear relation to the increase in income at the level of companies as a whole. In the observed period there was a fall in revenues per employee of 11.1%. In the IT sector this drop is 17.3%. This can be explained in part by increasing employment in this sector in the observed period compared to all companies in general.

All of the above statements are shown in diagram 2:



Source: Author's processing based on data from LRC d.o.o. Sarajevo.

Diagram 2: Changes in success indicators for all IT companies in the period 2014-2016

Analyzing the relationship between IT and all companies, it can generally be concluded that the IT sector has relatively little participation: the number of employees (approximately 0.9%), sales revenues (approx. 0.7%) and export earnings (growth from 0.8% to 1.4%), but on the other hand there are significantly higher growth rates mentioned and other indicators, which is evident that the IT sector strengthens its participation in the overall economy.

Comparison of the growth of the IT sector in relation to trends in the service sector and GDP is given in Table 4.

Category	Macroeconomic indicator			relation 2016/2014	relation 2016/2015
	2014	2015	2016		
GDP (ESA 2010)	28.365.000.000	29.666.000.000	30.862.000.000	108,80%	104,03%
Nominal growth rates	-0,03%	4,59%	4,03%	13433,00%	87,80%
Real growth rates	0,25%	3,84%	2,92%	1168,00%	76,04%
Income from the sale of IT companies (groups 62 and 63) (BAM)	365.373.767	357.762.655	409.618.271	112,11%	114,49%
The share of sales sells IT companies in GDP	1,29%	1,21%	1,33%	103,04%	110,06%
Export of goods and services (BAM)	9.299.204.000	9.884.363.000	10.587.840.000	113,86%	107,12%
Share of exports of goods and services in GDP	32,78%	33,32%	34,31%	104,65%	102,97%
Exports of services (BAM)	2.679.520.000	2.916.800.000	3.005.770.000	112,18%	103,05%
Participation of exports of services in total exports	28,81%	29,51%	28,39%	98,52%	96,20%
Export of IT services (groups 62 and 63) BAM	67.318.662	98.327.335	133.595.958	198,45%	135,87%
The share of exports of IT services in total exports of services	2,51%	3,37%	4,44%	176,91%	131,85%

Source: Edited by authors based on data from LRC d.o.o. Sarajevo, Agency for Statistics of BiH, [<http://www.bhas.ba/>] 2018.

Table 4 shows the following:

- IT sector increased its share in GDP by 3.04% compared to 2014;
- Export of goods and services grew by 13.86% in the observed period, while exports of services grew slightly slower (+ 12.18%)
- Although the slower growth of exports of all services is present, the export of IT services increased by 76.91%, and in 2016 it recorded a share of 4.44%. This implies that the growth of exports of services is due in large part to the growth of exports of services from the IT sector.
- Bosnia and Herzegovina increased export of services by KM 326.52 million. Out of this, exports of IT services amounted to KM 66.28 million or 20.3%. Practically 1/5 of service exports is related to services from the IT sector.

INTERNAL INDICATORS OF THE SUCCESS OF IT COMPANY IN THE PERIOD OF 2014-2016

Additional arguments for strengthening the IT sector should be sought in the internal performance indicators of this sector, since there are no such indicators for all companies in official statistical publications. Internal indicators are given in Table 5:

Category	Branch 62 Computer programming and consulting			Branch 63 Information service activities		
	2014	2015	2016	2014	2015	2016
	total number of employees	2.870	3.283	3.806	671	678
total sales revenue (BAM)	331.549.654	314.540.115	346.427.275	33.824.113	43.222.540	63.190.996
average sales revenue (BAM)	798.915	682.300	681.943	388.783	432.225	574.464
total profit (BAM)	43.469.270	47.693.052	51.661.136	3.674.063	3.935.734	8.060.512
share of profit in total revenue	13,1%	15,2%	14,9%	10,9%	9,1%	12,8%
income per employee (BAM)	115.523	95.809	91.021	50.409	63.750	63.636
average cost of salary per employee	26.691	27.740	27.898	20.951	22.119	20.617
business expenses/income	85,8%	83,4%	84,4%	85,6%	88,9%	84,3%
indicators of current liquidity	1,73	1,91	1,78	1,70	1,52	1,64
indicators of accelerated liquidity	1,56	1,75	1,64	1,56	1,40	1,46
% of other sources of funds	47,0%	44,0%	45,4%	40,9%	42,8%	44,5%
credit indebtedness/capital	17,9%	17,0%	19,7%	25,1%	26,6%	22,6%
ROE (return on capital)	34,4%	32,5%	31,5%	14,4%	15,4%	30,8%
ROA (return on total assets)	17,9%	17,8%	17,6%	8,3%	9,0%	16,9%

Source: Edited by authors based on data from LRC d.o.o. Sarajevo, Agency for Statistics of BiH, [<http://www.bhas.ba/>] 2018.

Table 5: Internal performance indicators for sectors 62. and 63.

Profitability - from Table 3 it is obvious that the IT sector has a profit growth of 26.7%, which is another indicator that attracts more and more new entrepreneurs into this sector. Comparing the realized profit with sales revenues, the profit rate of the IT sector increased from 12.9% to 14.6%. Interestingly, out of 470 IT companies in 2016, 468 of them were profitable, which is said by virtually all companies (99.6%) in this sector positively doing business.

Current liquidity, as a ratio of short-term assets and short-term liabilities for this sector in both branches, amounted to an average of 1.71 in the observed period. It is known from business practice that this coefficient should be over 2. However, these are branches of service activities where commodities stocks, as part of short-term assets, are relatively small. Therefore, for this sector, a more interesting indicator of **accelerated liquidity**, which eliminates the effect of stocks from this relationship. The average liquidity ratio for both branches is 1.56. This is significantly more than the minimum required

value of 1.00. From this it can be concluded that this is a liquid and solvent sector of Bosnia and Herzegovina economy.

The rate of use of other sources of funds is on average 0.44. One of the common rules is that this rate should be optimal around 0.50. It can be concluded that the IT sector has somewhat lower indebtedness than the optimal ratio, and that it uses its own capital in comparison with other sources, which is certainly a positive indicator.

Credit indebtedness on equity amounts to an average of 21.5% for both sectors in the observed period. On the other hand, **ROE - Return on Equity** amounts to 26.5% for both industries. ROE is also a good indicator of the company's growth rate because it is considered that total revenues cannot grow at a rate higher than the current ROE, other than borrowing from banks. It is usually considered that a ROE of 15% is the average for a good company. In this case, both sectors of the IT sector, as already mentioned, amount to 26.5%, which is significantly more than "a good 15%. Bearing in mind the rule that ROE should be higher than the credit debt on capital, it is evident that the IT sector, overall, can service its credit indebtedness without major problems and show significant profitability.

Return on Assets (ROA - Return on Assets) how effectively a company earns money. ROA can also help in estimating the profitability of some new projects that the company plans, namely, a new project is profitable if the ROA is higher than the amount of loan interest rates. In the IT sector, the average ROA was 14.6%. The range of banks' interest rates in Bosnia and Herzegovina to finance the company's operations ranges from 3-12% and is stable over the past several years. Comparing this range of interest rate movements with realized ROA in the IT sector, it is evident that this sector as a whole is relatively profitable.

EXAMPLE OF SUCCESSFUL IT COMPANY IN BOSNIA AND HERZEGOVINA

The IT sector in Bosnia and Herzegovina has recorded a higher number of companies in the last three years. According to the previously mentioned data, almost everything is profitable. What is even more characteristic of the domestic market in this sector is to reduce the concentration of activity to a smaller number of larger companies. Another feature is the relocation of activities from the capital to the regional centers, primarily Mostar and Banja Luka.

These trends are seen in the table.

Rank	Company name	Income in KM/BAM			Index 2016/2014
		2014	2015	2016	
1	N Soft d.o.o. Mostar	3.119.475	8.996.011	16.227.479	520,2%
2	Oracle BH d.o.o. Sarajevo	15.641.056	11.511.947	12.265.287	78,4%
3	BS TS d.o.o. Sarajevo	43.446.710	12.908.182	12.179.530	28,0%
4	Combis d.o.o. Sarajevo	8.498.346	10.216.843	11.954.008	140,7%
5	Asecco See d.o.o. Sarajevo	9.951.502	11.041.350	11.842.081	119,0%
6	Hermes Soft lab d.o.o. Sarajevo	10.562.266	9.315.478	11.508.179	109,0%
7	BBS d.o.o. Sarajevo	13.497.964	13.218.019	10.892.399	80,7%
8	Authority Partners d.o.o. Sarajevo	6.274.601	9.434.958	9.044.289	144,1%
9	King ICT d.o.o. Sarajevo	15.056.321	6.577.720	8.472.330	56,3%
10	Huawei Technologies d.o.o. Banja Luka	5.836.149	7.623.351	8.385.427	143,7%
The total of the first 10		131.884.390	100.843.859	112.771.009	85,5%
Total of the IT sector		365.373.767	357.762.655	409.618.271	
Participation of the first 10 in the total IT sector		36,1%	28,2%	27,5%	

Source: edited by authors based on data published in *Poslovne novine*, "100 largest in Bosnia and Herzegovina", number 1277, September / September edition, Sarajevo, 2017, p. 171.

Table 6: TOP 10 largest IT companies in total revenue in 2016.

Table 6. shows that the participation of TOP 10 IT companies decreased considerably in total revenue, by 8.6%. It is known that this sector as a whole grew by 12.1%, which suggests that higher sales revenues came from small and medium-sized IT companies, worse than the TOP 10. In addition, the TOP 10 revenue fell by 14.5% in the observed period, which is contrary to the trends of IT sector growth in general. In addition to reducing the participation of the TOP 10 companies, there is also the transfer of some of the largest IT companies outside the capital of Sarajevo. This is corroborated by the data on the first-ranked company N Soft d.o.o. Mostar and ten-rated Huawei Technologies d.o.o. Banja Luka. The table shows that they were not in the TOP 10 IT companies in 2014, at least not in terms of total revenues. Migration or strengthening of IT companies in other regions of Bosnia and Herzegovina contributes to the geographical, more balanced economic development of Bosnia and Herzegovina. Finally, it should be noted "relatively small investment of material resources and high profitability (approximately 15% annually) are some of the main motives that attract young people and new entrepreneurs to this sector. In addition, this sector has certain business specificities that are difficult to find in other sectors. These specificities are related to flexible working hours, the ability to work in their own home, dominant communication over the Internet, creativity and innovation, etc."

The IT sector is relatively open to other sectors in Bosnia and Herzegovina. There are no major barriers to starting a business, and the primary focus is on human capital (one of the elements of productivity and the largest measure of economic growth), while material resources for this kind of activity are less demanding. This combination of human and material resources corresponds to the impoverished Bosnia and Herzegovina economy. An example of the first-ranked company Nsoft d.o.o. says that the focus on human resources can be achieved above-average business results from Mostar. It is a company that has increased its income over 5 times in the past three years, which ranks it to the fifth position of the 50 fastest growing companies in the region of Southeast Europe (this award is given for the second year in a row). The company currently employs 190 employees and is mainly young people with IT experts. The owner of the company explains his own success through the focus on human resources. Business strategy Nsoft d.o.o. Mostar is based on the following postulates:

- The primary focus of business is on interpersonal relationships in the company;
- All employees are considered a large family and are trying to build a family atmosphere in the company;

- Every success of the company is shared with all employees;
- Focused on attracting young people who want to try out the IT sector.
- It is intensively working on team building and interconnecting not only on a business but also on a private level.

Bearing in mind the above, it can be concluded that the combination of a positive "family" climate and work in the field of IT technology represents a good marketing strategy for the company in attracting young people. The company is abandoning formal organizational structures and division of labor, applying the business practice applied by some of the largest IT companies in the world, primarily to the US. This can be a good incentive for other companies in Bosnia and Herzegovina to consider implementing such a strategy in their business, in order to attract and retain as many young people (especially those educated) in Bosnia and Herzegovina.

CONCLUDING CONSIDERATIONS

Bosnia and Herzegovina lags behind the countries of the region and the European Union. Relatively slow growth of GDP and economy as a whole increases this backlog and it will take decades to catch up. Economic policy makers and development strategies need to speed up economic development, but the question is how. In addition, it would be disputable which of the four components of economic development should put a greater focus on. The poor Bosnia and Herzegovina economy cannot generate rapidly the material resources needed for this growth, and the use of natural resources is relatively limited and is rapidly exhausted. Therefore, these two components need not be in the strategic focus, but primacy should be given to human capital and technology.

The IT sector is one of the more promising sectors. The paper presents data that the growth of all observed parameters has shown that it is a sector in expansion. IT sector revenue grows faster than GDP growth, as well as the growth of companies as a whole. It is especially important to point out that growth is primarily based on the strengthening of exports, which in 2016 reached 1/3 sales revenue of the IT sector. This sector recorded a higher increase in the number of employees than the companies did in general. Growing indicators of liquidity and profitability are attracting an increasing number of companies in this sector. Also, data were presented that the sector is optimum in charge and ensures profitability for almost all companies operating within it. In addition to the entire mentioned sector, the growth of revenues of small and medium-sized companies in the IT sector and geographical

dispersion across Bosnia and Herzegovina is recorded. All the above points to the benefits of the IT sector in relation to others. Critical success factors are certainly human potentials that require specific knowledge and application of modern technologies in this sector. Taking into account the ubiquitous trends of globalization and global cohesion, this knowledge is increasingly available to young people in Bosnia and Herzegovina. Another important fact is that more and more young people turn to IT technologies instead of traditional occupations. This will make it easier for economic policy makers to create a critical mass of young people who will seek their existence in this sector. In legal and economic terms, it is relatively easy to provide a stimulating work environment for the IT sector, but for some other sectors in Bosnia and Herzegovina. Because of the stated operating conditions and flexibility of work, combined with the possibilities for achieving above-average wages, young people will not leave Bosnia and Herzegovina. This should reduce the negative demographic trends that have been present in the last few years. In the end, in order to increase economic development, Bosnia and Herzegovina should do the following:

- Increase the level of awareness of the growing importance of the IT sector;

- Emphasize the IT sector in development strategies at all levels of government;
- Adapt education systems, especially higher education, to the needs of the IT sector;
- Create a favorable environment for the development of the IT sector in the economic and legal sense;
- Bring legal solutions that are the current obstacle to the development of the IT sector (such as, for example, electronic commerce laws, electronic stamps, etc.)
- Encourage the employment of young people in this sector through subsidies and co-financing of the newly-newly employed;
- Provide tax and other facilities especially for start-up companies in this sector;
- Strengthen the capacities of institutions that promote the IT sector, such as technology and IT parks, faculties, etc.

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INVESTIGATING SME'S STRATEGIC APPROACH IN THE CONTEXT OF INTERNATIONALIZATION AND ORGANIZATIONAL CAPABILITIES IN THE GERMAN MEDTECH INDUSTRY

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Abstract

This research is focusing on small and mid-sized enterprises (SMEs) in the German Medical Technology (MedTech) industry and investigates the antecedents and the effects of organizational capabilities on their strategy regarding international ventures. Although there is various research in the field of strategy, internationalisation and SMEs, the impact of existing research in the specific field of German MedTech SMEs is relatively poor while theoretical and empirical findings obtained in another particular institutional context are not yet applicable in other countries or industries. As a consequence, a systematic review of the literature has been conducted. An initial conceptual model was developed, in which significant findings regards country, industry and firm-specific aspects could be identified. The philosophical stand of the researcher and his ontological view as a post-positivist allows both, a qualitative and a quantitative approach. By applying a mixed method approach a focus group discussion provided in depth-knowledge in order to sharpen the initial model. Antecedents, as well as the most important factors related to strategy, were emphasized and further important aspects that focus on capabilities were revealed. With these results, constructs and relationships were modelled and quantitative data from a survey with more than 60 German MedTech SMEs were collected and assessed. This approach led to the finding that factors such as 'market potential', 'physical capital', 'medical regulations' and 'product competitive-ness' have the highest influence on the firm's strategic approach. 'Organizational learning' and 'coordination mechanism' have particularly an impact on strategy development, whereas relationship capabilities mediating effect on the strategy-competitive advantage relationship. Firm size and firm's experience in international ventures influence a firm's internationalisation. The results will serve as a strategic input for SME's in the German MedTech industry. This research provided a contribution to knowledge that is relevant from an academic as well as from an economic point of view. The findings should help academics, MedTech SMEs, and governmental institutions to understand the decisive factors for internationalisation and the importance to develop specific organizational capabilities in this context. This understanding contributes towards a sound development of German MedTech SMEs in their future internationalisation.

Keywords: Internationalization, SME, MedTech, Strategy, Organizational Capabilities

INTRODUCTION: MOTIVATION FOR THE SPECIFIC RESEARCH CONTEXT

Although a firm has different strategic options, internationalization often is an important element to support a firm's overall strategy. SMEs in German MedTech industry face a fundamental challenge. They are strong in domestic and EU markets, but compared to other high-tech industries they are under-represented in the large growth markets in overseas (Wiechers, 2016). But today healthcare market growth rates in Germany and the EU are stagnating due to restrictions on taxation and social security contributions, whereas foreign markets

develop dynamically (Kuhlmann, 2014). Germany is the third largest medical technology provider in the world. German small and medium sized enterprises (SMEs) enjoy universal recognition as manufacturers of medical technology (MedTech) products (MacDougall, 2012). High product development costs with respect to a distinctive innovation strategy force these companies to increase turnover. Consequently this means to recover investments via internationalization, but this is often constrained by resource limitations or challenging environmental regulatory related factors. In case these SMEs will not find a way to successfully internationalize their business, they will disappear from the market sooner

or later. This would have an economic impact, since the MedTech market is of major importance not only for the healthcare system but for the industrial development in Germany as well (Wintermantel, 2009). There would be as well a social impact, since the access to better treatments and the rapid progress on medical technology for the benefit of the patients in the context of the demographic challenges require maintaining supply, innovation and competition in MedTech for the future.

With respect to firm's internationalization the academic literature often refers to the three main strands of theories, namely the stage theory, contingency theory and the resource-based view, which represent three basic patterns in this context. Nevertheless, the literature suggests, that whilst there are some common processes and patterns among firms' internationalization, the variations can be explained through contingency theory. However, this neglects the specific industry context in which the firms operate as an important factor in their internationalization process. Hence, there need for integration of industry and country specific factors. The aim of this research is to find out which specific factors influence the strategic approach and consequently the development of international ventures in German MedTech SMEs, how organizational capabilities are related to their strategic approach and what influence they have on strategy execution. Based on theoretical justification and on an empirical investigation, a conceptual model of international expansion in this industry leads to understand the behaviour of such SMEs and evaluates important ingredients of success and identifies those that appear to be most prevalent.

INTERNATIONALIZATION: ISSUES REGARDING ANTECEDENTS AND THE ROLE OF CAPABILITIES AN STRATEGY

Internationalization from the view of a company can be described as the process of becoming multinational. In the first phase of this process a company sells its products in the domestic market. In a second phase the company begins selling its products abroad. The next step in the internationalization process may be the establishment of an international sales network. Then the process of internationalization has advanced so far that the individual company has manufacturing, sales and R&D in a number countries and it becomes multinational (Levitt, 1986).

Although, researchers acknowledge that such a development towards internationalisation is covered by well-established theories since many years, there is also some criticism. Circumstances have changed and internationalization theories do not cover all aspects of the current development in the world (Holtbrügge, 2005). Transportation has become cheap and information technology enables close

cooperation all over the world. The availability of knowledge in the times of the internet and real time information at any place in the world are enablers for recent developments but also caused a change regards established business paradigms.

According to the resource based view, firm size plays an important role with respect to SMEs internationalization process, particularly in the context of limited resources and knowledge. In this context, Shaw and Darroch (2004) observe a notable gap in the literature particularly concerning the role of organizational capabilities for SMEs.

Furthermore, in the context of strategy, the internationalization process is complex and determined by many different factors that encourage or discourage international involvement. There is some disagreement within the literature in terms of the relative significance of internal versus external contingency factors. According to Murray et al. (2010) researchers have conceptualized the environment as one of the key constructs of understanding organizational behaviour and strategic approach depending on the competitive setting of the business. In contrast, Leonidou et al. (2010) holds the view that internal organizational characteristics are more important, particularly in an organizational and managerial context.

Organizational capabilities affect the development and execution of firm's internationalization strategy and therefore its performance (Morgan et al., 2004). Through the lens of the resource-based view capabilities, a firm's management skills or its organizational processes for instance, are valuable and rare (Barney, 1991). Following the knowledge based theory, a firm's capability to co-ordinate internal competencies enables the transformation of knowledge into value creating processes. But there is a discourse on the impact of capabilities on strategy and firm's success. Atuahene-Gima and Murray (2004) highlight the influence of organizational capabilities in the context of the strategy development. In contrast, Lages et al. (2009) sees little empirical evidence of strategic impact of capabilities on strategy and performance in the context of internationalization. Hence, Theodosiou and Katsikeas (2013) consider firm's capabilities as a specific field of interest for future research.

BACKGROUND: GERMAN MEDTECH INDUSTRY

As a result of significant demographic challenges and fast technological development, the world market for medical technologies currently totals in the region of more than EUR 200 billion per year - a figure that is increasing all the time (Kuhlmann, 2014). As such, Germany is the third largest medical technology provider of products and medical services in the world (Beeres, 2016). The MedTech industry is an important industry sector of the German national

economy. It is mainly based on SMEs, which drive innovation and competition. SMEs play an important role regarding the GNP or employment rate and are consequently called the backbone of German industry (Geyer and Uriep, 2012). Although, most of the German SMEs have foreign business for the future, it will become even more crucial for German SMEs to intensify their international engagement (BDI, 2012).

The governmental German trade and invest agency highlights the medium-sized company oriented structure with niche products for specialist application as unique characteristic of German medical technology. Ninety-seven per cent of all medical technology firms in Germany employ less than 500 employees. These SMEs with less than 500 employees are accountable for roughly 40 % of the total turnover and more than 1,200 companies are active in this medical technology sector (Kuhlmann, 2014).

The medical technology producers in Germany achieve approximately one third of their turnover with products that are less than three years old. More than two-third of the generated revenue in this industry belongs to SMEs (MacDougall, 2012). Medical equipment is used in nearly all medical applications and medical technology products can be found in all stages of human life to support the health of human beings. Not at least with the help of highly innovative medical devices the possibilities in diagnosis, therapy and care have been developed significantly in the last decades, which consequently enable the a positive development of public health in many countries all over the world. Today's products available in this market include a wide range from high-end products, e.g. for diagnostics, therapy and monitoring, to commodities suitable to more general health care provision (Wintermantel, 2009).

The MedTech business worldwide is built up of different highly regulated markets. These regulations differ significantly from country to country along with the lack of harmonization in legal provisions for international standards of regulations. Consequently, the investments for certifications - a prerequisite for entering the market - are significantly increasing (Kramer et al., 2012).

With respect to marketing strategies, this often means delays for meeting the time to market announcements followed by additional market entrance costs and permanent expenses to run the organization in compliance according to the different national standards (Herok, 2009).

Recent research in the context of the MedTech industry emphasizes industry specific factors and concludes that economic success is e.g. more driven by regulatory knowledge than by technology or product-know how (Chatterji, 2009). This is in line with Hawawini et al. (2003), who sees for most firms, i.e., for those that are not notable leaders or losers in their industry, however, the industry effect turns

out to be more important for performance than firm-specific factors.

Furthermore, Hoskinson (1999) highlights that theoretical and empirical findings obtained in a particular institutional context are not equally applicable in other countries.

Following the resource-based view, internationalisation can be a challenge especially for SMEs in the MedTech industry. This might be a reason why only a few MedTech SMEs have managed to internationalize their business against global NMEs and local competition in the oversea markets.

Consequently, the following findings from the literature review will start with general SME related findings, then add the focus on SMEs in the MedTech industry and finally reflect country specific factors of such companies. Furthermore, a rationale is developed, as well as an initial framework based on constructs and relationships drawn from the literature.

RESULTS FROM THE LITERATURE REVIEW: INITIAL FRAMEWORK

Some scholars emphasize special key factors in the context of economic success and foreign business. Lages et al. (2009) have in their research a focus on quality and innovation as determinants of performance in international ventures. Leonidou and Katsikeas (2010) highlight the relationship of export performance and product innovation. Although competitive products and services are the base for international ventures they have always to be considered in the context of the specific situation regarding market and competition (Theodosiou and Katsikeas, 2013). Hence, also external industry specific factors have a strong impact. The importance of regulations in Healthcare has already been mentioned. Chatterji (2009) highlights that specific environmental factors such as regulations and approvals in the medical markets and the related know-how have a huge impact on the economic success of foreign ventures of SMEs in this industry. Narooz and Child (2017) underpin the importance of networking behaviour in response to specific institutional conditions. They highlight culture as a complex construct defined as the impact of language, education and socialization processes on the mind-set of the respondents. Barney (2010) emphasizes firm resources leading to sustainable competitive advantage by focusing on internal resources like physical capital, human capital, and organizational capital. This is in alignment with Piakowski (2012), who sees managerial factors as crucial in this context. According to the resource-based view, human capital has an essential impact on the internationalization of SMEs, but it is also agreed that financial and human resources are limited in such firms. Onkelinx, Manolova and Edelman (2016) identified that the role of firm-level human capital

is of considerable importance for firms that follow a strategy of accelerated internationalization. But also information can be seen as critical resource (Souchon et al., 2003). Katsikeas and Theodosiou (2013) see superior export performance linked to competitive advantages in specific competences and capabilities. These capabilities comprise: organizational learning, relationship capabilities and quality capabilities. Furthermore, such specific organizational capabilities are related to the execution of a certain strategy in order to do successful international business.

As outlined before, a lack of knowledge and capabilities often characterize the situation in SMEs' business in general. This is in line with findings from a survey of the German Chamber of Commerce, in which management knowledge, lack of experience and resources are named as barriers to the internationalisation of German SMEs (Geyer and Uriep, 2012). A survey in the MedTech industry that is focusing on SMEs in the UK gathered interesting results regards motivation, barriers and success factors in the context of internationalization (Barnes et al., 2007). Higher market size, guard own resources by entering more markets and greater profit were named as motivation, whereas finding the right partner, local competition and limited financial and management resources were named as barriers. Product quality and competitiveness as well as an experienced management have been identified as success factors.

Summarized, some factors have direct or indirect influence on firm's strategy and consequently on the economic success of international ventures. Some of these factors are important in a general context, while other factors have a specific weight in the context of SMEs or the MedTech sector.

As a result of a qualitative synthesis based on the findings from the reviewed literature, three different categories of influencing factors can be distinguished. Product related factors such as product's competitiveness, innovation and quality are named as the base of international ventures and define firm's strategy. Therefore the second order construct, named market specific product potential, represents product related factors such as product competitiveness, product innovation and product quality. Products are the base for international ventures and their characteristics have high impact on firm's strategy in this research context.

But also the market potential and the competition influence a firm's strategy as external factors in general. Regulations are another important external factor in the MedTech business. Hence specific environmental factors such as competition by MNEs or upcoming domestic firms in a foreign market, as well as market potential and medical regulations have a major impact on firm's strategy.

Other findings highlight internal resources like physical capital, human capital, and organizational capital and their impact on the strategy on the

internationalization of MedTech SMEs. Often, such firms have fewer skills and resources (Leonidou et al., 2011), which are obstacles in the internationalization process since experience and management skills are seen as important resources. Hence, information and knowledge, firm's resources regarding human and financial capital have been identified as internal factors as well as management skills and experience, which are recognized in the SME context as important representatives of the second-line constructs influencing a firm's strategy approach

Although the definition which specific variables represent the different categories in this framework will be described later, it can be recognized that a perspective respecting product, firm and environment related factors could group most of the factors extracted from the literature review.

Through the lens of the resource-based view, capabilities are valuable and rare. They can be viewed as bundles of tangible and intangible assets, including a firm's management skills, its organizational processes and routines, and the information and knowledge it controls (Barney, 1991). As a result, organizational capabilities have been identified as crucial and therefore shaped and detailed in the specific research context. Consequently, specific capabilities have been identified that are represented learning, relationship and coordination mechanism as representatives. Finally, these different capabilities can be combined in a second order construct named organizational capabilities, which is supposed to have a moderating effect on both, the development and the implementation of firm's internationalization strategy.

RESEARCH DESIGN

The purpose of conducting scientific research is to contribute to knowledge. All research is based on assumptions about how the world is perceived and how it could be understood in the best way (Trochim and Donnelly, 2007). This means that researcher's philosophical perspective on science influences the research and knowledge contributed. Accordingly, the research design is related to the ontological view, focusing on the beliefs about the real world which is being researched, and to the epistemology, meaning the knowledge that is required and seen by the researcher (Alrafi, 2007). The researcher's philosophical perspective can be characterized as a post positivist, with a foundation in critical realism which claims that a reality can exist independently from our knowledge of it, but also recognises that concepts in social sciences are constructed by humans and are thus subjective (Bryman and Bell, 2007). The related epistemological paradigm can be described as a modified objectivist, characterized by its critical tradition and assuming that findings are probably true. Following Kumar (2005), methodology

consists of practical ways or methods used to gain knowledge. Based on the underlying paradigms the philosophical and theoretical framework leads to a methodology that covers falsification of hypotheses, but also includes qualitative methods.

The basic research design will include three steps: literature review, focus group-interview and a quantitative study based on a internet-mediated survey:

In the first step the literature review delivers the basic psychological and behavioural models as well as potential determinants from previous studies partially in a different or more general context.

Thus in the second step, qualitative data derived from a focus group-interview is employed to elicit individual beliefs that are related to the industry-specific influencing factors on the internationalisation strategy of German SMEs. These determinants will be matched against the determinants that evolved from the literature review.

Finally, the third step is a quantitative study based on internet-mediated survey, where variables are used to answer research questions that present a systematic view of phenomena by specifying relations among variables.

The combination of an exploratory and explanatory approach, in order to strengthen research design, fits to post-positivist philosophical approach and the nature of the research questions and the intended process of generating evidence.

RESULTS FROM THE FOCUS GROUP DISCUSSION

A focus group is a controlled group interview of a target audience demographic, often led by a facilitator. The purpose is to obtain information of a qualitative nature from a predetermined and limited number of people (Krueger, 2008). A set series of questions or topics are covered and the results can provide a dimension that is simply unavailable with the traditional survey approach (Vigniali et al., 2013). Lindlof and Taylor (2002) imply that group discussion produces data and insights that would be less accessible without interaction found in a group setting - listening to others' verbalized experiences stimulates memories, ideas, and experiences in participants.

During the focus group discussion 10 subject-matter experts discussed antecedents, influencing factors and important ingredients for successful international ventures of German MedTech SMEs. Each of the participants had a profound business experience of more than 15 years, whereof at least 5 years in the MedTech industry. Most of them held or held a management position such as founder, CEO or manager in SMEs with international business activities, in additional many of them had also experience in the management of MNEs or as consultants and therefore, all of them could make

significant contributions by their own experience. Due to the selection of the participants most aspects along the value chain could be considered as well as their specific impact compared with other industries or MNEs.

There was a fruitful discussion and it can be summarized that many of the identified factors from the literature review could be confirmed as being significant. Some factors which have been considered as less important had to be replaced by new factors. These new factors have been integrated and the initial frame work was adapted.

As findings the factor "processes" was adopted as a firm specific resource factor, whereas the factor "cooperation" was adopted as an external industry specific factor. Also the impact of organizational capabilities could be confirmed. "Cultural understanding" was considered to have a high impact and therefore has been adapted as moderating variable of the construct "organizational capabilities". "Operational excellence" was named also as an important factor and has also been adapted in the construct "organizational capabilities"

RESULTS FROM THE INTERNET-MEDIATED SURVEY

Based on the initial framework a survey instrument has been developed that integrated the results from the qualitative focus group discussion and the literature review. An internet-mediated questionnaire approach was chosen in order to use established communication channels and platforms of the MedTech community. With respect to the design of the questionnaire several iteration loops were performed with respect to content, layout and operationalization of the survey questions. The rules of Dilman (2000) regarding the design of a survey-questionnaire have been followed in order to harmonize the different needs from world of academia, statistical market research and the intended respondents from the MedTech management. Special attention was devoted to the questionnaire layout, the cover letter and the question sequence, which certainly contributed to achieve the targeted response rate.

In sum, 26 items had been derived based the previous qualitative approach, which have been operationalized and grouped in 10 main question sections, and reflected by the psychological constructs. Alongside these, 5 further items were developed to measure background variables such firm-size and international involvement. Finally, by modelling the relation between the constructs and the representing factors research hypotheses have been developed and formulated.

Since firm's strategic information was part of the research the confidentiality and anonymity of the respondents had to be respected. Based on the survey platform 'research.net', which is widely

accepted in academic research and provides an industry-leading data security, a sample population which is truly representative of the target population of German MedTech companies was intended to be addressed. Particularly a sufficiently large and representative sample of the target group combined with a high response rate lead to a specific sampling and operationalization approach of the survey. This was realized by selecting respondents from one of the most important medical industry clusters in North of Germany called 'Life Sciences NORD' including more than 240 medical technology companies in this region. They represent approx. 10-15 % of the German Medtech industry in terms of turnover, employees or number of firms. Specifically, the SMEs in this cluster are the main economic contributors and consequently 68.7% of the cluster's value-added activities were produced by SMEs (Ostwald et al., 2015).

The likely response rate based on a mail survey is described in the literature with 30% as reasonable, whereas via internet, it is indicated with 11% or lower (Saunders et al., 2009). In total, 65 respondents started the questionnaire, of whom 65 finished it. The datasets were exported directly from research.net into an SPSS file. Each item of the psychological construct was measured on a seven-point Likert scale

and the resulting scales were consequently used in an explorative factor analysis. A reliability analysis of the factors confirmed a sufficient reliability of the measurement models. The resulting data was interpreted by applying appropriate statistical tests and procedures.

In a next step, structural equation modelling (SEM) was applied to test the conceptual model as it is widely used in social science for showing potential causal dependencies between variables and for demonstrating the relations between variables and their indicators. Therefore the measurement model and the structural model was evaluated in different steps e.g. by factor analysis and as a software tools Smart-PLS 2 was used. The assessment of measurement model proprieties was analysed by the structural model using partial least squares as recommended by Ringle (2005) because it is more robust also for small sample sizes. Figure 1 shows the related measuring model that is applied in order to investigate causal relationships between variables, which cannot be measured with a multiple regression model directly, due to their interference with observed variables. It is a common understanding that multiple regression analysis is applied in order to explore dependencies and to test hypothesis.

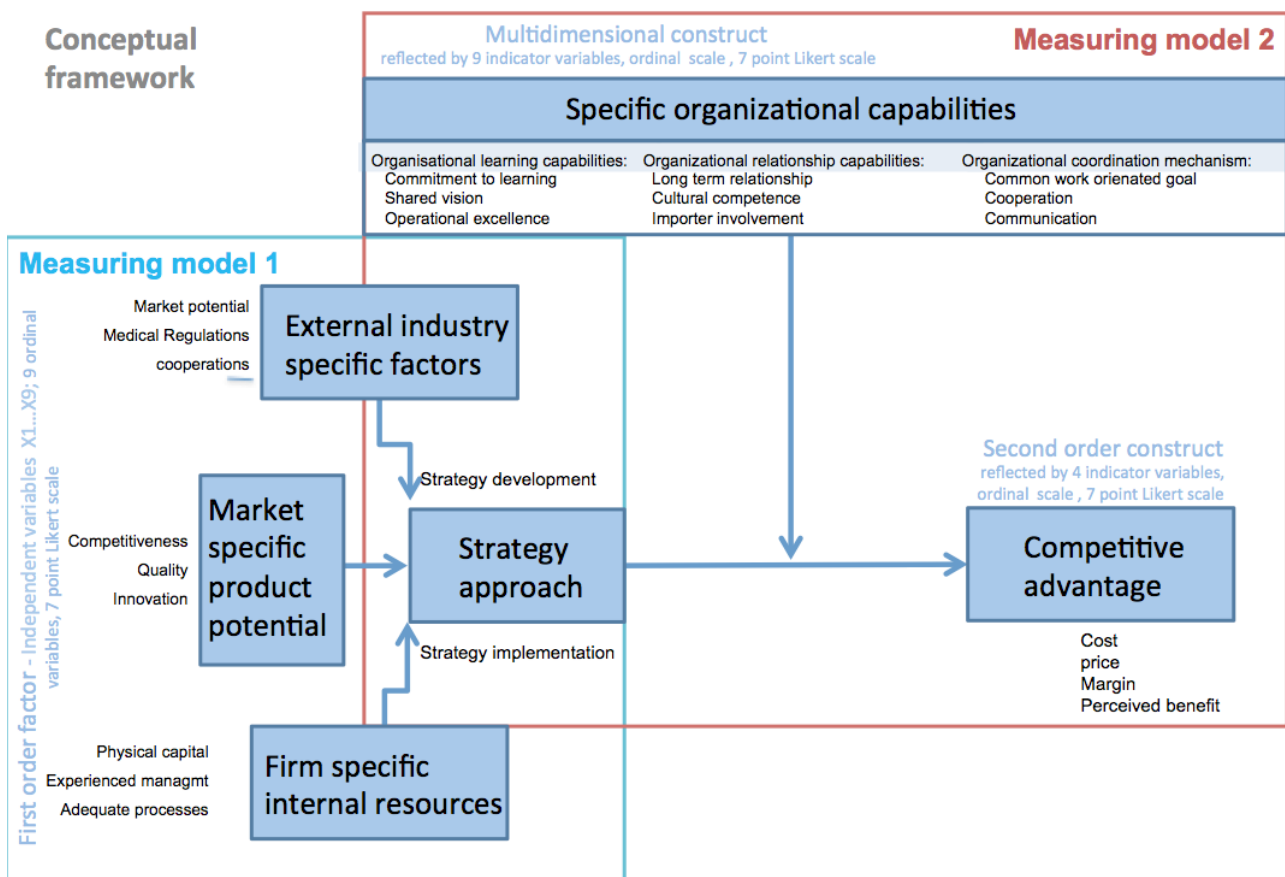


Figure 1: Measuring models

According to the measuring model 1 above, quantitative research was interested in relationship and effects between 9 independent variables (x1...9) and two dependent variables (Y1a and Y1b). Therefore a regression-based approach (multiple regression analysis) and factor analysis (EFA and Cronbach alpha (reliability) was used for creating factors (single dependent variables) Two separate regression models have been created (for dependent variable/factor Y1a and Y1b). Pearson's test for correlation and two-tail significance testing provide evidence regarding correlation. With a factor analysis it was tested if the correlation can be traced back to few variables. In statistical testing it is crucial to test validity and reliability. Cronbach's alpha test was used as an indicator for reliability. An exploratory factor analysis (EFA) was performed for creating factors representing constructs of single dependent variables. Two separate regression models were created (for dependent variable/factor Y1a and Y1b). For evaluating the results of the factor analysis the so-called sampling adequacy with the help of the Kaiser-Meyer-Olkin test (KMO) and by Bartlett's test of sphericity was assessed. The factor analysis of variance (ANOVA) explored if the model was good enough for prediction and finally it was examined whether variables have statistically significant effect on the concepts, so that hypotheses could be rejected or accepted.

Second, the quantitative research had interest in causal relationships and effects with latent variables/constructs. Measuring model 2 shows, that in detail 2 direct effects and a few moderating/mediating effects of 3 constructs regarding strategy, capabilities and competitive advantage were tested. Therefore an SEM approach was used, due to small samples the PLS method with bootstrapping was applied. First a factor analysis (EFA and Cronbach alpha) and CFA for creation of 6 constructs was conducted. While the Cronbach's alpha coefficient evaluates the overall reliability of the model, other measures show how well a single indicator fits within the model. According to Jais (2007), there are various tests to indicate a good fit and a high convergent validity of the item under investigation. Hence, for each construct convergent and discriminant validity was checked, before usage in SEM model. In the process of CFA analysis and SEM model testing the statistical assessment was performed on base of statistical indicators such as the χ^2 , GFI (Goodness of Fit Index), CFI (Comparative Fit Index), RMSEA, regression weights (C.R. with p), R-square (squared multiple correlations), AVE (average variance extracted).

The analysis of the results from measuring model 1 gave evidence that factors such as 'market potential', 'physical capital', 'medical regulations' and 'product

competitiveness' have the highest influence on the firm's strategic approach.

The impact on the strategy-competitive advantage relation is demonstrated by the results of measuring model 2. For the concepts of 'Organizational learning', as well as for 'Organizational coordination mechanism' and 'Organizational relationship capabilities' all standard regression weights were high enough and significant; furthermore all factors were statistically significant correlated, and consequently the constructs were accepted as reliable and of good convergent validity. The component matrix showed that for the concept 'Organizational learning' the item 'total agreement on business unit's vision and values across all levels and functions', formulated as one question in the questionnaire, had the highest factor score of the three items. For the concept 'Organizational coordination mechanism' the item 'Functional areas in this company work together in pursuing a common goal', formulated as another question in the questionnaire, had the highest score, which indicates the importance of being aligned and having directions based on an overall strategy. For the concept 'Organizational relationship capabilities' the item 'Our firm pays close attention in establishing and maintaining strong business ties with other organizations in foreign markets', representation a further question in the questionnaire, had the highest score, which indicates that cooperation plays an important role as soon as foreign business has been established, whereas the item 'Our firm places a high value on open-mindedness towards our foreign partners' culture' seems to have the lowest factor score. This is surprising since the cultural aspect was highlighted in the focus-group discussion.

Summarized, this means that 'Organizational learning' and 'coordination mechanism' have particularly an impact on strategy development, whereas relationship capabilities have a mediating effect on the strategy-competitive advantage relationship.

Furthermore, background variables such as firm size and the degree of involvement in international ventures have an impact particularly with respect with SME's perception regarding competition, their own positioning and international ventures.

RESULTING EMPIRICAL MODEL

The interpretation of the resulting data, using a regression model based on a factor analysis, resulted in a theoretical framework represented by a final empirical model for the internationalisation of German MedTech SMEs.

Theoretical Framework

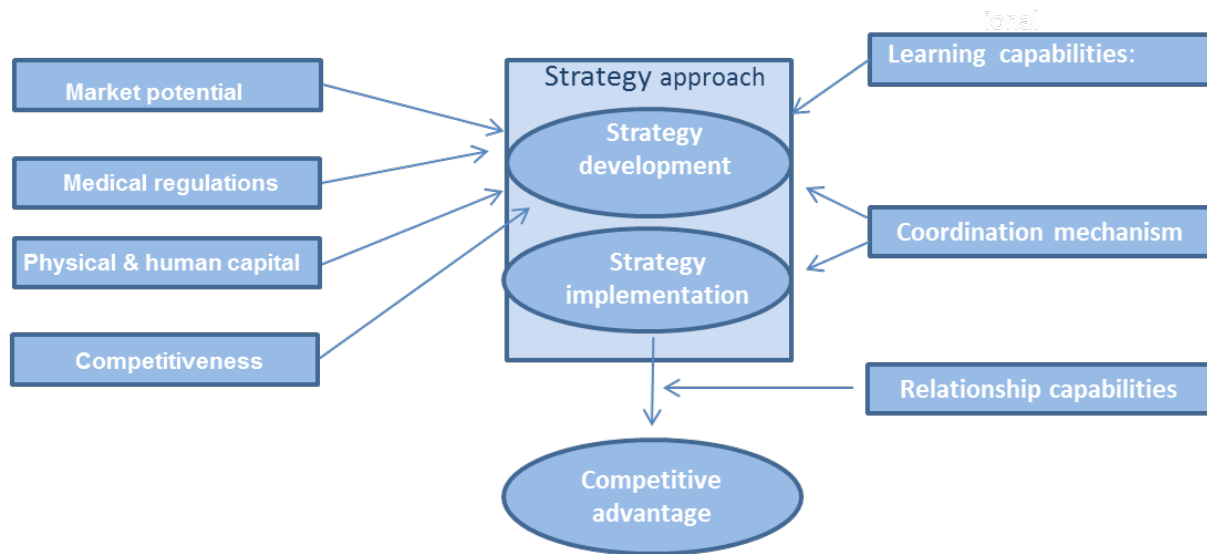


Figure 2: Final model

Figure 2 shows the empirical model, which is based on the results from the quantitative research and the hypothesis testing as described before. The mixed method provided an opportunity to test the potential influence of various descriptive variables on predictor and dependent variables and consequently on firm's strategic approach towards internationalisation, which will be discussed next.

DISCUSSION

So far, the different findings from the sequential steps of the research have been presented. Now, the role of the predictors derived from the quantitative data analysis will be discussed based on the overall research results. This means that results from the literature review and the qualitative interviews will be employed together with the quantitative results in order to arrive at a comprehensive and detailed picture of the proposed predictor structure. A summary of the main findings show as key aspects that:

- Resources with respect to employees and management as well as provisions for a sufficient amount of capital are the most important determinants for the development of an adequate strategy for international ventures.
- Market potential in foreign countries is an antecedent for the development of an internationalisation strategy.
- Medical regulations and product competitiveness have a particular impact on international ventures of German MedTech SMEs.

- Firms, who perceive barriers regarding the competitiveness of their products in or the related medical regulations of foreign countries, are significantly less likely to adapt an internationalisation strategy.
- Organizational learning and coordination mechanism have a positive effect on strategy development in the context of internationalisation.
- Competitive advantage in international ventures increases with the degree of the implementation of an international strategy
- Relationship capabilities strengthen the effect of strategy implementation on competitive advantage with respect to international ventures.
- Firm size and firm's experience in international ventures have an influence on firm's internationalisation. Those organizations with less international business, which are mainly SMEs, experience the barriers as higher compared to those who are significantly involved in international business.

The assessment of influencing factors on strategy development and strategy implementation in the

context of SME's internationalization leads to a distinguished picture with respect to the weight and importance of the different factors.

The strong positive impact of the factor 'market potential' (reflected by the hypothesis H3) is not particularly surprising and was already postulated as an outcome of the literature review. The quantitative results confirm also the qualitative results from the focus group discussion, where this factor was also ranked as important by 40% of the participating experts. This is in line with Aaker and McLoughlin (2010), who highlight market potential as an antecedent represented in most prominent analytical tools represented as market size (current and future), market trends, market growth rate, market profitability and various other key performance indicators.. Hence, from a theoretical, practical and statistical point of view this influencing factor can be confirmed for the specific research context.

The impact of human and physical capital was reflected by the hypothesis (H9), which has been accepted. Particularly in the context of SME's internationalisation the positive relation is not surprising either since it was already postulated in the theoretical work of Pfeffer and Salancik (1978) and in the resource-based view as a theory, which has been formalised by Barney (1991). The lack of resources and financial resources were also identified as barriers based on a survey among German SMEs as well as among MedTech firms in the UK and has already been discussed in detail during the literature review (Geyer and Uriep, 2012; Barnes et al.2007). Also, the qualitative results from the focus group discussion are confirmed by this quantitative survey, since this factor was ranked as highly important by 60% of the participating experts. Therefore, it can be identified as a major influencing factor in this research context, confirmed by qualitative and quantitative methods.

The statistical test proposed, that product related-factors such as quality or innovation have no significant impact on the development of firm's strategy. The supposed underlying mechanism that good products, which allow a differentiation from competitors, facilitate international ventures could not be confirmed, although at least innovation was ranked high in the qualitative focus group discussion. However, other product-specific and industry-specific factors represented by the hypotheses (H4, H6) can be highlighted, particularly the effect of medical regulations. This means, the bigger the medical regulation challenges, the worse is the development towards an international strategy; in other words, medical regulations can be a barrier, particularly for SMEs in the MedTech industry when willing to internationalize their business in foreign markets in a challenging regulatory environment. The specific role of regulations is not only supported by the literature (Chatterji, 2009), but also by 40% of the experts from the focus group discussion.

The effect of the factor 'competitiveness' was formulated in hypotheses (H6) suggesting that "The lower the competitiveness of a product, the lower is the development of a strategy (to market the product internationally)". But H6 was rejected contrary to expectations with respect to its statistical significance. However, cross-tabulations have shown that more than 80% of all respondents at least partially agree to follow a strategy, but only half of them see their products as competitive. Consequently only half of the respondents would have the base for developing a strategy for their international ventures due to the lack of product competitiveness. This is in line with Lages et al. (2009) who see competitive products as an antecedent to act successfully in international markets. Also other recent empirical research identified competitive products as a success factor in a similar research context, i. e. in the internationalisation of MedTech SMEs in the UK (Barnes et al., 2007). Hence, the impact of product competitiveness in this specific research context has been identified during the literature review and, in addition, the qualitative research showed that 50% of the experts from the focus group discussion ranked this factor as highly important.

Summarized, internal (firm-specific), external (market-specific) and product related factors influence firm's strategic approach. Particularly market potential, physical resources, medical regulations and product competitiveness have a particular impact on international ventures of German MedTech SMEs.

It has already been highlighted that organizational capabilities have impact on firm's strategy, since organizational learning capabilities are necessary to transform knowledge into value creation. To achieve this transformation in a most efficient and effective way, coordinating capabilities help to steer all internal and external activities and assure adequate communication regarding the related interactions. This is in line with previous research where organizational relationship capabilities are seen as crucial for networking and collaboration with foreign partners, since they help to overcome the lack of knowledge, resources and capabilities of SMEs.

Consequently, the effect of strategy on competitive advantage (H1b) was confirmed regarding strategy implantation and the moderating role of relationship capabilities (H2d) became evident. This means, that competitive advantage in an international venture increases with the degree of the implementation of an international strategy, while relationship capabilities strengthen the effect of strategy implementation on competitive advantage. Furthermore, the effect of organizational learning and coordination mechanism on strategy became evident, although their moderating effect on the relationship strategy-competitive advantage could not be confirmed.

Although the reviewed literature suggests that performance in international ventures is related to strategy, H1b has been accepted, whereas H1a has been rejected. Hence, the causal relationship between strategy development and competitive advantage was not confirmed. This was unexpected since other empirical research (Lages 2009; Aaby and Slater 1989) provides evidence of the link between strategy and competitive advantage. But in those models, the concept of strategy is not distinguished between planning and implementation, so that there is basically no contradiction. Furthermore, it has already been addressed that there is still a significant amount of SMEs in Germany that do not have implemented a formal strategy planning (Martin, 2005). It also has been noticed that those, who base their decision on formal processes and tend to more rationale and objective based decision modes come to different prioritizations regarding decision factors towards internationalisation.

Cross-tabulations have shown that more than 80% of all respondents at least partially agree to follow a strategy, but the majority of these firms being involved in international business only for 1-5 years. Consequently, more than one half of the respondents answer to have a low percentage of sales derived from international ventures ($\leq 25\%$). The majority of them would, according to the definition of the EU, count as a SME (< 250 employees) and consider their products not as better than that of their competitors. More than 50% of the firms see their production cost as comparable or higher in comparison to their competitors and assume that they can't enforce higher prices. Hence, these SMEs have a perceived barrier to increase their involvement in foreign markets.

Consequently, it is not surprising that based on these responses the concept strategy development is not directly linked with competitive advantage in the context of internationalisation. Many of the respondents develop a strategy, but due to different prioritizations this does not foster firm's internationalisation. This is confirmed by the findings from Martin (2005), who did a survey on several hundreds of SMEs in Germany and revealed that the ratio regarding those SMEs that follow strictly a growth strategy (41%) and those that concentrate on existing markets (46%) is quite heterogeneous.

It can be summarized that, although the effect of strategy towards competitive advantage could be statistically confirmed only partially, there is no basic contradiction and there is an explanation for the statistical result. Hence, the model and overall effect can be basically seen as confirmed.

Regarding the influence of background variables the findings from the quantitative data analysis and from the results based on the qualitative interviews and the literature review show interesting results. According to Leonidou et al. (2011) small firms

have less competent management and fewer skills to support foreign ventures effectively, compared to with large firms. Furthermore, firms with limited business experience have fewer resources and capabilities to advance their strategies. (Ventkatraman et al., 1990). Consequently, the interrelation of specific background factors, such as firm size and international involvement, is discussed with respect to their impact on the survey results. Nearly 70% of the responding firms can be grouped as SMEs according to the definition of the EU (< 250 employees), but only 20% of them state to have a percentage of international sales higher than 25%. Consequently, most of the firms with a significant international involvement belong to firm's with 250 employees and more. This means, that both, SMEs and larger firms are represented in this survey according to the target population, but that firm size and international experience might have had an impact on respondent's evaluation regarding influencing factors.

As a result of the focus group discussion, co-operations have been highlighted as an important factor. Based on cross-tabulations involving underlying descriptive data, firm size and experience in international ventures seem to matter. Those organizations with less international business experience the importance of international co-operations as lower compared to those who are deeply involved in international business. Hence, co-operations might have an impact, but finally could not be confirmed by this research due to statistical reasons that are finally based on sample size and distribution of responses.

As discussed before, quality and innovation as determinants of strategy and performance in international ventures could not be confirmed, although Leonidou and Katsikeas (2010) gave evidence regards the importance of these factors in the context of international ventures. Based on cross-tabulations, it is supposed that again firm's international experience is the reason for a different perception of the respondents, since those firms concentrating on the German market compare their products with other competitors than those firms acting internationally.

IMPLICATIONS AND PROPOSITIONS FOR FURTHER RESEARCH

In sum, the present research has provided a contribution to knowledge that is highly relevant from an academic as well as from an economic point of view. The study contributed to the theoretical discussion in the field of strategy and internationalisation, as well as to the methodological discussions in the broader field of social sciences. By developing a framework for SMEs internationalisation in the MedTech industry the study provides guidelines for further research in this field. Most importantly, however, the

resulting framework will support the industry as well as the governmental institutions and policymakers with an interpretive understanding of the decisive determinants for increasing international ventures in the context of German MedTech SMEs

The results of the research have several theoretical, managerial and economic implications. The theoretical implication of the research is based on the development of predictors in the present study not only anchored on previous theoretical and empirical work, but also on extensive qualitative research, presenting a new and unique model. The methodological implications are based on the results of the present study, which provide a clear justification for continuing to apply methods triangulation in a field of strategy and innovation, which is highly multifaceted and heterogeneous. Managerial and practical implications refer to country-specific governmental programs or institutions, which may be beneficial. However, the association between the use of such programs and firm's performance is not direct but rather achieved through an enhancement of firms resources and capabilities required to operate internationally. Hence, managers must be aware and appreciate their usefulness. Of specific importance in this context is the ability to implement and maintain strong business ties between international partners and therefore organizational capabilities are required.

Regarding the economical and governmental implications, it can be summarized that governmental institutions should focus on generating awareness-knowledge by supporting local-level initiatives and regional cluster organizations. Thus government has to act as a change agent, whose assistance facilitates firm's adoption of a more systematic, proactive and planned approach. Collaboration within a firm and within an industry is crucial. Managers and government should facilitate a close collaboration, enabled by regional networks. High-quality experts supporting know-how transfer and providing consultancy need to commit their engagement in such roles.

A near understanding between public and academia can furthermore have a positive spirit on the international education of managers in order to prepare for the future.

Throughout the course of this research, potential gaps in knowledge were identified and, if possible, filled with new insights based on reading or empirical data. Due to the clearly defined focus of the present thesis, a substantial number of gaps in knowledge in related fields were identified and should be addressed by further research. Since the scope of the present research are MedTech SMEs on the German market, the application of the derived predictor structure in related fields of similar industries could provide an insight into the generalisability of the findings and the universality of the developed conceptual model. Furthermore, the application of the model in different geographical or cultural environments could provide an important contribution to the question of whether and how SMEs internationalisation is affected by cultural factors. The analysis of group differences revealed that firm size and experience in international ventures have an influence on the perceived base of operations. Due to the limited sample size and conceptual limitations, the question of how these factors influence the results could not be answered with absolute certainty. Further research should conduct different regression models based on firm size and experience in international ventures. Another fruitful avenue for research could be the research on the influence of firm size and international experience to add deeper insights. Furthermore, the evidence of potential moderating or mediating effects of the factors 'organizational learning' and 'steering mechanism' could deliver a substantial contribution to knowledge. Based on the methodological approach of this thesis, the author clearly advocates the increased application of a mixed-methods approach in operational research. The application of a more explorative qualitative stage could enable further research to obtain a more comprehensive understanding of the concepts involved in decisions in the field of strategy, SMEs and internationalisation.

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THE INFLUENCE OF CHANGES IN THE CONTEMPORARY BUSINESS ENVIRONMENT ON COMPANIES' MISSION AND GOALS – THE EXAMPLE OF SELECTED EUROPEAN COUNTRIES¹

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Abstract

The aim of this paper is to assess the influence of new market trends and the emergence of the sustainability concept on the mission statements and goals of MSMEs (micro, small and medium-sized enterprises) operating in selected European countries according to the size of the company. The authors base the discussion on the results of their own research conducted among MSMEs operating in six European countries: Germany, Great Britain, Spain, Poland, Russia and Croatia. A quantitative approach was employed to gather data. Rich data were generated via interviews with CEOs or CMOs of MSMEs operating in the selected countries. The results were developed through qualitative analysis. The findings indicate that micro and small enterprises, unlike medium-sized enterprises, do not perceive adherence to the concept of sustainable development in their business operations as a very important challenge of the modern market. The research also showed that the most dynamic increase as regards the importance of socio-ecological objectives was recorded in the case of medium-sized enterprises. Unfortunately, neither micro, nor small, nor medium-sized enterprises include sustainability in their mission statements. This shows that the activities undertaken in this respect by the analysed entities are conducted at the operational rather than the strategic level.

Keywords: sustainability, marketing, business environment, sustainable goals, sustainable mission statement, European countries, MSMEs

Paper type: Research paper

INTRODUCTION

Since the 1990s there has been an increasing interest in the sources, dynamics and consequences of changes taking place in the business environment of contemporary companies. The primary source of these changes is undoubtedly the process of globalization. The benefits of this phenomenon include increased competition, the development of information and communication technologies, as well as the changing bargaining power of corporate stakeholders. However, there are also some downsides regarding the process that need to be stressed.

Lawrence and Weber (2017) notice that globalization leads, among other things, to weaker environmental standards and social injustice. This results in increased pollution and a deterioration of the natural environment; the development of consumer, social and alter-globalization movements; as well as changes in social and environmental regulations and legislation. All these make sustainability a priority in the process of creating new business models in order to achieve a long-term competitive advantage. Sustainability influences the way companies formulate their mission statements and, as a consequence, their goals as well as their market strategies.

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As the business environment is a dynamic system, companies themselves also have to change dynamically. The above mentioned sustainability challenges affect all businesses – regardless of size, the industry they operate in or the type of activity. In the proposed paper the authors focus on MSMEs, as they are the largest group of market entities and therefore seem to have a strategic importance in the European market. They have to face the consequences of market changes and confront new emerging trends, including sustainability. To do this successfully, they have to take these changes into account while creating new strategies aimed at fulfilling the company's mission and goals.

The aim of this paper is to assess the influence of new market trends and the emergence of the sustainability concept on the mission statements and goals of MSMEs operating in selected European countries. The authors base the discussion on the results of their own research conducted among MSMEs operating in six European countries (Germany, Great Britain, Spain, Poland, Russia and Croatia). The paper is structured as follows: first, the literature on the key trends in the business environment is reviewed; then the quantitative methodology is discussed; and finally, the findings, discussion, limitations and implications resulting from the study are presented. The paper then indicates some conclusions as well as opportunities for future research with regard to the issue of sustainability in the marketing strategies of MSMEs.

THE CONTEMPORARY BUSINESS ENVIRONMENT – TRENDS, CHANGES AND INFLUENCES ON COMPANY STRATEGY

An analysis of the literature leads to the reflection that the functioning of modern enterprises is influenced by several key factors that occur simultaneously, overlap and intertwine. However, the primary source of current market trends is the globalization of the economy. For some people, companies and economies globalization provides new business growth opportunities. Specifically, it offers them capital and new technologies; increases economic productivity; reduces prices for customers; as well as providing access to international markets and a global connection to the world, thus increasing the prosperity of the economies in which these companies operate. However, at the same time serious social and ecological consequences of globalization can be observed. Among the costs of globalization one should stress wage reductions and a decrease in job security as a result of a search for cheaper labour. Increasing pressures of competition on a global scale often force companies to continuously cut costs, which translates into a deterioration of product quality (Mirvis and Worley 2013). Lawrence and Weber (2017) indicate

that another dark side of globalization is that environmental and labour standards are often weakened as companies seek manufacturing sites where regulations are more lax – locations with fewer environmental protections; weak regulations relating to occupational health and safety, hours of work and discrimination; or fewer rights for trade unions. All these weaken environmental and social standards. Increased competition and consumption are also depleting stocks of natural resources, and a fight for market position creates many unethical and dishonest business practices. As a consequence, business has been undergoing the greatest scrutiny it has ever received from the public (Carroll, Brown and Buchholtz 2016). Business has been accused of having little concern for the good of customers and employees, as well as not caring about emerging social and environmental problems. This has led to an increase in customer sensitivity to social injustice as well as the development of consumer, social, and alter-globalization movements. Growing social movements dedicated to consumer protection, employee rights as well as care for the planet embody economic power and can become a trigger for creating regulations and legal remedies for combating these harmful phenomena. The above-mentioned circumstances change the bargaining power of company stakeholders and create the necessity to direct and manage relations between them.

Heightened expectations from customers, employees, regulators and the public at large, mean that businesses must not only operate more responsibly, but also take responsibility for addressing social, economic and environmental issues in society (Mirvis and Worley 2013). The survival and, above all, development of a company in times of intensifying adverse phenomena as well as the increasingly volatile and unpredictable business environment requires the implementation of a new management concept, the so-called corporate sustainability management; as well as new business models, referred to as sustainable business models. Corporate sustainability management means such a way of managing an organization that enables its sustainable development within economic, social and ecological aspects. It means, therefore, balancing the economic, social and ecological (environmental) goals pursued by the company (Hejduk, Grudzewski 2014). These include management practices aimed at achieving commercial success in ways that honour environmental and social concerns in business operations and in interactions with stakeholders (Hammann, Habisch and Pechlaner 2009). In such companies these activities are of a voluntary nature. As a result of balancing these goals, the long-term development of a given enterprise as well as improvements in the quality of life of present and future generations are possible. A company

managed in a sustainable manner implements sustainable business models. According to the work of researchers who have made the most significant contribution to the development of the literature on business model innovation (Osterwalder and Pigneur 2010; Teece 2010; Zott, Amit and Massa 2011), these can be defined as business models that create competitive advantage through superior customer value while contributing to sustainable development of the company and society (Bocken, Short, Rana and Evans 2013). It is about integrating societal and environmental matters into the core business of a company and, thanks to this, improving long term business success through achieving outstanding and voluntary social and ecological performance (Ludeke-Freud 2010). The aim of these models is to create solutions that will enable companies to capture economic value whilst generating environmental and social value. The key element of sustainable business models is creating, communicating and providing a value proposition not only to customers, but also to other company stakeholders. Therefore, as stressed by Zott and Amit (2010), these business models should be perceived from an activity system perspective, in which a business model is viewed as a network. This means that they are developed with a network-centric rather than a single-firm-centric perspective. This implies the necessity for a holistic approach to the value proposition, in which the benefits and costs to different stakeholders are considered and, as a result, so called shared value is created. Besides customers, these include employees, business partners, society, the environment, etc.

A holistic approach to creating the value proposition for stakeholders in sustainable business models means that sustainability should be embedded into the core business of a company, its culture as well as the mission statement and company goals. Commitment to this must first of all translate into reformulating mission statements to show that care for social issues and protecting the environment are primary reasons for the companies existence. A mission statement with a focus on sustainability keeps all the company employees on track during turbulent times and helps maintain a balance between striving for profits and values of a social and environmental nature. It also helps to develop appropriate planning processes and positions the organization for the future. According to A.T. Kearney, companies having that kind of commitment (expressed, among other things, in mission statements) outperform their competitors (Green Plus 2011). Aligning a company's mission statement towards sustainability informs not only customers, but also other stakeholders, including employees, of its commitment to sustainability. It is especially necessary to share this with employees to help them understand how each of them individually contributes to the success of a company, as well as how everyone contributes

collectively. Thanks to this a company will be able to create a coherent sustainable message for other stakeholders that can be effectively communicated by employees. The mission statement serves to give a sense of identity to an organization's members, enhance the stability of the social system, and direct the managers' attention to important activities. Lee, Barker and Mouasher (2013) indicate that without a clear sustainable mission a company can lose focus, which can, in turn, make it difficult to gain traction with other improvement efforts connected, for example, with goal setting. The mission statement is the first piece of tangible evidence that the business is devoted to reducing its impact on the environment.

A sustainable mission statement should be then translated into sustainable goals that the company will strive to achieve and which will determine the strategy the company will implement in the market. Traditionally, companies treated profit maximization as the ultimate goal; and according to this approach organizations are seen as instrumental and managers as rational economic actors, driven primarily by self-interest (De Wit 2017). In sustainable companies clear targets for sustainability objectives to business results must be set. The explicit identification of goals and targets is likely to improve corporate sustainability performance as it focuses attention on areas of concern and priority. Because of the complexity of sustainability issues, it is often necessary to set objectives not only relating to the company itself, but also objectives of a relational nature, relating to partnering stakeholders (De Wit 2017). The objectives should be clear, open and mutually beneficial to create added value of an environmental and/or social nature. In this approach, though economic goals are the ends of the business, environmental and social goals are considered as an integral part of the economic logic of the business. As a result of setting sustainability objectives, companies are able to develop plans and programmes aimed at improving environmental and social performance.

METHODOLOGY

This section explains the research methodology, including research approach and design as well as the methods of data collection and analysis, adopted in this study. The research results presented in this paper are part of a research project dedicated to the concept of sustainable marketing implementation. The research was conducted in six European countries, including three from Central and Eastern Europe (Poland, Russia and Croatia) and three from Western Europe (Great Britain, Germany and Spain). Once the research tool (a questionnaire) had been created, quantitative research was undertaken in all the six European markets. The research tool was first

prepared in English, then translated into languages of respondents from 6 countries and was adjusted by native participants from the partnering nations who coordinated the field-work in each country. After the final version of the survey had been accepted, pilot research was run in the form of in-depth interviews conducted with marketing or company managers. In total 30 interviews were completed. A key part of the survey was aimed at identifying the place of sustainability issues among the companies' business goals. The authors focused on the importance and influence of major changes occurring in the business

environment of today's companies on the mission statements, goals and strategies adopted by the entities surveyed. The research was conducted between April 2016 and January 2017; and the effective research sample totalled 770 respondents comprising 52% (401) from Central and Eastern Europe, and 48% (369) from Western Europe. As far as size is concerned most of the respondents were micro firms (41%), a third were small businesses, and 27% represented medium-sized enterprises (Table 1).

	Company size	
	Number of companies	%
Micro	316	41.0
Small	245	31.8
Medium	209	27.1

Source: own research

Table 1: The structure of the sample with regard to the size of the company

The majority of the respondents were companies, which generate the largest part of their revenues from manufacturing, slightly over 46%; followed by companies where the dominant type of activity is trade (40%); and in approximately 30% of the surveyed enterprises the largest proportion of their revenue comes from services. The respondents sell their products mainly through traditional distribution channels, and in nearly 85% of the enterprises more than half of their revenue comes from sales through such channels, while one in ten companies generate this level of revenue through online sales. The vast majority of the companies in the research sample are funded by domestic capital and they operate predominantly in the local market (40%), which seems understandable given the fact that the research was conducted among SMEs. One-fifth of respondents conduct activities in regional and national markets, and one in six on the international market. The declared financial situation of companies participating in the survey was quite good (Table 2) and four indicators were chosen to assess it: sales revenue, sales volume, net profit, and market share.

	Total sample		
	Definitely decreased/decreased	Did not change	Definitely increased/increased
Sales revenue	17.95%	36.81%	45.25%
Sales volume	17.53%	33.07%	49.41%
Net profit	19.32%	37.04%	43.65%
Market share	16.60%	38.51%	44.88%

Source: own research

Table 2: The change of financial situation in the researched companies (%)

In respect of all the analysed indicators that reflect the financial situation of a company, nearly half of the respondents declared they grew in the previous 3-5 years. Analysing the situation in the two groups of respondents (i.e. Central and Eastern European

countries and Western European countries), it can be noticed that SMEs operating in Western European countries assessed their financial situation slightly better in terms of all the indicators. An assessment of the significance of the differences between these two

groups by means of the Mann-Whitney U test proved that these differences were statistically significant in the case of two indicators, namely sales revenue and market share. SMEs from Germany, Great Britain and Spain rated their realized sales revenues much higher compared to businesses from Poland, Russia and Croatia ($Z = -2.9177$, $p = 0.003526$). Nearly half (49%) of the companies from Western European countries declared growth in sales revenues, while in the second group of countries this percentage was 42%. A similar, statistically significant, relationship occurs in the case of market share ($Z = -2.1083$, $p = 0.035005$). Forty-six per cent of the surveyed SMEs from Western Europe declared growth in this, while in the second group of countries the corresponding figure was 44%.

RESEARCH RESULTS

As stated earlier, one of the aims of this study is to determine the impact of key market trends on the mission statements and objectives formulated by MSMEs. Among the analysed phenomena that are currently occurring in the business environment, the surveyed entities attributed the greatest significance to the increased importance of a company's intangible resources (e.g. image, long-term relationships with customers) ($\bar{x} = 4.1$), and increased competition in the market ($\bar{x} = 4.0$). It should be emphasized that the respondents were in agreement as regards assessing

the significance of these trends. In both cases the coefficient of variation remained at a relatively low level (respectively $V_s = 23.22$ and $V_s = 23.16$). According to the MSMEs participating in the study, the declared mission and goals of an organization are to a slightly lesser extent affected by the development of information and communication technology ($\bar{x} = 3.8$), and changes in legal regulations related to corporate responsibility (concerning, for example, environmental protection, labour rights or principles of cooperation with business partners) ($\bar{x} = 3.7$). A company's mission and goals are determined to a moderate extent by the changing bargaining power of the company's stakeholders, such as employees, shareholders or local communities ($\bar{x} = 3.5$), and an increase in customers' sensitivity to social injustice ($\bar{x} = 3.4$). The smallest significance is attributed to the deteriorating condition of the natural environment ($\bar{x} = 3.3$) and the development of consumer, social or alter-globalist movements ($\bar{x} = 3.2$).

The above-mentioned changes occurring in the business environment of MSMEs imply the necessity for these entities to face numerous challenges. Generally, the respondents declared that attracting and retaining customers as well as creating a strong brand and positive image were the greatest challenges (Table 3). On the other hand, they attributed the least importance to research and development as well as to conducting activities consistent with the assumptions of sustainable development.

No.	Factors	\bar{X}	M	S	V_3
1.	Retaining employees	4.2	4.0	0.9	21.7
2.	Acquiring and retaining customers	4.6	5.0	0.7	15.6
3.	Conducting business activities consistent with the concept of sustainable development (combining economic objectives with ecological and/or social ones)	3.9	4.0	1.0	26.1
4.	Research and development (R&D)	3.5	4.0	1.2	33.7
5.	Creating a strong brand and positive image	4.3	5.0	0.9	20.1
6.	Operational efficiency	4.2	4.0	0.9	21.6

Source: own research

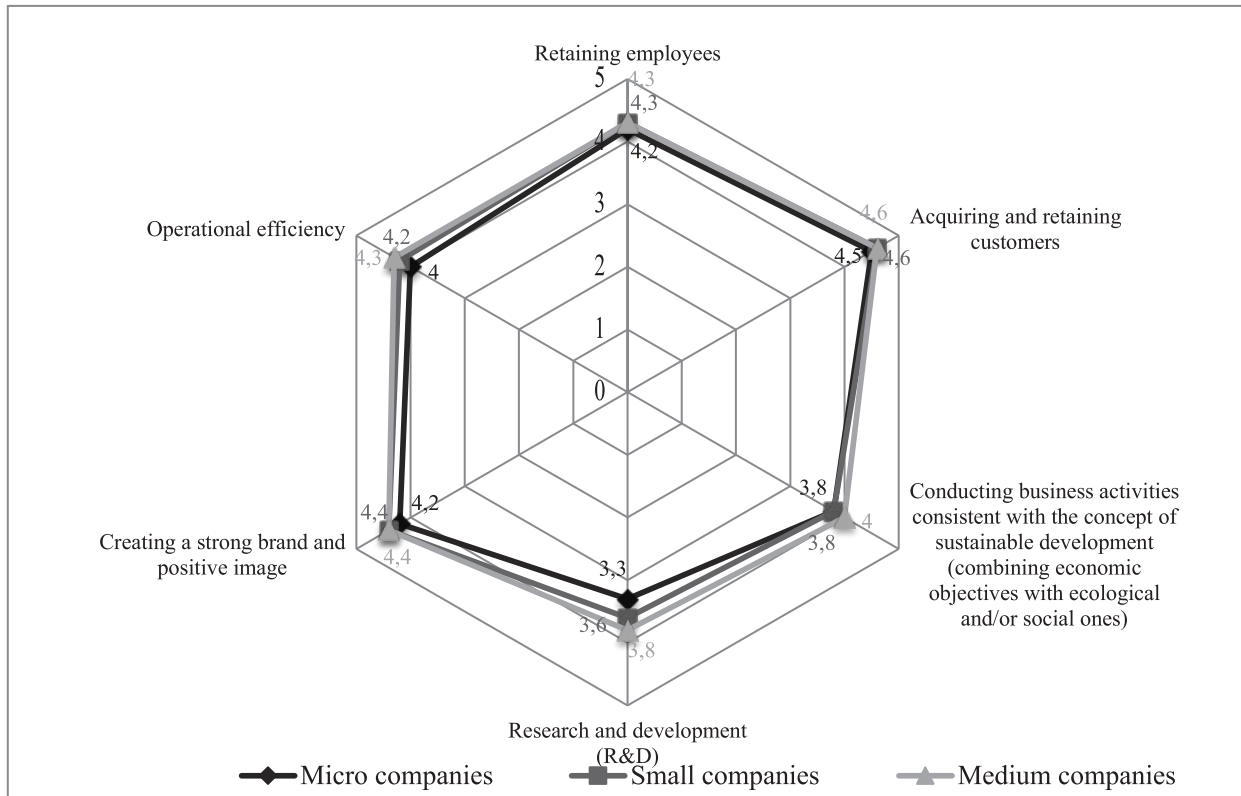
Table 3: Assessment of the challenges faced by MSMEs in the next 3-5 years

General trends in the assessment of the significance of the analysed challenges, which were obtained for the entire group of respondents generally, correspond to the ratings assigned to the challenges by companies from the specific groups corresponding to company size (Figure 1). However, a detailed analysis of the results obtained indicates the existence of some statistically significant differences in the assessment of the challenges depending on the size of the company. In order to investigate the impact of

company size on the assessment of market challenges, the non-parametric Kruskal-Wallis test was used. The calculations made it possible to determine statistically significant differences in the assessments made by micro, small and medium-sized entities. The distribution of descriptive statistics indicates the existence of statistically significant differences in the assessment of the significance of three of the analysed market challenges. The first difference concerns conducting business activities in accordance

with the concept of sustainable development. For medium-sized companies, this is currently a more important challenge than it is for micro companies ($T = 2.948510$, $p = 0.009579$) or small companies ($T = 2.739867$, $p = 0.018439$). Statistically significant differences also occur regarding perceptions as to the importance of research and development (R&D). In this case the analyses indicate that small and medium-sized enterprises rate this challenge higher

than micro enterprises ($T = 2.631971$, $p = 0.025467$ and $T = 4.248685$, $p = 0.000065$ respectively). The third challenge, which is differently perceived by the different groups of respondents relates to ensuring operational efficiency. In this case, differences occur in the assessments made by micro and medium-sized entities ($T = 2.584641$, $p = 0.029244$); medium-sized enterprises consider this to be a decidedly bigger challenge today.



Source: own research

Figure 1: Assessment of the challenges facing MSMEs according to company size

The challenges of the modern market which enterprises must face are directly reflected in the business objectives they formulate. Analysing the research results for the completely researched population, it can be noticed that in the past MSMEs attached the greatest importance to purely financial/economic objectives ($= 4.0$). Next came objectives related to adapting their activities to legal regulations, and those connected with ethical obligations ($= 3.9$). The least common were objectives related to social engagement ($= 3.7$) and environmental protection ($= 3.6$). As shown in Table 4, this regularity applies to micro, small and medium-sized entities. As regards financial objectives, however, it should be noted that their importance now and in the future remains at the same level or only slightly increases for all three groups of companies. On the other hand, the perception changes regarding the other groups of objectives on which the companies currently focus

or will focus in the future. The highest growth can be observed for objectives, which historically were rated the lowest, namely the social and ecological ones. In micro-enterprises, the largest increase was observed with regard to the implementation of objectives related to environmental protection (an increase of 0.5). Small enterprises declared that in the next 3-5 years they will be more focused on implementing objectives connected with the adaptation of their activities to the applicable legal regulations as well as those of a social nature (an increase of 0.5). In the case of medium-sized entities, in turn, the research revealed the largest increase of interest in the implementation of three groups of objectives, namely objectives related to adapting activities to legal regulations, those connected with social engagement (an increase of 0.5), and objectives focusing on environmental protection (an increase of 0.6).

No.	Objectives	Average rating (\bar{X}) (1-5)									
		Micro			Small			Medium			
		Past	Present	Future	Past	Present	Future	Past	Present	Future	
1.	Financial/economic objectives (increase in profits, sales, market share, market value)	3.9	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.2	4.2
2.	Objectives related to adapting activities to legal regulations	3.9	4.0	4.3	3.9	3.9	4.4	4.0	4.0	4.0	4.5
3.	Objectives related to ethical obligations	3.8	4.0	4.1	4.0	3.9	4.2	4.0	4.0	4.0	4.2
4.	Social objectives (charity work, addressing the problems of local communities, taking care of employees)	3.7	4.0	4.0	3.7	4.2	4.2	3.8	4.2	4.2	4.3
5.	Ecological objectives (activities related to environmental protection)	3.6	3.9	4.1	3.6	3.9	4.0	3.6	4.0	4.0	4.2

Source: own research

Table 4: The importance of strategic objectives pursued by micro, small and medium companies in the past (last 3-5 years), now, and in the future (next 3-5 years)

The research also sought to identify which differences in the assessment of the role of strategic objectives between the three groups of companies (micro, small and medium-sized) were statistically significant. The non-parametric Kruskal-Wallis test was again used to examine the significance of the observed differences. The distribution of descriptive statistics indicates the existence of a statistically significant difference in assessments regarding the importance of objectives between micro- and medium-sized enterprises. First of all, they concern past objectives related to conducting business operations in accordance with the principles of business ethics. Medium-sized enterprises attached a significantly greater role to these compared to micro companies ($T = 2.445670$, $p = 0.043375$). A similar relationship was observed when analysing the significance of implementing objectives in the future related to adapting business activities to legal regulations and involvement in social actions. Just as in the previous instance, medium-sized companies viewed both those objectives as significantly more important in comparison to the opinions expressed by micro companies ($T = 2.641634$, $p = 0.0024752$ and $T = 3.100675$, $p = 0.005792$ respectively). Finally, statistically significant differences were observed between micro and small enterprises in assessing the importance of social objectives in the future. Small businesses plan to implement them to a much greater extent than micro entities ($T = 2.769063$, $p = 0.016865$).

As emphasized in the theoretical part of this paper, effective implementation of an organization's ethical and socio-ecological objectives requires the inclusion of these activities in the company's mission statement. Taiwo, Lawal and Agwu (2016) indicate that creating a mission has proven to be a veritable tool in achieving the goals of an organization, and developing a mission statement is considered to be a crucial factor in the formulation of sustainable business strategies in organizations (Analou and Karami 2002). Therefore, this study also undertook to assess to what extent the changes taking place in the business environment of today's organizations, and consequently the emergence of the sustainable development concept, influence the mission statements formulated by companies. The research conducted indicates that although MSMEs recognize the growing importance of implementing activities consistent with the principles of sustainability, these are not included in the mission statements of these entities. This proves that social and ecological activities are still more operational than strategic in character. The elements which are by far the most frequently included in the mission statements of MSMEs are those that relate to the primary, traditional understanding of the marketing management concept (Table 5). In formulating the mission statement of their organization, the respondents currently concentrate mainly on satisfying their customers and meeting their expectations as well as achieving financial goals. In essence, these results coincide with previously presented findings concerning the objectives currently pursued by MSMEs.

They showed that at present these goals are the most important for micro, small and medium-sized companies. At the same time, the declared significant increase in the importance of socio-ecological goals leads to the conclusion that these aspects will also become key elements in the mission statements formulated by these organizations in the future. Currently, almost one-fifth of respondents emphasize

building good relationships with stakeholders in their mission statements, which is one of the elements of implementing the sustainability concept, and only 13% explicitly declare that they incorporate the principles of sustainability in their mission statements. Only slightly fewer respondents include in their mission statements pro-environmental activities and compliance with ethical standards.

No.	Factors	Percentage*
1.	Customer satisfaction and meeting their needs	37.6
2.	Making profits, increasing profits, increasing market share	24.5
3.	High quality of the offer, being the best, competences, innovation	23.5
4.	Company image	21.4
5.	Good relationships with employees, customers, business partners and other stakeholders	18.0
6.	Sustainability	13.0
7.	Compliance with ethical standards/codes of ethics	12.6
8.	Environmental protection	12.1
9.	Involvement in activities of a social nature	6.9

* Total doesn't equal 100% because the respondents could indicate 3 most important elements

Source: own research

Table 5: The primary focus of MSMEs' mission statements

Even though MSMEs recognize the increasing role of sustainability, the presented research findings show that sustainability is not yet treated as a strategic element integrated into the companies' vision and mission statements.

DISCUSSION AND CONCLUSIONS

In contemporary literature sustainability is indisputably regarded as essential for gaining a long-term competitive advantage. In recent decades the business environment has undergone significant changes, including intensifying competition; striving for lower costs; an increase in pollution; a deterioration of the natural environment; increasing customer sensitivity to social injustice; the development of consumer, social and alter-globalization movements; as well as changing environmental and social regulations or legislation. These changes do not only affect big companies as MSMEs are also increasingly being compelled to develop strategies to increase both their operational effectiveness and sustainability.

The study presented in this paper has shown that the environmental factors that have contributed the most to the development of the sustainability concept, i.e. the development of legal regulations related to responsible business or the increase in environmental pollution, are not yet significantly reflected in the business objectives and mission

statements formulated by MSMEs. As a consequence, the micro and small enterprises which participated in the survey did not perceive conducting operations in accordance with the concept of sustainability as a very important challenge of the modern market. The significance of this element is to the greatest extent recognized by medium-sized companies. The research also showed that while in all three groups of enterprises (micro, small and medium-sized) the importance of socio-ecological goals is growing, the highest dynamics of growth can be observed in the case of medium-sized companies. Unfortunately, it has to be assumed that the actions which are undertaken by the analysed entities in this respect take place at the operational rather than strategic level because micro, small and medium-sized enterprises do not tend to incorporate sustainability in their mission statements. With regard to the issue of the implementation of sustainability by MSMEs, it is rather disappointing that companies do not give a high priority to such key aspects of sustainable development as compliance with ethical standards, environmental protection, involvement in activities of a social nature, sustainability, as well as good relationships with employees, customers, business

partners and other stakeholders when creating a company-wide strategy.

From a managerial perspective, the present study provides several contributions for marketing professionals regarding the strategic development of MSMEs. The findings of this study indicate some key elements that play a significant role in creating their competitive advantage. The greatest chances of development will be enjoyed by those organizations that will be able to incorporate current trends, in this case sustainability, into the company's entire strategy, including its mission statement, goals and, as a consequence, marketing strategy.

From an academic point of view, the research examines some relevant questions regarding the implementation of sustainability into the strategies of MSMEs. For many years scientists have been engaged in a discussion on sustainable development,

the concept of meeting the needs of the present generation without compromising the ability of future generations to meet theirs, in relation to large companies. However, sustainability in MSMEs is a completely unrecognized notion in the literature. To the authors' best knowledge, this is the first study on sustainability issues relating to companies conducted among MSMEs with an international dimension.

The research also has some limitations, which will create challenges for future research. The primary limitation of this study is the fact that it is based on selected European countries, and therefore the results cannot be generalized to the entire population of MSMEs in Europe. Another limitation is the fact that it only involves MSMEs and not big companies. Therefore, the authors think that it would be interesting to conduct similar research among large European firms in order to make a comparative analysis between these two groups of entities.

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MARKET CHALLENGER STRATEGIC APPLICATIONS OF CRM: A CASE OF ROOFING TILES MARKET RE-INVENTION IN CROATIA

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Abstract

In its broad definition, customer relationship management or CRM allows companies to manage and improve relationships and interactions with their customers. From a system perspective, CRM operates as a dedicated database, containing sales related data, such as prospect and customer contact information, records of customer interactions, sales data, sales representative's performance data, leads and sales opportunities. Although it could be considered as an affordable and available concept, CRM can enhance company's competitive advantage, especially in the context of B2B markets. This paper focuses on the specific application of CRM within the context of Croatian roofing tiles industry. The paper describes how a newcomer company, with international background, entered well-defined market with structured competition. However, instead of directly fighting against main players in the market, the company decided to re-invent marketing strategy and develop strong focus on customers. The company introduced new marketing techniques and tools that have not been used by the competition. The cornerstone of such innovative marketing strategy was the application of CRM. The CRM system was tailored to fit the specific needs of the company and to address market specifics. Besides giving the management a strategic tool for customer management and sales optimization, CRM also provided sales representatives with almost real-time relevant customer and sales data before and during customer visits. Consequently, sales representatives became more efficient while interacting with customers, which also resulted with higher satisfaction rate among customers. Although the competition tried to copy the strategy and CRM applications, the sales growth rate was tremendous and unprecedented within the industry, and the company became a market leader.

Keywords: CRM, sales management, marketing strategy, roofing tiles market, Croatia

INTRODUCTION

Market position has significant impact on the company's strategy. Traditionally, marketing literature suggests a classification of competitive positions that range from market leader to market niches, with market challengers and market followers in between (Gilligan & Wilson, 2009). While the market leader is typically a company ahead of its competition in terms of market share, market challengers have slightly smaller market share. From strategic perspectives, market challenger is a company trying to increase its

market share on the account of the market leader or other market players (Kotler & Keller, 2012). The market challenger strategy is usually aggressive and consists of attacks on other companies on the market. However, market challenge can also utilise less direct attack strategies by re-inventing the market offering through differentiated product and supporting services. The aim of this paper is to present an innovative market strategy deployed by a market challenger within the well-structured and highly competitive roofing tiles market in Croatia. Instead of commencing direct attack in the form of

price competition, the market challenger decided to apply a differentiation strategy and offer more value to clients. In its pursuit to conquer the market, the challenger developed strong customer focus. The challenger also developed and launched fully tailored customer relationship management (CRM) system to support its differentiation strategy.

This paper first examines relevant literature and focuses on the market challenger strategies and strategic aspects of CRM. Next, a brief methodology description is provided, followed by the main section of the paper, in which the case study is presented. The case study section consists of three subsections. The first subsection provides a brief historic and market background, while the next two sections second delivers an overview of the market challenger's strategy and the strategic use of CRM. In the conclusion section of the paper, a conceptual CRM model is presented and discussed, together with research limitations and relevant implications.

MARKET CHALLENGER STRATEGIES AND STRATEGIC ROLE OF CRM

Market challenger strategies

A market challenger is a company whose aim is to increase sales and market share. In existing markets, options are limited. If the market is growing, a challenger can count on new customers and avoid direct confrontation with competitors. However, if the market is stagnating or shrinking, the market challenger can achieve growth only by attacking competitors and taking customers away from them. When deciding on the attack strategy, the market challenger can commit frontal, flank, encirclement, bypass or guerrilla attack (Kotler & Keller, 2012). In case of a frontal attack, the market challenger would attack in the area where the competitor is strong, while in case of a flank attack, the challenger would attack where the competitor is weak (Bhasin, 2017). Therefore, the frontal attack bears the highest risk for the challenger. An encirclement attack is a combination of both frontal and flank attack, while in a bypass attack the challenger ignores the existing offerings of the competitor and seeks for undefended markets (Yannopoulos, 2011). In a bypass attack, the challenger can focus on existing markets not currently served by competitors or, instead, it can create a new market by offering significantly new and innovative technology (Kim & Mauborgne, 2015; Paley, 1999). As an attack strategy, guerrilla marketing is about making small but valuable changes that will result in the market share growth over a certain period of time (Levinson, 2007). In overall, bypass and guerrilla strategies can be described as strategies in which market challenger avoids head-on confrontation. After deciding on the attack strategy, the challenger has to take into consideration the choice of whom

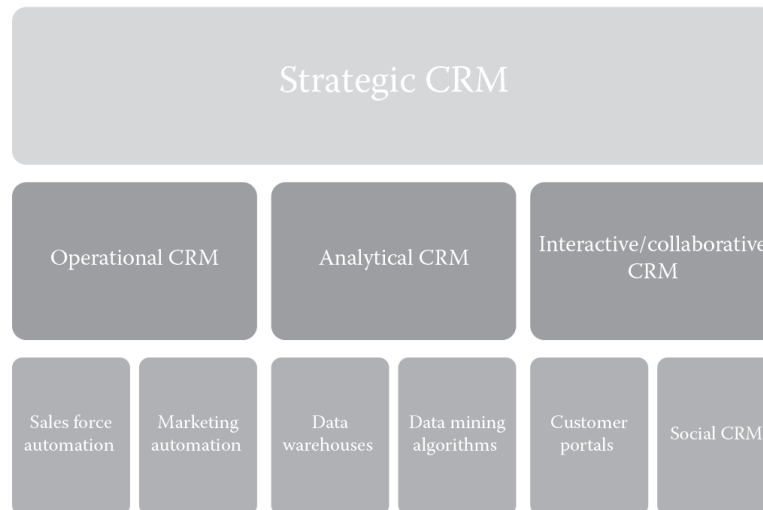
to challenge. Additionally, the challenger has also to consider the risk related to the aggressive stance and potential cost of such strategic decision (Gilligan & Wilson, 2009). The market challenger's goal is to increase its market share, but within the range of acceptable cost. In worst case, due to wrong choice of a target or an underestimated cost related to the specific attacking strategy, the challenger may even lose the market share. Therefore, the challenger has to carefully analyse all of the options before making any aggressive moves. To improve the odds, the market challenger has to develop sustainable competitive advantage, which is usually a combination of business strategy elements that provide a meaningful advantage over both current and future competitors (Aaker, 2013).

From traditional perspectives, a company can achieve competitive advantage following one of the generic strategies: cost leadership, differentiation or focus (Porter, 1980). As Porter (1980) suggested, cost leadership strategy is based on a lower production cost that can facilitate the lowest prices in a target market segment. With the application of this strategy, the company is increasing the market share by targeting price-sensitive consumers. The differentiation strategy is a more commonly used marketing strategy under which a company develops unique and desirable products to target consumers that are not price-sensitive and, in some cases, even underserved (Pavicic et al., 2014; Byorn & Dawes, 2001). Successful application of this strategy will result in the increasing demand for the product and/or increasing profitability based on premium pricing strategy. While both cost leadership and differentiation strategies target whole markets and large consumer segments, the focus strategy is concentrated on one or few segments. In this context, a company can build its competitive advantage by offering lower cost (cost focus) or differentiate itself (differentiation focus) (Porter, 1985). Porter (1980) suggested applying only one strategy, while failure to do so can result in "stuck in the middle scenario". Apparently, having no clear strategic focus can have a negative impact on the future development trajectory.

Porter's generic strategies received criticism over time. Apparently, the "stuck in the middle scenario" is not necessarily an unsuccessful strategy. According to some empirical studies, companies applying a hybrid strategy, or a combination of two generic strategies, can even outperform companies practising just one generic strategy (Prajogo, 2007; Spanos et al., 2004; Miller, 1992; Hambrick, 1983). Furthermore, in highly competitive and unstable market conditions, innovation and entrepreneurial spirit seem to be the key success factors, while following one of the generic strategies is a less important factor (Kuratko & Audretsch, 2009).

Strategic role of CRM

Customer relationship management or CRM can be defined as a comprehensive strategy that facilitates customer acquisition, together with management and improvement of relationships and interactions with current customers (Parvatiyar & Sheth, 2001). From the application perspectives, CRM represents corporate information systems that digitize business processes aimed at customers and end of the value chain, including marketing, sales, and post-sales support (Goodhue et al., 2002). Essentially, CRM's purpose is to create value for both the company and its customers, which gives CRM also an important marketing role (Shim et al., 2012). Therefore, CRM complements company's efforts to develop customer focus.



Source: Kinnett, S. (2017) *How to Win at CRM: Strategy, Implementation, Management*. Boca Raton, CRC Press, p. 7.

Figure 1: Complexity of CRM application

From the strategic perspectives, CRM represents a complex system that has to be meticulously planned and designed in order to properly address all the company's requirements and strategic goals (Figure 1). Although CRM became a prevalent initiative for many companies, poor planning and inadequate implementation can result in higher cost and partial benefits (Kinnett, 2017). Existence of CRM within a company cannot be considered as the sole success factor. As the empirical studies revealed, a successful implementation of CRM is strongly linked with various organizational factors, such as employees and their motivation, leadership type and specific know-how (Cambra-Fierro et al., 2017). Therefore, companies have to put significant focus on training and motivation of employees to improve the overall success rate of CRM. Additionally, full alignment between corporate strategy and clear CRM strategy is a prerequisite for the successful implementation of CRM (Payne, 2006; Rigby et al., 2002).

Besides the aforementioned improvement and management of relationships with customers, CRM can provide competitive advantage to the company by increasing customer loyalty. CRM helps companies to attain and continuously generate knowledge about their customers (Khodakarami &

Chan, 2014), which can be used for product/service customisation. Therefore, customer knowledge can be considered as a critical asset that can improve company's competitiveness by addressing individual customer requirements (Alfirevic, Draskovic & Pavicic, 2013; Garcia-Murillo & Annabi, 2002). However, effective use of customer knowledge is also related to the company's capabilities in knowledge management (Garrido-Morreno & Padilla-Meléndez, 2011; Campell, 2003). Consequently, proper use of customer knowledge will result in satisfied and loyal customers (Cuthbertson & Laine, 2004), and, additionally, in customers less prone to switch to competitive offers. Empirical research also detected the relationship length as one of the moderating factors of the customer loyalty (Padmavathy, 2017). This leads to the need of customisation of CRM activities based on duration of such relationship. A well-designed and fully deployed CRM also allows companies to create and deliver innovative marketing campaigns (Russell, 2015). Furthermore, the use of CRM data has been specially underlined in the context of digital advertising and programmatic ad buying (Ryan, 2017; News Marketing Weekly, 2015).

RESEARCH DESIGN

The purpose of this paper is to describe and analyse practical application of CRM by the market challenger in the context of Croatian roofing tiles market. Due to its explorative nature, the case study methodology has been selected as the most appropriate. As Yin (2009) suggests, the case study methodology represents an empirical inquiry that investigates a phenomenon in its real-life context. It is an intensive study that provides a high level of details and a better understanding of the complex phenomenon (Golic & Davis, 2012).

The data relevant for the development of a case study was obtained from available secondary sources and through a series of in-depth interviews with the industry professionals. The interviews were recorded and transcripts were created for the purpose of qualitative content analysis.

CASE STUDY: RE-INVENTING THE CROATIAN ROOFING TILES MARKET

Brief market background

Since the roofing tiles are heavy and bulky, the freight cost usually offsets lower production cost. Additionally, production of clay tiles requires local availability of raw materials, since its transportation is not cost-efficient. Therefore, the roofing tiles industry in Europe is predominantly based on the production output of local and regional production sites. On a global level, the roofing tiles market is growing, mainly due to positive trends in construction. Additionally, also replacement of conventional roofing materials with more modern materials contributes to the overall growth of the market (ReportsnReports, 2016).

In terms of competition, the Croatian roofing tiles market was relatively stable until early 1990s. During the mid-1990s, both local production and distribution were significantly interrupted due to the war. As the hostilities ended, the government initiated a large-scale reconstruction of buildings and houses damaged and destroyed in the 1991-1995 period. The increasing demand was largely covered by two big local producers (one producing traditional clay tiles, while other producing concrete tiles). The gaps were filled by several smaller producers (also producing traditional clay tiles) and partially by some sporadic imports. During that market blooming period, few local entrepreneurs started importing asphalt shingles, a roofing material popular in North America.

The Croatian roofing tiles market had a positive trend until the global economic crisis in 2007/2008. Due to the construction bubble burst, the demand for roofing tiles sharply decreased (Vecernji list, 2013). In recent years, the roofing tiles market started to recover (Croatian Bureau of Statistics, 2017).

Newcomer in the market

In the mid-1990s, the Croatian government started the privatisation of the state-owned companies, among which was the clay tiles production facility Zagorka in Bedekovcina, in the north-western part of Croatia. Zagorka was founded in 1889 by Ferdo Stejskal and his cousin Ernest Stejskal. As a site location, Bedekovcina was chosen due to the abundance of high quality clay (Punek, 1999). Besides clay tiles, Zagorka also produced clay bricks, pots and fire-resistant materials. In 1892, the company was sold to the Austrian company Wienerberger Ziegelfabrik. After the Second World War, the company was nationalised.

In 1996, a relatively large Austrian clay tiles producer decided to seize the opportunity and enter the growing Croatian roofing tiles market by acquiring Zagorka. Obviously, the newcomer chose a brownfield investment as a fairly quick and efficient entry mode. The acquisition was followed by a series of production related investments and improvements, since the existing technology was partially outdated. Furthermore, the production of bricks was suspended, due to an increased focus on the company's core competences. In 2000, the Austrian company acquired the second production site in Vinkovci, in the eastern part of Croatia. The Vinkovci plant was intensively modernised in 2009. With the humble beginnings and sales topping at 5 million pieces per year, sales reached 50 million pieces by 2008 and the newcomer became the market leader reaching 50% market share.

Due to a shrinking market demand, production in the Bedekovcina plant was suspended in 2012 and the Vinkovci plant became the sole producer of clay roofing tiles. In 2014, the company was acquired by the biggest Austrian producer of clay-based products.

The market challenger strategy

In the time of Zagorka's acquisition, the Croatian roofing tiles market was well-structured with intensive competition and the newcomer acted as a market challenger. However, since the overall market was growing, the newcomer's appearance did not raise too many eyebrows. At least, not at the beginning. Since the state of technology among Croatian roofing tiles producers was pretty much outdated, the newcomer decided to start with the improvement of the production facility. Consequently, this led to the production capacity increase and lower production cost. However, the company did not choose the cost leadership strategy, which can potentially result in the price war with competitors. Instead, the company set up a premium pricing strategy, supported by high product quality, and decided to differentiate its offerings in terms of customer acquisition and relationship management.

This way, the company also avoided direct clashes with other players in the market.

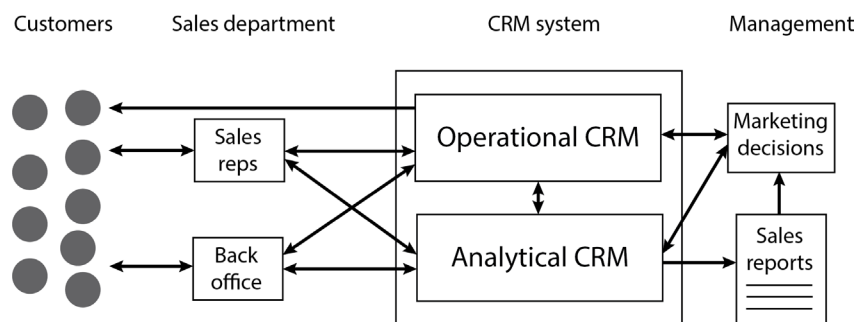
The newcomer completely redefined customer acquisition. Due to growing demand, the other players would usually wait for customers to reach them. Therefore, their behaviour was pretty inert. The newcomer decided to take more aggressive stance and actively search for new clients among several market segments – retailers, wholesalers, roofing contractors, construction contractors, investors (individuals and organizations), conservators and architects. While some of these segments would generate sales (e.g. investors, retailers, wholesalers), the company also targeted different stakeholders that may influence the purchasing process by giving the right advice (e.g. conservators and architects).

Sales representatives were instructed to initiate contact each time they would notice a new construction site on their respective sales routes. Besides offering their products, the sales representatives would also investigate participants on the construction project and target them individually. The newcomer also put extra effort on the retail network organizing trainings and events for their managers, but also sales staff. Apparently, retail sales staff was not commonly targeted by marketing activities, yet they directly interacted with customers ordering roofing tiles. Therefore, the newcomer decided to change that habit.

Besides sales related marketing activities, the company also developed a set of pre- and post-sales activities. Technical support was available to both individual investors and clients, so this way all

technical issues and concerns were quickly solved. The newcomer also started distributing e-mail newsletters informing stakeholders about important developments. Additionally, the company also sent personalised messages to various stakeholders (e.g. wishing them happy birthday). Since quite distinctive market segments were targeted, the company designed different types of events and programs for each of the segments. For example, for the roofing contractors the company organised educational programs, while new product presentations would be organised for the architects. The company also introduced a loyalty program for the customers. For each purchase, customers would receive a certain amount of points, which could later be exchanged for some practical awards (e.g. saws, jackets).

To improve the sales representatives' efficiency and overall customer satisfaction, the company developed and introduced a fully customised and mobile CRM system, which was another innovation within the industry. The purpose of the CRM system was twofold. Firstly, the system provided sales representatives with essential information related to the product range, client's performance, pending orders, etc. With all the information at their hands, sales representatives were able to address typical concerns and questions during sales interactions, which directly correlated with the overall customer satisfaction. On the other hand, CRM was also used as a sales performance monitoring tool and decision-making support tool by the company's management. This way, management obtained a real-time overview of sales efforts by a client or a stakeholder.



Source: authors' own work

Figure 2: The customised CRM application and main data flows

Figure 2 represents the main elements of the company's CRM application. The sales department, comprising both sales representatives and sales administrators (i.e. back office), is responsible for the data input. Some data inputs are automated since the CRM is connected with the company's management information system (e.g. invoicing, purchase order processing), while others require manual input (e.g. storing new customer data). The purpose of the operational part of CRM is to enable the automation of certain marketing functions, such as the distribution of the email newsletter or setting-up the alarm when some person's birthday is closing in. The analytical part of CRM comprises data warehouses and data mining tools used for automated generation of customised reports. These reports are used by the management to optimise the overall sales process and support the decision-making process.

CONCLUSION

As the case study revealed, the market winning strategy does not have to be aggressive towards competitors. Instead, companies can focus on providing more value to the clients by offering high quality products and supporting services that outperform competition. The newcomer at the Croatian roofing tiles market decided to differentiate both product and supporting services in order to create its own "blue ocean strategy", instead of directly confronting direct competitors (Kim & Mauborgne, 2015).

With this bypass attack, the market challenger created a certain diversion and the competitors were not able to respond adequately. Consequently, the challenger became a market leader.

An important element of the challenger's strategy was the development and implementation of CRM. Since the competition did not deploy its own CRM, it gave the challenger a certain competitive edge. The sales representatives were able to use the CRM to improve their performance and interactions with customers on the tactical level, which added value to the relationship. Additionally, the CRM provided the management a better overview of the sales process and helped them make better strategic decisions.

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ACCEPTANCE OF SHARED AUTONOMOUS VEHICLES – A CORRESPONDENCE ANALYSIS OF NEW CAR BUYER ATTITUDES

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Abstract

The development of autonomous vehicles will significantly change individual transportation as well as the psychological perception of automobiles. Most likely the advance of this technology will alter the concept of car-ownership, as shared mobility services will provide convenient individual mobility at low costs. Next to technical and legal challenges, the success of shared autonomous vehicles will depend upon the widespread acceptance of this service by customers. The present study addresses this aspect by eliciting salient beliefs of individuals towards shared autonomous vehicles. In sum, 41 new car buyers were interviewed upon the delivery of their new automobile at a German premium car manufacturer's delivery center. The semi-structured interviews were designed to evaluate the attitude towards this new technology as well as to collect related salient associations. Based on a two-dimensional correspondence matrix, a pattern of prevalent associations linked to the attitude towards shared mobility services was derived. The results show that acceptance is most strongly linked towards gains in productivity, while rejection is most closely related to reduced driving pleasure and general mistrust in technology. Notably, increased comfort and safety are rather corresponding to neutral beliefs towards this technology.

Keywords: Acceptance, Autonomous Driving, Shared Mobility, Correspondence Analysis

INTRODUCTION

The automotive industry is, in general, an innovation-driven industry in which competitiveness is heavily determined by innovativeness and continuous improvement. Accordingly, automobile companies have invested billions into research and development of innovations, such as driver-assistance systems, which increasingly automate the driving task. This development will ultimately lead to fully autonomous vehicles. The rise of this technology, however, will significantly change individual transportation as well as the psychological perception of automobiles. The idea of self-driving vehicles is transformative from an infrastructural perspective as well as from a public health perspective. If cars are able to navigate their way out of crowded cities, this could change the infrastructure of cities, since inner-city parking spaces are no longer needed (Fagnant and Kockelman, 2015). An automated management system of empty vehicles could move the vehicle to the nearest depot or car park (Alessandrini et al., 2015).

Most likely the advance of this technology will also end or at least drastically alter the concept of car-ownership, as Shared Autonomous Vehicles (SAVs) will provide convenient individual mobility at low costs. (Kruger et al., 2016). Currently, the cost of a human driver is the highest proportion in the cost calculation of ride-hailing services, such as Uber or Lyft. Removing the driver from the equation will reduce the cost of using a ride-hailing service below the cost of operating an own car. A recent study (ARK, 2017) even concluded that taking a robot taxi would be significantly cheaper than walking, assuming a per calorie price of \$3.99 for a big mac. It can be fairly assumed that the increased viability of this business model will also change customer acceptance. At \$3 per mile there is only a very limited market for instant ride-hailing, but at \$0.3 per mile these service will outright substitute private car ownership and even many other forms of transportation including public transport and walking. Chart 1 gives an overview about the estimated commuting cost structure.

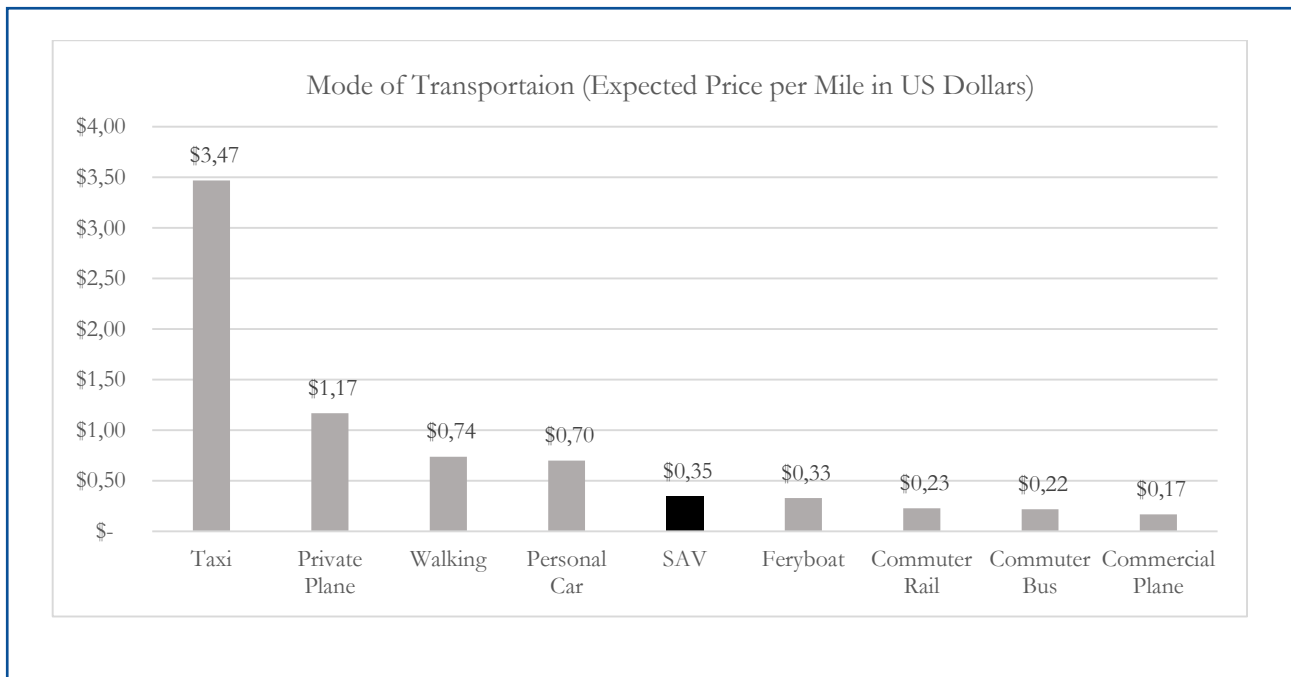


Chart1: Own illustration based on ARK Research (2017)

Second, from the theoretical perspective of innovation acceptance research, the context of SAVs combines some very unique aspects:

1. SAVs are a substitute for a highly emotional product, the automobile.
2. SAVs are aimed at replacing the driving task, which is known to have a special role in the self-identity of consumers
3. SAVs will drastically change learned routines and habits of consumers.

For this reasons, the beliefs towards the acceptance of SAVs are expected to differ substantially from other cases of consumer goods. Consequently, this unique context offers promising insights into the field of innovation acceptance (Burghout, Rigole & Andreasson, 2015; Kruger, 2016). The knowledge of which factors have the strongest influence on

consumer acceptance in the case of SAVs will help the industry to develop this technology further in order to better meet customer needs. It is obvious that a profound understanding of the reasons and root causes for the acceptance of SAVs will help governmental institutions to develop more efficient and effective legislative action towards their ultimate goal to in-crease road safety and inner-city infrastructure.

DEFINITIONS

For the purpose of the present research, Shared Autonomous Vehicles (SAV) will be used synonymously with Robo-Taxi, referring to a system that enables automated individual transport on-demand. This system no longer requires a human driver. Following the accepted taxonomy of automated vehicle systems this will only be possible with Level 5 automated vehicles. Table 1 shows the taxonomy and definitions for automated vehicle systems (adapted from Diels, Cyriel, and Jelte E. Bos, 2016 and SAE, 2014)

Automation level	Name	Narrative definition	Responsibility for driving task
Human driver monitors the driving environment			
0	No automation	The full-time performance by the human driver of all aspects of the dynamic driving task*, even when enhanced by warning or intervention systems	The driver
1	Driver assistance	The driving mode**-specific execution by a driver assistance system of either steering or acceleration/deceleration using information about the driving environment and with the expectation that the human driver performs all remaining aspects of the dynamic driving task	
2	Partial automation	The driving mode-specific execution by one or more driver assistance system of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the human driver performs all remaining aspects of the dynamic driving task	
Automated driving system ("system") monitors the driving environment			
3	Conditional automation	The driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task with the expectation that the human driver will respond appropriately to a request to intervene***	The System, driver monitors
4	High automation	The driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task, even if a human driver does not respond appropriately to a request to intervene	
5	Full automation	The full-time performance by an automated driving system of all aspects of the dynamic driving task under all roadway and environmental conditions that can be managed by a human driver	The System

Key definitions:

*Dynamic driving task includes the operational (steering, braking, accelerating, monitoring the vehicle and roadway) and tactical (responding to events, determining when to change lanes, turn, use signals, etc.) aspects of the driving task, but not the strategic (determining destinations and waypoints) aspect of the driving task.

**Driving mode is a type of driving scenario with characteristic dynamic driving task requirements (e.g., expressway merging, high speed cruising, low speed traffic jam, closed-campus operations, etc.).

***Request to intervene is notification by the automated driving system to a human driver that s/he should promptly begin or resume performance of the dynamic driving task.

Table 1: Taxonomy and definitions for automated vehicle systems

THEORETICAL FRAMEWORK

The present paper will be based on the Theory of Planned Behaviour (Fishbein and Ajzen, 1967, 2010), which proposes that behaviour is determined by intention, which in turn is determined by two fundamental factors: the attitude towards the behaviour and the subjective norms. Attitudes are basically the positive or negative evaluations of the behaviour in question, while norms represent the perceived social pressure to engage or not engage in the behaviour in question. Attitudes are believed to develop automatically and inevitably as new beliefs are formed about an object. Specifically, people are assumed to have pre-existing evaluations of certain

attributes of an innovation that become linked to this object in the process of belief formation. Depending on the strength of these beliefs and the evaluations of the innovation's attributes, the overall attitude towards the object is formed. Thus, in future, the attitude object will automatically activate the summated evaluative response: that is, the overall attitude towards the object. People can, of course, form many different beliefs about an object, but it is assumed that only a relatively small number determine the attitude at any given moment. Only salient beliefs (i.e. beliefs about the object that come readily to mind) serve as the predominant determinants of the attitude (Swartz and Douglas, 2009, p.26).

The present study will focus on these salient beliefs of individuals toward as Shared Autonomous Vehicles.

STATE OF CURRENT RESEARCH

Although the TPB has been widely applied to examine the adoption and acceptance of different technologies, the model itself does not provide a sufficient explanation or prediction for each behavioural context (Chen and Mort, 2007, p.356). Consequently, a growing body of research has focused on developing the model further by extending it with several new, context-specific, constructs. Recently, however, some researchers have also tried to integrate the existing models to examine technology adoption by employing the complementary and explanatory power of different acceptance models taken together. In an attempt to recognize the strengths and weaknesses of different technology acceptance models developed so far, Venkatesh et al. (2003) incorporated Rogers' Innovation Diffusion Theory (Rogers, 2003), the TPB as well as the TAM and several other specialized innovation acceptance models into one unified model, which was consequently referred to as the United Theory of Acceptance and Use of Technology (UTAUT). Yet, also this unified model has to be adopted to each behavioural context to fully explain the acceptance behaviour. It is therefore important to focus on context-related research in order to draw conclusions on acceptance behaviour. While the topic of Shared Autonomous Vehicles has gained relative popularity in commercial publications, the amount of scientific publication towards acceptance factors for Robo-Taxis is still relatively small. This may be due to the fact that the technology is not yet available and thus beliefs are not yet formed by individuals towards the research subject, making it difficult to elicit robust research result. A few studies, however, have derived acceptance and rejection factors towards SAVs. According to Litman (2017), Robo-Taxis would provide the benefit of reduced driving stress, improved productivity and increased mobility. Also SAVs are expected to reduce travel time, especially time to search for parking spaces (Burghout, Rigole & Andreasson, 2015). In a large international survey with 5000 responses from 109 countries, respondents were found to be most concerned about software hacking and general misuse, and were also concerned about legal issues and safety (Kyriakidis, Happee and de Winter, 2015). Other authors found that privacy and data safety may restrict willingness to use SAVs (Glancy, 2012). These factors were used to construct the interview-guideline in the next step.

RESEARCH APPROACH

As only salient beliefs (i.e. beliefs about the object that come readily to mind) serve as the predominant determinants of the attitude towards a new technology, the major challenge was to develop a research model that provides a setting in which respondents form beliefs about a new technology, which is not yet available. It is expected that a random sample of individuals was not a suitable solution in this regard, since most likely they won't have formed salient beliefs about Robo-Taxis. Thus the authors decided to use personal interviews of new car buyers, at the time of handover of their new car. For most new car customers, it can be assumed that this is a highly emotional moment, in which beliefs about a potential shared vehicle concept are most readily available. In sum, 41 new car buyers were interviewed upon the delivery of their new automobile at a German premium car manufacturer's delivery center. Table 2 shows the demographics of the interviewees. The semi-structured interviews were designed to evaluate the attitude towards this new technology as well as to collect related salient associations.

Sample Demographics		
Gender	male	70,7%
	female	29,3%
Age groups	18-24 yrs	31,7%
	25-34 yrs	24,4%
	35-44 yrs	4,9%
	45-59 yrs	19,5%
	above 60	19,5%
Residence	City	36,6%
	Suburban	34,1%
	Rural	29,3%
N=41 new car buyers		

Table 2: Demographics of Interview Participants

Attitude towards Robo-Taxi

In order to assess the Attitude towards Robo-Taxis a three item scale was developed based on a pretest (see Table 3 for the question items). The reliability of the measurement model depends on the average correlation among the observed variables and is usually measured using the Cronbach's alpha. Generally a value greater than .80 indicates a very high level of reliability (Bryman and Bell, 2007; Shelby, 2011). While the Cronbach's alpha coefficient evaluates the overall reliability of the model, the Item-to-Total-Correlation (ITTC) measures how well a single indicator fits within the model.

The ITTC describes the correlation between a single item and the sum of all items that are supposed to represent one factor. Usually the Corrected Item-to-Total-Correlation is used, which indicates the correlation between a single indicator and the sum of

all other items minus the item evaluated. The value of ITTC can range from 0 to 1, while generally higher values indicate a good fit and a high convergent validity of the item under investigation (Jais, 2007, p.128).

Number of Items		Cronbach's Alpha		
3		.869		
	Item	Arithmetic mean (M)	Standard deviation (S)	Corrected Item-Total Correlation (ITTC)
29.1	Robo-Taxis are a very good way for me to test autonomous vehicles	3.86	1.355	.770
29.2	I like the idea to order a car to my doorstep online within seconds	3.95	1.542	.822
29.3	I would prefer a Robo-Taxi to a normal vehicle, because I can reach my goals easier	3.00	1.496	.670

Table3 : Factor Attitude towards Robo-Taxi

With a Cronbach's alpha value of .8692, the factor Attitude towards Robo-Taxis can be regarded as a valid and reliable factor, which will be used for the further analysis.

Associations and Beliefs towards Robo-Taxis

After a short introduction of the Robo-Taxi concept by the interviewer, the respondents were asked to name three associations they have with the new technology. Afterwards they were guided through nine predefined categories of beliefs commonly held towards this technology. Based on the Literature Review described and an extensive pre-test, these nine major categories of associations with Robo-Taxis were developed: Increased productivity, increased safety, reduced travel time, increased comfort, limited driving pleasure, mistrust in technology, loss of control, liability issues and security and data abuse. These associations were brought up by the interviewer one after another in random order and it was documented whether or not the respondent was instantly supporting the belief or not.

Findings

Firstly, the descriptive statistics were employed to evaluate the attitude towards Robo-Taxis along demographics of the sample group. The age group split surprisingly revealed no clear tendency, whether younger or older people are more open towards this technology. Thus based on our sample age is no predictor for Robo-Car Acceptance.

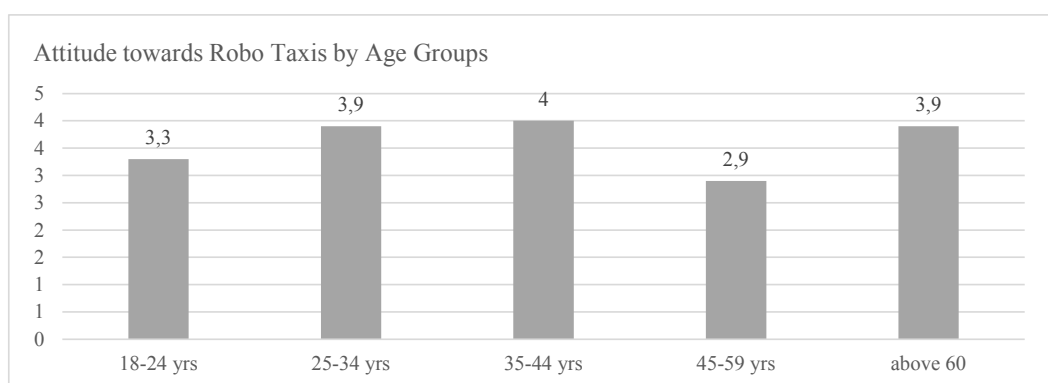


Chart 4: Attitude towards Robo-Taxis by Age Groups

Secondly, splitting the target group by residence reveals a difference between citizens of inner-city regions, suburban regions and rural regions. The results suggest that inhabitants of more densely populated areas generally have a higher acceptance of Shared Autonomous Vehicles.

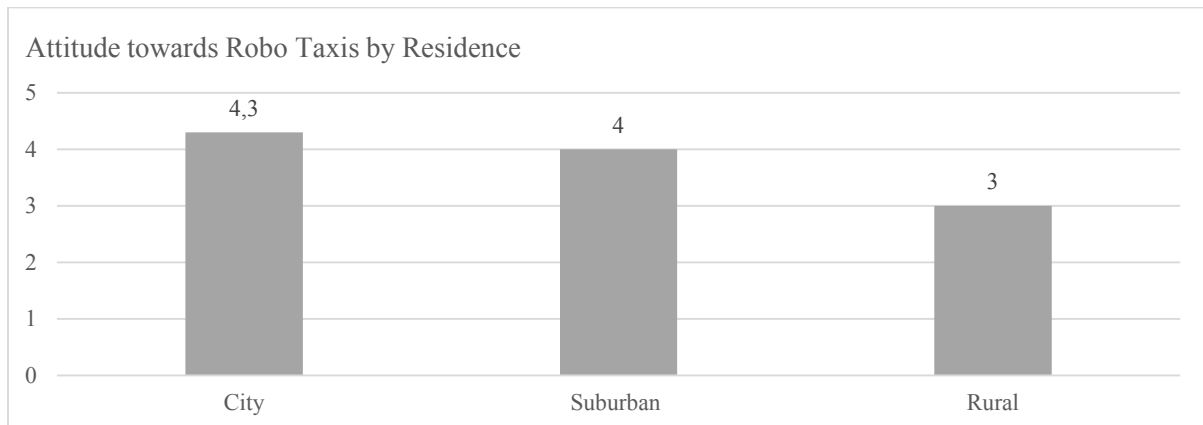


Chart 5: Attitude towards Robo Taxis by Residence

In order to test the significance of these difference a one-way ANOVA was calculated. Due to heterogeneity of variance in the groups a robust Welch-corrected version was employed (See Table 4). The Statistic was not significant with $F(22.2)=3.288$, $p=.056$ assuming a 5% significance level. In the next step a Post-Hoc analysis was used to evaluate individual group differences. Bonferroni corrected pairwise t-tests revealed a significant difference between the group Suburban on the one side and the group Rural on the other side, with $t=1.262$, $p=0.03$ (see Table 5). Thus, we can conclude that new car buyers from rural areas are significantly less likely to exchange their car for a Robo -Taxi.

	Statistica	df1	df2	Sig.
Welch-Test	3.288	2	22.246	.056
a. Asymptotic F-distribution				

(I) Residence	(J) Residence	Difference (I-J)	Standard Error	Significance	95%-Confidence Interval	
					Upper	Lower
Suburban	Rural	-1.262*	.465	.030	-2.43	-.10

Table 5: Post-Hoc multiple comparisons (Bonferroni pairwise t-tests)

Correspondence Analysis

Correspondence analysis (CA) is generally accepted as a way of visually displaying the association between two discrete variables, based on their cross tabulation in the form of a two-way table of frequencies. The row and column categories are depicted in a spatial map where certain distances or scalar products may be interpreted as approximations to the original data. CA is thus a particular case of weighted principal components analysis (PCA). In this general scheme, a set of multidimensional points exists in a high-dimensional space in which distance is measured by a weighted Euclidean metric. A two-dimensional solution (in general, low-dimensional) is obtained by determining the closest plane to the points in terms of weighted least-squares, and then projecting the points onto the plane for visualization and interpretation (Greenacre, 2006). For the purpose of the present Study the authors used SPSS Package CORRESPONDENCE Version 1.1 by Leiden University.

Since correspondence analysis is based on categorical data. The dependent Variable Attitude towards Robo-Taxis had to be categorized into three distinct groups, namely accept Robo-Taxi, neutral to Robo-Taxi, reject Robot-Taxi, based on their combined score.

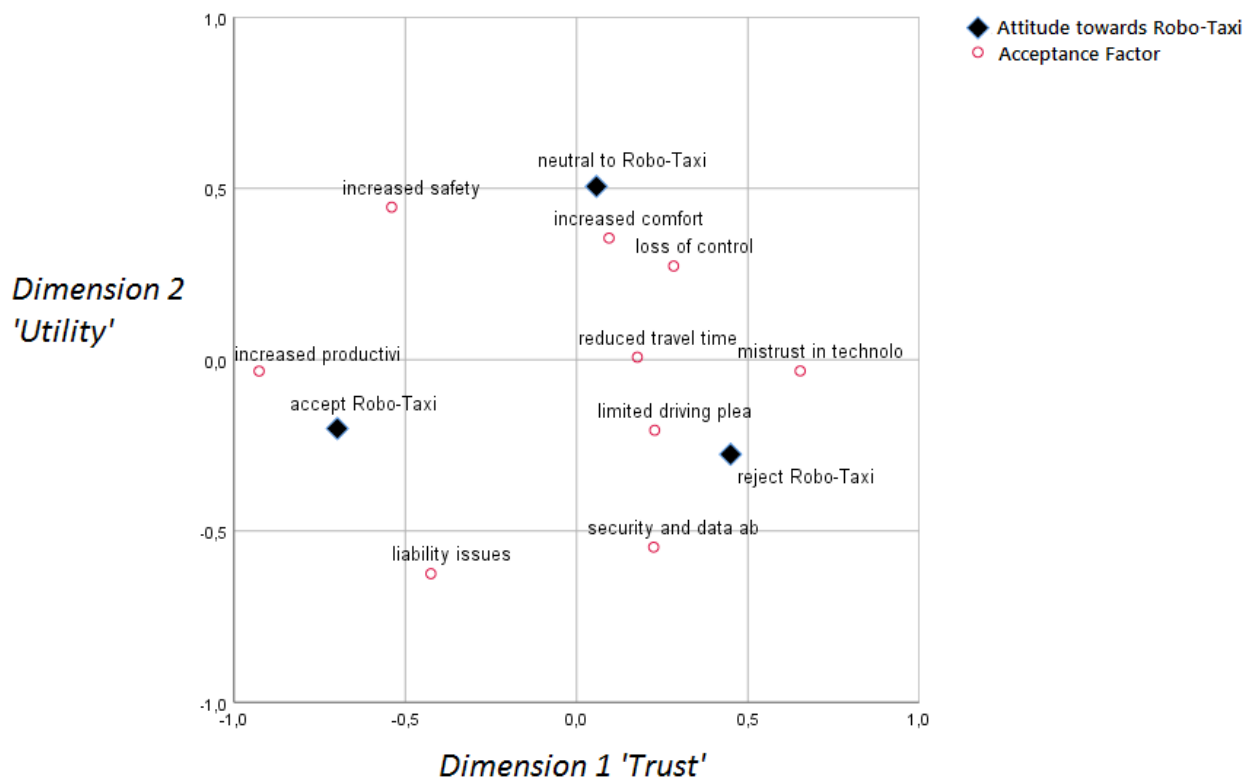


Chart6: Correspondence Analysis of Associations with Robo-Taxis

To interpret the results of the correspondence analysis the euclidean distance between the three vantage points (accept Robo-Taxi, neutral to Robot-Taxi and reject Robo-Taxi) and the associations needs to be regarded. Increased Productivity is closest to acceptance of Robo-Taxi, making it clear that this association is strongest linked to the acceptance of this technology. On the other side, Mistrust in Technology, Limited Driving Pleasure and Security and Data Abuse are most closely linked to the rejection of Robo-Taxi. Thus these associations seem to support a negative attitude towards the shared automated vehicles. Increased Comfort and Safety and Loss of Control correspond rather with a neutral attitude towards this technology.

CONCLUSIONS

The results of the present thesis contribute to this problem by offering an understanding of which factors are decisive for the acceptance of Robot-Taxis within the target group of German automobile drivers. Based on this understanding, implications can be derived that can help the industry to better market this technology. Firstly, the study revealed that there is a significant difference regarding the attitude towards autonomous driving between residence groups. Most importantly inhabitants of rural regions have a significantly lower attitude towards Robo-Taxis than suburban and city inhabitants. This may correspond to the availability of such services, since they will most likely be available in densely populated areas first, while in rural areas car ownership will prevail much longer.

The correspondence analysis has revealed three groups of corresponding association, which were named into Persuasive Unique Selling Propositions (USP), Rational Choice and Rejection Reasons. See Chart 6.

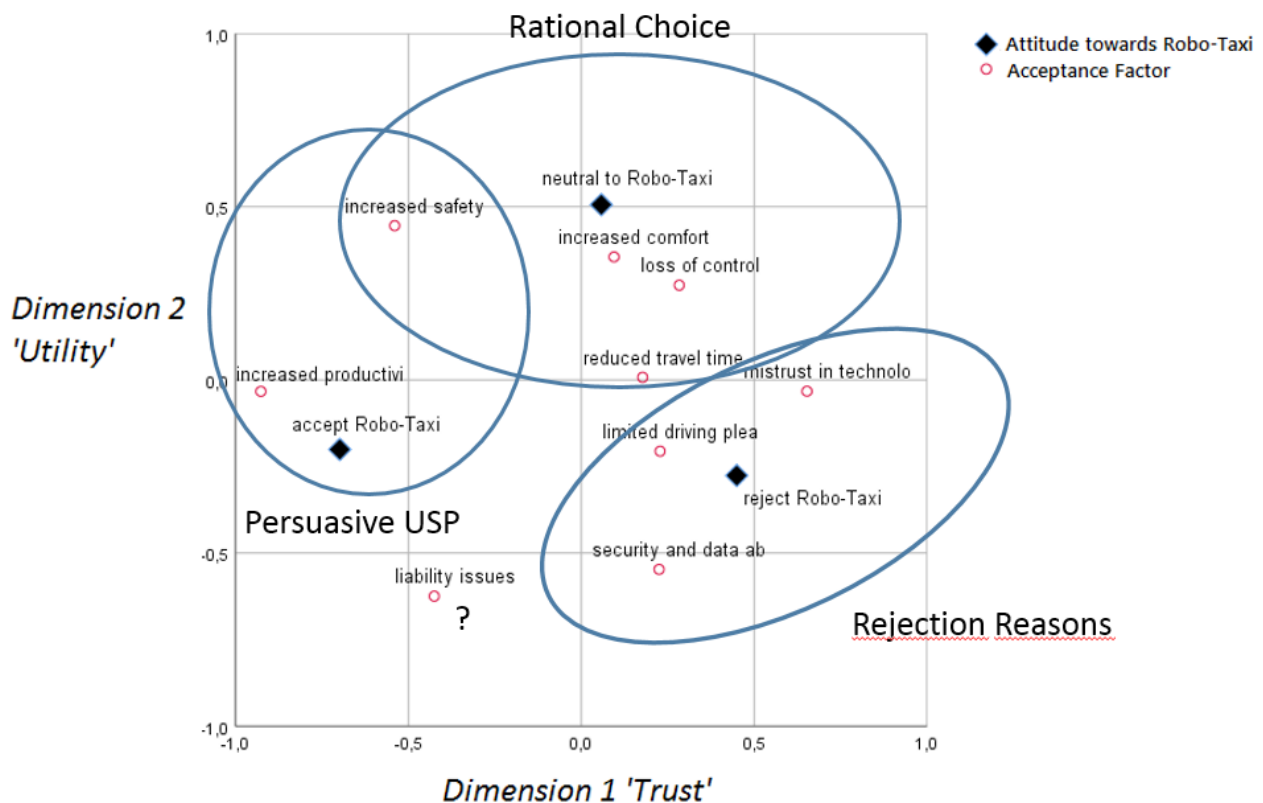


Chart6: Annotated Correspondence Analysis of Associations with Robo-Taxis

These three groups describe the salient beliefs which correspond with either behavior. A few associations, however, were not clearly defined. Increased Safety has a comparable Euclidean distance to Accept and Neutral, thus it is not clear whether safety can really be regarded as a persuasive USP for Robo-Taxis. Increased Comfort and Safety, albeit important aspects, seem not to correspond with a clear cut acceptance decision for Robo-Taxis. Interestingly Liability Issues seem not to correspond with either behavior. This is most probably due to the still very unclear legal situation of self-driving vehicles.

IMPLICATIONS

Since the study revealed that the Perceived Productivity Gains is the most decisive factor in SAV acceptance, the industry should focus its attention on the communication of potential productivity benefits of Robo-Taxis. Most important to reduce are concerns related to the Mistrust in Technology, which turned out to be one of the main reasons for SAV resistance. This factor, however, is affected by Experience with the technology. The more individuals have the chance to experience Robo-Taxis, the less they will have concerns about losing control or personal freedom when driving with driver-assistance systems. Thus, increasing experience will alter the potential belief sets positively and will thus have a positive effect on the acceptance decision (Fishbein and Ajzen, 2010). One of the main opportunities to increase SAV acceptance is to increase trial ability. Trial ability, according to Rogers

(2003), is the degree to which an innovation may be experimented with on a limited basis. Thus industry should intentionally lower the barrier to test Robo-Taxis in everyday situations in order to increase acceptance rates. To counter the perceived limited driving pleasure, which is another main factor for resistance towards Robo-Taxis, industry could focus on in-car entertainment and gamification concepts. While the sensory stimulation of driving a car cannot be replaced easily by offer free movies on board, new concepts might be able to include Virtual Reality in order to simulate for instance a racing game along the transportation route.

LIMITATION AND RECOMMENDATIONS FOR FURTHER RESEARCH

It is important to acknowledge that the present sample is restricted by quantity and generalizability of the target population. Since only 41 individuals participated in the study, all customers of one German premium car manufacturer, the conclusions derived from this study cannot be generalized without caution. Future research should broaden the scope by having a larger population with a

different demographic or regional scope. Future research should also be directed on the yet unclear associations, such as liability issues. These beliefs seem to be yet undefined in respondents' minds and it will be interesting to see how future events, such as accidents with self-driving cars, will alter these beliefs in either direction.

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EFFECTS OF EUROPEAN EMISSION TRADING SCHEME ON OIL PRICES AND STOCK EXCHANGE IN NIGERIA

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Abstract

TCarbon dioxide emission has a negative effect on human health and nature. The European Emission Trading Scheme (EU ETS) was introduced to reduce carbon dioxide emission and improve firms' performance through trading of marketable carbon emission. There is no known research on the effect of EU ETS on Nigeria oil prices and stock market returns. This research aims to bridge this knowledge gap. Data will be collected from financial reports of selected companies regulated by EU ETS and analysed. The significance of the relationship between dimensions of EU ETS, market value and oil prices will be determined using panel data regression models.

Keywords: *European Emission Trading System, Nigeria oil prices, stock market returns and Nigeria Stock Exchange*

INTRODUCTION

Oil and gas companies operating in Nigeria have been experiencing serious financial challenges partly due to the volatility in the global oil market and partly due to their inability to take advantage of opportunities in their environment, which has influenced negatively on their profitability. Available data showed that Oil and Gas firms quoted on the Nigerian stock exchange reported 18 per cent losses after tax for the half-year period ended June 30 2016 when compared with preceding year (Gbadebo, Izuora, Okoromadu & Nnana, 2016). According to the authors, this has resulted in cost-cutting measure like staff retrenchment and salary reduction and available statistics showed that Nigerian Oil and Gas Sector listed on the Nigeria stock exchange recorded 18 per cent losses after tax for the half-year period ended June 30 2016.

This is apparent that the low performance in Nigerian oil and gas companies has resulted in the slow economic, low standard of living, falling inflation expectations and the consequential effect on the lives of citizens in general, and not to mention the long standing uncontrolled effect of industrial activities on the natural environment that has created critical ecological and economic concerns (Gutti, Aji & Magaji, 2012; Ozor, Umunakwe, Ani & Nnadi, 2015). Although local and global policies in

both developed and developing nations have to some extent alleviated many of these environmental problems, the impact is still on the rise.

The worsening of ozone depletion, climate change, and exploitation of natural resources, air pollution and toxic wastes are harming environmental sustainable development and economic system. For example, the refining of oil, which is a water consumption activity and maintaining oil and gas production facilities are being affected by climate change (Schaeffer et al., 2012). Additionally, Covington and Thamotheram (2015) argued that 1% to 20% of investment value is at risk if the warming effect of climate change continues to increase. In terms of stock investment, stock price and share performance are very sensitive to the climate change issue (Dell, Jones, Olken & Gates, 2014). For instance, development of green energy could be a threat to conventional energy, thereby making stock price of green energy to be higher than conventional energy. It is estimated that Nigeria losses about 72 billion USD in revenues and 2.5 billion USD annually to gas flaring (Anomohanran, 2012).

The EU ETS, one of the greenhouse gas emissions trading scheme was set up to fight climate change issues and thereby improve corporate performance (European Union, 2003). The EU ETS relies on the principle of "cap-and-trade", whereby players in the market are mandated to hold allowances

corresponding to the amount of carbon dioxide they release into the atmosphere (Liu & Feng, 2018). The total amount due to EU Allowances is capped and gradually reduced. Participants can choose either to implement emission reduction measures or to buy EUAs from other players that have it in excess. Additionally, it provides a market efficient price for emission units that can be utilized by companies for future investment or business planning purposes (Lepone, Rahman & Yang, 2011).

In December 2004, Nigeria acceded to the EU ETS thereby setting the stage for the trading of Certified Emission Reductions (CERs) in Nigeria and making qualifying Nigerian emission reduction projects eligible for the issuance of CERs (Ijaiya, 2017). When adopting the EU ETS, Parties to the United Nations Framework Convention on Climate Change (UNFCCC) established the Clean Development Mechanism (CDM) with the twin goals of contributing to the sustainable development of developing countries and assisting developed countries to meet their emission limitation targets (Spalding-Fecher et al., 2012) through reduction in their carbon emissions. Despite the growing number of firms adopting EU ETS, there are mixed results findings regarding their benefits in empirical literature. Previous studies on EU ETS, which are mainly based on event studies or survey research, reveal inclusive and contradicting results in the relationships between EU ETS and firm performance (Martin, Muûls & Wagner, 2015; Wagner, Martin & Muûls, 2016). More importantly, the effect of European Emission trading system on oil prices and stock exchange has not been investigated. This current research attempts to fill this research gap by examining the effect of European Emission trading system on oil prices and stock exchange in Nigeria. Though studies on EU ETS in developed nations are abundant, (Rogge, Schleich, Hausmann, Roser & Reitz, 2011; Schmidt & Werner, 2012; Marin, Pellegrin & Marino, 2016; Makridou, Andriosopoulos, Doumpos & Galariotis, 2017), the same is not true of developing countries, particularly in Nigeria. It is important to analyze the effects of the European scheme, because this scheme remains the largest carbon trading market and the most important policy tool for climate change relief of the European Union.

OBJECTIVES OF THE STUDY

In line with the introduction, the general objectives of the study sought to examine the effect of European Emission trading system on oil prices and stock exchange, using data from Nigerian quoted firms. The specific objectives of the current study areas follows; to

- To ascertain the extent to which purchase of emission permits affect oil prices in Nigeria.

- To determine the effect of purchase of emission permits on the stock market returns of regulated Nigeria firms.
- Examine the impact of carbon price change by EU ETS on oil prices in Nigeria.
- To test the effects of carbon price change by EU ETS on the stock market returns of regulated Nigeria firms.
- To identify allowance allocation within the EU ETS framework effects on oil prices in Nigeria.
- To ascertain the extent to which allowance within the EU ETS framework affects the stock market returns of regulated Nigeria firms.

RESEARCH HYPOTHESES

In order to achieve the objectives as highlighted in the study, the following null hypotheses were formulated;

H₀₁: Purchase of emission permits does not have significant effect on oil prices in Nigeria.

H₀₂: Purchase of emission permits does not have significant effect on the stock market returns of regulated Nigeria firms.

H₀₃: Carbon price change by EU ETS does not have significant effect on oil prices in Nigeria.

H₀₄: Carbon price change by EU ETS does not have significant effect on the stock market returns of regulated Nigeria firms.

H₀₅: Allowance allocation within the EU ETS framework does not have significant effect on oil prices in Nigeria.

H₀₆: Allowance within the EU ETS framework does not have significant effect on the stock market returns of regulated Nigeria firms.

SIGNIFICANCE OF THE STUDY

An upward trend in environmental sustainability practices is being noticed worldwide, as companies in developed countries have started devising measures to combat the effect of carbon dioxide emission due to industrial activities. However, the same cannot be confidently said of developing countries like Nigeria, since the extent of environmental sustainability has remained predominantly very low (Oyebanji, Adeniyi, Khobai & Le Roux, 2017). Nevertheless, given the intensified interest and increasing demand from stakeholders for environmental sustainability through the EU ETS to combat climate change, this

study further provides an avenue for organizations on ways to view the importance of low carbon growth as they thrive to grow economy of their country and meet energy supply and demand. This study will invariably allow industrial companies that are under the EU ETS to identify opportunities for cost savings. It will provide an insight to industrial companies on how to satisfy the growing demands and continuous yearning for green house emission. More so, this study will make available for developed and emerging countries to see the need for environmental improvement and corporate environmental performance. This in the long run, helps to visualize an image of the country as having a moral obligation to take responsibility for its environmental activities.

Furthermore, this study will educate government or policy-makers on ways in which companies are planning, or have completed, the implementation of EU ETS can enhance its operations and better connect their efforts for environmental sustainability performance improvement. Besides, this study will serve as a template for other scholars that are involved in carrying out studies that are climate change/environmental sustainability based, especially within the context of developing country like Nigeria. Finally, this study serves as a reference point for future research on environmental sustainability practices through EU ETS among Nigerian firms.

SCOPE OF THE STUDY

The focus of this study is to examine the impact of emissions trading on the performance of firms in Nigerian oil and gas industry. The choice of Nigeria arises due Nigeria being one of the largest producer of crude oil in Africa and 14th largest in the world (Central Intelligence Agency, 2008). This statistic implies that Nigeria would be at the central of environmental sustainability through emission trading to combat climate change while still improving their performance.

To achieve the objectives of this study, this research would cover six (6) emission trading scheme project in Nigeria: (1) Escravos Oil Field Associated Gas Recovery and Utilization Project; (2) Recovery of associated gas that would otherwise be flared at Kwale oil-gas processing plant, Nigeria; (3) Pan Ocean Gas Utilization Project; (4) Recovery and marketing of gas that would otherwise be flared at the Asuokpu/Umutu Marginal Field, Nigeria; (5) Recovery and Utilization of Associated Gas from the Obodugwa and neighboring oil fields in Nigeria; (6) Afam Combined Cycle Gas Turbine Power Project. Only six were selected because the projects are owned by various oil and gas industries in Nigeria. Moreover, the choice of these industries is informed by the nature of their industrial/production activities and its direct impact on the environment.

These industries are considered to have a high pollution rate (First Global Select, 2008).

OPERATIONAL DEFINITION OF TERMS

Emission permits also known as carbon credit is defined as “a certificate showing that a Government or Company has paid to have a certain amount of carbon dioxide removed from the environment.

Oil prices refers to the spot price of a barrel of benchmark crude oil in Nigeria

Stock market returns is defined as the returns that an investor makes out of the stock market.

Carbon price refers to the cost applied to carbon pollution to encourage polluters to reduce the amount of greenhouse gas they emit into the atmosphere. d

Allowance allocation is the process of distributing allowances to covered entities in an emissions trading system (ETS). There are two basic options for allocation: allowances can be either given away (freely allocated) or sold at auction.

METHODOLOGY

In this research, in order to answer the research questions and test the hypotheses generated above, the methodology to be applied will be as follows: Before achieving the objective set, it is necessary to have a detailed understanding and knowledge in of EU ETS and market value and oil prices in Nigeria. Concept of EU ETS and its application is important for generating further research questions in the area. Literature review on these topics will be done through reading books, journal papers and related research studies. The literature review will build up the understanding on the definitions, meanings and importance of EU ETS on one hand and its relationship with market value and oil prices in Nigeria on the other hand. Investigation of the level of EU ETS compliance and its effect in Nigeria will be carried out in Nigeria stock exchange using panel data methodology. The relationship between the dimensions of EU ETS and market value and oil prices will be analyzed using panel data regression models. This model will prove the significance of the results generated. Data collected will be through the published financial reports of the selected companies regulated by EU ETS.

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THE EFFECTS OF GLOBALIZATION UPON THE SOVEREIGNTY OF NATIONAL COUNTRY

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Abstract

In this article author determines complex process of globalization and its effect on the sovereignty of national countries. It has been especially pointed out that globalization has positive and negative aspects. However, globalization mostly contributes to huge political and social changes at the world level. According to this, it has been pointed out in the paper that globalization is completely extremely complex process, which cannot be analyzed in one-dimensional way. Therefore, author especially postulates coordination of globalization and globalism with the sovereignty of national country. In accordance with that, primary character of the paper provides wide array of global thinking of leading theorists nowadays on dimensions and implications of globalization, referring to both, estimations and explanations that are affirmative without doubt, as well as to those explanations that describe the process of globalization as a very doubtful process. Author clearly concludes that the process of globalization causes change of traditional beliefs in many areas, and that, in strictly social meaning, it causes radical changes in our perception of economy, law, politics and modern entrepreneurship.

Referring to above, it may be concluded that for a long time the concept of sovereignty has been considered the ground base for domestic and international law. The very concept of sovereignty has been closely connected with the concept of the country. However, nowadays in the 21st century, concept of sovereignty has been exposed to many challenges and globalization is one of the most significant process among those challenges. This process has led to bigger dependency among people all over the world, which can be seen in all areas: in the area of economy, law, politics, military and culture. Therefore, there is a logical conclusion that the aim of this paper is to determine the issue of how globalization affects sovereignty of national countries and vice versa, including perception of important analysis of the arguments used in newer literature.

In this article, there have been used scientific (legal) methods, primarily dogmatic, normative and sociological methods, with the aim of better determination of the objects of research and postulation of scientific credibility of research in the article.

Keywords: globalization, sovereignty, national country, politics, law.

INTRODUCTION

All perceptions of globalization and sovereignty as limited and divided have been abandoned as contradiction in adjecto. However, any further analysis of the concept shows that globalization and sovereignty do not mean neither freedom from legal limitations, neither independence on external (economic) influences, whether it is about domestic or international regulations. Sovereignty has always been limited, as conception itself and as political practice. (Kostakopoulou, D., 2002:136) Since the role of the state has been changing and becoming bigger over time, the ethnical, legal and political limitations of its power have become more and more

strict and precise. In all political communities, the regulations defining activity of the state power were being created. Without legal regulations, sovereignty would become a mere factual power. Basic laws or written constitutions were created explicitly determining the activity of the state power. (Hinsley, F.H., 1992:206; Krbek, I., 1965:21)

Contemporary author Stephen Krasner describes sovereignty in international relationships as an organized hypocrisy, and he points out that the golden era of that concept had never existed: international standards connected with sovereignty through the history have been rejected and violated by the powerful states. (Krasner, S., 1999:9) After the Second World War, the most governments took

up the responsibility for safety, education, progress of economy and social welfare for their citizens. The states are occupied with macroeconomic planning, providing traffic infrastructure, and pass the legal regulations and provisions for those areas. (Kostakopoulou, D., 2002:135) The influence of the globalization on the state ability to govern has recently initiated many discussions, after which new perceptions of the nature and the future of the concept of the sovereignty have been created. Ambiguity and contradiction are both present in traditional concept of sovereignty and they appear to be in the focus of legal and political interest. (Kingsbury, B., 1998:610)

Nowadays, the states cannot pass and implement regulations independently because they are involved into complex global and regional networks. That is growing mutual independence recognizable in any field: political, military, economic, legal and cultural ones. The old concept of sovereignty has been questioned. However, it is still appreciated and supported by those who want (as they believe it is justified) to prevent involvement of foreign or international participants in decisions and activities of the national government. (Jackson, J.H., 2003:782) The first (operational) part of the article is referred to terminology of the term of globalization, and it provides survey of different definitions and explanation of the term. In the article, the author tries to define if the globalization is a new phenomenon. If it is not the case, what makes new form of globalization different from the previous ones. The second part of the article is based on knowledge of terminological determinations of the term of sovereignty. Considering the sovereignty in contemporary world as the focus of the theme, that part has the character of approaching the contemporary problems.

Sovereignty is not unchangeable or permanent concept. Historical concept has proven its flexibility, from monarchical sovereignty, through people's sovereignty to state sovereignty as the one being established by German legal doctrine during transition from the 19th to 20th century. The third, and the most important part of the article, questions general influence of globalization on the state sovereignty, and it provides primary survey of the arguments being used in newer literature. Author tries to provide answers in two subchapters for two questions and that is the scientific contribution of the article. Can Europe be the answer for the challenges of globalization? Can international organizations be the answer for the challenges of globalization? In the fourth part of the article author tries to compare legal postulates of global law with the law of national state. Therefore, it is very clear that author brings his focus on contradiction between traditional concept of sovereignty and contemporary global scene.

TERMINOLOGICAL DETERMINATION OF THE TERM OF GLOBALIZATION

According to some authors, discussion on globalization has differentiated three basic points of view: neoliberal, reformistic and radical. According to neoliberals, globalization is possible only with the condition of huge suppression of regulation and with abolition of state limitations that prevent movement of money, goods, services and capital. However, reformists promote wide array of different political measures in order to promote and to prevent negative potentials of capitalism. On the contrary, radicals are bivalent as follows: some of them are for preventing globalization meaning they are traditionalists, while the others are for globalization based on the assumptions of critical fractioning of one-dimensional progress. (Kalanj, R., 2001:203) Albrow, Beck, Castells, Giddens, Held, McGrow, Friedmann, Stiglitz and many other authors are the most significant theoreticians and experts of the globalization process.

Ulrich Beck believes that 'globalization imply the processes with the consequences when transnational participants, their chances for the power of orientation, identity and network mine national states and their sovereignty and they are mutually connected.' (Beck, U., 2003:28) The same author defines the term globalism. Therefore, according to him 'globalism is defined as perception where world market extrudes or replaces political activity, or ideology of world market rule, the ideology of neoliberalism.' (Beck, U., 2003:24) Globalism implies that we have been living in the world society of risk for a long time, meaning that image of closed spaces becomes fictitious. Connected to that, Beck believes that the reasons of irrevocable globalism are as follows: growing interactive abundance if international activity, the growth of power of transnational concerns, IT revolution, universal demands for human rights, flow of images of global cultural industries, polycentric world politics, the issue of global poverty, global destruction of the environment and transcultural conflicts in one place. Trying to provide answer to the question what globalism is, Davor Rodin concludes as follows: 'it is definitely not the result of seriousness, implementation of capitalism, of rule of technology, the history of mankind or national state on the whole world, but it is global facing with lifestyles of other cultures; therefore, as a result of semantic irritation of different cultures. Globalism is unexpected answer to xenophobic thesis of non-comparable different cultures as well as to colonial impetus of European modernism, which stands out as universal and as a destiny of the whole world.' (Rodin, D., 2001:344) In accordance with this, globalism is process of structurally new differentiation of human traditions and resources on the globe: new division of unpredictable, constantly new and changeable

resources, but not final and closed space.

Furthermore, author of so called 'the Third Way' in British politics Anthony Giddens defines globalization as the intensification of worldwide social relations linking distant localities in such a way that local happenings are shaped by events occurring many thousands of miles away and vice versa.' (Giddens, A., 1990:64) According to him, globalization has several essential dimensions: 1) the world capitalist economy, 2) the nation-state system, 3) international division of labor and 4) the world military order. In the end, Giddens admits that globalization in many aspects increases non-equity and injustice inside the world economy system, but cannot move out of its course because it is one of the characteristic of our present life. (Giddens, A., 1999:19)

Similar to this, David Held, as one of the leading contemporary political scientist today, defines globalization as 'a process (or set of processes) that embodies a transformation in the spatial organization or social relations and transactions, generating transcontinental or interregional flows and networks of activity, interaction, and power.' (Held, D., 1999:16) Held and Mc Grew point out several positions held by the globalists and that are contrasted to those held by their opponents, to be understood as follows:

1. Conception: sceptics or opponents claim that it is internationalization and regionalization, not globalization; globalists see world modelling by extensive and intensive flows set in networks of regions and continents;
2. Sceptics believe that national states still hold the power, while globalists see erosion of state sovereignty and removal from national states as well as the growth of multilateralism;
3. Sceptics and traditionalists see reappearance of national identity, while globalists point out the appearance of global culture and its hybridization;
4. Traditionalists speak of new imperialism through regionalization, while globalists speak of global information capitalism, transnational economy and new global division of labor;
5. Sceptics warn to growing division between North and South, while globalists insist on growing inequality inside and in between societies, and point out of the breakdown of the old hierarchy;
6. Sceptics fight for international society of the states, because political conflicts between the states still exist; on the contrary, globalists advocate establishment of multilateral global government, global civic society and global politics. (Held, D., McGraw, A., 2000:37)

Thomas L. Friedmann believes that process of globalization is extremely dynamic. Globalization means irrevocable integration of market, national states and technologies to the level not have been seen so far. This is happening in the way that

individuals, companies and the states are able to reach the whole world further, faster, deeper and cheaper than ever before causing strong reactions with those understanding the completely new system as rough or unreachable. Accordingly, globalization is defined by its own technologies, computerization, miniaturist policy, digitalization, satellite communication, optical fibers and the Internet. (Friedman, T.L., 2003:24)

Speaking of symbolical dichotomy between Lexus and the olive tree, author actually presents two opposite ways of living and thinking. While olive tree represent the warmth of the family, joy, individuality, intimacy of personal rituals, depth of personal relationships, as well as self-confidence and safety needed to go out and meet people we love, Lexus represents equally fundamental, primary human instinct- instinct to eat, improve, prosperity and modernity, as it appears in globalization system. Lexus represents new world markets, financial institutions and computer technologies that we use today in order to reach higher life standard. Therefore, Friedmann claims the difference between Lexus and the olive tree is pledge for existing of new world.

Zdravko Mlinar believes that 'globalization do not understand the breakage of local worlds of lives with their traditional local structures in the environment, therefore it is included in their interrelation in terms of localization and globalization. In social studies different terminology is used, e.g. deterritorialization or reterritorialization.' (Mlinar, Z., 2004:271) as different to Mlinar's belief, Manfred Steiger defines globalization as a variety of complex economic, political, cultural, ideological, and environmental forces that are rapidly altering our experience of the world. (Steiger, M., 2005:13)

Ronald Robertson believes that idea of globalization means reducing of the world, but also at the same time strengthening the awareness of the world as a whole. Author believes that modern sociological analysis of the 'world' has explicitly started in the 1960s in the 20th century. He believes what we today define as globalization was in the core of the analytical works by social theory scientists in 19th century. (Stiglitz, E.J., 1999:35)

In the range of definitions of globalization, there mostly prevail those that do not question the term or those defining it positively. However, there are significant and strong beliefs of the authors who define and analyze globalization in critical view. (Lozina, D., 2006:23)

TERMINOLOGICAL DEFINITION OF SOVEREIGNTY

Generally, it is considered that there is unique position inside political and legal system provided by the father of the sovereignty Jean Bodin. (Andrassy, V., 1927:86) He brought his classic positions on sovereignty in his famous work 'Six livres de la republique' (Six Books of Republic). Some experts

say about his piece of work to be the summary of everything he had written about the state. Boden's term of sovereignty takes over Roman legal categories *maiestas* and *imperium*. According to him 'sovereignty is absolute and permanent power of a republic under the Latin name *maiestatem* and Italian name *segnoria*. Therefore, the absolute sovereign is the one who does not recognize anyone more powerful than himself but God. The sovereign is not in any case liable to his own laws nor the laws by his predecessors, but only to his righteous and reasonable agreements respected generally and individually, and in the service of his people.' (Boden, J., 2002:38)

Boden believes that sovereignty has several different characteristics. The first characteristic of a sovereign is that he passes the laws for everyone in general and individual sense. However, that is not enough without agreement of the one superior than him or of the one inferior than him. Therefore, the first characteristic of sovereignty is the power (*pouvoir*) of passing the laws, i.e. commanding to all or everyone separately, the power not transferrable to the citizens. The second characteristic is possibility of declaring the war or peace negotiations. The third, essential one is reflected in nominating main officials. Therefore, the right of sovereignty is not contained in the election of the officials, but in their verification and nomination. The fourth characteristic of the sovereignty is the most superior authority (*dernier resort*), that has always been one of the main rights of sovereignty. The fifth constitutive characteristic is that the power to amnesty the convicts, which is above all decisions and acts contrary to the strict approach of the law whether that is the case when the convict is 'rewarded' with his life, or giving back his property or honor, or when he is forgiven of exile, and that is not in the power of the magistrates, no matter how superior they are, to approve or change anything of the decisions they brought. (Boden, J., 2002:53)

One of the best experts of the theory of the sovereignty Hinsley says that the term of sovereignty is absent during the existence of so called 'segment state', or at least during the moment when balance between the state and its segments, between the core and other power holders that experienced limited control, does not prevail to the middle changing segment state into unitary one, or fusion of several hierarchical segments into unique social hierarchy. In that regard, Hinsley says that 'the appearance of the state as a form of ruling is necessary, although it is not enough condition for the concept of sovereignty. Community and its authority have to be separated enough, which is the case only when the authority has the state form, before the concept of sovereignty becomes relevant. Therefore, only when community acknowledges the state and the state acknowledges the community, political power in term of sovereignty

can be discussed.' (Hinsley, H.F., 1992:27)

Therefore, in international law, sovereignty represents the ability of a subject of international law to possess the power to command other people in its area, to be independent from any other authority, to have freedom to make decisions, and at the same time, it has the most superior power over persons and things in certain area. (Ibler, V., 1987:307)

Above all, it is important to mention that many distinguished analysts of international public law believed that The Peace Treaty Westphalia from 25th October in 1648, which was concluded by the leading states of Europe in order to end thirty year war between catholic and orthodox states, is the birth place of *ius publicum europaeum*, i.e. of international law. Its founders were theory scientists and philosophers, like Francisco Suarez (1548-1617), Hugo Grotius (1583-1645), Samuel Pufendorf (1632-1694), and later Immanuel Kant joined them with his theory of 'eternal peace'. (Lozina, D., 2006:26)

Different from modern international law, said in condensed sense classic international law is based on the following characteristics:

1. subjects of international law are nations, i.e. national states as actors of strategic play in international relations;
2. states practice real independence and they act autonomous to own preferences;
3. they defend themselves from danger and guarantee safety of their citizens, and they follow only their own interests;
4. everyone may make coalitions with anyone in order to increase its power and safety. This old paradigm, or so called classic international law, has determined several rules for these relations as follows:
 - a) in order to become a subject of international law it has to be qualified as follows: sovereign state has to supervise its territory, establish homogenous population and it has to keep internal legal order;
 - b) condition to join this is international acknowledgment, a sovereignty is secured by international acknowledgment;
 - c) status of sovereign state is shown in its ability to conclude agreements with another state. In the case of conflict it has right to declare war to the other states without mentioning its reasons (*ius ad bellum*);
 - d) sovereign state may break the standards of wisdom and efficiency, but not of morality. its behavior is considered morally indifferent;
 - e) immunity of the state extends to its representatives, civil servants and officials;
 - f) sovereign state keep its right of juridical prosecution of crime committed in war;
 - g) opposite to the war led by the conflicted parties, third parties remain neutral. (Posavec, Z., 2004:115)

New paradigm of international law, or so called idealistic tendency means tendency of national state to become new world order, or world republic making supranational legal order, that provides transfer of positive law for the citizens from national to international level. Innovative core of the idea is a consequent reshaping of international law, new designing of the state law into the law of the world citizen as the one that belongs to an individual. (Lozina, D., 2006:27)

Hardt and Negri bring very wide interpretation of the sovereignty issue. Following post Marxist theory, these authors believe that their 'basic hypothesis is that sovereignty has new shape made of chain of national and supranational bodies united by unique logic of the ruling. We call it Empire.' (Hardt, M., Negri, A., 2003:8)

The new paradigm, called Empire, the authors take as combination of Luhmann theory system and Rawls justice theory – law as equity. They also believe that general apparatus of imperial commanding is consisted from three segments: including one, differential one and commanding one. The first one shows generous face of the Empire. Everyone is welcomed inside its borders no matter to race, religion, skin color, gender etc. The second, differential character involves setting accepted differences inside the Empire border in the end the authors believe that motto 'divide and rule' is not correct parole of imperial strategy. The Empire usually does not divide already accepted existing and possible differences, it actually welcomes them inside general economy of commanding. Therefore, according to Hardt and Negri, triple imperative of the Empire is: join, differentiate and rule. (Hardt, M., Negri, A., 2003:171)

GENERAL INFLUENCE OF GLOBALIZATION ON STATE SOVEREIGNTY

Three major directions are present in the literature concerning the relations between globalization and sovereign national state. The first one is followed by the authors who believe that globalization is not anything new, and that their effects are exaggerated. Therefore, globalization is not opposed to national states, but the states have key role in the process of globalization (so called point of view by traditionalists or sceptics). It has been pointed out that world economy and world (legal) order had been globalized in the 19th and 20th century, as well as they are today. (Quiggin, J., 2001:57). In addition, the most of economic and social activities are still of regional, and not global character. So called trinity (The Triad), the United States of America, Japan and the European Union, achieve almost three fourths of the gross world social product in the late 1990s, and there is the same image in the 21st century. Besides that, trinity is responsible for two thirds to

three fourths of all economic activities, and it makes only 15% of the world population. That actually means that 85% of the world population is out of the process of globalization. (Thompson, G., 2000:110)

Another direction is represented by the authors who believe that globalization is inevitable development that cannot be influenced or prevented by the national states. The influence of globalization is present all over the world and state borders become less important with growing of global interrelations. National cultures, legal order, economies and politics are involved in the global network. That makes national differences and sovereignty lesser, and creates homogenous global culture, international legal order and global economy. (Cochrane, A., Pain, K., 2000:22; de Vries, M., 2001:392). There is a new global structure of rules that set out the way in which the states, organizations and people function. Globalists' arguments claim that the states lost the ability to fight in war and defend their population because of development of nuclear weapon, because only isolated states can fight one against other provided they are not in the sphere of a military union. The states lost their ability to control the economy and legal order, they are not able anymore to satisfy economic needs of the citizens or protect cultural identity and differences of their population. (de Vries, M., 2001:397; Beetham, D., 1984:210)

According to the third direction, national states will not disappear, but the way the government fulfill their function will be significantly changed (this is so called opinion of transformists). Modern globalization seems like continuum of the previous ones, but still having different characteristics. 'Sceptics are wrong. Not only everyday life and activities over national state borders are new, but also the safety of the community, labor and capital. Global ecological awareness of dangers and adequate areas of activity are also new, as well as inevitable observation of transcultural others in own life with all contradict results, new circulating level of 'global cultural industries', new growth of European creation of the states, number and power of transnational actors, institutions and agreements. And finally, a ratio of economic and legal concertation is new, but it is still being slowed through new over border world market concurrency.' (Tucak, I., 2007:155)

Transformists admit that globalization has significant influence on the sovereignty of national state. Although these authors respect permanent relevancy of modern state, they point out that increase of interrelationship leads to transformation of its nature and role in global system. The state is less and less able to fulfill its central functions without international cooperation. Single states are not anymore the only political units suitable for solving key problems. (Held, D., 1997:114) all of this led to stronger political integration with other states, to multilateral agreements and

contracts in order to establish supervision over destabilizing consequences of globalization, as well as to establishing cooperation with non-government actors. According to Held, it is not possible anymore to explain global system without taking democratic state into consideration. (Held, D., 1997:44)

However, for national states to conduct the process of globalization is not only impossible, but it is obligatory. According to Vries, it is the fact that international trade is more and more dominant in economy and law of the states. However, the governments still can run development of economy. The national states did not lose the ability of making and applying the regulations in industry, or the ability to change their tax system according to their own needs. It is dominantly believed that the government can do it only by taking risk of decreasing of foreign investment and with the risk of the companies to leave the state. The states can run the development by adding high taxes and other forms of limitations to those companies they believe unwanted in their area, e.g. to big industrial polluters. Besides this, it is not true that the business grow where the income and the labor price are the minimal. Safety, social safety, infrastructure, education system and health are also important factors for successful business, and these are the elements to be cared about by the government. (de Vries, M., 2001:413)

From the everything mentioned above, the facts and the evidence allow different interpretation of the relations between globalization and the state. Further on, the author will try to answer to two questions; 1) Is Europe able to response to the challenges of globalization? and 2) Can international organization be the answer to the challenges of globalization? Modern nature of the modern state power can be shown by comparing the idea of sovereignty and new roles of international organizations, non-government actors, and appearance of so-called 'global law'. In this way, it can be shown how globalization limits national states in a set of key areas.

Can Europe be the answer to the challenges of globalization?

How does Beck see Europe? What does make his vision of Europe? Beck does not see Europe as geographical term, but as 'imaginary space'. (Beck, U., 2003:361) He then questions 'isn't political Europe illusion?' (Beck, U., 2003:362) He is especially irritated by the fact that political Europe does not exist and the fact that has not been taken as disadvantage. According to Beck, Europe expansion may cause 'further provincialism or opening of the European Union towards the world'. (Beck, U., 2008:137) In this context, Beck says that Europe cannot be built on the debris of national states, but the 'idea of 'cosmopolitan Europe' might unite the Europeans, because they will be free from fear of losing their identity. Beck believes

that 'recognition of differences' and 'integration of differences' are possible in European integration. (Beck, U., 2008:145) Then the basic cosmopolitan issue is justified as it sounds: how do you treat the differences of the others? Cosmopolitanism accepts differences, without removing all the differences like in the case of globalism, but it 'finds and recognize the other...in five basically different dimensions: recognizing differences of culturally different others..., the future..., the nature..., object and other rationalities.' (Beck, U., 2004:360) Beck asks about the foundations of the assumption that the idea of cosmopolitanism may inherit the 20th century ideas, and he mentions four 'victory paradoxes': '1) resistance to globalization speeds it and makes it legal; 2) globalization improves by paradox brotherhood of its opponents; 3) self-jeopardize replaces democracy; 4) self-establishment replaces democracy.' (Beck, U., 2004:360)

Beck is interested in what Europe is and what it should be. That cannot be seen from the history or tradition, but it should be 'developed as political answer to the questions of the future – in all areas' like 'labor market, ecology, social state, international migration, political freedoms, basic rights.' (Beck, U., 2003:365) Beck does not see the exit from this trap of globalization, but he believes that 'transnational state' may again create advantage of political, social, legal and economic political ability to act on cooperative states that can be controlled in democratic way.' (Beck, U., 2003:367)

There are five steps in defining Europe. Beck describes it primarily as 'open political project', claiming that 'it can define itself only as political project'. (Beck, U., Grande, E., 2006:20) Then, he questions about 'political principles that function for Europe to establish itself.' (Beck, U., Grande, E., 2006:22) His argument is the one allowing that 'values and norms of new Europe can be seen as an answer to the history of left and right terrorist regimes of the 20th century'. That is different of the claims by the left and right orientated discussions about Europe, from Copenhagen principles of extension to the East to advising by European constitutional commission. (Beck, U., Grande, E., 2006:23) Beck finds that 'political construction of Europe has internal and external side', because according to some researches integration of Europe is accepted as a process directed towards inside, while, on the other hand, Europe outside is forcing political definition and taking up the attitude to world politics. (Beck, U., Grande, E., 2006:24) Beck follows Eising when claiming that 'European integration ...is dynamic process of open result' taking place towards inside and outside. By inside includes 'constant extension of the European Union competencies and structural adaptations in the member states', and by outside by 'constant extension of the union and export of its norms and regulations'. (Beck, U., Grande, E., 2006:24)

In the end, Europe is not the same as the European

Union, i.e. 'it cannot be equal to a certain institutional form'. (Beck, U., Grande, E., 2006:25) Therefore, Europe is 'very complex and extremely differentiate, exciting and mobile political project.' (Beck, U., Grande, E., 2006:25) Becks finds key to understand Europe in cosmopolitanism. He sees three scenarios showing us the future of Europe: scenario of dissolution, of stagnation and of cosmopolitanism. According to the first one East European states will not integrate in terms of economy. According to the scenario of stagnation East European states will succeed to integrate in terms of economy, and according to the scenario of cosmopolitanism Europe will after extension to the East want to 'integrate the European Union in terms of economy and free it from chains of neoliberal project of internal market.' (Beck, U., Grande, E., 2006:284)

According to Beck, restoration of Europe is based on four pillars: 'on strengthening European civil society...., in transition to new post national model of democracy...., on introduction of new cosmopolitan approach to integration' and 'on establishing Europe as moving power of global cosmopolitanism and as a member of new transatlantic safety union.' (Beck, U., Grande, E., 2006:286) Discussion on mentioned pillars for renewing Europe goes out of this article's topic, but it should be point out that globalization is a process that influences the individuals as well as the states. It will progress, no matter what choice we make, for or against. Since the existing political structures, as shown in this paper, are not able to deal with changes of globalization in legal, economic and political area, it is easy to understand the need to create 'global democratic structure' like the European Union based on the idea of cosmopolitanism.

Can international organizations be the answer to the challenges of globalization?

'Moving toward institutions' appears after the First World War by establishing the League of Nations. (Chayes, A., Chayes, H., 1995:124) After the First World War the United Nations were founded, important institutional decisions were brought in Bretton Woods (New Hampshire, the United States) in 1944, that led to founding of International Monetary Fund (IMF) and World's Bank. This had caused extremely tension between the idea of state sovereignty, with national politics and national institution inside its core, and nature of making decisions on international level. Although de iure sovereignty is not directly damaged, the way of making decisions of international organizations sets important issues about possibility of a political community to decide independently upon its destiny. (Held, D., 1997:135) According to the level of reached integration, most of those organizations belong to so-called traditional international organizations.

The consent to transfer sovereign powers to international organizations is not necessarily permanent. Nobody can prevent member states to revoke their membership in international organizations, so they could have sovereign power they had transferred. (Raustiala, K., 2003:849) However, the United Nations, as the most significant international organization, has never completely pleased the assumptions related to so called traditional international organizations. (Martinez, M., Magdalena, M., 1996:294)

In that way, International Court of Justice transferred to the international level theory of implicit powers that had originally been formed by the Supreme Court of the United States of America in order to strengthen federal powers over the powers of the member states. (Janda, K., Berry, J.M., Goldmann, J., 1999:71) In 1949, advisory opinion of the International Court of Justice in the case Reparation for Injuries Suffered in Service of the United Nations marked the beginning of judicial acceptance that the United Nations have powers bigger than those explicitly assigned by the state members in the founding contract. (Martinez, M., 1996:70)

International organizations make decisions that had been considered to be in the state competence. Inequality among state members has become usual in the international organizations. 'Globalization has affected rejecting of normative elements of universal and equal sovereignty (...) unanimity is not necessary for decision making, and veto is also a rare case. Although consensus is often used, there are more often proportional voting or especially defined functional majority, and some international organizations can impose their decisions to the states.' (Kingsbury, B., 1998:611)

Operation of international economic organizations, International Monetary Fund (IMF), World's Bank and World Trade Organization, is especially disputable in terms of imposing conditions to the states, even the governments themselves, having not much space for national economic policy, ask for interventions. (Held, D., 1997:135) The World trade organization has developed from General Agreement on Tariffs and Trade (GATT) after Uruguayan round successfully finished at the Conference of Ministers in Marrakesh, Morocco, in April 1994. Numerous critics by World Trade Organization point out the lack of the control of the citizens and possibility of domestic democratic bodies to make decisions in many areas of traditionally domestic politics, e.g. on safety of food products, on foreign investment policy. So, there are some opinions like: 'Power to make decisions, assigned to the citizens and chosen domestic representatives, has been seriously limited by administration and by the bodies for resolving disputes with the headquarters in Geneva, that act secretly and without procedure guaranties and without citizens' participation present in domestic lawmaking bodies and courts.' (Jackson, J.H., 2003:790)

In other words, the lack of democratic legitimacy of rights of World Trade Organization is emphasized. (Drezner, D.W., 2001:336) These critics of international organizations are based on the assumption that the transfer of sovereign powers to international organization is bad. Supreme authority needs stay at the society level, process of democracy is more successful when the government is closer to its citizens. (Held, D., 1997:314) Markus Krajewski believes that the right of international trade organization has to satisfy the standards of both, the first and second group, since it defines obligatory directions for national, economic, legal, and social politics. Norms of international law become legitimate when process assumptions are fulfilled; the states are asked to give the consent included in the contract or in international customary law, and material assumptions of cooperation and peaceful conflict resolution. A norm of domestic law is in most modern constitutional systems considered legitimate if it is brought in democratic procedure and if it follows basic, social values like human rights and general welfare. (Krajewski, M., 2001:169) Since the norm of international law has to be reshaped into domestic law in order to be applied directly by domestic courts, unless it is self executive agreement, legitimacy of international law norms is not defined by national legitimacy standards. (Krajewski, M., 2001:170)

Therefore, until its provisions are not directly applicable, for the law of the World Trade Organization it would be enough the law from the international law point of view. However, the law of the World Trade Organization is significantly different from other international law agreements that are created inside other international organizations. The rules brought by this organization decide on public obligations in details and therefore limit national lawmaking. (Krajewski, M., 2001:170)

It is not possible to avoid conclusion that the World Trade Organization law and its system of dispute resolving have similar effect on national law as the law of the European Union and of the European Court of Justice. However, the World Trade Organization law is not supranational law, since it does not have elements of supremacy and direct effect. Krajewski finds it as a functional equivalent of supranational law. (Krajewski, M., 2001:171)

GLOBAL LAW VS NATIONAL STATE LAW

How does the process of globalization affect the law? There are new sources of norms created independently from national state. They are seriously different from methods and institutions of traditional interstate creation of law. (Berman, H.J., 1995:1617) these rules are brought and applied by non-state actors inter se. It is considered that these global actors move out of state order and that they

started to act towards world private regimes. We have witnessed the creation of 'global law' from private initiatives. (Teubner, G., 1997:6; Denninger, E., 2001:72)

Lex mercatoria, autonomous law of economic transactions, is the most successful example of 'global law' without state. This law is universally applicable, to those involved in economy, in their own state or abroad. (Berman, H.J., 1995:1620) Then, these are standardized conditions in certain industrial branches, normative practice of the lawyers and other professions related to trade transactions, business with credit cards. Global franchises etc. (Kingsbury, B., 1998:612) The changes appeared in labor law, in the law of companies and unions, and private actors appear as dominant regulators. Also, Lex sportiva internationalis is mentioned very often. (Teubner, G., 1997:6)

Although it is about informal social norms, they effectively shape behavior, and often limit regulatory possibilities of the states and international organizations. It is not realistic or possible in all cases to transform these norms into state ones only because traditional domestic and international law cannot deal with them. It is especially difficult to be done on the ground of some consent or delegation of sovereign will. Political theories of the law cannot help us in understanding of legal globalization. Joining the law and politics through constitution is not present at the world society level. This is especially true for positive theories that emphasize unity of state and politics. (Teubner, G., 1997:6)

Nowadays, multiple nature of normative orders and the law itself as an idea has been spread (legal pluralism). Relation between different legal systems has to be heterarchical, and not hierarchical. However, while previous interest of theories of legal pluralism had been directed to relation between state law and the law of different ethnical, cultural and religious communities, it has been now redirected to global law regimes. (Teubner, G., 1997:7) 'New world living law' is not thankful to tradition for its development, but to present self-reproduction of high technological, specialized, often formally organized and usually narrowly defined global networks of economic, cultural, legal, academic and technical nature.' (Teubner, G., 1997:6)

Globalization suspends basic principles of the national state law. Validity of legal norms does not arise from legal sources hierarchy, law legitimacy does not arise from politically constructed constitution, the law does not arise through parliamentary process, and the basic principles of legal state are endangered. (Denninger, E., 2001:72) Flexibility and differences are increasing. Global law functions as soft law. It is characterized by the lack of clearly defined legal institutions and precedents. However, it is harder to ensure coordination with non-obligatory rules. Coordination cannot be realized by formal mechanisms, but convincing, qualification and

supervision. (Väyrynen, R., 2001:234; Lohmann, G., 2004:98) One of the tendencies of these autonomous legal systems is that, in conflict situations, international judicial bodies do not decide according to positive hierarchically systematized legal norms, but among interested actors in arranged arbitrary instance with predicted sanctions according to the contract. (Lohmann, G., 2004:98)

Teubner recognizes four important characteristics that make 'global law' different that the national state law. (Teubner, G., 1997:8) These are borders, sources of the law, independence and unity of law. Borders of global law are not shaped on territorial basis, but on, invisible markets and branches', 'invisible professional communities', invisible social networks' that overcome territorial borders. In terms of the source of the law, general lawmaking bodies will become less important by development of globalization. Global law is highly specialized and it has technical nature. It is founded autonomously, by the 'invisible societies'.

While in the most of national states the legal procedure has high level of institutional independence, global law is tightly connected to adequate specialized social areas. From the point of national sovereignty, unity of law is a symbol of national identity and universal justice. Unity of law on the world level is not possible to achieve primarily because of existence of different legal cultures.

CONCLUSION

Sovereignty is complex theoretical term that includes a lot of theories and theoretical definitions. There are sometimes so big differences between those that certain concepts of sovereignty mutually exclude each other. Historically, sovereignty first appeared as sovereignty of a monarch, being described as a chain of powers assigned to the ruler. After civil revolutions, especially French and American revolutions, people's sovereignty becomes dominant principle of a democratic state. German theory at the beginning of the 20th century defines sovereignty as a characteristic of legal power, the highest and independent from other states (negative definition of sovereignty). This definition of sovereignty removes misunderstandings caused by two first ways of defining. Nowadays, the term of sovereignty, according to which a state from international point of view must not be subjected to any foreign power, and from the domestic point of view the state is superior to all persons and international organizations found in its territory, has been endangered by the process of globalization.

Between different ways in which globalization can be defined, it seems to us the most acceptable argumentation is that globalization is much more than liberalization of market that started by the end of the 20th century. Globalization is not recent

historical phenomenon, it is a process, i.e. complex chain of different processes that led everyday activities to be happening in the other part of the world, and behavior of local communities may have global echo. It has been developing in many areas: law, economy, culture, politics, military, etc.

Existence of different ways of interpretations for globalization and sovereignty relation (globalists, sceptics and transformists) shows us that the facts and evidence do not speak for themselves. Globalists see globalization as inevitable process that cannot be affected. They see development of a new world order and the end of national states' sovereignty. Traditionalists believe that globalization is not completely new phenomenon, that its effects are exaggerated and that national states are still dominant. Transformists choose middle way. They agree with globalists that modern globalization significantly differs from previous one. However, they believe that globalization can be affected, and there is still significant area for national state activity. Global flow of the capital, goods, service, technology, communication and information limit state sovereignty. The states cannot independently solve the issues like organized crime that goes over borders, environment pollution, etc. A huge number of well-organized associations of civil society warn to global issues. These associations have memberships all over the world and technology progress makes their communication possible. Process of globalization affects the law as well. Informal social norms increase more and more. These are set by non-state actors, and one of the most successful are *Lex mercatoria*, *Lex sportiva internationalis*, etc. (global private regimes). This new 'global law' effectively shapes behavior, although it is not set in parliamentary procedure. It arose out of state institutions and its legitimacy does arise from constitution.

A state tries to confirm its power again at the world's stage by building international institutions, by broadening of multilateral negotiations and agreements. The competencies of the state are at the same time narrowed and broaden, which provides it a chain of functions that cannot be performed individually anymore because of global international connection. International organizations become a mean by which the states can provide their basic aims: safety, economic progress and decent life to all citizens. However, international organizations are prone to live their own life. Related to this, some researches show that international organizations' competencies start surpassing the power of the member states, and by this global bureaucracy is being established. Therefore, for example, organizations like International Monetary Fund represent their own interests, and not the interests of their state members.

Modern state is trapped in global interconnection, embroidered supranational, intergovernmental and transnational forces. Sovereignty, being described as

absolute and unique and safely founded in national state, is being slowly rejected by theory. Sovereignty does not disappear, but its nature changes. Sovereignty today is presented as divided between

the list of actors, national ones, regional ones and international ones, and is being limited by the nature of this pluralism.

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ONLINE COMMUNICATION TOOLS IN BUILDING RELATIONSHIPS WITH YOUNG CONSUMERS

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Abstract

The development of the online environment, particularly the access to information resources and new information and communication tools, undeniably and dynamically affect marketing. The properties distinguishing the online environment, such as speed, interactivity and multimediality determine the way businesses function on broadly defined markets and substantially change the forms of communication with customers. The development of new technologies and the associated access to information and a wide range offer from all over the world means that companies, wanting to retain their customers, are making every effort to build stable relationships. In order to do so it is necessary to use tools tailored to the expectations and lifestyles of their present and potential customers. Therefore, as companies are heavily dependent on the particular market segment, this research is limited to the segment of young people aged 15 – 24 years. The empirical investigation was based on a sample of 502 young people from the Zachodniopomorskie province in Poland. The main aim of this research was to develop and validate a model of the impact of online communication tools on building relationships in the segment of young consumers. The analyses performed confirm the assumptions that specific online communication tools aimed at building relationships have a positive strength of behavioural and affective relationships built with young consumers. Moreover, the results obtained suggest that an increased relationship in the emotional dimension causes a significant increase in the strength of a relationship at the behavioural level.

Keywords: relationship marketing, young consumer, online tools, behavioural relationships, affective relationships

INTRODUCTION

Dynamic changes occurring in the market have made it necessary to adjust marketing activities to the expectations of customers. Among the determinants of such changes in the environment, technological advances and the emergence of new electronic channels of communication are of particular importance. Other factors include the increasing maturity of most markets as well as a growing difficulty in acquiring new customers due to their higher requirements, stronger competition and the increasingly common imitation of the solutions used by market players. The realities of the contemporary market mean that companies more and more heavily focus on building lasting relationships with customers (Otto, 2004b). According to this approach, the main goal of business activity should be striving to build lasting and valuable relationships with customers treated as individuals (Rudawska, 2008), and consequently adopting the relationship

management concept.

In view of the phenomena that can be observed in the market, focusing activities on building customer relationships seems to be extremely important since durable, and thus difficult to imitate, relationships that connect customers with the company are considered to be a resource that allows companies to gain a strong position in the market. This had already been emphasised by representatives of the resource-based theory (Warneldfelt, 1984; Barney, 1991; Barney, Wright and Ketchen, 2001; Hooley, Piercy and Nicolaud, 2008), who included marketing resources in the form of, among others, customer relationships in the intangible value of an enterprise. The focus on building lasting relationships with customers is reflected in the concepts of relationship marketing, which have emerged in many countries in the world since the 1980s (Berry, 1983; Sheth, 1988; Grönroos, 1990) and which gained popularity in Poland in the second half of the 1990s (Rydel and Ronkowski, 1995; Fonfara, 1995; Otto, 1996;

Rogodziński, 2000). The relationship marketing concept emphasizes building customer relationships through the use of information and databases (Copulsky and Wolf, 1990), the aim of which is to establish, maintain and deepen mutually beneficial exchanges (Cram, 1994; Morgan and Hunt, 1994) and fulfill promises (Grönroos, 1996).

Among the various approaches that explain the essence of relationship marketing, there are also those that treat it as merely an extension of marketing defined in the traditional way. One representative of such an approach to relationship marketing is M. Armstrong, who states that this is 'a concept according to which customer service and quality are added to the traditional marketing mix' (Otto, 2004a).

The use of modern technologies, including the Internet, provides a new dimension to customer relationships, and their proper adaptation becomes the basis of success in the contemporary market (Porter, 2001). Unlike traditional media, the Internet makes it possible to create space for multilateral communication, making transactions, searching for information as well as co-creating content (Mazurek, 2010). Despite the many benefits of this means of electronic communication, the use of the Internet in building relationships also has disadvantages. Primarily, building trust and managing relationships is potentially more difficult, especially if the interaction takes place exclusively through online channels (Morris i inni, 2002; Naquin and Paulson, 2003). Therefore, it seems important to understand the specificity of online relationships as well as the tools that can contribute to their strength.

The group which is to the greatest extent influenced by new technologies is the young person cohort. For the young generation the Internet is a natural environment. It is a means of spending free time; a place for having fun, learning, working, shopping, making friends and communicating; as well as an important tool for building both one's individual identity and relationships within a group. In view of this, the present research involved the segment of young people, i.e. people between the ages of 15 and 24.

In the literature one can find a number of empirical studies on the impact of technological advances, and in particular the Internet, on marketing (Toffler, 1980; O'Reilly, 2005; Kotler, Kartajaya and Setiawan, 2010; Porter, 2001; Prahalad and Ramaswamy, 2000; Kaznowski, 2007; Mazurek, ; Dobiegała-Korona, Doligalski and Korona, 2004; Frontczak, 2006). However, the majority of this research focuses on identifying the potential and possible ways of using virtual space for the operations of companies in general. Studies concentrating on narrower areas of business operations, including building customer

relationship in the behavioural and affective dimensions, are less frequent. Hence, the main aim of this research was to develop and validate a model of the impact of online communication tools on building relationships in the segment of young consumers.

Two dimensions of relationship

The nature of the relationship between customers and businesses can be considered in two aspects: behavioural and affective (emotional) (Day, 1990; Oliver, 1999).

The behavioural approach is related to customer behaviour and is defined as 'making purchases from the manufacturer of the same brand, buying at the same retail outlet or from the same seller' (Smyczek, 2001). Proponents of this approach agree that consistent shopping behaviour is a result of sales efforts aimed at building a long-term relationship with customers. In order to measure the strength of the customer relationship, it is necessary to analyse the volume of the purchases of a particular brand, i.e. the date of the last transaction, the frequency of purchases and the amount of money spent (RFM – Recency, Frequency, Monetary) (Cichosz, 2003).

The other, broader approach to analysing the customer relationship is the affective approach, also called the emotional approach. In this approach, the relationship is defined as a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts that have the potential to cause switching behaviour (Oliver, 1999). The affective approach assumes that positive emotions cannot be induced solely by such actions as price reductions, discounts, etc. The reason for this conviction is that such actions may lead to an escalation of customers' expectations, and failure to meet these expectations may lead to their dissatisfaction, thus making them more susceptible to the activities of competitors (Markiewicz, 2013). The affective approach assumes that what the customer finds the most important is often not so much the financial benefit but the relationship built through direct or indirect contact with the company, which makes the customer feel noticed and appreciated. Strong relationships are related to the level of trust that customers have for the company, as well as customers' engagement in developing the relationships established. This is because the existence of emotional bonds determines the existence of a true relationship (Rudawska, 2011). Acquiring a group of customers who are emotionally engaged in a relationship with a company contributes to its long-term competitive advantage. This is partly due to the fact that psychological relationships are a barrier to competition that is not easy to copy because

it is difficult for a competitor to create emotional impressions of the same strength and intensity as those currently offered (Skowronek, 2012).

The characteristics of customers engaged in a relationship with a company in the behavioural and affective dimensions are presented in Table 1.

A customer engaged in a relationship with a company	
In the behavioural dimension	In the affective dimension
<ul style="list-style-type: none"> – (RB1) is more prepared to accept the risks connected with making a purchase, – (RB2) wants to get the best price but is less sensitive to price changes, – (RB3) uses a lot of the company's products, both complementary and new, – (RB4) increases the frequency and volume of purchases, – (RB5) expresses a good opinion about the company and recommends its products. 	<ul style="list-style-type: none"> – (AR1) pays less attention to competitors' marketing activities and is less susceptible to them, – (AR2) identifies with the values represented by the company, – (AR3) willingly participates in developing the company's offering by sharing information about the needs and expectations of the market, – (AR4) voluntarily selects the company and its offering and then demonstrates their emotional commitment to the brand, – (AR5) is more willing to forgive the company for mistakes or failures, – (AR6) trusts the company.

Source: own compilation based on: Griffin J. (1997), *Customer Loyalty: How to Learn It, How to Keep It*, Jossey-Bass Publishers, San Francisco, p 31; Urban W., Siemieniako D. (2005), *Motywy lojalności klientów*, „Marketing i Rynek”, no. 5, pp 2 – 7; Liang Ch., Chen H. (2009), *A Study of Impacts of Website Quality on 'Customer Relationship Performance*, “Total Quality Management & Business Excellence”, vol. 20, no. 9, pp 971 – 988.

Table 1: Characteristics of relationships in the behavioural and affective (emotional) dimensions

TOOLS FOR DEVELOPING RELATIONSHIPS

New technologies have contributed to a significant modification of the determinants of relationships in the virtual world. Personal contact with the customer, previously regarded as a key factor, has been replaced by other elements that enable the creation of customer relationships.

A detailed analysis of the literature made it possible for the author to propose their own concept regarding the factors determining the ability to shape relationships with customers in the virtual world in the behavioural and affective dimensions.

Online communication tools for developing relationships at the behavioural level (BT)

The following factors are considered to be of key importance in the process of developing relationships at the behavioural level:

1. Value proposition and customer convenience (BTvac), which includes the following elements:

- (BT1) An attractive and intuitive website (intuitive page layout, visual appeal, efficient site search functionality);

- (BT2) A wide assortment of available products and the quality of their presentation on the website;
- (BT3) A range of delivery options;
- (BT4) Easy online payment options;
- (BT5) Possibility of tailoring the offer to individual needs;
- (BT6) Customizing the website for mobile devices.

2. Safety and trust (BTsat), which includes the following elements:

- (BT7) Complete and reliable information about products/services on the website;
- (BT8) Data security and privacy policy;
- (BT9) Reliability of the technology used (server reliability, web page loading speed, fast purchase processing);
- (BT10) Systems which enable customers to leave feedback and read other customers' comments;
- (BT11) Search engine advertising (high search engine ranking).

3. Customer service (BTcus), which includes the following tools:

- (BT12) Instant messaging available on the website to enable contact with the company in real time;

- (BT13) Easy contact with the company via e-mail;
- (BT14) Promptness of responses to online enquiries;
- (BT15) Easy and free returns of purchased products;
- (BT16) Providing information about special offers and new arrivals in a newsletter;
- (BT17) Delivery tracking system.

- (AT3) Online viral marketing (interesting content created by the company; for example videos, pictures or advertisements; that customers can share with friends);
- (AT4) Personalized e-mails, for example birthday greetings;
- (AT5) A company blog and newsgroups.

With regard to the issues discussed above and the identification of the tools affecting the behavioural dimension of relationships, the following research hypothesis was formulated:

Hypothesis 1. (H1) *The use of online communication tools aimed at building relationships in the behavioural aspect increases the strength of relationships in this dimension.*

Online communication tools for developing relationships at the affective level (AT)

The following factors influencing the process of developing relationships at the affective level have been identified:

1. Belonging and involvement (ATbi), which includes the following tools:
 - (AT1) Building a community around the company on social networking sites;
 - (AT2) Personalizing online communication on the website (e.g. personal greeting);

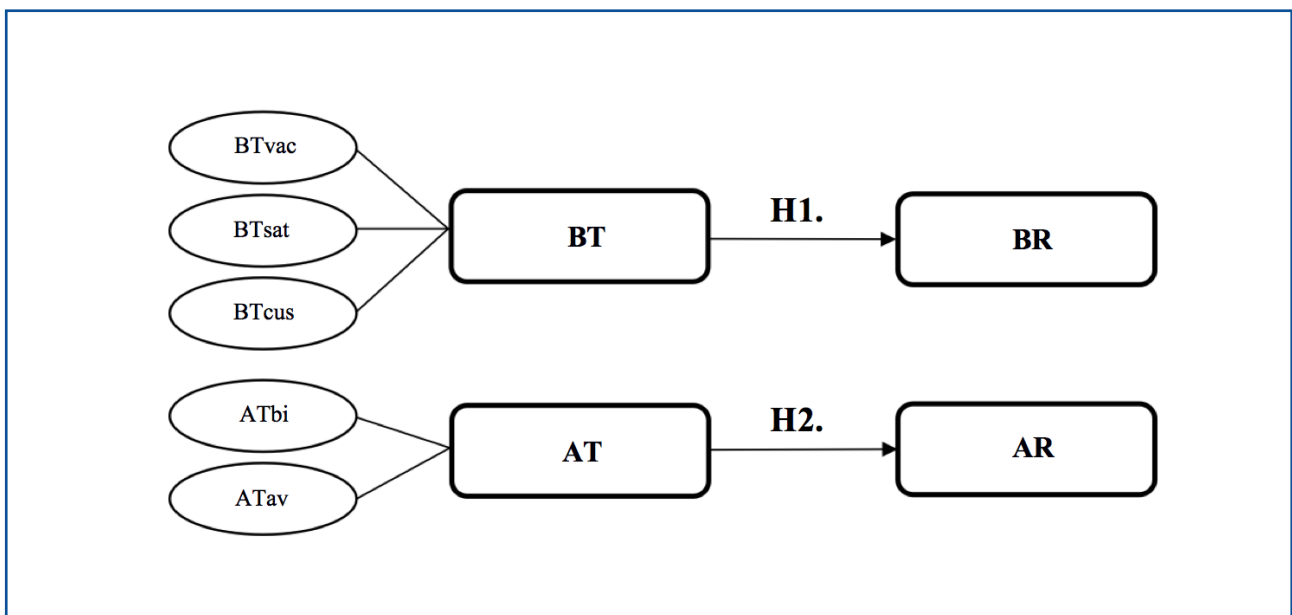
2. Added value for customers (Atav), which includes the following tools:

- (AT6) A customer rewards system, e.g. loyalty programmes;
- (AT7) Access to unique content and resources;
- (AT8) Advertising games and competitions offered by the company;
- (AT9) Free mobile applications;
- (AT10) Tools that enable customers to co-create the offering (packaging design, new product suggestions, etc.).

With regard to the issues discussed above and the identification of the tools affecting the affective dimension of relationships, the following research hypothesis was formulated:

Hypothesis 2. (H2) *The use of online communication tools aimed at building relationships in the affective aspect increases the strength of relationships in this dimension.*

As a result of theoretical research, a model of dependence was proposed (Figure 1), which was subsequently verified in empirical studies.



Source: own research.

Figure 1: A theoretical model of dependence between online communication tools and relationships in their behavioural and affective aspects

RESEARCH SAMPLE

The study was based on a questionnaire survey and conducted on a representative group of 502 young people aged 15-24. It was conducted in the Zachodniopomorskie province in Poland in January and February 2016 by means of direct contact. The age of the respondents was the main criterion taken into account in the sampling, but in order to increase the correctness of the conclusions, the researchers also tried to ensure that the genders were represented in equal proportions (50/50). The appropriate size of the sample for the planned study was determined on the basis of population data from the Zachodniopomorskie province in the year when the study was conducted (2016), obtained from the Central Statistical Office. The sampling was purposive and, to increase the accuracy of the research, respondents from different backgrounds were included in the sample.

METHODOLOGY

In order to determine the dependencies between the tools that shape relationships at the behavioural (BT) and affective (AT) levels plus the behavioural (BR) and affective (AR) dimensions of relationships, methodology applicable to the category of structural models was used. Due to the fact that the tested constructs were latent and could not be subjected to direct observation, Latent Variable Partial Least Squares path modelling was used for the analysis. This made it possible to combine the advantages of factor analysis and classic regression analysis. On the one hand, it was possible to conduct analyses at the level of latent variables (similarly as in factor analysis); and on the other hand, this method made it possible to identify the causal relationships between independent and dependent variables, as is the case in regression analysis (Rudawska, 2008). The sequence of analyses was as follows:

- Confirmatory factor analysis was performed to determine the factor loadings of the individual variables on the measurement scale.
- Cronbach's alpha was calculated to verify the reliability of each of the analysed constructs.
- The relationships between the individual constructs were determined by means of a linear structural model.

As a result of these analyses it was possible to verify the theoretical model of dependence between online communication tools and relationships in the behavioural and affective aspects, as well as creating the final version of the model supported by empirical research.

As mentioned above, four latent constructs were analysed in the study:

1. Online communication tools shaping relationships at the behavioural level (BT).

2. Online communication tools shaping relationships at the affective level (AT).
3. Behavioural dimension of relationships (BR).
4. Affective dimension of relationships (AR).

In order to verify the first two latent constructs (BT and AT), in the second part of the survey the respondents were asked to declare which online communication activities to the greatest extent influenced the strength of the relationship that exists between them and the company with which they had the most frequent online contact. The question consisted of elements which manifest themselves in the following ways:

- making further purchases, recommending the company to others, or experiencing a lower level of risk related to making purchases;
- emotional attachment to the company.

To this end, respondents were asked to assign a weight to each of the activities indicated in the questionnaire and to assess the companies whose services they used most frequently in terms of using those tools on a Likert scale from 1 to 5 (where 1 was the lowest rating and 5 the highest). In order to verify the other two constructs (BR and AR), participants were asked to respond to statements relating to the company with which they had the most frequent online contact. The statements in the questionnaire were connected with the behavioural and affective dimensions of relationships. In this case also respondents expressed their opinions with regard to the statements using a five-point Likert scale. The responses obtained made it possible to verify the proposed theoretical model and identify the tools that are the most significant for building relationships in the behavioural and affective dimensions.

RESULTS

Confirmatory Factor Analysis (CFA) was used in the initial stage of the study to prepare the measurement model. This analysis made it possible to test the fit between the hypothetical factor model and the covariance matrix of observable variables as well as the estimations of factor model parameters (Sagan, 2003a). The factor loading values obtained and the significance level α for each observable variable defining the latent constructs are presented in Table 2. The values obtained for each of the examined factors were high, which indicates an appropriate fit for the observable variables operationalizing the individual constructs. As a result, all the variables defining the different constructs were included in further analyses. Because their number was not large and the values of the factor loadings were high, it was decided that there was no need to limit the number of variables in the measuring scale only to those that the most strongly defined the constructs.

	Observable variables	Factor loading	Significance level α
BEHAVIOURABLE TOOLS (BT)	BT1	0.690	0.000
	BT2	0.776	0.000
	BT3	0.803	0.000
	BT4	0.807	0.000
	BT5	0.786	0.000
	BT6	0.768	0.000
	BT7	0.803	0.000
	BT8	0.804	0.000
	BT9	0.752	0.000
	BT10	0.764	0.000
	BT11	0.723	0.000
	BT12	0.786	0.000
	BT13	0.796	0.000
	BT14	0.769	0.000
	BT15	0.702	0.000
	BT16	0.688	0.000
	BT17	0.660	0.000
AFFECTIVE TOOLS (AT)	AT1	0.688	0.000
	AT2	0.851	0.000
	AT3	0.957	0.000
	AT4	0.999	0.000
	AT5	0.995	0.000
	AT6	1.128	0.000
	AT7	1.192	0.000
	AT8	0.993	0.000
	AT9	0.781	0.000
	AT10	0.692	0.000
BEHAVIOURAL RELATIONSHIPS (BR)	BR1	0.536	0.000
	BR2	0.461	0.000
	BR3	0.843	0.000
	BR4	0.733	0.000
	BR5	0.657	0.000
AFFECTIVE RELATIONSHIPS (AR)	AR1	0.481	0.000
	AR2	0.664	0.000
	AR3	0.679	0.000
	AR4	0.799	0.000
	AR5	0.672	0.000
	AR6	0.585	0.000

Source: own research.

Table 2: Factor loadings for the variables defining the individual constructs – the results of confirmatory factor analysis

In the next step, in order to identify and verify the latent variables, the reliability of each construct included in the study was estimated. The analysis indicated that the measuring scales developed for the constructs can be considered to be reliable. In each case, the standardized Cronbach's alpha, which denotes the lower limit of the reliability estimator, is at a high¹ and fully acceptable level. The use of a standardized coefficient made it possible to eliminate the influence of the number of variables used in the description of each construct. The values of the individual coefficients assessing the reliability of the individual constructs are presented in Table 3.

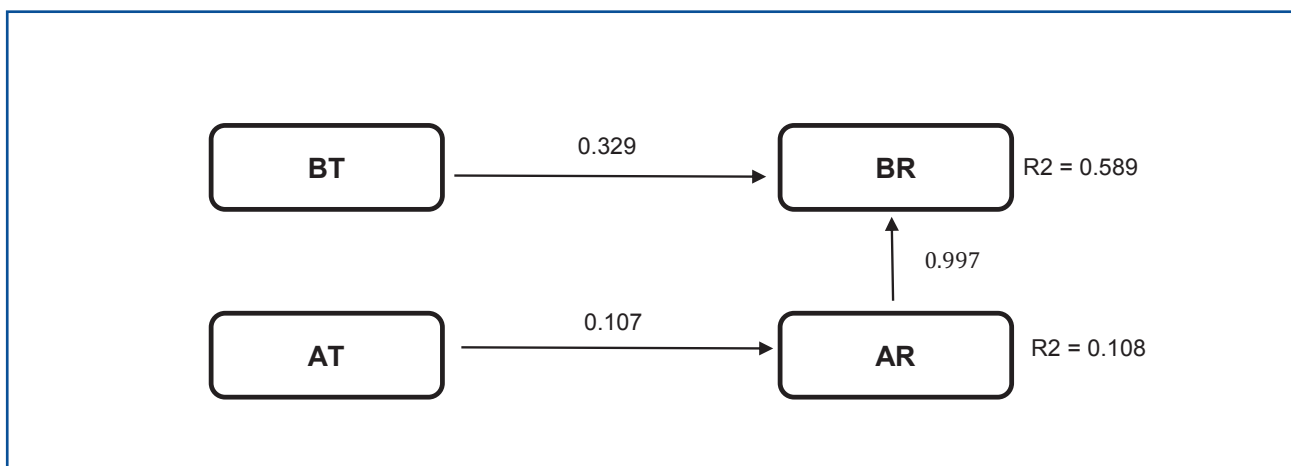
Construct	Standardised Cronbach's alpha
BT	0.904596
AT	0.907467
BR	0.715024
AR	0.758213

Source: own research.

Table 3. Assessment of the reliability of individual

As a result of the analyses the adopted constructs were finally treated as a linear combination of observable variables, as listed in Table 3. Linear structural models were used to determine the relationships between them. Thus, it was possible to identify not only the relationships between the observable variables and the four latent constructs, but also the causal relationships between the latent variables themselves (Sagan, 2003b). The empirically verified structural model created as a result of statistical analyses is presented in Figure 2.

In the model, the rectangles denote the latent variables subjected to factor analysis. The arrows indicate the causal relationships that occur between the individual constructs, while the lines represent the correlations together with the strength of the relationships between the latent variables. The estimated parameters of the path analysis permitted an assessment of the relationships between the online communication tools used by companies and the nature of their relationships with customers.



Source: own research.

Figure 2. A linear structural model of dependence between online communication tools and relationships in behavioural and affective aspects

¹ The value of Cronbach's alpha can vary between 0 and 1. The commonly accepted critical value of the coefficient is 0.6. Thus, if Cronbach's alpha ≥ 0.6 , the analysed scale can be considered reliable.

CONCLUSIONS

The model presented in Figure 2 shows that there is a positive correlation between the online communication tools that a company uses and the nature of its relationships with customers. The analyses performed confirm the assumptions that specific online communication tools aimed at building relationships in the behavioural dimension (BT) influence the strength of relationships in this aspect (parameter value = 0.329). Consequently, it can be concluded that an increase in the number or frequency of using these online communication tools will have a positive impact on the strength of behavioural relationships built with young consumers.

The analyses reveal that there is also a positive correlation between the latent AT construct and relationships created in the affective dimension (AR). Although the value of the parameter is positive, it shows a lower value for the path parameter, which is 0.107. The value of the coefficient of determination ($R^2=0.108$) for the dependent variable AR indicates that it is 10.8% explained by the online communication activities which make use of affective tools. Considering the multitude of factors that influence customer relationships and the image of a company in the eyes of consumers, the value of the indicator can be regarded as satisfactory. Hence, using tools designed to create the emotional involvement of customers can be considered a valid element of companies' communication with consumers.

The research also shows that companies oriented towards the behavioural dimension of customer relationships; which is primarily connected with the customers returning and making subsequent, often larger, purchases; should not refrain from also using the tools responsible for creating relationships at the affective level. The main argument for adopting such an attitude is another important correlation which was not identified at the stage of theoretical considerations, namely a particularly strong relationship between the existence of a relationship in the affective dimension (AR) and the strength of the relationship in the behavioural dimension (BR). The results obtained suggest that an increased relationship in the emotional dimension causes a significant increase in the strength of a relationship at the behavioural level. The value of the path parameter for this dependence is very high – 0.997. The value of the coefficient of determination ($R^2=0.589$) for the dependent variable representing the BR construct indicates that it is 58.9% explained by using behavioural tools (BT) and the strength of the affective relationship (AR).

The findings of the path analysis lead to the conclusion that the latent constructs BT and AT, which comprise various online communication tools, have a positive influence on creating customer

relationships in the behavioural and affective aspects (BR, AR). However, the values obtained are relatively low, indicating that this effect is not very strong. Analysis of the coefficients of determination shows that a small proportion of dependent variables (BR, AR) is explained by independent variables (BT, AT). These results seem to confirm the view, strongly emphasized in the literature, that the strength of customer relationships is the result of a range of factors. Even companies with online communications and customer services of a very high standard are not able to take complete control of their relationships with customers because these relationships are also influenced by exogenous factors that are independent of the company. These factors include, in particular, social and psychological circumstances; but also the actions taken by competitors, the availability of substitutes, and the cost of changing supplier.

The findings which highlighted the strong influence of affective relationships on behavioural relationships show that it is extremely important for businesses to undertake activities which affect the emotional engagement of consumers in their relationships with companies. Consequently, implementing such actions as building brand communities on social networking sites, interacting with customers through personalized messages, and providing added value in the form of awards or mobile applications not only increases the number of brand advocates and supporters, but also boosts the company's profits. This is connected with an increase in the strength of behavioural relationships, which results in customers making more frequent and larger purchases, as well as recommending the company's offering to others.

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SALES EFFECTIVENESS OF DOMESTIC AND INTERNATIONAL TRADE SHOWS - FROM THE PERSPECTIVE OF FURNITURE MANUFACTURERS IN BOSNIA AND HERZEGOVINA

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Abstract

Purpose of the research: Lack of research and development in creating new products is a major weakness of furniture manufacturing company in BiH (Bosnia and Herzegovina). Since furniture demand today is determined by design, the need for product development prevents the retention of existing and entry into new markets (Vlahinić-Dizdarević and Uršić, 2010). So, the purpose of this article is to analyze and explain to what extent trade shows gives the opportunity to Bosnian furniture manufacturer to improve sales effectiveness depending on goals settings that will be achieved by activities before, during and after trade show.

Theoretical grounds: Most market-oriented companies are trying to sell or increase the sales of products and services that are the objects of their business and to be effective, which is also the ultimate goal of every organization. The question is whether the companies, specifically the furniture manufacturing companies, are effective from the point of sale and to what extent? In order to answer this question, the concept of effectiveness and several approaches to defining an organization as effective will be defined first. Then trade shows will be defined as one of the ways of sales and business promotions used by companies. The sales effectiveness of a trade show means activities prior to the show - gathering of market information, concerning the activities at the show and at the end the evaluation of the exhibition itself.

Methods: A combination of theoretical and empirical scientific methods will be used in the formulation and presentation of the results of the research. With theoretical conceptualization, quantitative empirical research is presented in the paper. The research study started primarily by researching the literature to gather further information on selected problems and applied to companies. The questionnaire will be used as an optimal instrument for obtaining the appropriate data and proving the hypothesis. The questionnaire consists of 38 questions pertaining to: - trade shows participation and the extent in which the respondents set goals, engaging in preshow activities, activities at the show and post-show activities, domestic and international trade shows effectiveness measurements, and organizational demography. Only the companies from Bosnia and Herzegovina that have already participated in trade shows are participating in the research. The furniture manufacturing companies in Bosnia and Herzegovina represent sampling units as they represent one of the largest and growing industries that participate in trade shows both domestically and internationally.

Contributions: Find out the effect on trade shows on sales effectiveness of furniture manufacturing companies in Bosnia and Herzegovina. In this regard, to give an insight of how Bosnian companies prepare for trade shows and monitor what is happening in the process of product demand and exploitation of industrial products in international and domestic trade shows.

Keywords: Trade shows, sales promotion, effectiveness, furniture manufacturing companies

INTRODUCTION

Today, in times of globalization and informatization of almost every aspect of human life, we have witnessed many changes in lifestyle and business. Especially looking for good business skills and new approaches to business, specialization and efficiency that will respond to an increasingly demanding global market. Many companies across Europe are trying to penetrate the market and be recognizable of what they are doing, and differentiating themselves from other marketing and brand strategies that affect their development and competitiveness. In this way, most market-oriented companies try to sell or increase the sales of products and services that are the subject of business and to be effective, which is also the ultimate goal of each organization. The question is whether the enterprises, specifically, the furniture manufacturing companies are efficient from the point of sale and to what extent? In order to answer this question, the concept of effectiveness and several approaches to define an organization as effective will be defined first. Then trade shows will be defined as one of the ways of promoting sales and business promotions used by industrial companies. The sales effectiveness of a trade shows means activities prior to the fair, the gathering of market information that will be mentioned below, concerning the activities at the fair and at the end of the evaluation of the exhibition itself, the activities that will be analyzed by the companies after the shows.

SALES EFFECTIVENESS

According to Tomašević-Lišanin (2010), efficiency means the ability to use less resources for the same goal or task, the definition of effectiveness from an organization's performance standpoint represents the totality of all organization's goods, sum of elements such as production, costs, performance, revenue, product quality, profitability and efficiency. Efficiency can be observed through the success in achieving one's own goals. In this regard, the authors Robertson, Callinan and Bartran (2002) distinguish between primary and secondary goals. The primary goals relate to organizational "raison d'etre" (reason of existence) and are generally expressed through trade factors (market share, profit share, etc.). While, secondary goals are focused on achieving primary goals, and often relate to internal organizational criteria (job satisfaction, creating a "proper culture", effective internal communication, and so on). In answering the question of what an enterprise can do to be effective and who are the actors affected by this success, efficiency can be observed through the following:

- Return on invested investments, long-term stability and growth for investors and shareholders
- Customers want value for money, products or services, good support and after-sales service

- Employee Satisfaction, Security, Career Progress, Personal Development and Good Wages and Awards
- The impact of organizational activities on the environment and lifestyle (economic, social, political and cultural), which should be positive and beneficial

These criteria are just some of the possibilities for an organization to be considered effective. However, the idea that the whole organization is characterized as efficient or ineffective is problematic. In each complex organization there are parts that work better and that are effective, while other parts of the same organization are worse (Daft, 2009). In this paper, efforts will be made to explore the company's efficiency through efforts to improve the efficiency of a particular segment, which is product sales. Thus, efficiency will be observed through sales-oriented activities, or sales promotion.

Sales enhancement can affect the organization's efficiency by increasing profitability by increasing sales (Williams and Authors 2012). Sales promotion consists of short-term incentives, along with the basic benefits offered by the product or service, to encourage the purchase or sale of a product or service. Includes a wide range of promotional tools that stimulate faster or stronger market responses (Kotler and authors, 2006). The choice of sales promotions depends on the set goals of sales promotion, target market specificity, competition and costs (Brkić, 2003). The goals of improving sales in the business market are mostly to trace potential buyers' marks, leave the impression or reward customers, and stimulate sales forces to invest more effort. In this regard, the means used to promote sales are: trade shows, special business publications, competitions in sales, promotional news.

TRADE SHOWS

The trade shows are direct sales mix (exhibitors or sales staff present at the stand) and promotions (the stands are designed to attract attention and provide a great deal of product information and without the presence of staff), (Gopalakrishna et. al., 1994). Trade show experts confirms that trade shows today represent an irreplaceable communication and marketing tool for small and medium-sized enterprises (which today make up about 90% of exhibitors at world fairs). Even 80% of respondents hold a trade shows or very important trade show for small and medium-sized companies, primarily because the trade show offers the opportunity to enter the international markets (57% of respondents) (Cvitanović, 2008).

According to recent sources, 3/4 of the business in the business market use this form of marketing communications and spend 14.5 % of the total budget on trade shows and exhibitions. Only in the

United States 600,000 businesses appear every year at trade shows and 80% of visitors are those who can influence the purchase. Every year \$ 10 billion is spent for rent space at trade shows (Kesić, 2003). Different companies have different benefits from the trade shows - from creating traces of potential buyers, corporate image promotion, and regular contacts with existing buyers, depending on the new or existing product being exhibited (Gopalakrishna, Lilien, Williams and Sequeira, 1995). For companies, it is very important to choose the right promotional method, as it depends on marketing budget, or maximizing return on investing. The survey conducted by the Exhibition and Event Association of Australia (EEAA) showed that the average investment of 9% of the marketing budget of the company at the shows, resulted in a 23% return on business (Cvitanović, 2008).

There are several factors that influence the choice of trade shows as a promotion method (Situma, 2012):

Promotion Goals - What is common to most trade shows and what is considered to be one of the key successes of the fair is setting the goals of participating in the fair. Goals can be observed from the aspect of sales or non-sales goals. In this case, there are goals aimed at promoting corporate image, on the one hand, and sales, on the other. Those who focus on the image try to provide information about their products, usage, and / or services, and promote corporate image to improve communication with their customers. Exhibitors whose main focus is on sales / buyers believe it is crucial to have contacts with prospective buyers to generate / create new sales during the fair and thus bring new customers to whom the fair could hardly come (Rodriguez-Oromendia , Reina-Paz and Sevilla-Sevilla, 2012). However, sales targets in relation to non-sales are more measurable, as they affect profit, sales and market share.

- Product nature - Industrial products can be easily demonstrated at the fair, to be tested by the participants at the fair.
- Target market - there are potential suppliers, buyers and media in one place, and in a very short time one can reach the targeted audience and the market.
- Competitive Behavior - Resellers are constantly looking for ways to find creative ways to differentiate their promotion from competitors.

While companies are constantly looking for the cheapest but most efficient method of promoting their products, trade show in most cases include a significant marketing investment. Costs include renting, designing and creating stalls, travel, accommodation, promotional materials to visitors, as well as many other costs associated with preparing for the fair. Therefore, many companies especially

small and medium sized give up after their first exposure, but not only because of high costs, but also because of insufficient or no previous preparations for the trade show, and ultimately unfulfilled results. From introduction it can be seen that trade show are an effective tool of promotion because companies give fairly amount for trade show, and frequency increases despite the global crisis. According to the UFI (World Exhibition Industry Association)¹ , 75% of the organization member's plans to exhibit at classical trade show as well as virtual, and 49% plan to exhibit in the new country. In addition to the set goals that are the basis for further trade show planning, in order to optimize the outcome of trade show, companies must be able to plan their activities effectively, making all the necessary efforts before, during and after the event, because fairs are very effective tools for stimulating sales and to promote image and business products (Rodriguez-Oromendia, Reina-Paz and Sevilla-Sevilla, 2012). The above results from the fact that the sale is a process consisting of stages in which potential customers have different needs for information that the sellers are trying to satisfy (Dekimpe and Authors, 1997). Thereby sales promotion through a trade show represent a series of activities and tasks that affect better performance. However, there is not enough empirical research on the effects of trade show, especially in Bosnia and Herzegovina, and also whether activities before, during and after the fair are effective. Undefined goals before going to the trade show, the high costs as well as the difficulties in measuring the efficiency of the trade show are just some of the flaws of the trade show as a tool of communication for the company, especially for small and medium sized companies.

The efficiency of trade show as a marketing tool and tools for sales promotion of furniture companies in Bosnia and Herzegovina is currently unknown, but it certainly needs to encourage industrial development and technology transfer, increase regional and national industries and stimulate foreign investment (Situma, 2012).

1 UFI - The Global Association of the Exhibition Industry (<http://www.ufi.org/>) is a leading European trade show organizer and trade show-market owner, as well as the main national and international exhibitors' associations and selected exhibition industry partners. With 552 members in 84 countries and a special regional presence in Asia and Africa, UFI's global reach provides great value to its members through promotion, information and networking. Among the key member states for which regular statistics are kept are Austria, Bulgaria, Croatia, Denmark, Finland, France, Germany, Italy, Norway, the Netherlands, Poland, Portugal, Czech Republic, Slovakia, Romania, Russia, Spain, Sweden, Hungary. UFI's main goal is to represent, promote and support its members and the exhibition industry in the world. See more at http://www.udruga-opcina.hr/universalis/1275/pdf/newsletter9_1202343993.pdf (accessed on 03.02.2018.)

The government, though it encourages activities aimed to improve the competitiveness of enterprises in Bosnia and Herzegovina, as far as furniture manufacturing and export companies are concerned, their export potential has not yet been utilized. There is a need to create a marketing strategy as well as goals in accordance with the opportunities and threats of the environment. Trade shows are one of the tool of sales promotion that promotes business in terms of making new business connections, contacting consumers, introducing new products, introducing new customers (Kotler, 2006), raising awareness, creating a good corporate image, providing product information, addressing complaints (Gopalakrishna and Authors 1994), and are an opportunity for companies to present their possibilities.

Most attended trade shows by furniture manufacturers in Bosnia and Herzegovina companies are:

International Furniture Fair "IMM Cologne" in Germany in Cologne

The International Furnishings, Equipment and Interior Decoration Fair (UFI)

The Domotex International Flooring Fair, held in Hannover, Germany

From the above mentioned problematic, the subject of this paper can be defined as well:

- Analyze and explain to what extent trade shows affect the sales efficiency of a furniture manufacturing company in Bosnia and Herzegovina with a view to improving sales, determine whether the trade shows set goals are being achieved through the preparation for trade shows, training sales staff activities, trade shows activities and activities after the show.

Research problem

Due to the market saturation, globalization and intensified international competition, companies constantly engage in a search for a new and more efficient production business to not lag behind (Nelson and Winter, 1982). However, for companies that innovate in isolation takes time. Enterprises must have information and access to other knowledge to innovate (Schjønby, 2009). Good knowledge of marketing of production goods is especially important for businesses in Bosnia and Herzegovina for successful performance in international markets. In this regard, fairs allow companies to monitor what is happening in the process of product demand and exploitation of industrial products. According to Kesić (2003), appearing at foreign fairs with very small exhibition space does not provide the basis for representing the reputation.

Trade shows are a way for companies to showcase their products, but also to see new ideas or

applications for existing products. However, some trade shows statistics show that a large percentage of exhibitors, even 40% of them after their first show at the trade show have been released from all future appearances. The reasons lie in the fact that a large number of small and medium-sized businesses miss the necessary preparations for the trade show, and are often disappointed with the results of the first presentation of their company and products at a trade show event. It is necessary for each company to set concrete and measurable goals for its trade show performance at the fair before exhibiting at the trade show, and at the end of the trade show event to measure the return on its financial resources for the show (Cvitanović, 2008).

Though trade shows have existed for centuries, they have become more frequent in the 1960s by the establishment of numerous trade associations. Also, the measurement of the effects of trade fairs has been increasing in the last decades, given that companies allocate substantial financial amounts to this marketing activity, and fairs become an important sales and marketing strategy. Most of the empirical and theoretical researches that have been conducted relate to the Americas, and research related to Europe is gradually increasing. Accordingly, Germany, Italy and France dominate in this sector of arrivals, exhibitors and visitors, and Spain, the UK, Austria and Scandinavian countries (Smith, Hama and Smith, 2003) are growing. Most of the research is related to developed countries in Europe, so the efficiency of trade fairs in companies in other (less developed) countries of Europe such as Bosnia and Herzegovina is less well known.

Without the evaluation of the trade show efficiency, it is not known whether trade shows fit into the overall strategy and achievement of business goals. Also, the government of Bosnia and Herzegovina, the Foreign Trade Chamber, which is the organizer of many performances at international fairs and other organizations involved in development processes, cannot, without proper results, adopt the appropriate policies that will encourage the sale of products / furniture in this way.

REVIEW OF LITERATURE OF TRADE SHOWS SALE EFFICIENCY MEASUREMENT

This part of the paper will outline the literature on the effectiveness of trade shows, but without a critical review of individual authors. These measures and authors are most frequently quoted in the literature and were available at this time. The final selection of the methodology will certainly include the evaluation of the set goals, the test of the variability of variables that, according to previous research, have an impact on sales issues, referring to the involvement in activities before and after

the fair, the level of success at the domestic and international fair in terms of costs and outcomes. The concept of sales effectiveness of the company has been viewed through five separate factors, namely: sales management activities, salespeople, sales organization design, vendor efficiency with respect to results and behavior (Razum, 2011). The concept of sales efficiency of trade shows similar to the concept of sales efficiency of a company can be observed through the following factors derived from: activities before and after the trade show, trade show stand design, sales staff effectiveness at the trade show, efficiency of converting potential buyers'

leads to real buyers. The measurement of return on investment in trade show is linked to many factors. First, the participation of companies at trade shows has the effect of both sales and non-sales - cognitive (creating familiarity with the product, building image and reputation, etc.). Trade shows are also linked to other marketing mix elements such as advertising and direct sales (Gopalakrishna and authors, 1994). In the literature on fairs, there are three main phases of participation at the trade show from the perspective of exhibitors: activities before, during and after the trade show (Roshnee and Fowdar, 2004). (Table 1)

PRE SHOW ACTIVITIES	AT SHOW ACTIVITIES	AFTER SHOW ACTIVITIES
Staff training	Events at the show	Current Effects
Attracting visitors	Contact Visitors	Delayed effects
Trade show services	Visitor tracking	Participation costs
	Visitor's interest	
	Sales information	

Source: Seringhaus, R., & Rosson, P. (2005). *An analysis model of performance measurement of international trade fair exhibitors*. Wilfred Laurier University.

Table 1 – Attendance activities at the trade show

Seringhaus and Rosson (2004) have developed a model that includes variables of the effects and variables of the company's activities. Various business activities, especially those prior to the fair and during the trade show, affect the group of outcomes that the authors state as a measure of impacts. These effects of the trade show are: sales at a fair that includes the number of contacts per person (sales staff) and the number of traces per person, the key persons to come, the sales traces converted into buyers within 12 months, the time it takes to realize sales, total sales of the fair, sales within 12 months in percentage, cost per sales path, achieved percentages, marketing impact. Starting from the questions what are the benefit of trade shows and whether the fairs paid off, we come to the main goal of participating in fairs, which is the sales that is manifested through the qualification of traces of new buyers who ultimately become actual buyers (Qualification of potential buyers represents every sales track that needs to be valued in terms of the likelihood that such an identified person / organization will have a need for our product, and whether the ability to buy, Tomašević-Lišanin, 2010, p.202) Most of the author states sales activities as the most important goal of most exhibitors at the trade show, while some authors point to the importance of non-sales targets (market testing on the acceptance of a new product, strengthening the corporate image, finding suitable distributors and agents (Knight, 2000 Seringhaus and Rosson, 2005). Table 2 shows measurements of trade shows efficiency.

SOURCE	MEASUREMENT OF TRADE SHOW EFFECTIVENESS
Kerin i Cron (1987)	Sales activities: presenting a new product, selling at the fair and testing a new product Non sales activities: recognizing new opportunities, gathering information about competitors, strengthening corporate image, servicing existing customers
Gopalakrishna i Lilien (1995)	Three-stage model BOOT ATTRACTIVENESS EFFICIENCY Target audiences who visited the stand and size of the targeted audience (performance techniques - promotion before the fair, stand size, strategic location) CONTACT EFFICIENCY Target Audience Ratio that visited the stand and contacted and the number of targeted audience who visited the stand CONVERSION EFFICIENCY The ratio of the number of effective traces and the number of targeted audiences visited and the number of contacts contacted from the fair converted to potential buyers
Dekimpe, Francois, Gopalakrishna, Lilien i Van den Bulte (1997)	A measure that includes the company's ability to attract targeted customers to their stand at the fair and contact them. That is, the ratio of the number of targeted audiences who approached the stand for conversations and the size of the targeted audience
Seringhaus i Rosson (2005)	Measures: total number of contacts, total number of qualified traces, sales at the fair, which implies the total number of contacts per employee and the total number of clues per staff, the key decision maker to reach, the percentage of traces converted into 12 months, the time needed to complete the sale, sales from the fair, percentage sales in 12 months, cost per click, percentage of achievements, marketing learning
Hansen (1999)	Income system: sales activities and behavioral system: information gathering activities, image-building activities, motivational activities, and relationship-building activities

Source: adapted from Hansen, K. (1999). Trade show performance: a conceptual framework and its implications for future research. *Academy of Marketing Science Review*, (1999), 1-12.

Table 2 - Measurement of trade show effectiveness

Due to a wide range of objectives, mainly related to sales activities (new products, sales at the fair, and testing of new products), Kerin and Cron (1987) also define non-sales activities such as identifying new opportunities, gathering information about competitors, corporate image, servicing existing customers that affect the position of a company in the market that is being realized at trade fairs. The authors used 7 - point scale Likert's (1 = very poor, 7 = very good) to measure several aspects of the effects of trade fairs such as identifying opportunities, strengthening corporate image and other non-sales activities. They have found that more successful companies exhibit a greater number of products, have more customers, more sales, some specific goals for the fair, and less participate in horizontal fairs, and more on vertical (Gopalakrishna and Lilien, 1995).¹

Measures such as the number of potential traces or the number of visitors to the stand are used in a limited number of academic literature. Gopalakrishna and Lilien (1995) analyzed industrial fairs through a three-tier model that is based on the flow of visitors to the fair. Starting from the problem that many companies do not have clear goals for participation at the fair as well as the way of evaluating the effects after the fair, they suggest evaluating the effects of the fair by using more indicators so different goals can be translated directly into the appropriate performance measures. For example, if a company launches its new product for the first time at the trade show, its goal will be to get familiar with the product and disseminate product information. If a visitor stands for a potential buyer, then a personal contact of the sales staff with the visitor can accelerate the process of customer recognition that product capabilities meet his / her needs. If a company exhibits an already existing product, its goal may be to seek feedback from existing customers about the product and its performance as regards new customers, potential customers' qualifications as sustainable buyers, as well as viable suppliers to those buyers. In view of the above, the booth may be one of the tactical ways of attracting visitors while sales staff and their abilities can be key to turning potential buyers into real. The model goes through three phases: the effectiveness of the stand (stand), the efficiency of the contacts, the efficiency of the conversion. Accordingly, the authors have modeled several factors that affect the effects and are characteristic for particular phases: promotion before the fair, stand size, use of

¹ Vertical fairs include a lower product range and attract visitors who are particularly interested in this type of product, while Horizontal Fairs include a larger range of products and a different audience. See more on Wu, J., Dasgupta, A., & Lilien, G. L. (2003). An empirical study of trade show formation and diversity (Doctoral dissertation, Thesis, Institute for the Study of Business Markets, the Pennsylvania State University, University Park, PA).

attracting techniques, competition and number and training of the sales staff of the stand. In this way, the measurements of effects with tactical variables controlled by the enterprise are linked.

The Decomposers and Authors (1997) have investigated whether previous studies of the key promoters of the trade show that they have identified (promotion before the fair, stand size, stew staff) can be generalized at other fairs and industries. As a measure of efficiency, they used the ability of companies to attract their target audiences to their stand and contact them. The authors have established the existence of differences between the two countries in which the research was conducted. Some of the differences are the following: European trade shows attract more executive executives who mostly conclude sales at the fair. There are also differences in the physical appearance of the booth, where the focus is on attracting attention in America, while in Europe making long-term relationships. Promotion costs before the trade show in Europe are being used to meet formal commitments while in America the aim is to increase interest. Therefore, there is a difference in the goals of the visitor, which affects the tactical variables of the company.

Two research questions are:

- Are the furniture manufacturers in Bosnia and Herzegovina effective from the point of sale / promotion when attending trade shows?
- What marketing activities / strategies are undertaken by furniture manufacturers in Bosnia and Herzegovina in trade shows in order to improve sales ?

RESEARCH METHODOLOGY

Data Collection

For a better understanding of the nature of the fair and meeting the comprehensive theoretical background based on previous research on the trade shows, Hansen (1999), based his theoretical framework on two control systems: an Outcome-Based Control System related to sales activities and behavioral system (Behavior-Based Control System) regarding information gathering activities, image-building activities, motivational activities, and relationship building activities. In his work he emphasizes the importance and complexity of measurement of the behavioral dimension which, according to the author, is highly related to the skills of the sales staff of the trade show in product and company knowledge, sales expertise and professional competence. An exploratory study was initially carried out by way of wide literature survey to gather further research on research problems. The survey questionnaire was chosen because it is an optimal data gathering tool that enables researchers to establish the relationship

and motivation of respondents, and provides a very high response rate. The questionnaire covers issues that concern: (1) general company information; (2) the extent to which the respondents set the objectives of participation at the fair, (3) engagement in activities prior to the trade show, gathering information on the trade show's customers, and measurement of trade show effectiveness. Only the companies from Bosnia and Herzegovina that have already participated in trade shows are participating in the research. The furniture manufacturing companies in Bosnia

and Herzegovina represent sampling units as they represent one of the largest and growing industries that participate in trade shows both domestically and internationally. The Chamber of Commerce of Bosnia and Herzegovina has provided information on companies that meet these conditions. Of the 30 companies most frequently exhibited at foreign trade shows, 13 furniture manufacturers completed a questionnaire that was sent by e-mail.

RESULTS

Table 3 depicts the demographic characteristics of the respondents.

Demographic variable n=13	Frequency	Percent
What is your area of responsibility in the company?		
Finance and Commerce		14,3
Sales and marketing		71,4
Development of new business		7,1
Total		100,00
What is the approximate number of employees of your company?		
Less than 10		7,7
10 - 49		15,4
50 - 249		53,8
250 and over		23,1
Total		100,0
Has your company participated in any of trade show in the last 3 years?		
2018	8	61,5
2017	4	30,8
2016	1	7,7
Total	13	100
In which country do you most export your furniture?		
Germany	6	42,9
Serbia	3	21,4
Romania	1	7,1
Austria	2	14,3
Switzerland	1	7,1
Total	14	100
Is there a department for product development in your company?		
Yes	12	92,3
No	1	7,7
Total	13	100
Do you use designer services?		
Yes	6	46,2
No	7	53,8
Total	13	100

Table 3. Demographic data

Most marketing activities used by Bosnian furniture manufacturer are personal sales and submission from person to person used by 35, 7 % firm, and the rest of the marketing activities use 7, 1 % manufacturers, as it can be seen in Tabel 4.

Types of marketing activities	Frequency	Percent
Advertising	1	7,1
Personal Sales	5	35,7
Sales promotion activities	1	7,1
Submission from person to person	1	7,1
Social networks (Facebook, Youtube, Linkeln and others)	5	35,7
Total	13	100

Table 4. Types of marketing activities

Most engaged pre-show activities are identifying and formulating the goals of participating in fairs. As it can be seen in Table 5. Introducing a new product is the main goal for 23, 1 % participant. For 7, 7 % participant the main reason to attend trade show is discovering new opportunities, and achieving sales goal, and most participant of this study, more precisely 53, 8% are going to enhance the awareness of their company or product.

Participation goals	Frequency	Percent
Presenting a new product	4	23,1
Discovering new opportunities	1	7,7
Realization of sales	1	7,7
Enhance awareness of company or product	7	53,8
Total	13	100,0

Table 5. Trade show participation goals

Exhibitors engaged in promotional activities such as phone, fax or mail, advertising in professional / specialized journals, press Releases / Media to communicate with their target audience. 71, 4 % of exhibitors send staff who have had previously experience at the fair. They attract visitors / partners / potential buyers to visit them at the fair by sending invitation letter, invitation brochures, telephone call or fax contact before the fair, advertising material (Table 6.).

	Frequency	Percent
What did you use mostly in communicating with your target audience / target group of visitors?		
Phone	2	15,4
Fax or mail	8	61,5
Advertising in professional / specialized journals	1	7,7
Press Releases / Media	2	15,4
Total	13	100,0
What kind of training for staff to attend the fair is practiced before the presentation itself?		
A special criterion for selecting staff going to the fair	1	7,1
Systematic staff training	2	14,3
Staff who have had previously experience at the fair	10	71,4
Total	13	100,0
How does your company attract visitors / partners / potential buyers to visit you at the fair?		
Invitation letter	4	30,8
Invitation Brochures	6	46,2
Telephone call or fax contact before the fair	1	7,7
Advertising material	2	15,4
Total	13	100,0

Table 6. Pre – show activities

It can be seen from table 7. that the most significant services engaged during the show were: The visitor's name notation, companies by name listed and identification buyers by purchasing power with percent of 15,4 % and 69,2 % respectively. Buyer names were recorded in nearly all cases. In all cases Product inquiry was the main interest of the visitor when approaching the booth. 92,3% exhibitor 's think that the most effective way to reach an international customer at a foreign fair is meeting at the stand, and mutual promotion with other exhibitors with 7,7 %. In all cases best way to reach an international customer at the domestic fair is meeting at the stand. When it comes to costs exhibitor's think that the most common additional / unexpected costs when participating in foreign fairs in 7 cases is hidden exposure costs, then follow, cost of arrivals in and from the hotel to the fair, transport of exhibited products and at the and fun just for one participant.

	Frequency	Percent
What type of fair service does your company use?		
Pledge with logo / name of exhibitor	13	100
Total	13	
How does your company keep tracking visitors?		
The visitor's name is noted	9	69,2
Companies by name are listed	2	15,4
By purchasing power	2	15,4
Total	13	100
In general, what is the main interest of the visitor when approaching your booth?		
Product inquiry	13	
Total	13	100
How much your staff is on a 10 m2 stand?		
Two	13	
Total	13	100
In your opinion, the most effective way to reach an international customer at a foreign fair is:		
Meeting at the stand	12	92,3
Mutual promotion with other exhibitors	1	7,7
Total		100
In your opinion, the most efficient way to reach an international customer at the domestic fair is:		
Meeting at the stand	13	
Total	1	100
What are the most common additional / unexpected costs when participating in foreign fairs?		
Hidden exposure costs	7	53,8
Transport of Exhibited Products	2	15,4
Cost of arrivals in and from the hotel to the fair	3	23,1
Fun	1	7,7
Total	13	100

Table 7. Activities at the trade show

Table 8. specify the average time it takes to close a sale from lead generation at trade shows. For most exhibitors it takes four to six months to close sale. The proportion of trade show leads of all sales leads generated is 6-10 %, and 6-10 % proportion of these trade leads resulted in actual sales.

	Frequency	Percent
Please specify the average time it takes to close a sale from lead generation at trade shows? Estimated in months.		
2-3	2	15,4
4-6	6	46,2
7-12	4	30,8
More than 12	1	7,7
What is the proportion of trade show leads of all sales leads generated? Estimated Percentage in the chosen calendar year.		
0-5 %	1	7,7
6-10 %	8	61,5
11-20 %	3	23,1
21-30 %	1	7,7
What proportion of these trade leads resulted in actual sales?		
0-5 %	2	15,4
6-10 %	5	38,5
11-20 %	4	30,8
21- 30 %	2	15,4

Table 8. Measuring trade show effectiveness – post show activities

Table 9. shows the means and standard deviations of the activities exhibitors engaged in after trade shows. These figures show that trade show exhibitors engaged in all the three post show activities listed. In fact, follow up by direct mail and salesperson direct follow up were rated at 3,54 and 3,46 respectively, and literature mailing if requested at 2,0.

	Mean	Std. Deviation	Variance
Follow-up with direct mail?	3,54	1,13	1,27
Literature mailed if requested?	2,0	1,0	1,0
Salesperson direct follow up?	3,46	1,13	1,27

Table 9. Post show activities

DISCUSSION AND CONCLUSION

The research has shown that trade shows are efficient enough for a furniture manufacturing company in Bosnia and Herzegovina. After defining the goals, it is certainly important to determine the ways of achieving the goals. Although participation at the trade show has resulted in sales, exhibitors do not have a clear strategy to improve the effects of participation at the trade show and that can be seen from the activities before and during the trade show. Trade show statistics says that a large number of exhibitors will be discontinued after all their appearances at the trade show. To optimize the outcome of a trade show, companies must be capable of planning their activities effectively, making all the necessary efforts before, during, and after the event, since trade shows are highly efficient tools for boosting sales and for promoting a company's image and products. Namely, these activities are reduced to the minimum of preparation and contacting potential buyers. Introducing a new product is the main goal for 22, 3% participants. For 7, 7% of participants, the main reason to attend trade show is discovering new opportunities, and achieving sales goal, and most participant of this study, more precisely 53, 8% are going to enhance the awareness of their company or product. Exhibitors engaged in promotional activities such as phone, fax or mail, advertising in professional / specialized journals, press releases / media to communicate with their target audience. 71, 4% of exhibitors send staff who have previously had experience at the trade show. They attract visitors / partners / potential buyers to visit them at the trade show by sending invitations, invitation brochures, phone calls or faxes before the trade show, advertising material. Pledge with logo / name of exhibitor. Most companies are exposed to more than 50 employees and 53.8% more. Small businesses are in the total amount only in small percentages. The imbalance between the financial strength of small and medium-sized businesses on the one hand and the high costs on the other hand is the reason why small and medium-sized enterprises do not exhibit at a fairly large percentage. In addition to the high cost of renting the exhibition space, exhibitors are also heavily loaded with hidden exposure costs, transport of exhibited products, costs of arriving in and from the hotel to the fair.

From the results of the research it can be concluded that it is expected continue the trend of increasing Bosnia and Herzegovina furniture exposure both domestically and internationally, and that trade shows, regardless of the technology development, will be a link between participants in the markets, enabling increased competitiveness of the emerging market of the furniture products of Bosnia and Herzegovina.

Recommendations for future research

Furniture manufacturing company represent one of the most increasing industry in Bosnia and Herzegovina. The key factor of engaging entrepreneurs in trade shows is access to new knowledge and supply of complementary goods. Bosnia and Herzegovina has also recognized the importance attending industrial and other trade shows. The government, although it promotes trade shows activities, has limited resources and capabilities for participate in trade international trade shows, so it is necessary to determine if trade shows makes other industries more competitive and more effective in order to invest more in preparation for exhibitions. It is also necessary to explore the ways in which the common areas such as sales, promotions and marketing have influence on competitiveness. When new products come to the market, a marketing department is being set up trying to find new customers using sales enhancement techniques to create a purchase option that will affect sales volume increase, which is the case with furniture manufactures trying to promote their joint efforts and improve their sales and find new customers. Knowing the use of promotional tools is of benefit to any firm that is determined to be present in the market for a long time in the long run (Balaghar and Authors, 2012). Further evaluation of the impact of these promotional tools on sales and ultimately efficiency is needed, to better plan these activities and use them better.

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THE COMPARISON OF CONSUMERS' PRODUCT INFORMATION SEARCH AND PURCHASE DECISIONS IN THE SELECTED EUROPEAN COUNTRIES

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Abstract

The aim of the article is to compare the purchasing behavior of consumers in selected European countries in the context of changing channels. Following research questions were asked: 1) Is it possible to find some common patterns of searching and buying behavior in selected European countries? 2) Does the uncertainty avoidance determines the severity of the ROPO and showrooming effect? 3) Does access to the Internet determine the severity of the ROPO and showrooming effect? Data analysis allowed us to confirm the relationship between the occurrence of the effect ROPO and internet penetration, as well as the level of uncertainty avoidance in selected European countries. In the case of the showrooming effect, we confirm the relationship with the avoidance of uncertainty.

Keywords: consumer behavior, ROPO effect, showrooming

INTRODUCTION

Contemporary retail industry can be characterized with growing omnichannel and ecommerce (Melis et al., 2015). Ever increasing popularity of online channels forces even the most traditional brick- and mortar stores, such as groceries, to launch online channels, which allow customers to choose between online and offline shopping experience (Melis et al., 2015; Bondos and Lipowski, 2016). Van Bruggen et al. (2010, p. 331) coined the term "channel multiplicity", that is using multiple channels to provide customers with information, offerings and services, to achieve customer post purchase satisfaction and retention. Verhoef, Neslin and Vroomen (2007) argue that such channel multiplicity induces changes in consumer behavior, such as research shopping that is searching for products and information in one channel, while concluding actual purchase in another one. The most often observed market manifestations of research shopping behaviors are ROPO effect (Research Online Purchase Offline) and reverse ROPO effect (Research Offline and Purchase Online), often referred as to "showrooming".

The key determinants of switching between channels are consumers' propensity to choose channels perceived as the most suitable in the context of specific purchase, low channel switching cost, and cross-channel synergy, allowing consumers using multiple channels to draw satisfactory experiences

of using various purchase places (Verhoef, Neslin, and Vroomen, 2007).

The aim of this article is to compare shopping behaviors of consumers in the selected European countries in the context of the change of the type-shopping channel. To do so, the authors build on TNS research for Google (Consumer Barometer 2016) and Hoefstede's culture's dimensions (2001).

THE ROPO EFFECT

"Research shopping" manifests in different ways, ROPO effect being the most popular one. It means that consumers search online for information regarding products and services before making final purchase in brick- and mortar stores (Wolny, 2016). From the perspective of a classic model of consumer decision making process, ROPO effect occurs mainly on the stage of information search, when consumers use internet as an external information source. Internet offers almost unlimited possibilities of information search in one place and, thanks to mobile devices, any convenient time. Internet became dominating source of information for consumer products (Darley, Blankson, and Luethge, 2010), healthcare services (Kammerer et al., 2013), news and politics (Kuikemeier et al., 2014). Early research identified that the source of internet's popularity laid in its perceived utility, which in turn resulted from speed of information access, ease and effectiveness

of information search (Peterson and Merino, 2003). ROPO effect occurs also on the stage of alternative evaluation, when consumers compare attributes of the selected products and services and purchase locations (Wolny, 2016).

The development of Web 2.0, and social media in particular, gave consumers almost instant access to informal messages about products and services that is opinions and recommendations of other consumers, usually independent of any corporate communications. Research study by Wolny (2016) conducted in the context of services indicated that the main determinants of ROPO effect were willingness for immediate purchase, unwillingness to disclose personal data, lack of trust in online shopping, and faster return policy.

It is worth mentioning that consumer online information search is neither very intensive nor sophisticated. Many consumers have limited computing/ digital skills (Mazurek, 2012; van Dursen and van Diepen, 2013). In result, they can ignore important information during search or gather unreliable information (Roscoe et al., 2016). Research conducted by Bhanter and Ghose (2004) revealed that typical internet searches are limited both in scope and time (Bhatnagar and Ghose, 2004). The majority of consumers spends less than 20 minutes and does not search more than 2 times a month, visiting no more than 2 or 3 websites in the selected categories (Zhang, Fang, and Sheng, 2009). More intensive information search occurs when comparing prices or searching for information regarding specific product attributes and availability, or when purchasing something perceived expensive (Roscoe et al., 2016). Furthermore, consumers can employ rather primitive search strategies, such as using just one search word, focusing on the first www address found and not performing more in- depth search. It all leads to rather limited effectiveness of the whole process (Van Dursen and van Diepen, 2013; Tu, Shih, and Tsai, 2008). Knowledge on the searched subject existing prior search might influence the complexity and effectiveness of the whole process (Monchaux et al., 2015).

THE SHOWROOMING EFFECT

Another observed form of research shopping is reverse ROPO effect, that is searching product information (such as product testing) in stationary shops, and buying it online (Wolny, 2016; Bilińska-Reformat, 2014), also known as showrooming. Rapp et al. (2015, p. 360) define it as shopping practice of visiting a brick- and- mortar store to evaluate products or services and using mobile technology to compare the alternatives an individual is interested in, and to purchase them in another channel. Evans (2012) argues that such a behavior is price- driven. In some situations, such as purchase of more expensive and complex products, consumers visit multiple stores to

compare prices (Kushwaha and Shankar, 2013). After product evaluation or test is completed, consumers shop in another channel, for example online (Evans, 2012). According to O'Donnell (2012), although the actual purchase can be finalized either in the online channel of the previously visited retailer, but more often with its competitors. This phenomenon is fueled by affordable mobile technologies (Rapp et al., 2015). Such developments as easy broadband internet access and smartphones decreased information barrier and effort necessary to find a channel offering the lowest price (Cao, 2012). From consumer's perspective, technology makes market more transparent, allowing at the same and real time experiencing products in stationary shops and searching for lowest prices or better conditions somewhere else.

CONSUMER ONLINE INFORMATION SEARCH AND PERCEIVED RISK

Various studies suggest that consumers from different age cohorts exhibit considerable deficiencies on all stages of information search (Roscoe et al., 2016). Children and teenagers, for example, have problems with using already acquired knowledge and formulating proper queries, and all consumers, regardless their age, have problems with defining right search terms, evaluation of search results and regulation of the whole process (Roscoe et al., 2016). Consumers searching online and purchasing in stationary shops can willingly utilize seemingly unlimited possibilities of online information search, yet avoid online shopping due to the risk perceived with both product and the online shopping process itself (Liang and Huang, 1998; Choi and Park, 2006). The uncertainty with product results from concerns that product would not meet expectations, and with the process relates to the lack of confidence in the transaction itself. In the e- commerce literature, the risk perceived by consumers is considered as one of the most important barriers to shop in multiple channels (Dholakia et al., 2005). Consumers might fear to disclose their credit card or private information, lack of sensory contact with a product, or wasting time required to complete transaction and waiting for a product (Konsu et al., 2008; Forsythe et al., 2006). The risk perceived can be one of the sources of the ROPO effect, and its type and magnitude might be determined by broader cultural factors (Choi and Park, 2006). For example, research study conducted by Choi and Park (2006) revealed that concerns related to delivery and customer service decreased Korean consumers' willingness to shop online, while Americans were more concerned with delivery and transaction's safety.

UNCERTAINTY AVOIDANCE AS DETERMINANT OF PERCEIVED RISK

Culture's dimension that can significantly determine the extent and magnitude of consumer perceived risk while shopping online, thus explaining differences between countries, is uncertainty avoidance. Hofstede (2001, p. 38) defined it as the level of discomfort, which individuals from particular cultural context experience when exposed to uncertainty and ambiguity, which in turn affects their tolerance of risk and propensity to undertake risky pursuits. In cultures, where this dimension achieves high levels, people tend to avoid uncertainty and prefer to act in accordance with commonly accepted norms. While Hofstede's model is applied to analyse groups, current research suggests that individuals also have cultural values (McCoy et al., 2005). Although comparative studies of nationalities or ethnic groups are standard approach in the literature, one should not ignore that consumers from various segments/groups with similar socio-economic backgrounds and lifestyles, may follow similar value systems across nationality or ethnicity lines (McCoy et al., 2005). In the literature on uncertainty avoidance one can distinguish four major research streams/perspectives (Karahanna et al., 2013). In the first, online shopping is always assumed to be risky, and high levels of uncertainty avoidance influence risk perception. In the second, one finds studies focusing on the influence of uncertainty avoidance on the need to utilize technology. The third focuses on the influence of uncertainty avoidance on perception of websites. The fourth comprises of studies of relationships between uncertainty avoidance and trust, considered by some researchers as one of the key determinants of consumers' attitude toward online shopping (Akroush and Al-Debei, 2015). A study conducted by Belkhamaz and Waf (2014) indicated that the level of uncertainty avoidance affects differences in utility perceptions and willingness to shop online. However, so far, there are no studies available that compared more than 2-3 countries from broader perspective.

RESEARCH AIM AND METHOD

To achieve the purpose of the study, the authors analyzed secondary data from Consumer Barometer and Hofstede's cultural dimensions. The following research questions were stated:

1. Are there any similarities in the information search behaviors and purchasing among consumers in the selected European countries?
2. Does uncertainty avoidance strengthens ROPO or showrooming effects?
3. Does internet access strengthens ROPO or showrooming effects?

To answer the above stated research questions, the authors used the data from TNS study for Google. 26 EU countries (excluding Malta and Cyprus, not included into Consumer Barometer) with Norway and Serbia included into comparison. The analysis utilized the average scores for declared behaviors related to information search (online versus offline) and purchase in 20 product categories (car insurance, cinema tickets, clothing and footwear, DIY, flights, groceries, ground travel, hair care, home appliances, home furnishings, hotels, laptops, make up, mobile phones, music, personal loans, real estate, restaurants, television, vitamins and OTC remedies) in last 6 months. Four types of situations were identified: information search and purchase online, online information search and offline purchase (ROPO), offline information search and online purchase (showrooming), information search and purchase offline. Uncertainty avoidance (UA) scores for each country were retrieved from Geert Hofstede's website (<https://geert-hofstede.com>), and used to develop clusters of countries with similar levels of ROPO and uncertainty avoidance.

The following research hypotheses were formulated:

- H1: High level of UA strengthens ROPO effect
- H2: High level of internet penetration weakens ROPO effect
- H3: High level of UA weakens showrooming effect
- H4: High level of internet penetration strengthens showrooming effect

RESEARCH RESULTS

For statistical analysis, it was stipulated that percentage values be equivalent to of 1 to 100--interval scale, similarly to Hofstede's measure. The correlation was measured with Spearman's rho. The strongest relationship was identified between [the escalation of] the ROPO effect and internet penetration in a country ($\rho = -0,774$, for $p < 0,001$). There is also positive, statistically significant relationship between uncertainty avoidance and the ROPO effect ($\rho = 0,533$ for $p < 0,01$). The weakest relationship was identified between [the escalation of] the showrooming effect and uncertainty avoidance ($\rho = -0,395$ for $p < 0,05$). An important finding was strong, statistically significant negative relationship between internet penetration in a country and uncertainty avoidance ($\rho = -0,751$ for $p < 0,01$). This could explain the situation in such countries as Greece and Portugal, with relatively low internet penetration, compared to the Western European countries, can be attributed/ can result [to some extent] from high levels of uncertainty avoidance. The strongest ROPO effect was identified in the ex-communist countries, which could result from low level of infrastructure's development on the one hand, or low levels of [social] trust in general on the other. The weakest ROPO effect occurs in the

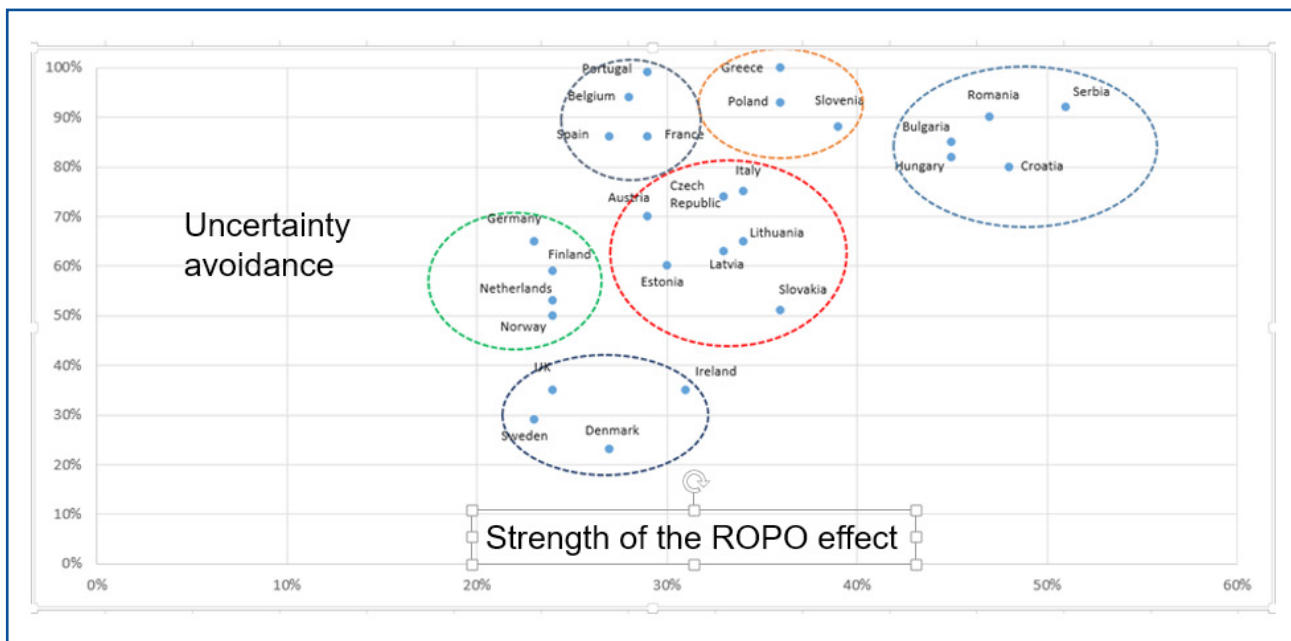
Table 1 presents the data for the analysed countries.

Country	Online/Online %	ROPO %	Showrooming %	Offline %	Internet penetration	Uncertainty avoidance
Serbia	18	51	8	44	69%	92
Croatia	20	48	7	45	72%	80
Romania	29	47	10	39	66%	90
Bulgaria	29	45	12	39	71%	85
Hungary	22	45	8	42	82%	82
Slovenia	25	39	10	43	75%	88
Poland	28	36	11	41	78%	93
Slovakia	29	36	11	39	84%	51
Greece	26	36	10	46	72%	100
Lithuania	32	34	14	38	77%	65
Italy	23	34	9	43	77%	75
Latvia	32	33	13	37	76%	63
Czech Republic	32	33	10	38	81%	74
Ireland	25	31	11	38	88%	35
Estonia	28	30	11	41	81%	60
France	28	29	12	39	83%	86
Austria	24	29	9	43	83%	70
Portugal	14	29	6	58	71%	99
Belgium	21	28	9	46	82%	94
Spain	27	27	11	43	81%	86
Denmark	28	27	8	36	92%	23
Great Britain	34	24	14	30	83%	35
The Netherlands	30	24	11	36	93%	53
Norway	29	24	11	35	93%	50
Finland	28	24	10	37	90%	59
Sweden	29	23	12	37	94%	29
Germany	27	23	11	39	82%	65

Source: own study, based on Consumer Barometer (2016), <https://www.geert-hofstede.com/cultural-dimensions.html> (accessed on 2018.01.26).

Table-1. Consumers' utilization of internet in purchase decision making in European countries (in percentage points).

To compare countries and to map them, only the ROPO effect was used, as it was stronger and more differentiated. Taking into consideration two dimensions - the strength of the ROPO effect and the level of uncertainty avoidance, the analysed countries were divided six clusters/groups. Group 1 includes the countries with the strongest ROPO effect and very high level of uncertainty avoidance: Romania, Serbia, Bulgaria, Hungary and Croatia. Group 2 includes countries with the moderate level of the ROPO effect and very high level of uncertainty avoidance: Greece, Poland and Slovenia. Group 3 includes countries with lower than the average strength of the ROPO effect and very high level of uncertainty avoidance: Portugal, Belgium, Spain and France. The remaining three groups include countries with lower level of uncertainty avoidance and moderate or low level of the ROPO effect. An interesting group includes Ireland, Denmark, Great Britain and Sweden, which characterize with very low level of uncertainty avoidance, but at the same time exhibit lower than average level of the ROPO effect. Figure 1 presents the map of the identified groups.



Source: Own study based on Consumer Barometer (2016), <https://www.geert-hofstede.com/cultural-dimensions.html> (accessed on 2017.01.26)

Figure 1. Countries according to strength of the ROPO effect and level of uncertainty avoidance.

SUMMARY

The analysis conducted indicated relationship between the ROPO and showrooming effect, internet penetration and uncertainty avoidance in the selected European countries.

Three hypotheses were positively verified:

- H1: High level of UA strengthens ROPO effect ($\rho=0,533$, $p<0,01$)
- H2: High level of internet penetration weakens ROPO effect ($\rho=-0,774$ $p<0,01$)
- H3: High level of UA weakens showrooming effect ($\rho=-0,395$ $p<0,05$)

The last hypothesis (high level of internet penetration strengthens showrooming effect) has been verified negatively - high level of Internet penetration weakens not only the ROPO effect, but also the effect of showrooming ($\rho= -0,751$ for $p <0,01$).

It turns out that consumers in some countries, due to their geographical and cultural proximity and shared experiences behave similarly in the context of information search and purchasing.

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