# International Journal of Sales, Retailing & Marketing

# Special Issue: 12th International CIRCLE Conference, Szczecin, Poland

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## **Editorial**



The current issue of the International Journal of Sales, Retailing and Marketing is once more dedicated to the best research papers from the area of retailing, sales and marketing presented at the 12th

International CIRCLE Conference which was held at the University of Szczecin, Szczecin, Poland from 8<sup>th</sup> to 10<sup>th</sup> of April, 2015. More about the Conference can be found at:

http://www.circle2015.wordpress.com
In this issue we are proud to present seven original research papers from: Italy, Germany, United Arab

Emirates, United Kingdom, Poland, Czech Republic, and Kenya. The contributing authors published an interesting researches about the retail management, brand loyalty, elderly consumers, customer delights, and many other interesting areas of management and marketing.

The profile of contributors to the Journal ranges from well-known established professors to young and promising doctoral students whose time is yet to come.

Thank you for taking interest in publishing and reading The International Journal of Sales, Retailing and Marketing. We hope it will be a valuable help in your professional and academic advancement.

Editor,

Professor Mirko Palić, Ph.D.

Ch. Jali

## CONCEPTS AND REALIZATION OF CUSTOMER DELIGHT

#### **Andreas Marquardt**

#### Abstract:

The article reviews the main authors and concepts of customer delight and develops a model of customer delight dimensions and a model of ideal realization in practice.

Previous research focusing on customer delight on retail level is very rare. Most researchers focused on customer satisfaction and not delight. Little research can be found about the success factors of realization. The purpose of the article is to show and combine theoretical knowledge to improve customer delight at retail level.

The findings of the article are that the combined ideas of Parasuraman, Zeithaml and Berry as well as the reflections of Kano, Johnston and the EFQM model lead to two interesting new models. The "house of service excellence" shows the dimensions to delight customers in three columns with different importance based on customer understanding and interpretation. The developed model of success factors gives answers for ideal realization of customer delight in practice based on the derived dimensions.

Key Words: strategy, customer delight, success factors, automotive retailing, service innovation

#### 1. Introduction

Increasing and changing competition between companies leads to the necessity to gain customer loyalty through customer satisfaction and delight as a major goal because of resulting higher profits. Previous research focusing on customer delight on retail level is very rare. Most researchers focused on customer satisfaction and not delight. Little research can be found about the success factors of realization. The purpose of this article is to show and combine theoretical knowledge to improve customer delight at retail level.

The general concepts of customer delight and the factors for realization in general exist (Gouthier 2012, Zeithaml et al., 2010, p. 70 and Berry L.

#### **Andreas Marquardt**

Dr. Ing. h.c. F. Porsche Aktiengesellschaft Amtsgericht Stuttgart HRB-Nr. 730623 Email: andreas.marquardt@porsche.de University of Gloucestershire, Great Britain 1999). There are different approaches how to explain customer delight but there is little written on how companies can realize the concept (Johnston 2004, p. 129). Also the academic discussion has no clear definition like the practical world what this excellence really is (Gouthier 2012, p. 459). The key question how to deliver service excellence is not answered yet.

The findings of this article are that the combined ideas of Parasuraman, Zeithaml and Berry as well as the reflections of Kano, Johnston and the EFQM model lead to two interesting new models. The "house of service excellence" shows dimensions to delight customers in three columns with different importance based on customer understanding and interpretation. The developed model of success factors gives answers for ideal realization of customer delight in practice based on the derived dimensions.

#### 2. Previous work within this topic

A literature review showed that the main authors about customer satisfaction are Parasuraman, Zeithaml and Berry. Gouthier (2012, p. 448) mentions, that the three most commonly used concepts for service excellence are the Kano-Model, Johnston's view on service excellence and the national quality award models. The ideas of Parasuraman, Zeithaml and Berry as well as the reflections of Kano and Johnston are used for this study to cover the most important ideas.

Customer satisfaction is defined as the result of Service Quality, Product Quality and Price (Zeithaml et al., 2010, p. 79) (Figure 1). Perceived service quality is a part of customer satisfaction (Zeithaml 1996, p. 31). The customer evaluates these factors always influenced by situational and personal factors based on its formerly defined needs and expectations. Satisfaction is not static. It is influenced by a variety of factors over time. The result of customer satisfaction can be customer loyalty. If customer satisfaction is exceeded from the level of contentment it can be called delight if the fulfilment level is higher than the expectations. To delight customers can be used to gain competitive advantage based on a profoundly positive emotional state that follows after exceeding customer expectations with a surprising

degree (Zeithaml et al., 2010, p. 68-80). It is defined as feature that is unexpected and surprisingly enjoyable. Customer delight can be seen - as explained - from a psychological point of view with emotions or from an analytical point with exceeded expectations. The evaluation of satisfaction and delight can be based on affective (liking/pleasure) or cognitive (thinking/judging) components (White et al., 2006, p. 411; Grover R. and Vriens M, 2006, p. 570). Oliver (2010, p. 366) writes: Delight has only recently been a research focus. It is an affect in psychology and results from joy and surprise. He also states that: "The Question of whether satisfaction is an emotion still has not been answered" and also that "Emotion is an hybrid cognition-emotion not well described in the psychological literature" (Oliver 2010, p. 342). The following chapters review the mentioned authors and models.

#### 2.1 Factors for Service Quality

Parasuraman, Zeithaml and Berry write that the creation of service quality is based on five dimensions (Zeithaml et al., 1990, p. 23 and Berry L. and Parasuraman A. 1991, p. 63 and Lovelock C. and Wright L., 2002, p. 371). These are reliability, responsiveness, assurance, empathy and tangibles.

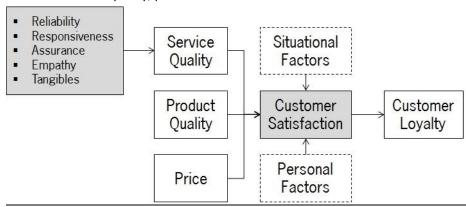


Figure 1: Correlation between quality, price and satisfaction

Source: Zeithaml 2010, p. 79

The dimensions are defined as follows (Zeithaml et al., 2010, p. 87):

**Reliability** is the most important factor to customers and means to perform the promised accurately. If Reliability is not given, no satisfaction can be reached.

**Responsiveness** is the fast and adequate reaction to customer's requests, questions and complaints. It is evaluated by the answers and the reaction time.

2.2 Kano-Model

The Kano Model helps to understand what customer expectations have to be fulfilled to gain satisfaction and also what must be addressed to avoid customer dissatisfaction. Satisfaction is seen as a two state construct as satisfied and dissatisfied. The model consists of five categories (attractive, one-dimensional, must-be, indifferent, reverse) of requirements there of three are described because of their relevance for service excellence (Gouthier 2012, p. 454). As shown in the following figure these three categories are must-be, one-dimensional and attractive requirements (Högström 2011, p. 111). The first group immediately leads to dissatisfaction if the "taken for granted" characteristics aren't present. One-dimensional needs can create dissatisfaction or satisfaction in dependency to the offered features or services that exceed the must-be contents (Erto 2011, p. 197). The third group (attractive requirements) increase or decrease the satisfaction level proportionally to the presence of

**Assurance** is the courtesy and knowledge of employees and their ability to gain trust and confidence. This factor is very important to services with difficult ex ante evaluation.

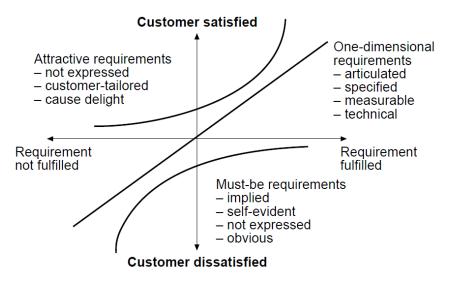
**Empathy** defines the personal and individualized attention to customers based on the knowledge about individual preferences of these customers

**Tangibles** are the physical proofs of services. It is the appearance of physical facilities, equipment, personnel and communication materials. These are used as representatives to evaluate quality.

additional features or services. These are neither expressed nor demanded (Gouthier 2012, p. 454).

The logic of the Kano-Model gives important ideas of what is necessary and what is less important to reach customer delight. It can be said, that the must be characteristics are an absolute must and aren't allowed to be neglected in the attention of the management because dissatisfaction is an immediate consequence and prevent as a direct consequence the basis for customer delight. The difficult part is to find the right level of offers to gain at least a minimum of satisfaction to avoid dissatisfaction based on the one-dimensional aspects. The question to delight is how to meet attractive requirements, this leads to the idea to find out the different importance levels of customers regarding different sets of services, even if a customer doesn't express or demand these offers. This leads to an approach of customer understanding or customer interpretation in the later developed model.

Figure 2: Kano's model



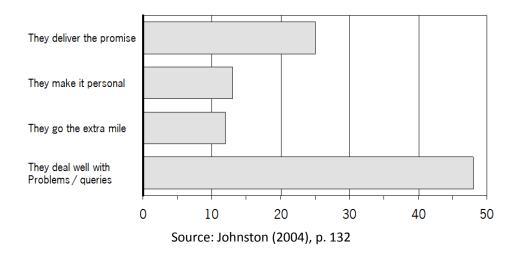
Source: Matzler, Hinterhuber, Bailom and Sauerwein (1996), p. 7

#### 2.3 Johnston

"The level of satisfaction and lasting impression of a company is based first and foremost on what happens when something goes wrong" (cited in: 2004, "Delighted, returning customers") thinks the hotel company Ritz-Carlton, the worldwide leader measured in the number of service excellence awards. Johnston's research also has this finding but the main finding is, that service excellence is about "easy to do business with" for customers. This is subdivided into four topics with decreasing importance: "dealing well with problems and queries, delivering the promise, providing a personal touch and going the extra mile" (Johnston, 2004, p. 131). It is mentioned that customer expectations are driven by the promised

and so even low-service offers can delight customers if the promised is delivered. Interesting is the point, that customers with a problem that is dealt well with have higher levels of delight than vlamis "satisfied" customers ("recovery paradoxon" Johnston 2004, p. 133, Bowen 2009 and Michel 2009, p. 253) and that dealing with problems is the critical factor to wether an organization is evaluated between satisfaction and the vote for excellence or poor service. Exceeding customer's expectations can be very little things that have a huge lever but this point and also the personal touch have much lower importance for customer delight (Johnston 2004, p. 132, following figure).





In Johnston's opinion service excellence is creating intense feelings that customers refer to an organisation, its people and its services. Individuals can immediately understand if they receive excellent services - even if it's hard to say why" (Johnston 2004, p. 130). Johnston sees service excellence from an emotional point of view and often can't understand it's organisations importance today because they find it elusive.

Johnston's "delivering the promised" is very similar to the Kano-Model with the must-be requirements. The difference is, that the promised can exceed the must- be criteria. That means, that a company has to find out what the must-be criteria are and can than decide what could be a promise to delight on top. But, it can also be deduced, that a company should be very careful with promises to customers because this is going to be measured like a must be criteria and delivering less than the promised immediately to dissatisfaction. The importance how to deal with complaints is underlined very strongly by Johnston and often not realized in companies.

The findings of Johnston and the Kano-Model are complementary and can be combined. Johnston in

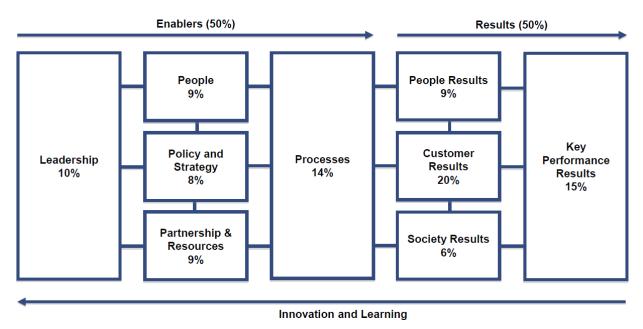
comparison to Kano weights the importance of his findings, what helps to focus both models.

## 2.4 EFQM Model (European Foundation of Quality Management)

Excellence models are a strong instrument to develop a company. It is proven, that organizations that won awards (e.g. EFQM) outperform compared to companies with the same size and within the same industry (Talwar 2011, p. 30). Worldwide exist different models but the approaches are similar (Talwar 2011, p. 29). One of these is the EFQM Excellence Model that is taken as the relevant one for Europe (Gouthier 2012, p. 452). The model helps companies to improve their long term performance levels based on a holistic approach with different evaluation criteria. It is a model that shows the cause and effect relationships between enablers and results of company's actions. There are five enablers that can be seen in the following figure on the left side. The steady success of a company is guaranteed by strong leadership that focuses on shaping the future and realizing the planned based on ethics and trust (EFQM 2012, p. 4). People stands for a culture that creates win-win situations for the company and its employees based development of capabilities, fairness and equality. Motivation of people, building of commitment and usage of skills and knowledge are also addressed. Strategy stands for deployment, development and implementation of mission and vision based on a stakeholder view (EFQM, 2012, p. 4). Partnership and resources define the planning and management of own and third party resources with aim of strategy support and efficient as well effective execution of processes. Last but not least follows processes with the highest weight that addresses the design, management improvement of processes with the objective to optimize stakeholder's interests.

The right side of the figure shows the results that the enablers generate. These are subdivided in four groups. The most important result group is customers. Those intents, that a company seeking excellence should agree performance indicators with its customers to measure if the needs and expectations are met. Key results are used to measure the satisfaction levels of internal key stakeholder's interests. People results stands for needs and expectations of the employees that are measured by indicators that are based on the company's strategy regarding people. The fourth group are society results that report the results from a societal, ecological and political point of view (external stakeholders). The model is checked based on a stabilized frequency by a PDCA-Logic (Plan, Do, Check, Act) to maintain its effectiveness.

Figure 4: EFQM Model



Source: EFQM (2012, p. 4)

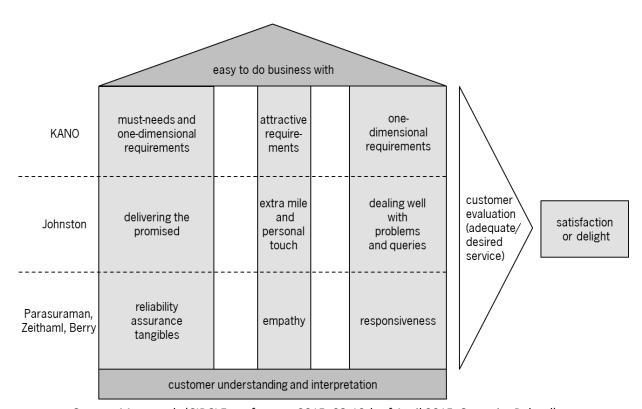
The EFQM model gives a good overview of relevant aspects to address customer delight through service excellence. The model is very rational and lacks the emotional components (Gouthier 2012, p. 452; Yu and Dean 2001, p. 238) of customer delight; therefore a combination with the Kano-Model and Johnston's view is necessary.

## 3. Combination of existing knowledge (results / findings)

Previous researchers have concentrated general concepts of satisfaction and delight (Parasuraman, Zeithaml, Berry, Kano, Johnston). These concepts were combined as basis to get a fresh perspective of the important ideas on what customer delight is and on how to gain and realize it in practice. The dimensions of customer delight can be seen as a house of service excellence. Everything stands under the main objective of creating a company with which it is easy to do business. The roof is stabilized by three columns that have different diameters that represent the relative importance for the whole building. The largest one is the column of basic customer requirements that must be fulfilled. The second

largest is made of a system that deals well with customer complaints and avoids negative effects on customer satisfaction (one-dimensional). The column in the middle of the building is not necessary for the stability of the house but it's the element that makes the difference to competitors because it can create delight. The extra mile and the personal touch with empathy can be used to reach measurable excellence. The complete house based on customer understanding interpretation (expectations) what underlines the importance of a customer orientation as central element.

Figure 5: Dimensions to delight customers



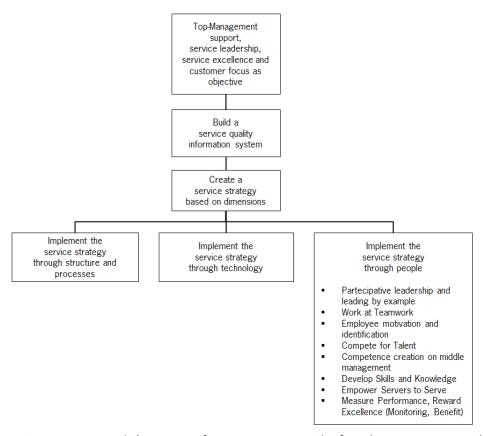
Source: Marquardt (CIRCLE conference 2015, 08-10th of April 2015, Szczecin, Poland)

The following figure shows the mentioned elements for operationalization. The EFQM model, Berry's view (framework for great service, Berry, 1995, p. 5) and the other reviewed authors are to summarize the operationalization used knowledge. A successful operationalization of customer satisfaction is based on TopManagement support, a dedication to service leadership and excellences as well as customer focus as objective. Starting from that basis an information system to monitor service quality is needed. These two steps are preparations for the third step – the choice and definition of the service strategy. The service strategy must be defined on

the topics shown in figure three. This ranges from customer satisfaction based on must needs to customer delight with individualization and attractive requirements. After the strategic dedication and definition of a service strategy the implementation starts with well-defined processes and derived organizational structures. Technology should be used to work effectively and efficiently. After all this steps the key factor for success people — is in focus. Leadership should be participative and conducted by example through

managers. Working in teams as well employee motivation and identification with the company should be generated. Recruitment should focus on service oriented talents. Competence creation, knowledge and skill development for all employees and very focused for middle-Management are important topics for human resource development. Employees need empowerment for own decisions regarding customers and for their own motivation. The complete chain of service excellence should be measured and rewarded.

Figure 6: Elements to operationalize customer delight



Source: Source: Marquardt (CIRCLE conference 2015, 08-10th of April 2015, Szczecin, Poland)

#### 4. Contribution to knowledge and next steps

Summarizing, customer delight at retail level as well as its success factors have been poorly investigated and concepts were not securely articulated or are missing. The purpose of the

article is to improve the gap in knowledge regarding theoretical and practical knowledge to improve customer delight at retail level. The contribution to knowledge are the model of "dimensions of customer delight" and the model of "elements to operationalize customer delight".

These help to improve the practitioner's journey to gain customer delight.

The article also shows that further research is necessary to improve knowledge. Further research should give a clear definition what customer delight is in the opinion of practitioners, should

confirm, explore and develop what concepts exist, are valid and relevant to gain customer delight. Additionally it should be researched how customer delight can be ideally realized in the retail business from a practitioner's point of view.

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# **EVENTS PLANNING AND POLICY FRAMEWORK IN** DEVELOPING COUNTRIES: THE IMPACT OF EVENTS PLANNING DEVELOPMENT ON ABU-DHABI ECONOMY

#### Mohammed Aljeaidi, Claudio Vignali & Razaq Raj

#### Literature Review

#### Events:

Events are an important platform for businesses and governments to promote and market a product, an idea, nation or company. In regions where economies are hugely driven by accelerated population growth and oil revenues, events are to a large extent deployed as catalyst of enhancing social development and economic diversification. Events have been defined by different researchers in different perspectives such as (Merck, 2008), has defined it as events are impermanent occurrences having a limited length and usually for planned events it is publicized and fixed. Further observations were also made by the (Bethapudi, 2013), that events are the transient and each distinctive combination management, duration, setting, and people. In this definition, bγ "blending" means linking management, staff, time, venue and attendees. (Seeger, 2006), has also defined events as a

Mohammed Aljeaidi, School of Events, Tourism and Hospitalityg, Leeds Beckett University, Leeds, UK. Email: Mohammed.aljeaidi@gmail.com Claudio Vignali, Dean of the Virtual College, The University of Vitez, PhD/Dba supevisor/MBA module leader, The University of Szczecin Poland, Leeds University; Leeds Met University; The University of Gloucestershire, Phorzeim University, Germany; University of Zagreb Croatia.

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distinctive moment of time celebrated with ritual and ceremony for satisfying needs.

#### **Event Management:**

Event management was a process through which an event was planned, organized, and produced (Burbank, et al., 2012; Yeoman, et al., 2012). It was examined that the event management was the coordination, and planning of the entire event features, people, participants, team members that came together to build any kind of event (Silvers, 2012). Planned events were all generated for a determination and what was once the dominion of single and public initiatives had largely became the realm of authorities and businesspersons. To the amount that event tourism practices were renovating that was they change politics, values or attitudes then persons will likely adopt new deeds in the future (Getz, 2008)

Most of the countries are planning events to promote the tourism and increase country economy. The economic conditions do not allow the achievement of a particular task, people must form purposes to fulfill these events at some later point in time (Khuja, 2014). If members have to take two different types of decisions that had to be ended in the ongoing charge their performance at fulfilling the potential task should decline as compared with contestants who had only one type of decision to make (Preston, 2014). Effective planning and reactions to risk and other extreme events necessitates certain planning and decision procedures so that can make a suitable balance between risk and development.

Tourism and foremost events are progressively interwove as governments seek to indorse economic development, change place imprinting. Such are the professed benefits of that governments events are attractive increasingly active in order for hosting privileges and generating the right environments for the production of major events (Ghaderi, 2011). This government connection has increased as shown by a growing body of special drive legislation designed to support the request for and staging of proceedings, growth in public speculation in events, and the provision and use of public possessions. Thus government contribution in event planning and organization is further difficult because governments are now falsifying two

potentially opposing roles in (Ghapar & Jamal, 2014):

Facilitating the command for and performance of events; and, Protecting broader community interests and handling negative impacts

#### **Event Planning Goals/ Objectives:**

While deciding about planning of the events, there must be description of general overview about the event and it must be specific. In taking decision about the events, for avoiding clashes there must be consideration that there would not be any other events on this date. Timings are also very important during planning an event. Timings should be such that at which visitors or participants can easily come in the event (Commission, 2011). You should also be able to define and communicate your event's objectives as per (Richards, 2011):



Although most of the time management is very keen in managing and arranging an event but he cannot perform all the activities by himself. They must be in need of a group that could handle and divide all the role and responsibilities (Parent, 2010).

Events are an important platform for businesses and governments to promote and market a product, an idea, nation or company. This is the case in events of high profile magnitude like the case where Qatar is using close to USD 65 billion to host the FIFA 2022 football World Cup to the Middle East. Many Middle East businesses are investing about USD 1.89 Million in events annually hence making event management and planning an important activity than before (Feng & Miller-Hooks, 2014).

**Events in Abu Dhabi (United Arab Emirates):** 

Abu Dhabi is the part of the United Arab Emirates, but still it is competing with the other member states of that union for attracting more events and there come into sight more emphasis presented for the infrastructure development instead of formulation of actual policy. In this perspective, major focus of the Abu Dhabi government is on structuring its events industry with the help of its present comparative and competitive advantages (Mondok, 2009). Even though, Abu Dhabi is part of United Arab Emirates, it has been competing with other member states of this union to attract more events and it appears more emphasis provided for infrastructure development rather than actual policy formulation (SESRIC, 2010).

In this regard, Abu Dhabi government focuses more on building its events industry through its present competitive and comparative advantages. For instance, Abu Dhabi National Exhibitions Company (ADNEC) has a comparative advantage through its location and most importantly it could achieve competitive advantage through its expertise of hosting major events (Hislop, 2013). UAE is trying to become destination for tourism and events and exhaustive competition between diverse members of union, state with an enhanced policy framework will bring best from the competitive concentration (Mitchell, 2012).

#### Event policies for Economic Development:

Events are an important platform for businesses and governments to promote and market a product, an idea, nation or company. In regions where economies are hugely driven by accelerated population growth and oil revenues, events are to a large extent deployed as catalyst of enhancing social development and economic diversification. Policy formulation and framework affect event planning and organizing any given city in the world (Buckley, 2012). From time immemorial the emergence of festivals and organized events are well documented even before the collapse of Western Roman Empire that occurred in A.D. 476. The practice of events management and planning has been evolving and growing as a body of knowledge and formal discipline (Moussa, 2013).

# Government Influence for Event research Organizations:

Government inferences, people activities and places are included in the event industry. It is an evolving and dynamic industry having various related industries, for instance hotels, venues, and caterers. Contribution has also been made by the research to the knowledge about several areas and a large number of review articles have also summarized this research (Cohen, 2009). Numerous articles identified the governing research themes and suggested avenues for the future research (Derrett, 2008). Before1993, research of event industry was seen in the major stream tourism journals after the founding of

Festival Management & Event Tourism journal which is known as Event Management nowadays for instance Tourism Management, Annals of Tourism Research, and Journal of Travel Research (Boukas, 2012).

#### **Event Management in Abu Dhabi:**

Standards of living that measure to the international standards have to be key to any development decision. Abu Dhabi has a unique chance of providing a special combination of elements in its urban identity; a safe and authentic, yet also an open and progressive Arab city within the contrast of management of the events (Derrett, 2008). The large context of the population into the Abu Dhabi is continuously in the effort to put forward the people towards the organization of the events within the vision of 2030 of strategic development. The progression had been pushed with the strategic development of the social sustainability and growth while the inclusion of the competitive environment. The leaders into the Abu Dhabi are also tend to divert their attention towards the organization of the events to make Abu Dhabi optimism in business (Webster, October 2011).

#### History of Event Industry in Abu Dhabi:

Events are happenings out of the usual, narrow in period and occasionally organized (Watch, 2014). The term of special event has been created for describing specific presentations, rituals, or celebrations which are designed for marking special occurrences or for achieving specific social, cultural, or corporate objectives and goals (Allen, O'Toole, McDonnell, Harris, 2005). During 20th century, special events were used for celebrating a range of the achievements, together with landing of the explorers, launching of the legislation or new governments and coronations of the queens and kings. Nowadays event has become fundamental component of local, private, national

A similar effort was done by (Getz, 2010) in which

and regional economic portfolios (Arturo Molina, 2010).

#### Event planning impact on Abu Dhabi:

The event industry being established towards increasing the impact on the region for the people, Abu Dhabi had established the event organization industry (Getz, 2008). Event planning had changed the meaning for the organization of the events into the industry and shaped in terms for qualities and characterized with the certain description of event industry. Although there is similarity understanding for event tourists, but they are different in interpretation and experience therefore, diverse meanings are rendered by them that are permeated by the subjective significance and as a result influence their choices of consumption (Boukas, 2012). Abu Dhabi had make essential to develop the policies and planning for the organization of the events and make it understand to design the consequence of the interaction of the event tourists with the understanding being recommended by event in the tourism destination (Boukas, 2008).

#### **Event Planning Model:**

Personal
Characteristics

Event Planning

Event Places

Event Places

Organizing

Characteristics

Failure of Events

The success of the event could be measured by the promoter through a simple model that tells, if revenue from the tickets sold is higher than cost of event then it shows the success of the event. But, interviews are done from many promoters who said that success of the event is not only dependent on the profits or break evens. Such as explained by the Mackie (2008) that it was

he developed model of intended event experience, by which a holistic perceptive of event tourism experience is provided from motivations, needs, attitudes and the anticipations brought to events, by real living experience which shapes meanings of event and impacts future manners. This model give emphasis to the fundamental role of the liminality that exemplify character of the event like a special place in the special time exterior the restrictions and routine of the normal life. Recommendations were made by (Getz, 2010) as an initial point for holistic perceptive of experience of event tourism, notion of the liminality, that has been established to be relevant to the both event and travel experiences. Liminality begins from the anthropological work, defined as the liminal events providing communal space at which event participants contribute to the obviously sacred experience (Cohen, 2009). When such experience happens in secular space, then it is described as the liminoid. Sense of the communal bonding and the camaraderie postponing normal social boundaries and rules that is stimulated in those spaces has been defined as the communities (Cohen, 2009).

supposed by him that worst gig would be the loosing of money by the promoter but he can lose money on the gig and then think that it is fantastic. With reference to the full capacity, an event shows financial success but event quality is also considered as an important factor for judging whether an event has got success or not. Quality may possibly be analyzed by the enjoyment levels

of the participants, number of people that are present till the end of the event (Castrogiovanni, 2005).

Event Planning and policies contents in Abu Dhabi:

Abu Dhabi has been now flourishing being the part of the dynamic world of event organization. The leaders and the part of the event organization industry are now been engaged in planning and developing the strategies for the promotion of the region and the successful organization of the events in Abu Dhabi (halbase, 2011). Various aspects of event organization have now been looked upon to know more about the event industry and for enhancing the strategies for the development purposes. The region of Abu Dhabi have extremely capable of the event organizers for covering costs related with organizing an event, for instance, marketing, infrastructure, insurance and staff. Revenue for covering such costs is frequently sourced from the areas for instance merchandising, participation fees, sponsorship and fundraising are all are considered while at the stage of planning and policies establishing (Allen, et al., 2012).

## <u>Phenomena for Event Management into Abu</u> Dhabi:

Phenomenology is a methodological and philosophical line of consideration that is capable of using for the examination of the event experiences deeply. The objective behind phenomenology is to deepen and enlarge understanding of range of instant experiences of event management in Abu Dhabi (Aiber & Landau, 2008). Phenomenological investigation is a direct explanation of understanding with not considering of its emotional origin (Aiber & Landau, 2008). As a result it becomes very important to know the methods by which meanings of events are being shaped after interaction of attendees of event with the proposed experience offered by a specific event. After doing it, the distinctiveness that build

an experience significant for the event audiences and participants can be understood in a better way with the intention that event activities and elements are efficiently leveraged and designed for magnifying the impacts of an event familiarity. With reference to social constructionist point of view, meaning is described as the 'individual implication or internal representation, symbolization, and conceptualization of external world' (Aiber & Landau, 2008). phenomenologists and especially for Heidegger (1927/1996), there cannot be separation of meaning from the ontological structures; therefore, it is indivisible from the situation and context where in a person is placed. By considering it, it can be said that the meaning represents understanding within context of a specific life perspective or world.

The search, thus, for meaning requires investigate a life world and its horizon of understanding. In other words, according to Heidegger, the use and meanings of things are always related to existential possibilities or to a very concrete manner in which individuals exist in the world (Ziakas, 2011). With reference to events, meanings could be described as they represent social and personal constructs together with all experiences, thoughts and feelings as the successive sense of the salience that is obtained by people from their attendance of participation in, or activities based on event. In common, meaning is a persistently problematic achievement of the human dealings loaded with the novelty, change, and ambiguity (Castrogiovanni, 2005).

Similarly, with reference to events meaning can be defined as a complex demonstration of the interacting forces by which a polysomic tapestry is shaped regarding perceptions and understandings. Such tapestry involves existential, personal, sociocultural and ontological dimensions that symbolize the representative expression of the meaning and of processes of extraction. It is soundly described in the cultural and social anthropology literature

(Castrogiovanni, 2005) by which socio cultural dimensions of events are examined and consequently provides groundwork for the study. This line of inquiry, however, is rarely integrated in event management research, while its relationship with phenomenology within the context of events remains ambiguous. Light could be shed by Phenomenology on complicated nature of the meanings of event and the polysomic grounds which are transmitted symbolically, frequently patterned by the culture, for manifesting local meanings and values (Asquith, 2009).

For effectively employing the phenomenological perception, it is necessary to comprehend the existential and ontological nature of the events as explained in the cultural and social anthropology. Events are intertwined as significant practices with the coatings of negotiation and social ordering that instill with the significance of their performance. According to the Geertz (1973), all the social relations are symbolic and the meaning is resulting from the how such signs are developed and put in the usage (Asquith, 2009). With this respect, events offer means for production and the expression of signs that deduce or reconstruct the social conditions. In this manner, the notion of the social drama of Turner's (1974) enacted through events demonstrates the dramaturgic character of the events as critiques commentaries on, or as the celebrations of, diverse dimensions of the human relatedness in which a collection of the community not simply states itself but more aggressively, tries to comprehend itself for bringing change in itself (Asquith, 2009).

Similarly theorization by (Boukas, 2012) about events as intense concentrations of the locations and symbols communication that express participants into the versions of the social order demonstrate that their permission is to employ in ordering of the people, ideas, and situations. On this foundation, phenomenology is able to be used for analyzing how figurative meanings are

interpreted and perceived by the event attendees being results of lived interaction and experiences with an environment of the event. In doing so, phenomenology needs to be profitably integrated with the anthropological-based work on events, thereby framing eventually a hybrid holistic perspective on the phenomenology of event experiences and meanings. Particularly, phenomenological stripe of the inquiry necessitates get in the profundity person accounts from the people that assign, describe, and explain meaning to a variety of the event experiences (halbase, 2011).

In this context, a model was developed by (Fischer & Halibozek, 2008) about planned event practices, that provides holistic considerate of event experiences, from attitudes, needs, expectations and motivations brought to events, by the real living experiences that shapes the event meanings and the influences of future behavior. This model is largely dependent on the anthropological and social literature relating to the liminality, has its center an experimental limuloid / luminal that illustrates event as special place in the special time external the regular and limitations of the normal life (Fischer & Halibozek, 2008). In simple words, celebratory personality of events can cause a limuloid / liminal time/space where the people consider more uninhibited and comfortable and are exposure to the new ideas. (Asquith, 2009). Thus Liminality can encourage the feelings of partition from the loss of identity, normal life, and the social status and persuade role reversals especially from communities that facilitate a sense of the communal bonding and the camaraderie suspending the normal social boundaries and rules. For getting the wide-ranging understanding of event experiences, there must be the study of antecedents, diverse dimensions engagement/involvement and the degeneration to the routine life, on which emphasis is given by (Cohen, 2009) that it should be go along with of accomplishment, sense the change,

transformation, renewal, loss or relief in order for experience to be memorable and special.

Theory by (Asquith, 2009) about flow also fits into the model explaining fundamentally phenomenology of the enjoyment. In terms of the effects and formation of the event meanings, dramaturgical opinion is helpful for studying methods events and their symbols or elements demonstrating dramatic and expressive dimensions (Asquith, 2009) by which a symbolic context is shaped wherein people understand order of the conditions that structure their lived

experiences. On such basis, concept of event dramaturgy was put forward by (Ziakas, 2009) and described it as 'the withdrawal of the shared meanings permitted by the performance or projection of the symbolic depiction in the activities of event. This definition was based by him on notion of the dramaturgy of the Goffman's (1959) like a theatrical metaphor by which social behavior is explained and conceptualization of the event performances by Turner's (1969, 1974) like types of social dramas and rituals which are uttered on collective level (Asquith, 2009).

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# TIME VALUE AND THE ELDERLY CONSUMERS: AN INTERPRETATIVE INQUIRY

#### Marcin Awdziej

#### **Abstract**

This paper presents the results of interpretative study of how elderly consumers perceive, consume and value their time. In the first part of the paper previous research studies regarding temporal aspects of consumer research, elderly consumer behaviour and time valuation are reviewed. In the second, aims and method are explained. Results of the study are presented in the third part. Elderly consumers were fond active and selectively innovative consumers. They have feeling of sole ownership of their time and do not perceive it as equivalent to money.

**Keywords:** Elderly consumers, time, time valuation

#### Time as determinant of consumer behavior

Time is fundamental aspect of consumer behaviour as it affects all consumer decisions. Not only various aspects of time moderate consumer decisions and their outcomes, but time is also permanent background, in which these decisions are immersed. Temporal context is what Johns said 'a surrogate of external stimuli' (Johns, 2006, p. 392). Things happen in time and because of time, time is always present when phenomena occur, and exists externally to them in their social environment (Johns, 2006). However, time is rarely explicitly addressed in marketing literature, and is usually conceptualised as a boundary condition (George and Jones, 2000). Explicit inclusion of time into scientific inquiry requires stating when and what occurs, and how the phenomenon studied changes in time. Although this complicates the theoretical propositions and empirical research, it provide more relevant and realistic contextualization of any research findings. George and Jones propose that time should play more important role in theory development as it directly

affects its crucial components: what, how, and why of theory (George and Jones, 2000). If any theory aims to provide an accurate explanation of a phenomenon, time cannot be ignored, and must be addressed explicitly. Consumer behaviour and time are inextricably bound and moderated by time, yet temporal research in consumer behaviour, and marketing in general, is still rather marginal.

Consumers' life, language and purchasing decisions are affected and linked to time (Kummel, 1966; Howard and Seth, 1969; Spears, 2003). The role of time in consumer behaviour has been recognized as early as the 70ties of the last century, initialising several research streams, such as allocation of time (Feldman and Hornik, 1981; Gross, 1987; Holbrook and Lehmann, 1981; Kaufmann et al., 1991), time's role in consumption (Myers- Levy and Maheswaran, 1992), consumer time orientation and its influence on consumer behaviour (Bergadaa, 1990; Leclerc et al., 1995). This growing body of literature indicates that marketing scholars appreciate the role of time and are increasingly interested in investigating its

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Department of Marketing Kozminski University influence on consumer behaviour (e.g. Hornik, 1984; Ko and Gentry, 1991; Anderson and Venkatesan, 1994).

Much of the research studies in consumer behaviour have been devoted to the notion of time scarcity and time- impoverished consumers (Gross, 1987; Szmigin and Carrigan, 2001). The focal point of these studies is the time deficit experienced, and resulting willingness to 'buy' time through acquisition of products and services that 'save' it. Time therefore is treated as a commodity that can be exchanged, and has some inherent economic value, resulting from its scarcity. Such perspective on time is consistent with the linear- separable concept of time, that is conceptualized as a arrow running from the past, through the present to the future, and can be divided into discrete units, is measurable and conceptualization objective. This of time dominates the studies of time allocation.

An interesting research stream is temporal orientation of consumers, that is orientation towards the past, present or future. Consumer orientation towards the future was investigated in the context of long-term financial planning and towards present in the context of hedonic consumption, while orientation towards the past was researched in the context of nostalgia (Havlena and Holak, 1991). Considerable attention was devoted to purchase planning, too (Bergadaa, 1990). An extensive body of knowledge can be found in the services marketing literature, where problems of waiting time, delay and convenience received significant attention.

Another stream of research consists of studies of cultural determinants of time perception and how resulting differences moderate consumer behaviour (Brodovsky et al., 2008). Numerous differences studies investigating time conceptualizations and attitudes in various cultural

contexts found that people place different value on time (Anderson and Brodovsky, 2001; Levine, 1997; Van Auken et al., 2006). The cultural context is embraced by the notion of social time, that is the specific conceptualization of time that a society holds. It affects such temporal aspects of consumer behaviour as timing, frequency and cyclicality of purchasing, time spent shopping, and expectations towards durability of products and immediacy of services (Brodovsky et al., 2008). Social time frames how people think and feel about time, and includes complex sets of rules, standards, habits and requirements regulating behaviours and social interactions in relation to time and temporality (Anderson and Venkatesan, 1994). Last but not least, one must remember that the nature of time concept is personal, and it is psychological variable, reflecting to much extent the importance of time perception an individual has (Venkatesan et al., 1996). There is no single conceptualization of time, as they are fluid and subject to continuous re- interpretations in the dynamic network of social interactions. Despite considerable growth in the number of studies of temporal aspects of consumer behaviour, the knowledge we have is fragmentary and full of gaps. It is not probably because the subject itself is not interesting nor important, but probably because time is ambiguous and multi-layered concept that does not allow easy empirical inquiry.

#### Time valuation

In many languages, words used to relate to time are often the same to those used to relate to money. Time is, hence, spent doing something, wasted not doing something or doing something considered useless, could be somehow bought and managed. Language provides a valuable insight into how specific cultures conceptualize time, and what importance they attribute to it. Jacoby et al. (1976) argued that time is valuable resource that consumers have, and its similarity to money results from its scarcity.

Once one thinks of time as scarce commodity or resource, the consequence is that time is subject to valuation. In the economic literature, time is valued in monetary terms, that is the choice of consumer is usually the trade-off between time and money. These resources are similar as they are scarce and hence valuable, but their fundamentally different properties lead to much different value perceptions (Chang et al., 2013). Chang et al. (2013) identified six characteristics of time and money that allowed identification of the key differences between them: consumption pattern, evaluation, budget, fungibility, and source, expectations towards resource itself.

According to Gross (1987) time consumption is unconscious. Time perishes regardless people engage in activity or not (Gross, 1987; Leclerc et al., 1995; Soman, 2001). Unlike money, time cannot be stored for the future usage. The passage of time cannot be controlled, while how and when we spend money is subject to our consent decision. Time cannot be 'earned' and is inherent as resource (Chang et al., 2013). Its budget is renewable, as everyday a consumer receives 24 hours, but unlike money these hours cannot be earned through work or saving. Various empirical studies confirm that value of time is subjective and its perception is ambiguous (Okada and Hoch, 2004; Saini and Monga, 2008). Situational, psychological and cultural factors moderate the perceived value of time, resulting in different value perceptions of the same time units (Wei et al., 2013). On contrary, the value of money is constant in different situations and across different consumer segments (Saini and Monga, 2008). As mentioned above, the supply of time is constant, while each consumer, at least theoretically, has opportunity to change her monetary budget. Although some individuals tend to be more

polysynchronic than others, that is can perform many activities at the same time, obtaining some sort of time budget extension, it results in nothing more than illusion of additional time earned.

Money is subject to relatively easy measurement and division into standard units of universally agreed value. The value of time is more ambiguous, and people usually tend underappreciate it. This is because information regarding the value of time is less accessible in their memories, as compared to that of money (Chang et al., 2013). What is more, people usually expect more time slack than money in the future, and this is why they exhibit stronger preference towards discounting temporal benefits faster than monetary ones (Chang et al., 2013). Various studies suggest also that people have relatively stable preference toward saving money, but with time it is malleable, depending whether they were made aware of the value of time.

Saini and Monga proved that decision making regarding time is qualitatively different than regarding money and when deciding in regards to time, consumers rely heavily on heuristics (Saini and Monga, 2008). Mental accounting for time is much more difficult than accounting for money, as consumers cannot easily visualise the alternative use of their time, and there is a different set of budgetary constraints placed on time compared to money. According to Hsee (1995), temporal budget constraints are soft or at least elastic, that are difficult to evaluate.

An interesting insight into economic valuation of time is provided by Pfeffer and deVoe (2012), whose study suggests that people acquire ways of thinking about time partly from workplace. This is confirmed by Soman (2001) who found that the connection between money and time particularly strong when people are paid by the hour. When there is direct function of working hours multiplied by pay rate, people account for time and money in similar manner (Pfeffer and

deVoe, 2012). The value of time, however, is difficult to account, and results in its underestimation. Consumers experience difficulty in accounting for the opportunity cost of time, and rarely consider the sunk cost of time (Soman, 2001). The main source of fundamental differences between decisions regarding money and time results from time's infungibility (Leclerc et al., 1995). At the end, the size of time budget, the perception of time value, and how much time is still left are affected by complex set of variables, such as personality, cultural and social context and situational factors.

#### The meaning of 'old'

Szmigin and Carrigan noted (2001) that importance of time and consumption are not limited to particular consumer groups that face time deficit. Age itself is a dynamic temporal factor (Szmigin and Carrigan, 2001). Not only older consumers may be aware of less time available to them due to their mortality, but also their specific psychological, social and biological condition may affect the way they perceive and value time. This holds true for all consumer groups, but for the elderly, changing social context like retirement and children leaving home, and more importantdeteriorating psychophysical conditions- serve as reminders of that time left becomes limited.

There are many terms used in marketing literature and practice to refer to aged consumers, such as "elderly", "older", "senior" or "grey market". All these are ambiguous and imprecise, and applied to many different groups of consumers constitute very heterogeneous market. The definition of "elderly" is based on specific chronological age, that allows including an individual to this group. For this study WHO's definition was adopted which states that the beginning of the old age is 60 years. WHO's definition is useful, as it distinguishes three periods

of the old age: 60-74 years ('young -old"), 75-89 ('old age'), and above 90 ('longevity'). These distinctions reflect varying physical and mental states of the 60+ people, resulting often in very different biological (psychophysical) age, despite obvious similarities (Roszkowski, 2010). Depending on the health status, for example, elderly in the same chronological age may exhibit different cognitive, social and physical abilities and, thus, live completely different lifestyles. However, chronological age is probably one of the most widely applied independent variable in research and segmentation, clouding the differences between individuals. In marketing practice, chronological age is one of the most important consumer's characteristics, used for segmenting huge number of markets. It is not identical with an individual's cognitive age that is the age person feels to be, and the age group she identifies 2013). Penaloza, (Bernhart and The abovementioned biological age is responsible for the gap between chronological and cognitive age. Research studies confirm that the population of consumers feeling to be exactly in their chronological age is small (Gonzalez et al., 2008). This allows questioning the usefulness of chronological age as the key criterion of including an individual to "elderly" market. It is yet difficult to be replaced, especially in empirical research, as defining the cognitive age of respondents implies additional study. Moreover, there is no commonly accepted chronological age that allows classifying a consumer as 'elderly'. In the literature one finds various chronological age thresholds, starting from 49 years, with 55+ and 65+ being the most common ones. Some researchers argue that the moment when a person retires is more useful that the chronological age itself (Tynan and Drayton, 1998), as it implies significant changes of lifestyle, income and consumption. Bernhart and Penaloza (2013) proposed that consumption itself may be better criterion to consider an individual as 'elderly' rather than employment status. Despite the lack of agreement which chronological age is safe to classify a person as 'elderly', the heterogeneity of 'elderly' market is at least recognized (Maison, 2014). It is not the age itself, but financial, health, and marital status, as well as cognitive age that can be more useful to segment this group of consumers more meaningfully.

The lack of commonly accepted definitions of what constitutes 'elderly' is one of the symptoms of marginalisation of elderly consumers in academic discourse and business practice, which is surprising in light of intensive public debate regarding the consequences of ageing populations in the developed countries. Although we can observe significant growth of the number of research studies devoted solely to elderly consumers, the number of publications is still limited. Moreover, these are not free of negative stereotyping and simplifications. The negative picture of ageing as a period of decline and unproductivity dominates social sciences, and this holds true also in the case of marketing, where stereotypes of negative construction of old age perpetuate. The practice of marketing is still focused on young consumers, even if their spending power is often much lower compared with the elderly. The elderly consumers are perceived mainly through their limitations that prohibit their active and innovative participation in consumption. These limitations result from deteriorating cognitive, physical and social abilities, resulting in limited capacity to learn new skills, conservatism, vulnerability and dependency on the others. Two important concepts in consumer behaviour science- family life cycle and diffusion of innovation model provide here a good illustration. In the first elderly are depicted as living with a spouse or lonely, not participating in more complex social contexts. In the second they are placed under "laggards" category, the least innovative and the most reluctant to adopt any new product.

Early literature devoted to elderly consumers emphasized challenges and problems

consumption that resulted from ageing: cognitive vulnerability, isolation decline, and dependent on the support of others. Many of the empirical studies published in the 90ties of the previous century focused on market alienation and exposure to unethical marketing practices, to name a few. The scope of inquiry was substantially extended in the next decade, with problems such as brand loyalty, influence of specific promotional tactics and vendor patronisation. It is implicitly that ageing affects consumption assumed patterns, limiting consumer innovativeness, willingness to adopt new products discontinuing many activities, such as leisure or hobbies. The influence of consumer behaviour on understanding and perception of 'old age' is largely ignored. Another important issue is selfidentification of these individuals who passed the arbitrarily adopted threshold of chronological age of 50, 55, 60 or 65 years. Apart physiological and cognitive, ageing has also social dimension, reflecting abilities of individuals to participate in groups and fulfil various social roles. The identities consumers adopt change in time and reflect current social discourse. Research suggests that age identity, determined within specific social context is usually unstable and incoherent, and is probably one of the less important for an individual's self- identification. People in general do not identify themselves primarily with the age group they belong due to birthdate. Schau et al. (2009) found that retired consumers identified themselves more often through their ethnic or professional backgrounds rather than specific age cohort.

Most of researchers point that elderly are of marginal interest to business due to supposed low spending power, physical and cognitive limitations, and lack of up to date and relevant information on elderly consumers (Tynan and Drayton, 1998). However, as the elderly population in the developed countries continues to grow, so it is its significance from business perspective. Assuming

chronological age as the key segmentation criterion will not only result in imprecise estimate of this market size, but will ignore the heterogeneity and complexity of this consumer group. From practical perspective, there may be no major difference in the lifestyles of healthy, married and well educated 60 years old females and 45- years old with similar psychographics. Elderly in affluent urban areas may also live surprisingly rich social lives and enjoy higher quality of life than much younger consumers from economically impoverished areas. Another practical problem that still needs to be resolved is whether elderly consumers, whatever the definition, want to be treated as 'elderly' at all. If there is a difference between cognitive and chronological age, how will elderly react to products and marketing communications targeted specifically at them and reminding them of their 'actual' age?

#### Aims and method of research

The main focus of the study was understanding how the individuals experienced their time as an important element of the complex relationships between themselves and the their world (Dapkus, 1985; Szmigin and Carrigan, 2001). The Dapkus phenomenological analysis was basis for the analysis of the individual experience of time. Dapkus identified three major categories of the experience of time: change and continuity, limits and choices, and tempo (Dapkus, 1985). Change and continuity reflects the constant flux of things, that change yet there is continuity between them. Limits and choices reflects the fact that the nature of time forces people to choose how they spend or allocate scarce time between alternative activities. Unlike money, time budget is always fixed and constant, and devoting time to one activity consumes temporal budget available for an alternative one. Temporal trade-offs may result in guilt, as consumer may perceive that her time was wasted or some important activities were postponed (Gergen, 1991). To some extent this resembles post-purchase dissonance, yet products ignored in specific moment can be bought when the next purchasing occasion occurs, which is not possible when considering time. Tempo reflects pattern of time or the perception of how it flowsfast, slow, regularly or irregularly, without any rhythm. Of all the above discussed temporal categories, central to much consumer behaviour is limits and choices.

The approach taken in this study interpretative, due to complex and multilayered nature of the time, and also related constructs that make reflecting on time difficult. Such approach to study time in the context of complex consumer behavior was proposed by Szmigin and Carrigan (2001), who investigated time and consumption of cognitively young elderly consumers. Interpretative inquiry allows meaningful investigation of motivations for activities, their patterns, and rules that individuals follow (O'Shaughnessy, 1992). It provides also in-depth understanding of what an individual experiences and identifies in the context of own behavior and specific social setting (Foxal, 1996). Interpretative studies can be classified as naturalistic (Belk et al., 1988) or humanistic (Hirschman, 1989), but their purpose is both to provide description and general understanding of the phenomenon investigated. The study conducted was humanistic, as it focused on investigating consumers' experiences as seen by them and reflected in their own terms. The emphasis was put on personal experience of informants, how they used, experienced and valued their time. The data gathered during the study, that is reflections of respondents on themselves and their actions, can be classified as guided introspection, (Wallendorf and Brucks, 1993).

The study comprised of two stages. First, the possible informants were identified through asking family members, known to researcher, in four locations in Poland (city of more than 1 Million with 300.00-500.000 inhabitants. town inhabitants, town below 100000 inhabitants, and rural location with less than 200 inhabitants). The family members provided brief description of the current status of their elderly relatives, focusing on the key variables, such as age, health and family status. The intermediation of people known to possible informants was instrumental not only to facilitate contact with informants, but also to secure the necessary level of trust. The family members explained the purpose of the study and

how it would be conducted. This proved to be important, as almost all informants expressed their concern whether they would be able to answer questions or provide "valuable" or "interesting" accounts. A possible explanation behind their concern is that the informants selected had never participated in this kind of study, and elderly are rarely subject to research studies in Poland. From the initial list of 30 informants, 7 women and 1 man agreed to meet for the second stage of the study. Table 1 presents characteristics of informants:

Table 1. Informants characteristics

Informant	Sex	Age	Marital status	Work status	Children/ grandchildren	Education	Location
Jadwiga	Female	65	Married	Retired	Both	University	Town <100000
Janina	Female	64	Widow	Working	Both	University	City > 1000000
Teresa	Female	80	Widow	Retired	Both	Vocational	City > 1000000
Lila	Female	65	Married	Working/ soon to retire	Both	University	City 100000- 500000
Grażyna	Female	64	Married	Retired	Children	University	Rural/ village < 200
Józef	Male	66	Married	Retired	Children	University	Rural, village<200
Ewa	Female	75	Widow	Retired	Both	Vocational	Town <100000
Eugenia	Female	71	Married	Retired	Children	University	City > 1000000

The age of informants ranged from 64 to 80. The selection of age range aimed to include wide range of elderly consumers. Six informants were retired. Two were working, with one just to retire in the middle of the year the research was conducted. Six informants came from middleincome, professional classes. Two, one partner in lawyer company, and co - owner of a company, had considerably above the middle income. None reported financial situation as bad. Four informants admitted they were occasionally supported financially by children. With the

exception of two informants, all attended universities.

A series of in- depth, semi- structured interviews were conducted and audio - recorded with eight consumers. The choice of eight consumers was based on the guidelines for this kind of research (Szmigin and Carrigan, 2001; Levy, 1981). Transcripts of interviews were analyzed to identify key issues, patterns, similarities and differences. The interview protocol included the element of storytelling technique (Tkaczyk, 2011). Before the main questions of the interview, each informant

was asked to recall a "typical day", and narrate in own words through activities from waking up to going to sleep. In the two cases of the still working informants, upon their own request, the narrative of "a typical day" was extended with the recalling of "weekend" or "special days". This stage of the meeting aimed to create relaxed atmosphere, thus reassuring the informants of the value of information they provided and to generate information regarding the pace and tempo of their lives. Once the "story of a day" was finished, researcher proceeded to series of questions that concentrated on time experience and perceptions, activities, time planning and control, shopping and time value. With all these, respondents were asked to reflect how ageing influenced them in the areas investigated.

#### **Results**

#### Tempo

Tempo, as defined by Dapkus (1985) reflects the speed and pattern of time: pace and regularity/ irregularity. With one exception, all informants in the study felt that time run faster compared when they were younger. There was never 'enough time' that 'leaked' or 'escaped' unnoticed.

Jadwiga, who worked as manager of large company, said she did not 'slowed down' after retirement.

Jadwiga: I am very busy! I have time hardly for anything. In summer, when I have garden to work in, I must wake up earlier to manage to complete work.

Grażyna: I think time runs now much faster. I used to work fast when I was younger. Time escapes from me.

It must be pointed that interviewees had very busy day schedules and most of them admitted that

could not complete all the tasks they planned. The only exception was Teresa, who was the oldest informant (80).

Teresa: Sometimes I do not know what to do with my time. I think it is sometimes too much of it, and I try to kill it with a book.

The analysis of 'a typical day' narratives indicated that the informants lived orderly and similarly structured days, waking up around the same time and proceeding to daily rituals such as breakfasts, grooming, reading newspapers and doing whatever they planned for the day or not. The rhythm of their time was organized around "temporal anchor", such as preparing a meal for family or watching favourite TV program. The day was split between 'before' and 'after' these events, with time pressure slowing down after. Lila, scheduled her day around early dinner for her daughter and granddaughter, but did not find it limiting her time in any way.

Lila: My day revolves around serving dinner. My daughter and granddaughter run in, eat fast and go to whatever they had to go that day. I do not feel this is limiting me anyhow.

Almost all interviewees did not seem unhappy with the similarity of their days, except Eugenia, who complained that sometimes this was boring and made her feel wasting her time.

Eugenia: One day rolls into another. You wake up, have coffee, small breakfast, then morning television, then shopping, then lunch and you do not even notice when you have to go to sleep. Nothing interesting happens. Sometimes I fear that nothing interesting will ever happen.

Eugenia used to live active life of businesswoman, but since the company was taken over by her son, she stepped out of her managerial duties, and she missed all the 'action and people' she used to have when she was younger. Others, however, seemed to enjoy the quiet and less frantic lives, with three informants terming it 'luxury of being old'. It took different forms: 'small pleasures' such as sleeping longer without consequences, deciding what to do with own time, or not participating in the competitive work environment.

Ewa: I enjoy sleeping longer, that I do not have to hurry or prove something. This is for young people to do.

#### **Change and continuity**

Similar to research findings reported by Szmigin and Carrigan (2001) elderly consumers continued wide range of activities they did when they were younger, and there was strong sense of change and continuity. They enjoyed reading, gardening, travelling, needle- work, and maintained surprisingly rich and active social life. It is not the age itself that inhibits people doing things they like, but health, and physical limitations that result from it.

Józef, who was professional athlete and coach did not participate actively in sports, but he was up-to date with latest information regarding results, teams and championships and attended often many sport events as spectator.

Józef: Of course, I would love to go fishing, or swimming, but after my operation and all these medical treatments, I simply cannot, it is difficult to me. It would be great to gather all the boys and play again. But I know this is now impossible.

Female informants had impressive number of hobbies, most of them continued from their youth times, which they tried to pursue and develop. Grażyna, who enjoyed gardening, was frustrated with the fact that her deteriorating health did not

allow her to do her gardening work as quickly as she was young. She nevertheless tried to work in her garden, and continued to watch her favourite gardening programs. The same held true for Teresa, who not only continued working in her garden, but also engaged into voluntary gardening society administration and management. With ageing however, they depended more on help from the others to complete the most physically demanding tasks.

Grażyna: I love to walk in my garden in the morning, to see what happens. And I see also how much work needs to be done. I find this frustrating and it annoys me that I need so much more time to do anything, and work in the garden never ends. I am retired and have all time for myself, but it takes so much of it to have anything done. And, in result, one does not know when and how the whole day is gone.

Grażyna watched gardening programmes on TV, red magazines and tried to be up- to date with latest gardening products, such as new plants. Similarily Lila, who was avid reader, admitted that she was trying to be up- to –date with the latest books. However, she complained at the much of the choice:

Lila: Yes, I try to be up to date with latest books. But now, when you go to a bookstore, there is definitely too much rubbish. And everything is presented as yet another bestseller or breakthrough piece of fiction. And at the end of the day this is not so much worth. It is difficult to filter really good books from the pile of mediocre paper.

The most considerable change was observed within social life. Despite surprisingly rich social life, including regular meetings with friends and families, all informants spoke about declining intensity of social life, compared to when younger.

Janina would enjoy going out more, but since her husband passed away, she had not enjoyed parties and meeting so much.

Janina: When I used to go out with my husband, I had comfortable situation. I knew there was always him to pick me up home when the time was just right, and going out together was so much more fun anyway.

Józef mentioned that he enjoyed spending time with his friends very much, but sadly, many of them were gone. Moreover, as he moved to countryside when retired, he found driving for meetings discouraging. Jadwiga, who had the most impressive social life admitted she 'could not sit in one place' and often activated her less willing friends to go out and meet. Ewa complained that social meetings, like parties, were much shorter than in the past, and much less energetic.

Ewa: It takes so much effort to collect them, I mean my friends. And when they finally come, we do not party till sun comes up, not anymore. Everybody gets exhausted very fast, and we say goodbye after three hours max. And it seems we talk about the same things. Health, children, grandchildren. On and on again.

Working informants reported general change of their attitudes.

Janina: When I was younger, I would not go to bed if there was anything left not finished. I hated to leave a single little dish not washed and put back to the cupboard, would not sleep, just to complete something I had to for my work. But now I do not care so much. Let these things wait for tomorrow. I do not want to say I became negligent. No. I just want to say that you became to understand that these petty things are not worth bothering. I used to stay in work to complete everything before I left. Now I do not. Work can wait. When you grow

old, you have this luxury of not caring and letting things wait. It will be done. Let the young people hurry and complete everything on time.

An interesting observation is that 'hurrying up' was associated with 'young' people.

It seems that informants attempted to find were compensating to some extent burdens and problems of ageing. It rises an interesting issue here: does elderly, especially these still employed, allow themselves to be more relaxed with their professional responsibilities because they experience a change of their life priorities or just accommodate to lowering expectations younger co-workers have towards them?

The only thing all the participants truly regretted with regards to ageing was deteriorating health. It was what prohibited them or would prohibit continuing activities they enjoyed. Grażyna, who enjoyed gardening and needle-work said since her health deteriorated it took her much more time and effort to complete her work. The concerns about health and physical limitations confirm previous findings by Szmigin and Carrigan (2009) and Moschis et al. (2000), who identified them as the major concern of elderly consumers. Some informants regretted they did not travel when younger or did not maintain contacts with their school or university mates.

Yet they perceived their lives as satisfactory, and did not regret retirement. It seems that there was not considerable psychological change, except for those informants who lost their partners. Teresa admitted that she felt lonely without her husband, even if her children visited regularly.

Teresa: The evenings are the worse. When children leave, I am alone, and have these thoughts. It is hard to be alone.

Lila missed travelling the most. She used to travel extensively abroad when younger, and often went for spontaneous short trips with her husband and the closest friends.

Lila: Probably I miss travelling the most. But this is not money or time. I cannot go with my husband, due to his health. And one of my friends, with whom we used to go for spontaneous short trips is dead, so this is not the same pleasure. I would like to travel again, but no regrets.

Two working informants, as noted earlier, reported some change in their priorities and attitudes. Lila, who was successful lawyer, noted that she became more tranguil and balanced with age.

Lila: I started using public transport more and I like it. When I was younger I would be seriously annoyed when my bus would be late. But now I am not. Why should I? the bus will come anyway, I will arrive anyway, no big deal when I am 15 minutes late?

In general, past was not cherished, as none of the participants stated it was definitely better. Most were satisfied with the present, criticising some of its aspects. Teresa complained that 'now people have no manners and are more egoistic'.

#### Time ownership and control

Questions regarding time ownership and control aimed to investigate the limits and choices regarding the use of time. All informants had firm feeling that their time belonged solely to them, even if there were others they had to care for. Surprisingly, limitations on their time placed by others was perceived mostly positively, as it probably provided sense of being useful. Grażyna admitted that in some situations she was 'only' irritated with her husband interrupting her schedules, but she was trying to be understanding.

Grażyna: He could do these things himself, and I cannot finish what I planned because I must help him. This makes me angry. But on the other hand, he is not well, and I understand.

Ewa and Janina admitted they had no problem with their working children using them as babysitters for grandchildren.

Ewa: I first opposed the idea that I will be babysitting my children, but you know, I am looking forward for my son and daughter to bring them. We do many interesting things together.

Janina: You have such a short time with your grandchildren. They soon became teenagers, and you know how it is with teenagers. They are not interested in spending time with their grandmother.

So, adjusting own schedule and devoting time to others was not perceived as constraint. Most of the informants did not schedule their activities or scheduled them when only necessary. There was certain degree of planning, yet more flexible approach prevailed.

#### Time value

Since the time available to elderly is objectively limited, one should expect that they value their time more than younger consumer groups, or at least reflect on it often. However, time value and valuation are rather ambiguous and accounting for time is psychologically difficult. Informants were first asked to reflect on expression 'Time is money', and then how they valuable they perceived their time to be. For most of the interviewees it took some time to do so, and some were surprised.

Józef: What may my time be worth! I am retired man. When I was working, then yes, there was money to be earned working hours, but now? Nope.

When asked if he would devote extra time to search and travel to another place where certain product was cheaper, he said that he would calculate how much gasoline he would have to pay for to do so, and then see whether it paid off, but he would not take time into consideration. Ewa, who considered herself as 'price driven' consumer, would not engage in travelling from store to store to obtain better bargain, but not because of time wasting, but of effort.

Ewa: These few pennies are not worth effort. One gets exhausted for a small gain. No, this is not for me.

Lila found question regarding relationship of time and money particularly interesting.

Lila: I have never thought about this, really...but hold, let me think. This is really interesting! When I was working then I saw the connection, but now, I do not.

Also Teresa found no relationship between time and money, which she considered 'two different things'.

Grażyna, like Józef and Lila, also linked monetary value of time to employment situation.

Grażyna: I think time can be equivalent to money. For instance, when one works, so the longer work can result in recognition and promotion in workplace, and these, in turn can generate better pay.

Although all informants perceived their time as valuable, only Grażyna and Eugenia, who admitted

recent health problems stated that they valued their time 'because they knew it was not much of it left'. Time was perceived not as equivalent of money, but rather from the perspective of activities yet to be done, things and problems yet to be fixed, and experiences that they hoped yet to live. Accounting for time was simplified and heuristic. The value of time seemed to depend on whether an activities were placed 'at home' or 'out of home', and in the case of one working informant 'weekdays' and 'weekends'. Time 'at home' was more valued, and even if wasted, it was much enjoyed. Irritation with tasks unfinished or people being late for meetings was much stronger when experienced 'out of home'.

#### Consumption

The last part of the study considered the consumption habits of informants. The first finding, similar to these reported by Szmigin and Carrigan (2001) was that they watched little television. This is contrary to popular stereotype of elderly watching television all day long. All informants said they had favourite shows they watched, but they were selective viewers. They complained on the quality of TV programming, terming it 'vulgar' or 'irrelevant'. All read newspapers, and most of them admitted limited internet use. Eugenia and Janina, who used internet at work, admitted to 'use it only as much necessary', and did not understand how their grandchildren could 'waste so much time online'. Józef, who planned to install internet connection in a few months, said that this was for 'reading news, shopping and banking'. Teresa, who was the oldest in the group, had no interest in internet at all. The most enthusiastic was Jadwiga, who embraced internet with all 'possibilities it offered', such as Skype to stay in touch with her friends and grandson.

The participants had mixed opinions regarding shopping. In general they enjoyed it when shopping for products they were interested in. With the rest there was visible tendency to limit time and effort spent in shops. There was also no considerable planning of shopping trips, length of stay in stores, or extensive shopping list preparations. Most of respondents preferred buying groceries every day in the store they were familiar with, because 'they could not know in advance what they would like to have for lunch or dinner'. With less involving product categories informants relied on the same brands, preferring 'what has been proven already'. The same applied to shopping locations. There was no significant preference towards some specific shopping format, although many disliked super and hypermarkets ʻtoo overwhelming as exhausting'. The choice offered there was also considered as 'unnecessary', and 'distracting'. Novelties and innovations in low involvement categories were largely ignored as 'obsolete and not novel at al'. However, when their hobbies and interest were concerned, they tried to be up- to date with the latest products and innovations. This suggests that elderly consumers are selectively innovative. Grażyna was one of the two who admitted to like shopping in big stores or shopping malls (the other one was Jadwiga, who used shopping mall to meet friends).

Grażyna: I do not plan how much time I have to spend on shopping. It depends. I like shopping for groceries. I like hypermarkets very much. I must touch everything, I read the labels, and as everything is in under one roof, then I do not hurry. I spend sometimes two hours, but this is pleasant. On the other hand, I do not like shopping for clothes and shoes. I do this when absolutely necessary.

Dissatisfaction with shopping for clothing and accessories was surprisingly common among

female informants. They found products not suitable for their age, of poor quality, bad design and "too youngish".

Janina: I can hardly find anything for myself. I went last week to a store, just to have a look, to see, of curiosity, what's in now. And these things were simply ugly. Badly cut, poor quality fabrics. Nothing for me.

Ewa: The things they make are not for old ladies like me. This is all too young. And there are too many fashions, styles, all at the same time. I get headache five minutes after entering these modern stores.

Teresa relied on her daughter when it comes to clothing and accessories.

Teresa: I do not shop for clothing. I do not like it. I am lucky because my daughter buys me these things, so I do not have to.

Female informants seemed to be under influence of social norms regarding how they should dress. They wanted 'more universal' fashions, not something that will become de mode fast. On the other hand, this was the only product category that was termed 'worse than in the past'. The only informant who did not dislike shopping was clothes was surprisingly Józef.

None of the interviewees complained their financial situation was bad. Two stated it was 'very good' and better than they were younger. Although most of them had to 'watch every penny', there was no dissatisfaction with life quality. Some reported to be supported by children, thus belonging to 'sandwich generation'. Money was less important than health and strength, the only problems most of informants pointed to.

#### Limitations to study

There are some limitations to the above study. First, it included limited pool of informants, who agreed to participate in the study. Second, the role of researcher and interpreter must be considered, too. The descriptions and interpretations of time perception, use and valuation are unavoidably subjective, but can be used for further in- depth research. The objective of this study was not to sample for representativeness or validity. The interviewees themselves were not chosen for any particular consumer characteristics, as accessing elderly respondents is difficult in general. Despite coming from diversified locations and social backgrounds, they were financially secure, welleducated and fortunate than many of the elderly in their age cohorts. Last, but not least, the findings must be considered in the light of the exploratory and qualitative nature of the study.

#### **Conclusions**

The objective of this study was to investigate how elderly consumers perceived, used and valued their time. The results indicate that despite ageing and limitations it places on the elderly, they are active and involved in their social environment.

Their lives are complex and rich, and further research should uncover this complexity. They continue with activities they liked when younger, and the only limitations come from health status. Although no psychometric measure of temporal orientation was used, there was no strong past orientation or nostalgia towards the past. Elderly are selectively innovative consumers, and as such, constitute attractive target market for providers of offerings they are involved with. These findings contradict stereotypical picture of elderly and passive, pessimistic and uninterested in anything new. There were no explicit mentions of mortality, but this issue was avoided, unless brought by informant. Nevertheless, elderly seem to make the best use of their time. The perception of the value of their time requires further investigation, as it may reflect socially constructed value of old age, rather than reality. They do not perceive time in monetary terms, but rather in effort terms, so 'buying time' may not be the right value proposition to them. In- depth research of elderly consumers is necessary, both qualitative and quantitative, to provide better understanding how our societies change. The presently dominating pessimistic picture of ageing population may not necessarily reflect the true, but stereotypes we apply to ageing process and elderly.

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# ASPECTS OF ELECTRONIC DOCUMENT SHARING

#### Lucie Veselá, Miroslav Radiměřský & Martina Toulová

#### **Abstract**

The implementation of electronic data interchange (EDI) is one of the essential determinant of business success. Increasing number of business organizations shows that EDI became an essential part of the IT environment and represents a competitive advantage in the customer-supplier relationships. It will also be a necessity for the participation in public procurement. The aim of this paper is to characterize the ways of exchange of documents between Czech companies and to identify the factors that influence the attitude to EDI implementation from a company perspective. The conclusions of this paper are drawn on the basis of primary data collected via questionnaire survey in 2014. This work provides a comprehensive view of the way of communication in the supply chain in the retail sector and highlights the main internal factors influencing the implementation decisions. The results indicate a positive relationship between the number of suppliers and the knowledge of EDI. The implementation decisions and expected benefits for company depend on the number of received documents. Despite the fact that electronic document sharing provides many advantages, the adoption of this communication is still insufficient. Therefore this phenomenon still represents a significant challenge for companies as information awareness is a critical indicator of the company's survival.

Key words: EDI, information, critical factors, Czech companies, document exchange

### Introduction

Electronic data interchange is an interorganizational system that involves the movement of business documents electronically between or within firms in a structured, machine-retrievable, data format that permits data to be transferred, without rekeying, from a business application in one location to a business application in another location (Hansen and Hill, 1989).

Far from becoming a legacy technology, EDI continues to be a preferred platform for sharing business documents in many supply chain—based transactions (Narayanan, Marucheck and

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The importance of interoperability (the ability of different systems to work together) for enterprises is undeniable as well as it is the need for standardization and information flow transparency. For that reason one of the European Commission objectives is to achieve the Europe 2020 Strategy in the Digital Agenda, which is the introduction of mandatory electronic invoicing for public authorities in the case of public procurement till 2016 (Edizone, 2014). To send an electronic invoice is the most commonly used system of electronic data interchange (EDI). That is the way of communication, which is an automatic exchange standard, structured business and other documents in electronic form, which allows the invoice to be included in the information system of

the supplier and automatically transferred to the customer information system. The implementation of electronic data interchange is therefore increasingly desirable and will be one of the essential determinant of business success. It can be assumed that the number of organizations involved has grown, and for many of them businesses electronic data interchange (EDI) become an essential part of the IT solution, as well as their next competitive advantage in the development of customer-supplier relationships.

An efficient management of inward cash flows from completed sales is absolutely critical for staying in business (Hanif, 2013). The introduction of new technologies has become critical for the maintenance and improvement of organizational competitive advantages (Bolívar-Ramos et al., 2011).

As the wide adoption of EDI could increase the economic welfare of the industry as a whole, efforts have been made to understand more about the technology and to identify factors affecting the adoption decision (Clemons and Row, 1993).

#### Literature review

Rapid technological innovation is another force for change in organizations, and those who fail to keep pace can quickly fall behind. Technological innovations bring about profound change because they are not just changes in the way work is performed. Instead, the innovation process promotes associated changes in work relationships and organizational structures. The variables used to measure the technological change in the organization are as follows: (1) implementation of the advanced technology, (2) learning new skills to use the technology, (3) periodic technology up gradation and, (4) teaching the technology to subordinates (Anjani and Dhanapal, 2011).

However, despite most invoices being prepared electronically, the vast majority are processed by manually keying information from a paper invoice into a financial management system to then

There are several foreign studies that deal with this issue but this issue is still poorly academically mapped in the Czech Republic. Most Czech authors are mainly focused on technological terms and specification of influencing decisions about implementing EDI bodies which have not been incorporated in an exploration yet.

While complexity and expense are commonly cited as the reasons for the lackluster diffusion of EDI, formal studies that examine factors responsible for successful EDI implementation are lacking (Goksoy, Vayvay and Karabult, 2012).

In 2014, a pilot survey on the introduction of electronic data interchange was conducted by the authors, which became the basis for the paper. The survey would focus primarily on identifying the main factors that influence the decision to implement the exchange of business documents using structured messages of EDI standard. It will be the first stage of mapping the current situation of electronic data interchange in the Czech Republic.

process and pay. This represents a considerable waste of time and effort, especially given that the reproduction process can lead to the introduction of inaccuracies. Automating this function not only eliminates these risks, but enables the digitized content to be reused in a more efficient way (Hayward, 2013).

Once the EDI system is implemented, its use (follow-up and communication with it) is very easy. After EDI implementation, the company listed the benefits as: cost saving, time saving, increased efficiency, better communication, less errors and delays. Consequently, customer satisfaction and performance level has been dramatically increased (Asli, Olzap and Gulnur, 2012).

EDI, specially e-invoicing reduces the total costs simply by eliminating the millions of paper invoices exchanged every year. Further savings can be made by streamline business processes and the adoption of related innovations. One of the benefits that should be highlighted is the improved efficiency of human resources by freeing personnel of administrative tasks, allowing them to dedicate their time to other more productive aspects. Furthermore, the information is obtained in real time, which makes it easier to verify where the einvoice stands in the billing process. Finally, it is pertinent to emphasize aspects such as agility in deciding, control of errors and the efficient use of financial resources (Tait, 2009).

Another study points to the fact that the transition from paper to electronic invoicing can bring savings of 60 to 80 percent of the total cost of invoicing, with a payback period of 0.5 to 1.5 years (Koch, 2009).

According to the 'EDI Cost Savings Report,' published in September 2010 by the global standards organization GS1 UK, in conjunction with Cranfield School of Management, some 27 million orders are made in the UK grocery sector every year, with 84% of orders by retailers and 87% of invoices from suppliers transacted using electronic data interchange (EDI) technology. The report into the UK's top 15 grocery retailers (covering 90% of the sector) finds that the industry saves £650 million per year in costs by using EDI instead of manual, paper-based processes for its orders, invoices and despatch advices. An increasing number of retailers seem to be recognizing this opportunity and are now pushing for even greater supply chain efficiencies by demanding more information from suppliers (Reeves and Deimler, 2011).

In particular, Web-based electronic supply chain integration has lower costs, superior operational efficiency, higher cooperation between partners, and greater overall perfor-mance than no electronic supply chain integration (Downing, 2010).

Despite all these advantages, which brings EDI, unfortunately smaller businesses who are unable or reluctant to move with the times find themselves on the world market is still at a disadvantage. Without the ability to easily exchange data and integrate it into back office systems they are forced to rely on costly, error prone manual processes that affect business agility. A reluctance to adopt new standards and practices will drastically affect their ability to trade in the future (Radu, 2013).

A study from 2010 reported as the main reasons for the sometimes slow adoption of EDI, in the face of all the overwhelming arguments in favour, are as follows. (1) There is usually resistance to change in financial administration (change which must happen one enterprise at a time - this takes time). (2) Old invoicing software needs to be adjusted to send e-invoices (not a difficult task, but time consuming). (3) Despite the availability of solutions requiring 'Zero IT skills', some market players still consider e-invoicing not easy and not cost-effective enough. (4) There is not enough pressure from public sector invoice receivers. (5) Digital signatures are mandatory in some countries. (6) Communication today is difficult (everybody is writing and nobody has time to read), (Salmony and Harald, 2010).

Other paper points out that one of the most important factors when deciding on the implementation of EDI became competitive pressure, as well as advanced technology, business partner readiness, pressure from a strong business partner and perceived benefits (Chwelos, Benbasat and Dexter, 2001).

Three major factors that influence EDI adoption practices of small firms were identied in study from 2000. These factors included: (1) perceived benefits; (2) organizational readiness and (3) external pressure (Kuan and Chau, 2000).

The question of EDI adoption is particularly complicated for firms characterized by physical capacity restrictions, a limited pool of candidate trading partners and/or financial limitations with respect to adoption. For such firms, the potential gains available via EDI adoption can only be realized in the presence of excessive transaction costs and/or EDI requirements set forth by business partners (Kaefer and Bendoly, 2000).

There is still prevalent lack of awareness among businesses of conventional systems, EDI and this relationship implies the following shortcomings: (1) the unavailability of information about real world implementation of business processes, (2) redundancies the transferred business documents and (3) lack of support for the systematic analysis of business performance and decision making (Engel, et al., 2011).

#### Objective and methodology

The aim of this paper is to characterize the methods of documents exchange between Czech companies and to identify the factors which may affect the attitude to EDI implementation from a company perspective. The objective of this study is also to give a comprehensive view of the way of communication in the supply chain in the retail sector and highlights the main internal factors influencing the decisions for the implementation. It is one of the first steps of the mapping and the understanding of that current trend among others. While the benefits of electronic exchange are broadly recognized, its expanded diffusion, especially in small businesses, is still a distant objective. So why do Czech firms participate in implementation of EDI, what are their motives and driving forces?

In order to undertake this research, a personal interviewing survey was conducted in 2014. The questionnaires were addressed to the managers responsible for the use of ICTs in the firms and they were requested to answer on behalf of the firm. The companies were from retail industry of Czech market and this included companies with an annual turnover above 100 mil CZK. This target group was selected on the base of previous studies that indicated a high potential for implementation of EDI in that segment. A total of 1 000 companies

were interviewed and 85 completed surveys were obtained.

For data processing, descriptive statistics such as absolute and relative frequency was applied. To test the independency between the variables, the hypothesis testing was performed. The Pearson's Chi-Square test of independence between qualitative variables was used. There was applied a 5% level of significance ( $\alpha = 0.05$ ) and the basic decision rule for rejection of null hypothesis. The null hypothesis on the independence of variables was rejected when the calculated p-value was lower than the significance level.

#### **Results and discussion**

This chapter presents the results of primary research. In the primary research companies in a segment of retail with an annual turnover of 100 mil CZK and more were interviewed (total of 85 fully completed questionnaires). The paper also focuses on examining the factors that may influence the use of EDI.

It was found out by the survey that that it is common for more than one third of the interviewed companies (35%) to use the electronic data interchange. On the contrary one third of the respondents not only does not use this but also they do not know the term of the electronic data interchange and they have not met this possibility yet. Despite the fact that mostly the companies exchanging hundreds of business documents were among the respondents an assumption of high positive effect of electronic data interchange implementation is existing. So that the authors' theory about entrepreneurs insufficient awareness about the possibility of the electronic communication was verified.

These results are also in accordance with the survey of ČSÚ which took place in 2014 and refers to the fact of 29% use of electronical invoicing sending (the most frequent of the EDI information) between large companies (ČSÚ, 2014).

According to the finding the most common way of ordering the goods is via e-mail (57%) and via

phone (17%). Only 9% of respondents mostly send their order via the EDI system. Certain discrepancy between the number of the companies which implemented EDI and those which use EDI for sending the orders is obvious. This discrepancy is caused by the fact that this way of mutual communication cannot be used with all business partners. This fact was also one of the most common arguments against the implementation of this technology.

Satisfaction with the way of ordering was also studied and the Figure 1 shows us satisfaction of both the companies that have not used EDI yet and companies that have already implemented it. It is obvious that satisfaction is predominant for both groups. In case of those using EDI 83% companies chose values 1-3 on the scale 1-10 which can be classified as high satisfaction.



Figure 1: Satisfaction with the way of goods ordering (Source: author's results)

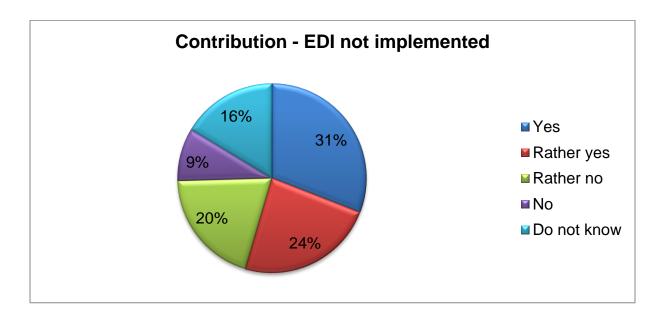


Figure 2: Evaluation of the perceived benefits of EDI – firms without EDI (Source: author's results)

The reverse situation arose from the view of the electronical data interchange contribution for both groups. We can see in Figure 2 and in Figure 3 that EDI contribution is viewed as higher and it is rated

like the positive one by 97% of firms which have already implemented it. The firms which have not implemented it yet it is rated as beneficial only in 55% cases.

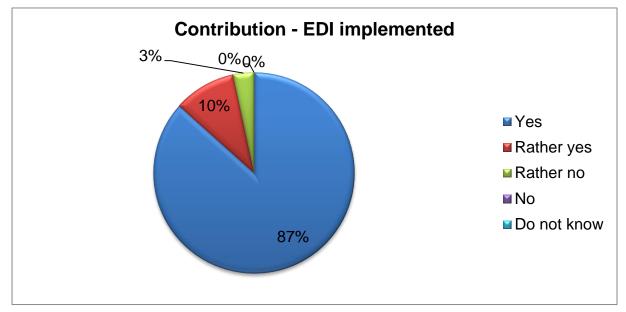


Figure 3: Evaluation of the perceived benefits of EDI – firms with EDI (Source: author's results)

Generally 69% respondents rate it as beneficial. Among the main reasons for the implementing belong increase of the perfect mutual communication, administrative cost reduction and notably speeding up the information flow. On the the main disadvantages contrary, for implementation of this technology are notably high primary cost and also insufficient expansion of the electronical data interchange among business partners.

Another finding is that companies accept only 39% of documents electronically. The rest of the documents is laboriously copied into the firm informational system and estimated average time is 10 minutes for copying of this document into the system. Almost 40% of questioned companies handle more than 500 invoices per month.

The study is primarily focused on the internal factors identification which lead to the decision for or against electronical data interchange implementing. What is then the most important object in this process? How is this attitude

influenced by electronical data interchange knowledge? How does a number of cooperating subjects participate in supply chain and what is the significance of number of business documents exchanged by the companies? The above arguments lead to the following hypotheses.

Hypothesis 1: Is the knowledge of electronical data interchange influenced by the number of the suppliers supplying the company?

Ho: The knowledge of EDI is not dependent on the number of companies regularly supplying the company.

H1: The knowledge of EDI is dependent on the number of companies regularly supplying the company.

Acquired p-value (0,0390) is lower than  $\alpha$  level of significance (0,05), thus zero hypothesis of independence between both variables can be rejected. This means that in selected segment of companies it was validated that with the increased number of regular suppliers the knowledge of the term electronical data interchange is increasing. In

this case the Cramer standby coefficient reaches 0.33 and this means strong dependence between both signs.

Hypothesis 2: : Is the knowledge of electronical data interchange influenced by the number of handled orders?

Ho: The knowledge of EDI is not dependent on the average number of orders per month.

H1: The knowledge of EDI is dependent on the average number of orders per month.

P-value (0.0840) which is higher than  $\alpha$  level of significance (0.05), zero hypothesis about the independence between two characters cannot be rejected. That means, that no dependence between EDI knowledge and number of issued orders exists.

Hypothesis 3: Is the perceived utility of electronic data interchange influenced by its knowledge?

Ho: Perceived utility of EDI is not dependent on EDI knowledge.

H1: Perceived utility of EDI is dependent on EDI knowledge.

P-value (0.0016) is lower than  $\alpha$  level of significance, thus there is dependence between perceived utility of EDI and its knowledge. The dependence is strong (V=0.34) in this case.

It is possible to judge on the base of contingensy table analysis that companies whose EDI knowledge is direct (they have implemented it) 97% of them is convinced about its utility for the firm. On the other hand it is obvious that those companies which have not encountered the term EDI yet do not judge this document interchange as contributing. So that the subjects judge EDI contributing according to the amount of information which the questioned company has.

Hypothesis 4: Does number of in-invoices influence perceived utility of the electronical interchange?

Ho: Perceived utility of EDI is not dependent on average number of in-invoices per month.

H1: Perceived utility of EDI is dependent on average number of in-invoices per month.

P-value (0.0091) is lower than  $\alpha$  level of significance (0.05), and thus the dependence is between perceived utility EDI and number of ininvoices. In this case the dependence is again strong (V=0.36).

On the base of the contingency table analysis it is obvious that in companies which have an average number of invoices per month higher than 500, perceived utility is positive in 86%. The companies judge EDI the more contributing, the higher average number of invoices per month they have. Hypothesis 5: Is the way of goods ordering influenced by the branch of the company?

Ho: There is no dependency between the branch of the company and the way of goods ordering from the supplier.

H1: There is dependency between the branch of the company and the way of goods ordering from the supplier.

The results also point out the influence of the branch where the company operates and popularity of this way of communication within the branch. This finding is in accordance with the study from 2009 where the extension of EDI among cooperative partners is one of the main factors which influence decision about implementing the technology (Narayan, Maruchek, Handfield, 2009). This tested hypothesis , where p-value (0.0172) is lower than  $\alpha$  level of significance and it concompanies very strong dependency (V=0.45) between branch and the way of goods ordering.

Hypothesis 6: Is invoice receiving in electronical form influenced by the number of printed invoices in paper form? Does invoice receiving in electronical form influence the number of invoices which is printed?

Ho: There is no dependency between printing the invoices and number of received invoices in electronical form.

H1: There is dependency between printing the invoices and number of received invoices in electronical form.

The last stated hypothesis when p-level (0.0194) is lower than the  $\alpha$  level of significance (0.05) and zero hypothesis is thus rejected and confirms the fact that despite the company receives more electronic than paper form documents, the former are still printed for archiving.

Table 1 shows complexly the results of hypotheses testing.

Table 1: Results of hypotheses testing

	Null hypothesis	p-value	Result	Cramer's V
H <sub>01</sub>	The knowledge of EDI is not dependent on the number of companies regularly supplying the company.	0,0390	rejected	0,33
H <sub>02</sub>	The knowledge of EDI is not dependent on the average number of orders per month.	0,0840	accepted	0,32
H <sub>03</sub>	Perceived utility of EDI is not dependent on EDI knowledge.	0,0016	rejected	0,33
H <sub>04</sub>	Perceived benefit of EDI is not dependent on average number of in-invoices per month.	0,0091	rejected	0,36
H <sub>05</sub>	There is no dependency between the branch of the company and the way of goods ordering from the supplier.	0,0172	rejected	0,45
H <sub>06</sub>	There is no dependency between printing the invoices and number of received invoices in electronical form.	0,0194	rejected	0,61

#### Conclusion

The subject of electronical data interchange is constantly more topical which is obvious also from the pressure of public authority.

Interoperability significance for the companies has been always increasing, yet it still prevails small awareness on the Czech market about the possibilities which electronical data interchange brings. Despite the fact that big firms with turnover higher than 100 milion CZK were appealed, which means strong assumption for use of this communication, one third of firms still do not know what the electronical data exchange means. Advantages of this way of communication are used only by 35% of those questioned. E-mail

communication still prevails in supplier-customer connection.

EDI researches emphasize higher fastness, efectivity and savings from the electronic document interchange even despite cooperative orientation of EDI, they also describe competitive technology as 'weapon' for businessman. However broader experience with EDI imply that it is better, than to look for short term competitive advantages from EDI, it is in the area of system integration and business reengineering, where EDI offers wide scale real advantages. This integration allows EDI to support really strategic approach to business which offers wide comparative advantages for companies and business groups. The papers indicate that while EDI itself is rather easy technology, consequence of its strategic use as a mean for the main organizational restructuralism is profound.

The companies stated that 10 minutes is average time for incorporation of the document into information system and in combination with the fact that almost 40% of the questioned receive more than 500 invoices per month and with cost growth for an employee it means that recoverability time of the investition in this new way of communication lowers.

An important role for the decision about implementation is just awareness and with the growth of awareness about EDI perceived benefit it grows. The other factor which significantly

influences decision about EDI implementation is amount of documents, which the company processes and amount of subjects involved in supply chain.

More than two thirds of firms judge the electronic data interchange as contribution for their firm and so that we can expect that number of the subjects involved will have increasing tendency.

Despite the fact that electronic document share affords range of advantages, massive aceptance of this way of communicationn is still insufficient. This phenomenon is then still a big challenge since good information is critical indicator for the company survival.

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# THE IMPACT OF THE LIBERALISATION OF OPENING HOURS ON SMALL RETAIL ENTERPRISES

#### Valerio Temperini & Gian Luca Gregori

#### Abstract

This paper aims to analyse the effects of deregulation in the retail sector, with specific reference to the Marche Region (Italy). Recent regulatory intervention has abolished any restrictions on shop opening hours, in addition to which being open on Sunday has been allowed. This action seems inconsistent with the characteristics of the Italian distribution system, which is composed of large numbers of small-sized shops and family-run businesses. In the past, the issue of deregulating the opening hours of shops was the focus of an important debate that attracted various academic contributions, with consideration given to the possible effects, as analysed from the perspectives of the different stakeholders. However, little empirical evidence is available. In this study, the focus is on socioeconomic effects, which are examined through a survey of 534 owners of small shops. The results show that economic advantages for small retailers are limited, while they view the large-scale retail trade as a greater threat. Furthermore, there are major negative social effects.

Keywords: deregulation, shop opening hours, opening on Sundays, retailing sector, family-run businesses

### 1. Introduction

Regulation of the opening hours of retail establishments in the countries of the European Union is not uniform. With regard to stores opening on Sundays, in some cases there is noteworthy liberalisation (Sweden, Estonia, Latvia, Lithuania, Croatia, Ireland), while in others the freedom to open on Sundays is subject to certain restrictions (Finland), and in still others stores are prohibited from being open on Sunday, though there are possible waivers and exceptions to the rule. Italy proves to be the 'liberalist' of the largescale European nations: following the issue of the so-called 'Save Italy' decree on 1 January 2012, stores can remain open every day, 24 hours a day. In other countries, certain restrictions apply, as described below (EuroCommerce, 2014):

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Department of Management Marche Polytechnic University (Italy) France: stores are normally closed on Sundays and holidays; exceptions are permitted in the case of small grocery stores (which can be open from 9 am to 1 pm), in addition to the possibility of five openings a year at the request of the mayor of the town or city. The restrictions do not apply to tourist areas, and there is also the possibility of extending such exemptions to major metropolitan areas.

Germany: opening hours are governed by the Länder (federated states). Stores are normally closed on Sundays and holidays, with the exception of those in certain merchandising categories (bakeries, flower shops, newsstands etc.). In the different Länder there are cases in which the restrictions can be waived.

United Kingdom: in England and Wales restrictions apply to stores with a surface area of more than 280m2; Scotland takes the most liberalist approach.

Spain: regulation is handled on a regional basis. Permits for opening range from 10 to 16 hours, but it should be noted that, in the course of a year, there are 8-12 Sunday openings.

Among the reasons pointed to as favouring the liberalisation of retail sales in Italy is a desire to bring the country in line with the regulatory framework in the rest of the European Union as regards free competition, while mention is also made of the expected benefits in terms of increased revenues and employment, all in pursuit of the goal of stimulating consumption during a period of marked economic crisis.

In realty, and especially with regard to the possibility of opening on Sundays, deregulation has been subject to significant criticism, especially on the part of associations of small retailers and unions representing workers in the retail sector. Their position is that such initiatives prove more favourable to large-scale distribution enterprises (among whom participation has been extensive), seeing that such companies can draw on greater organisational resources and higher levels of flexibility than small stores. And yet it is small

## 2. Main Evolutionary Developments of the Retail System in Italy

Over the last thirty years, Italy's retail system has undergone far-reaching modifications that have redesigned the way it is structured with respect to both supply and demand.

The most noteworthy developments involving supply are the growth of the grand-distribution sector and the rise of new forms of distribution. As is widely known, Italy has undergone a process of 'passive internationalisation', in the form of the introduction and consolidation of new approaches to retail sales imported from abroad. Chief examples include discount chains (based on the German model), hyper-markets (inspired by similar stores in France) and factory outlets (which originated in the United States). Underlying this

stores that typify Italian retail sales, playing an important role in the socioeconomic development of urban areas while also making an invaluable contribution to the continued retail coverage and 'occupation' of local, outlying territories. In other European-Union countries as well there has been heated debate, and for some time now, on the issue of liberalisation, with sharply conflicting arguments between those who, on the one hand, call for unrestricted competition and increased opportunities for consumers, while others hold that the right of retail workers to rest on Sunday should be maintained.

The main goal of this study is to determine, through empirical evaluation, socioeconomic effects of deregulation of the retail sector, focussing in particular on traditional retail sales. To this end, a survey was performed through direct sampling of storekeepers located in the Marche region, part of a broader analysis under which the survey was supplemented by qualitative research involving a number of different operators and stakeholders who took part in interviews and focus group.

process is the increasing spread of large-scale retail sites located on the outskirts of urban areas. A development of particular note is the increase in the number of planned shopping centres, which increasingly serve as sites of socialisation; the fact is that the greater availability of parking, the presence in the vicinity of leisure entertainment structures, along with «semicommercial and extra-commercial» activities (bank branches, public services, movie theatres etc.) give users a variety of reasons to go to shopping centres (Sbrana and Gandolfo, 2007).

On the strength of varied offerings that feature a wide range of choices presented in settings that are both pleasant and functionally efficient, planned shopping centres meet the needs of a typical consumer who has undergone far-reaching changes as well, to the point where he or she

places increasing importance on the 'experiential' aspects of the processes of purchasing and consuming while tending to make fewer shopping trips. This last behavioural trend can also be interpreted in light in the light of the 'time' factor, which would appear to be an increasingly limited, precious resource to be managed with care. At the same time, it should be observed that the creation of large-scale retail should be preceded by an accurate analyses of ongoing changes in the characteristics of a given territory, complete with analyses of demographic and socioeconomic variables, in order to evaluate their potential user basins. There is no denying that, in certain areas of Italy, the concentration of large-scale commercial structures has grown (and continues to grow) to a significant extent, giving rise to serious problems of economic sustainability, in light of the overlapping of user basins.

Also evident is the weakening of the retail fabric in historic downtown areas, due the disappearance of a variety of traditional, smallscale enterprises; in more than a few cases, what can be observed is a worrisome 'vicious circle' that sees the drop in the number of enterprises in downtown areas further undermine the powers of attraction of such locations.

And the effects of the economic crisis of recent years have only made the development that much more noticeable.

The figures shown on table 1 point to a decrease in the overall number of retail enterprises in Italy, which went from 776,365 in 2010 to 755,045 in 2014 (for a percentage variation of -2.7%). But if the figures for the same years are broken down into size, then the result show that, while the number of small stores fell, the number of largerscale establishments actually rose. In the case of retail stores with surface areas of less than 50m2, as well as those measuring between 51-150m2, the overall number decreased by -5.1%, falling from respective figures of 272,065 and 196,765 units to levels of 258,262 and 186,777 units. Establishments with surface areas of between 1,501m2 and 5,000m2 increased by +12.0% (going from 2,743 to 3,071 units), while those with surface areas of more than 5,000m2 went from 563 to 582 units (+3.4%).

Table 1 – Number of retail stores in fixed sites in Italy 2010-2014

	2010	2011	2012	2013	2014	% 2014/2010	Var.
Units	776,365	776,155	766,821	762,932	755,045	-2.7%	
Annual % var.		0.0%	-1.2%	-0.5%	-1.0%		

Source: our processing of the figures of the National Commercial Sector Observatory - Ministry of **Economic Development** 

And so there can be no mistaking the major impact of the economic crisis on Italy's commercial system, as demonstrated, for that matter, by the extent to which the economic figures prove negative. According to the World Bank, from 2010 to 2013 Italy's per capita GNP fell by -4.5%, while per capita spending on final consumption by families dropped by -7.5%; the ISTAT statistics institute also reported that the employment rate,

which stood at 6.1% in 2007, had doubled by 2014, moving past 12%.

Given the importance of the commercial sector for socioeconomic development of territories, proper planning of initiatives that regard it is held to be a priority concern, in the interests of promoting balanced development; to this end, the measurement and assessment of the effects of the actions taken would appear to be useful and necessary.

In the present study, specific reference is made to initiatives of liberalisation involving opening hours. After the 'Save Italy' decree was issued on 1 January 2012, retail sales establishments could stay open without any restrictions, a change made in part to stimulate consumption and, therefore, contribute to the country's economic recovery. But what results were actually obtained?

## 3. The possible effects of extending store opening hours: theoretical background

For some time now the issue of deregulating store opening hours has been a topic of lively debate, as a number of contributions from the academic world have considered the possible effects of deregulation and examined the points of view of the various stakeholders.

In the 80's a series of theoretical works forecast the potential economic effects of deregulating store opening hours, with a number of the positions taken contrasting significantly:

Nooteboom (1982) held that extended opening hours would lead to increased costs for stores while reducing the number of grocery stores in operation.

Taking a different stance, Thurik (1984) observed that extended hours could increase the productivity of the workforce, thus offsetting the higher costs; productivity would rise due to the reduction in peak sales periods together with a redistribution of workloads over time.

According to Morrison and Newman (1983), sales volume would rise for large retail structures, while smaller stores would lose volume.

On the subject of stores opening no Sundays, De Meza (1984) highlights the risk of a generalised decrease in the efficiency of the retail system, due to the possibility of high fixed costs.

Kay and Morris (1987) make the point that competitive pressure could lead to excessive store openings on Sundays, meaning that high costs would have to be sustained.

In the short term, Tanguay et. al (1995) see prices being raised by the larger-scale enterprises (on the strength of their bargaining power) while those of smaller concerns would fall.

In a work written more than twenty years ago (1989), and in which attention was focussed specifically on the possibility of allowing retail stores to open on Sundays in England and Wales, Burke and Shackleton (1989) analysed what were then the two opposing positions, examining the primary reasons for each stance. The authors related how the chief arguments of those 'in favour' of the initiative included the belief that levels of consumption would rise once there was more time for consumers to search for, choose and purchase products. Such advantages were thought to be especially pronounced for areas hosting flows of tourists, seeing that, if their stay lasted for a week, they would have 15% more time to devote to shopping. Another belief observed was that deregulation reflected a wish to keep in step with changing lifestyles.

In looking at the opinions of those 'not in favour', emphasis was give to the following negative considerations:

the risk that the stores' weekly turnover could simply be redistributed among the different days, though with higher costs (especially for personnel), with a negative effect on profitability (thus the reservations on the part of storekeepers)

the inconvenience for retail workers (especially for those accustomed to not working on Sunday) the negative impact on family life

congestion in shopping areas.

It is interesting to note that the considerations addressed in the aforementioned study all prove to be decidedly relevant and meaningful in other countries as well, including Italy.

More recent theoretical works have analysed specific themes, again giving rise to contrasting positions.

On the one hand is the belief that deregulating opening hours could result in noteworthy advantages, especially for consumers, but for retail enterprises as well. Rouwendal and Rietveld (1998), for example, hold that, were there to be full participation in the extension of opening hours, then society as a whole would reap advantages, as the lower profits would be offset by the increased possibilities to make purchases, with stores being pushed to make themselves as attractive as possible.

According to Hedhli et. al. (2013), extended opening hours would have a significant positive impact on the role of stores in sustaining the quality of life, and therefore the wellbeing of the individual. Nor should the different segments of consumers who, for a variety of reasons, would be especially appreciative of longer opening hours be ignored. The results of an empirical survey carried out by Geiger (2007) among customers of Irish supermarket chains that were experimenting with staying open 24 hours a day showed that those who habitually patronised the stores at night did so more for reasons of practically and efficiency than any sort of hedonistic urge (they were people who themselves worked at night, or other workers who found it less easy or convenient to shop during the day, as well as people whose family routines left them short on time, such as those with children at home). The chance to manage time (through increased scheduling possibilities), as well as the ease and speed of shopping at night, were the chief advantages sought by such consumers, who also, though to a lesser extent, expressed satisfaction over the greater opportunities for socialisation (especially with the staff) compared to daytime hours.

A number of authors also foresaw advantages for the storekeepers, as in the case of Gradus (1996), who held that extended opening hours, at least within certain limits, could generate economic benefits for merchants by increasing both the productivity of labour and sales.

According to Inderst and Irmen (2005), deregulation could result in price increases that would be justified by the customers' perception of the increased value of the differentiated service. Tanguay et al. (1995) saw the short-term effects as including price hikes enacted by the larger-scale enterprises as their bargaining power grows.

Kosfeld (2002) proposes an outlook focussed on reaching a balance between the needs of the storekeepers and those of the customers. In response to the different attitudes of latter with respect to similar developments in the service offered, the storekeepers could follow a strategy of extending opening hours, possibly with higher prices, or of not extending their hours but offering more convenient prices. In the specific case of the German experience with opening hours, the author reports that, while large-scale enterprises, chains and stores found inside of shopping centres can draw on a certain level of coordination, as well as advertising campaigns, to spread awareness of the service, small independent stores would find themselves at a disadvantage.

For that matter, as is pointed out by Skuterud (2005), small specialised stores would encounter greater difficulty in staying open on Sundays by increasing the hours of the current staffs than would the larger-scale structures.

A number of the positions expressed, therefore, hold that deregulation would favour the larger enterprises, at the expense of the smaller ones. The risk would be that of contributing to the 'impoverishment' of retail offerings that can be seen in a large number of downtown areas. Along these lines, Coca-Stefaniak et al. (2005) observe the following developments, with specific reference to Great Britain, faced by small shops located in downtown areas:

#### On the macro level

Social: greater mobility of individuals, who are willing to travel significant distances from their place of residence to make purchases, a trend that large-scale, decentralised retail structures take

advantage of by extending their opening hours and offering shopping convenience.

Technology: the availability of self-service arrangements (even in terms of payment operations) is increasingly appreciated.

Political considerations: steps such as extending opening hours and keeping stores open on Sundays have a negative effect, while red-tape places constraints on business.

#### On the micro level

Competition: large retail enterprises tend to open structures even in the vicinity of urban areas, placing them in competition with small shopkeepers.

Rents of stores in urban areas: the levels are high, further contributing to the exodus of storekeepers from downtown areas to outlying ones.

There is no question, therefore, that the issue of retail deregulation affects the interests of a variety of different subjects (enterprises, workers, residents, consumers, authorities in local areas and cities etc.), meaning that the different points of view and needs must be considered, in order to come up with initiatives that maintain a certain balance.

## 4. The results of the empirical survey in the Marche Region: a descriptive analysis

The Marche region is found in central Italy, with a population that, in recent years, has settled at a level of slightly more than one and a half million inhabitants. The region's demographic make-up shows an ageing process in keeping with what is taking place in the rest of Italy: of particular note is the fact, based on the data of the ISTAT statistical institute for the period 1992 to 2014, that the number of residents over the age of 80 has almost doubled, going from 60,800 to 119,773 units, with the incidence of this group out of the total population rising from 4.3% to 7.7%. During the same period, the portion of the population below the age of 35 decreased by 13.4% (going from 603,930 to 522,948 units).

The region's economy has a decided tilt towards the manufacturing sector, featuring a significant presence of small and medium-size enterprises, for the most part family-run businesses. In the wake of the major economic crisis (between 2007 to 2014 the unemployment rate rose from 4.2% to approximately 10.0%), tourism has increasingly been viewed as another sector that could play an important role in the future socioeconomic development of the region, given the resources of attraction widely found throughout the region. With this in mind, special attention has been focussed on the supply of services, including retail sales, as a key factor in stimulating the growth of tourism as well.

The figures shown on tab. 2 point to the fact that the drop in recent years in the number of retail stores has been even more pronounced than the decrease recorded for Italy as a whole (see table 1).

**Table 2** – Number of retail stores in fixed sites in the Marche Region

	2010	2011	2012	2013	2014	% var. 2014/2010
Units	19,807	19,918	19,527	19,313	19,092	-3.6%
Annual % var.		0.6%	-2.0%	-1.1%	-1.1%	

Source: our processing of the figures of the National Commercial Sector Observatory - Ministry of **Economic Development** 

Between 2010 and 2014 the number of stores fell by 3.6%, but if the figures are broken down by the size of the establishment, then it becomes clear (in keeping with the national trend) that, while the number of small stores decreased, the larger ones actually recorded a increase. In the case of retail stores with sales space of less than 50m2, the number of units fell from 7,068 to 6,725 (for a negative variation of -4.9%), while those measuring between 51m2 and 150m2 dropped from 5,542 to 5,209 units (-6.0%). During the same period, the number of structures in the 1,501m2 to 5,000m2 category rose by +22.9% (from 83 to 102 units), while the number of stores larger than 5,000m2 rose by only one unit (due to a regulatory 'stop' placed on the construction of large-scale retail outlets by the regional government, in light of the excessive number of such structures compared to the potential user basins). The descriptive figures, therefore, point to trends in line with what can be observed in the rest of the country.

The empirical survey was carried out between October 2013 and March 2014 on a sample group of 534 retail establishments in the Marche Region, with the goal of determining:

the degree of participation in the liberalisation of retail sales, in particular as regards opening times and days

the effects sustained, both economic and social, by the stores that have implemented such initiatives the considerations of those who have not participated and their intentions for the future assessments of the measures of liberalisation for the retail sector in general, also addressing the topic of promotional initiatives and facilitations for the opening of new establishments

the role that public-sector operators are called on to play, in order to favour a balanced development of retail activity in the territory of reference. To achieve the above research goals, a semistructured questionnaire was drawn up for the owners of the retail enterprises. The questionnaire was distributed both at the offices of the storeowners' professional associations and directly at stores located in a number of the region's typical urban areas. The towns and cities in question were selected based on variables of size (small, medium and large urban agglomerations) and location (coastal areas, inland, along the region's boundaries).

In order to fine-tune the structure of the survey, in addition to interpreting and analysing the results obtained, 11 focus groups involving 103 storekeepers were held in a number of cities and towns deemed to be representative of the territory, while interviews were carried out in person or by phone with officials of a number of municipal governments in the Marche region, and of governments of neighbouring regions, as well as with representatives of retail workers unions and consumer defence associations.

#### Characteristics of the sample group

In terms of the make-up of the sample group, it is balanced in terms of distribution by gender (50.1% female, 49.9% male); the breakdown by age group is as follows: 6.8% are younger than 30, 22.0% are aged 31 to 40, 31.0% fall in the 41 to 50 year-old age group, 25.4% are between 51 and 60 years old and 14.8% are older than 60. Approximately two-thirds (67.6%) of the storekeepers are married.

In terms of education, 61.7% declare that they have graduated from secondary school, 14.5% have university degrees and 22.1% hold middle-school diplomas. The majority of the subjects have noteworthy experience working in the retail sector, as 18.9% of the respondents declared that they had worked as shopkeepers for more than 30 years, roughly a third could point to experience of 21-30 years, 23.9% had been in the field for 11-20

years, 16.4% for 5-10 years and 16.0% for less than 5 years.

In terms of the features of the retail establishments, it was found that 81.1% of the sample group handle non-food products. Roughly 67.5% of the stores are located in downtown areas, 18.8% in intermediate zones between downtown and outlying districts, 4.1% in outlying districts, 7.9% in semi-rural districts and 1.7 % in other types of areas. For the most part, the establishments are small in size: almost half (48.0%) have a selling surface area of less than 50m2, while 35.15% of the stores have a surface area of between 51m2 and 100m2, 11.6% measure between 101m2 and 200m2 and 5.3% are larger than 200m2; the average selling surface area is estimated at 85m2. In 70.4% of the cases, the retail activities are carried out in rented facilities.

The main type of enterprise is an individually owned company operated on a family-run basis. Of note is the fact that, in 70.7% of the cases, the overall number of staff (including the owner(s)) numbered no more than two, and for 27.1% of the stores considered, the owner was also the lone worker in the store. Approximately 41.0% of the storekeepers stated that they employed salaried personnel, while 43.6% said that they work together with other members of their families.

For more than a third of the stores (37.1%), the clientele is primarily adult (individuals aged between 41 and 65 years old).

## Enactment of initiatives of liberalisation and the effects observed

The questionnaire contained a number of questions geared towards understanding the types of initiatives taken (with the possibility of providing multiple responses) and indicating the effects observed. The responses showed that opening on Sundays constituted the main step taken by the shopkeepers interviewed (51.9% of the respondents); next came opening on holidays

(22.5%), followed by the lengthening of normal opening hours (21.4%) and the elimination of closing times during the week (16.3%).

As regards stores opening on Sunday, it should be noted that, of the total of 274 establishments that took this step, 40.5% specified that they were open for only a few Sundays each year, 35.4% opened on Sunday only if there was a special event and 20.8% opened every Sunday. For that matter, 36.4% of the respondents declared that they did not take any initiative in this sense.

As for the effects observed following the enactment of initiatives involving the liberalisation of opening hours and days, the following results were reported:

69.5% of the respondents claimed that they had not noted a positive impact on economic results 60.3% maintained that no new clients were attracted

65.0% felt that there was no increase in customer

74.1% stated that there was no increase in overall purchasing by clients, but rather a redistribution of purchasing in terms of time

for 64.7% of the interviewees, the initiatives taken led to increased costs (tied, in particular, to personnel management and the consumption of electric energy)

75.8% said that they felt no stimulus to introduce new services into their stores

83.2% noted that the experience caused them more physical fatigue

83.0% did not notice any improvement in the handling of workloads

91.8% said that they had less free time for leisure pursuits and social and family life;

72.2% of the respondents who employ salaried personnel reported that there was no increase in their staff's wages

in only 8 of the establishments did any of the staff go from a situation of sporadic employment to a permanent position (in all these cases, only one employee was involved)

in only 8 of the establishments did any of the personnel go from part-time to full-time employment contracts (in 7 of these cases, only one employee was involved, and the remaining store did not specify the number)

10.9% of the respondents said the initiatives held them to employ additional personnel on an occasional or fixed-term basis (in the majority of these cases, only one employee was involved)

2.9% of the respondents said that they wound up hiring additional personnel on a stable basis (in the majority of cases, this meant only one additional employee).

The level of satisfaction with the initiatives taken was decidedly low, with the average opinion expressed, on a scale of 1 (dissatisfied) to 5 (very satisfied), standing at 2.1. It is worth noting that more than a third of the respondents (36.2%) held themselves to be dissatisfied (giving a satisfaction rating of 1), while only 4.5% showed themselves to be fully satisfied (with a rating of 5).

Looking only at the assessments of those who limited themselves, in terms of initiatives taken, to opening on Sundays (111 storekeepers), the judgments appear even more negative: 87.0% of the respondents said that they did not note any positive impact on economic results; 79.8% reported increased physical fatigue; 90.8% observed that they had less time for leisure pursuits or social life.

As noted earlier, 192 storekeepers (equal to 36.4% of the sample group) stated that they did not implement any of the initiatives; 179 of these respondents specified their reasons for not doing so. A lack of economic convenience was the main motive (57.5% of the respondents, followed by a wish to maintain their leisure time and their social lives (45.8%), and then the conviction that the only outcome would be to redistribute sales over time (23.5%) and lastly the impossibility of employing

additional personnel (21.8%). Of interest is the fact that 85.9% of these subjects noted that they had no intention of implementing any type of initiative in the future either; 8.1% of the respondents planned to open on Sunday, for the most part on the occasion of special events, but none of these shopkeepers was willing to open every Sunday of the year.

#### 5. Analyses and discussion of the results

The results of the research bring to the fore a number of considerations on the impact of the liberalisation of retail sales in the Marche region.

The first point of note is that, taken on the whole, the economic impact of the initiatives was not judged to be positive, a verdict which should be interpreted with consideration for the period of economic crisis being experienced by our country. In a number of cases it was observed that, in a time of high unemployment and shrinking purchasing power on the part of families, the effect of longer store opening hours in terms of stimulating increased consumption is essentially non-existent. The effective outcome is a redistribution of sales turnover during the course of the week; the most commonly held opinion (expressed both by small shopkeepers and by a number of representatives of large-scale distribution enterprise who were interviewed) is that the sales registered on Sunday do not add to but rather replace those of other days during the week. Plus there is the fact that the cost of personnel is higher on Sundays (seeing that the hours count as overtime), and so there is ultimately no economic convenience.

It was also noted that the impact on employment proved to be rather limited, as the survey performed directly with small shopkeepers showed that in only a very few cases was new personnel hired or were previously sporadic employment situations stabilised. In the case of the large-scale distribution enterprises, given the limited effect in terms of higher sales volume,

there was no ignoring the difficult task of managing human resources and organising the work so as to provide effective and efficient service.

It can be observed, therefore, that the initiatives do not appear to have produced positive results as reads either economic return or levels and conditions of employment.

In addition, there was significant mention of the negative consequences in the social sphere. Frequent opening on Sundays meant, both for small shopkeepers (who, in certain cases, were 'forced' to stay open to respond to the competition) and for employees (especially those of large-scale distribution enterprises, a large part of which opened on Sundays), less time to spend with their families (especially for individuals who have to care for their own children) or for social activities. Importance was also placed on the need for rest and free time, whether devoted to recreational activities or other pursuits. The question that arises is whether satisfying the wishes and needs of consumers justifies the lack of attention paid to certain principles and rights of storekeepers and retail workers.

Along these lines, it is worthwhile noting that the prevalent opinion among representatives of consumer associations is that the liberalisation initiatives have proven less than satisfying. Furthermore, and keeping in mind the social problems referred to above, it is held that consumers can show a certain appreciation for such initiatives, though not to the point that they are willing to pay higher prices to purchase products on Sunday.

The study also brought to the fore a number of considerations on potential initiatives promoting a balanced development of retail sales in the region. A point highlighted on a number of occasions is the importance of regulations that respect the distinctive features and prevalent economic activities of individual local areas, seeing that, in certain cases, the possibilities for additional opening hours are greater (in tourist zones, for example), while in others they are limited to certain periods of the year (i.e. the Christmas holidays) or to moments when special events are held.

Another possible solution put forth - once again taking into account the features of the area, as well as the time periods, plus an evaluation of the behaviour patters of consumers - would be to extend the opening hours further into the evening on weekdays too, but without staying open on Sunday. For that matter, there was also a certain amount of support for alternating the opportunity to open on Sunday between the large-scale distribution enterprises and small shopkeepers.

In any event, the owners of small stores expressed the hope that initiatives would be taken to support their development, so as to allow them to compete within the new context that has arisen, in part, as a result of the liberalisation initiatives.

Along these lines, one area that might produce interesting results if developed through training efforts is the use of 'new' forms of web communication that can prove to be of use when it comes to increasing visibility, communicating with customers and developing relations with them.

There was also mention of the need for coordination among the small shops in a given area, with the goal of carrying out more effective promotional efforts, especially in terms of the organisation of events, when it is rarely the case that all the shopkeepers take part. Another need felt quite strongly regards the develop of policies to upgrade and showcase downtown areas, whose vitality depends, to a large extent, on the contributions of small stores and shops. It was pointed out that, in certain cases, there are critical issues that limit the attractive capacity of downtown areas (difficulties in accessibility, limited availability for use, depopulation, deterioration).

Consideration should be given to the importance of coordinating efforts among neighbouring regions, in order to avoid situations in which discrepancies between different sets of regulations give rise to competitive conflicts between areas.

#### 6. Non-conclusive observations

It is widely accepted that the retail sales system of a given area has a noteworthy effect on its vitality. Of particular importance is the role of retail sales in creating wealth and employment, as well as the service provided to the community and the function of territorial 'occupancy' that retail stores carry out in the areas where they are located.

In light of this widely acknowledged importance, it is held best to focus particular attention on changes and initiatives affecting this sector.

Based on an all-encompassing vision for a given territory, the challenge to be faced is that of favouring a balanced development of the commercial sector, so as to make the most of the contributions of both small establishments and large-scale enterprises to efforts to increase the powers of attraction of the territory itself. All this while taking into account the different characteristics and vocations of individual areas, so that these distinctive traits can be used as the foundation stones for creating worthy proposals that satisfy the needs of the various stakeholders (residents, visitors, tourists, businesses, miscellaneous organisations) while also respecting the principles of sustainable development that commercial policies should always comply with. Indeed, the perspective of sustainability brings to the fore the question of measuring the effect of the actions undertaken.

Following the introduction of the 'Save Italy' decree, there are no more requirements for store closings during the week, on Sundays or on holidays. At the same time, possibilities for opening new commercial establishments have also been increased. In practical terms, the goals pursued through these initiatives are to:

generate a positive economic impact, stimulating and supporting consumption through initiatives that include extension of the time available for making purchases

create employment

favouring increased competition in the sector, for the benefit of consumers, by facilitating new entrepreneurial initiatives.

The problem is that the efforts described above do not appear to have met with widespread satisfaction on the part of the various stakeholders in the retail sector. A variety of positions can be observed, at times standing in sharp contrast with one another. In the specific case of stores opening on Sundays, a number of criticisms were voiced regarding the negative repercussions of total liberalisation. There have even been signs of efforts on a national level geared towards revising the change in the system and moving back in the direction of greater regulation. There widespread agreement that large-scale distribution enterprises are better equipped than small stores to open on Sundays, allowing them to take advantage of deregulation to obtain a higher share of family spending budgets.

Though it is true that, thanks to e-commerce (whose use in Italy, though on the rise, still appears more limited than in other countries), it has essentially become possible to make purchases on any day of the week, at any time, the question that needs to be addressed is whether the initiatives of liberalisation referred to above have effectively favoured the development of the commercial sector and the surrounding territory, without forgetting to take into consideration the period of crisis, in terms of both economic results and employment levels, that the company has been experiencing for some years now. Also worthy of attention are the possible repercussions in terms of social relations, and especially the consequences on the quality of life of workers in the retail sector.

The empirical assessment made it possible to determine that small shopkeepers, in particular, do not consider the economic impact to have been positive, in addition to which there are social problems of no small importance affecting the employees of the large-scale distribution enterprises as well. All things told, there is ample reason to question the overall success of the initiative.

For that matter, the outlook for Italy's small and medium-size manufacturing enterprises negative, given the increasing difficulty they experience in placing their products with the largedistribution concerns. The widely acknowledged structural and managerial shortcomings of companies of limited size hamper their efforts to develop export activities, with another limiting factor being the absence of large commercial enterprises capable of promoting their

products on international markets, as is the custom in other systems abroad. Against this backdrop, the disappearance of traditional small retail outlets would pose a threat to Italy's industrial system as a whole.

Analysis of the results of this study proves extremely useful for reflection and formulation of potential initiatives geared towards developing retail activities, all as part of an effort that should be subject to ongoing experimentation and evaluation, in an attempt to reconcile as already illustrated, the goal of satisfying the needs of the various stakeholders with that of developing local areas in such a way as to make the most of their distinctive characteristics ongoing developments.

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# BRAND LOYALTY INFLUENCE ON CONSUMER CHOICE, AN EMPIRICAL AND QUANTITATIVE ANALYSIS IN THE RETAIL SECTOR

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#### **Abstract**

Consumers are overwhelmed with a vast array of choices in today's retail marketing environment. This is especially because they are exposed to so many items in the market and they have to make quick decisions based on the items they ought to be and which can be catered for by their disposable income. The decision the consumers make determines the item they select and eventually buy. The objective of this study is to present a comprehensive empirical analysis of the brand loyalty construct, compared to other elements of brand equity such as brand awareness, perceived quality and other proprietary brand assets by integrating and capitalizing on prior empirical evidence, some theoretical thinking in marketing and considerable body of pertinent knowledge in social psychology. By providing a comprehensive empirical analysis of brand loyalty, we hope to reconcile past differences in research and thinking, and to generate new hypotheses for additional research in consumer research.

**Keywords:** Brand equity, Brand loyalty, Consumer choice, brand awareness, perceived quality and proprietary brand assets.

#### Introduction

Despite extensive research on branding managers face considerable uncertainity about the role it plays in fast moving consumer goods. The decision the consumers make determines the item they select and eventually buy. According to Leighton (2012), the average supermarket has over 50,000 Stock Keeping Units (SKUs), while the average retail shopper buys around 50 items in 50 minutes. Therefore, consumers make a decision while facing around 800 items per minute. Because there are switching costs associated with changing manufacturer, for example, these need to be considered when examining relationships between

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brand loyalty and consumer choice. The marketing managers have to know exactly what to invest in time and money so as to correctly understand the role of each brand equity construct in the lives of their customers.

The relationship between Brand Equity and Consumer choice

Prior research of brand equity and consumer choice studies from researchers such as Mittal, and Sharma (1995) identified five constructs. These include performance, social image, value, trustworthiness, and attachment. Yoo, Donthu, and Lee (2000) integrated these five, and used three measures to test brand equity and consumer choice. The researchers measured brand loyalty, brand awareness, perceived quality and other

proprietary brand assets in consumer product study. Yoo et al., (2000) did acknowledge marketing strategy (marketing mix elements), or marketing efforts as precursors of brand equity, and operationalized the marketing mix as store distribution image, intensity, price and promotional spending. Pappu, Quester, and Cooksey (2005) questioned amalgamating brand awareness and brand association. Pappu et al., (2005) and Pappu & Cooksey, (2006) initially utilized and used two products, whereby both studies successfully tested the four dimensions for brand equity influence on consumer. These studies were dissimilar to Yoo, Donthu, and Lee (2000). Neither Pappu et al., studies (2005; 2006) tested the marketing mix, brand equity and consumer choice relationship. Their findings supported the hypothesised four dimension model of consumerbased brand equity across two product categories and six different brands. Brand associations, proprietary brand assets and brand awareness were found to be two distinct dimensions of brand equity. The principal contribution of their research was that they provided empirical evidence of the multidimensionality of consumer based brand equity, supporting Aaker's and Keller's conceptualisation of brand equity.

In a study by Ruchan and Huseyin (2007) on customer choice based brand equity in the hotel industry, the researchers explored interrelations of the four brand equity components: brand awareness, brand loyalty, perceived quality and brand image in hotel industry. The findings of their research paper supported the three-dimensional model of brand equity and consumer choice in the hotel industry, but brand awareness dimension was not found significant in the tested model for hotels. Ruchan *et al.*, (2007) acknowledged that further research should attempt to examine brand equity across many different product categories, as this will give the opportunity to make

comparisons between different industries and products.

Fiona and De Chernatony (2001) study on the influence of brand equity on consumer responses, investigated the effects of this construct on consumers' responses using data from two European countries. The results of their study indicated that brand equity dimensions interrelate. Brand awareness positively impacts perceived quality and brand associations. Brand loyalty is mainly influenced by brand association and finally that perceived quality, brand associations and brand loyalty are the main drivers of overall brand equity. Their findings also corroborate the positive impact of brand equity on consumers' responses. In addition, the general framework proposed in their study found to be empirically robust across the studied countries with only a few differences being observed.

The Steven, Celuch, and Goodwin, (2004) study on "The importance of brand equity to customer loyalty" involved a nation-wide sample of industrial customers of heavy equipment manufacturers. Their findings suggested that brand equity and trust are consistently the most important antecedents to both behavioural and attitudinal forms of customer loyalty. They also evidenced that the models underlying the formation of behavioural versus attitudinal forms of customer loyalty may vary across research settings. Their results suggested that industrial equipment marketers may consider moving beyond a focus on satisfaction in relationship marketing strategies toward integrated strategies that foster brand equity and trust in their customer base as well.

Atilgan, Aksoy & Akinci (2009) examined the practicality and application of a customer based brand equity model based on Aaker's well-known conceptual framework of brand equity. The study

employed structural equation modelling to investigate the causal relationships between the dimensions of brand equity measuring the consumers' perceptions of the dimensions of brand equity. Specifically, it measured the way in which consumers' perceptions of the dimensions of brand equity affected the overall brand equity evaluations. Data was collected from a sample of university students in Turkey. The study concluded that brand loyalty was the most influential dimension of brand equity. Weak support was found for the brand awareness and perceived quality dimensions. Subsequent to identifying that the brand loyalty was the most influential dimension of brand equity, there was, naturally, a need to find the factors involved in the brand awareness and perceived quality order to strengthen their influence on brand equity.

#### **Brand Loyalty and consumer choice**

Brand loyalty as defined by Gommans, Krishnan and Scheffold. (2001)as a deeply held commitment to re-buy the prefered product/services despite the situational influence and marketing effort. The brand loyal consumer will not only tend to repurchase but also refuse to switch even when better offer comes along. According to Oh and Fioritio (2002), there are significant differences between brand loyal and non-brand loyal consumers in the purchase criteria.

As cited in Paswan, Spear and Ganesh (2007) the loyal consumer will tend to repeat purchase a prefered brand .This had been supported by Ha, Janda, and Park (2008) who found that there is a strong correlation that exists between loyalty and the mean number of different stores visit per week. Moreover, the loyal consumers are likely to be less price sensitive, pass on the positive recommendation about the brand and willing to

spend more money to their loyal brand (Dowling and Uncles, 1997 as cited in Schoenbachler Gordon and Aurand., 2004). The positive word of mouth that brought by brand loyalty is the mechanism which enable corporation to save the marketing cost (Rundle-Thiele & Mackay, 2001). Besides that, according to Nia and Zaichkowsky (2000), the loyal consumers will refuse to switch to the counterfeit brand and stay with the original brand as they believed original brand able give them personal satisfaction.

The intention to purchase is a kind of decision making in which is studied in how a customer purchases a specific type of brand. The constructs like for example the consideration of purchasing a brand and the anticipation to purchase a brand aids to scope the intentions of purchasing (Porter, 1974). As cited by Porter (1974) he elaborated that the customers' intention to purchase a focused brand is not merely by his same brand attitude, but also by his attitudes leading to other brands in choice of set considered. Schoen bachler (2004) explained a type of loyal customer, whose purchase decision is insensitive to pricing and the show their loyalty by suggesting positive recommendations to firm and even investing money in the brand which show their extreme trust in the brand. Porter (1974) explained that customers buying behaviour also depend on the level of existing competition in the industry. According to Wang (2004), the people of China who can afford expensive imported branded items of clothing, are becoming receptive in large number to fashionable styles internationally and demand for imported brand products increasing due to variations in behaviour of the consumer as well as growing purchasing power. According to Rajagopal (2006) under these circumstances, customers must depend merely on extrinsic attributes of the product. Sovereignty of the consumer rely on saving decisions which want that the individual effectively finds income view of current and future consumptions (Redmond, 2000). To do so consumers should obey their practices in the past for the products in particular type (e.g. brand loyalty or habitual buying) in formation of the decision for the purchase of the product (Terrell, 2002). According to Sproles and Kendall (1986), a consumer's decision making style is "a mental orientation characterizing a consumer's approach to making choices"

The literature on loyalty measurement shows an evolutionary development that began with behavioural-based notions but which has now come to embrace attitudinal, cognitive and values approaches. Behavioural based approaches operationalise loyalty in four ways, first, through measures based on the actual consumption of the goods or services. This approach usually combines volume and frequency of purchase over prescribed time periods (Lin et al., 2000; Veloutosou et al., 2004). Ehrenberg (1988) observed that patterns that emerge from such measures assist marketing practitioners in identifying "frequent purchasers" and "heavy purchasers". Second, measures aimed at the proportion of consumption within a specified set of other goods and services located within a defined market or even within a nominated retail location (Driver, 1996; East et al., 1995). The concept of "brand loyalty" clearly falls within this class of measure. Third, measures based on the probability of repeat purchase. Fourth, measures that examine the point in time where customer switch to other brands (Hsiu-Yuan and Li-Wei, 2005). While looking through the above measures, researchers have used various choice criteria such as brand familiarity (Dick et al., 1996; Wood, 2004, Feltham, 1998), convenience and usage experience (Rowley, 2005; Lin et al., 2000), social cost, image and self concept (Abendoth, 2001; Auty, 2001), perceived value and satisfaction (Baltas, 1997; Ness et al., 2002; Wood,

2004) among others to measure the brand loyalty construct.

Griffin (1997) discussed loyalty and the purchase cycle by representing the repurchase loop. He described this process as the most crucial attitude for loyalty giving the reason that loyalty does not exist without repeat patronage. When consumers purchase a product that they are not loyal to, they will purchase a different brand of that product. The loyal consumer however tend to purchase the same brand that they feel a strong bond with and as long as this bond is not affected by switching factors (Dick and Basu, 1994; Bolton et al., 2000). However, Ehrenberg (1988) states that loyalty and switching factors do not affect the purchase decision instead it only depends on buyer characteristics. Johnson (1984), on the other hand, calls the decline of brand loyalty a myth, as neither Ehrenberg et al. (2004) nor Lal and Padmanabhan (1995) have found sufficient evidence to prove otherwise.

As cited by Keller (2008); Hardesty and Bearden (2009) the examination of customers' loyalty to retail brands choice is increasingly important, such that they believe research needs to be conducted to better understand retail brand customers' behavioral propensities and actions. As Pappu and Quester (2008) indicated, customers' loyalty to brand choice stems from their tendency to prefer purchasing from a brand that they perceive as being crucial. They further note that customers' loyalty toward brand choice may differ among disparate product categories. There clearly seems a contradiction among researchers regarding the impact of brand loyalty on purchase decisions.

## **Consumer Choice**

The study of Meyers (1995) aimed to provide an understanding of the consumer uncertainty and risk that affect consumer choice and purchase

intention. They focused on the psychological dimensions of risk to examine consumer uncertainty as it relates to consumer choice. This study showed that consumers largely associate the uncertainty and risk involved with making purchases. The study concluded that by understanding the uncertainty and risk these consumers feel regarding consumer choice and purchase intentions, these fears can be alleviated by companies hoping to engage this audience through advertisement, to reinforce belief and conviction to aid them in decision making.

Lawson (1997) demonstrated that consumer decision making requires three types of information which consists of appropriate evaluative criteria for the solution of the problem, existence of appropriate alternative solutions and performance level or attributes of each alternative on each evaluative criterion. Lawson stressed that a great variety of information of potential interest to consumers exist in the external environment.

Nyer *et al.*, (1999) stated that moods were transient to feelings that were generally unrelated to a specific event or object. Unlike emotions, moods tend to lack intensity and may operate without an individual's awareness. Moods both affect and get affected by the consumption process. They also influence consumers' decision processes and the purchase and consumption of various products.

White (2005) developed and refined the framework underpinning consumer satisfaction emotions and re-examine the emotions and behavioural choice link. The study suggested that satisfaction emotions were best conceptualized as a three-dimensional construct that included positive, negative and "bi-directional" emotions. The findings of the study indicated a positive statistically significant relationship between

emotions and consumer purchasing behaviour was established through when the underlying products establishes satisfaction, and as a consequence if a product is referred, or is experienced, consumers are ingrained to purchase from their satisfaction levels.

Norberg and Maehle (2011) study on antecedents and outcomes of consumer choice asserts that it is important for marketing managers to understand which factors influence consumers' purchase intentions and their willingness to pay a premium price. They stated that special attention should be paid to building consumers' trust in a brand label which is an important factor influencing consumers' attitude toward the label. It is also crucial to create positive expectations to the quality of the labelled product among consumers. However, it is important to avoid creating too high expectations. If the product quality does not meet high consumer expectations, it can lead to dissatisfaction and decreased repurchase rates.

Prieto and Caemmerer (2013) study on factors influencing car purchasing decisions results showed how employment can generate substitution in car purchasing behaviour. These findings underline the importance of economic and financial variables in explaining choice between car segments not only by car model, but also by the differentiation whether the car is new or used. However it should be noted from Prieto et al., (2012) that choice cannot generalized in other market, and thus there is need for specific research in consumer purchasing decisions in every market.

Hanzaee (2012) investigated the relationship between factors affecting brand loyalty and purchase intention in the cosmetic industry in Iran. The investigation of the antecedent elements that lead to brand loyalty and purchase intentions. The research results showed that there was a positive and significant relationship between factors of brand loyalty and cosmetics purchase intention.

Malik (2013) explored the effect of brand awareness and brand loyalty on purchase intention. The results of this study indicated that purchase intentions have a strong positive association with brand awareness and brand loyalty, and concluded that purchase intentions can be enhanced by brand awareness and brand Loyalty as a result of their strong positive association, thus managers all over the world should strive to promote the brand awareness along with brand loyalty as both of them contribute towards positive purchase intentions.

#### **Research Methodology**

The research methodology used in this study was cross-sectional survey design. The descriptive

explanatory research was ideal to describe the characteristics of the variables and at the same time investigate the cause effect relationship between variables (Malhotra & Birks 2003). The choice of cross-sectional allowed collection of quantitative data from a population in an economical way (Mugenda & Mugenda 2003; Saunders *et al.*, 2009). This design was archetypal because of its suitability in elaborating the characteristics of a particular individual or a group of individuals (Kothari, 2006).

#### **Empirical Model Formulation and Estimation**

Consumer choice (Y) is a function of the composite variable brand equity whose components are brand awareness (BA), brand loyalty (BL), perceived quality (PQ) and proprietary brand assets (PB). Hence:

Consumer choice Y is a latent or unobserved variable. However, it is made concrete when purchasing decisions are made. To this end Y is estimated using consumer purchase decision. To achieve the study objectives a variety of choice models such as linear probability model (LPM), probit and logit models maybe be used. Logit and

probit models yield similar and robust results and may be used interchangeably. However, the linear probability model is weak in that there is no guarantee that the probability will lie between zero and one (Gujarati, 2004). Therefore, the study used a simple binary logit model

Purchasing decision, Y can be categorized as follows:

$$Y = \begin{cases} 0\_if\_no\_purchase \\ 1\_if\_Purchase \end{cases}$$
 1.2

Assuming Y follows a logistic distribution, it follows that:

$$Y_{i} = \frac{e^{\beta_{0} + \beta_{1}BA + \beta_{2}BL + \beta_{3}PQ + \beta_{4}PB + e}}{1 + e^{\beta_{0} + \beta_{1}BA + \beta_{2}BL + \beta_{3}PQ + \beta_{4}PB + e}}$$
 1.3

Where:  $\beta_i$  represents a vector of parameter estimates for each independent variable defined in the latent regression model in equation 1.1 Equation 1.3, the logistic regression model, is non-linear in parameters.  $\beta_i$  Coefficients measure the

natural logarithm of predicted probabilities odds ratio rendering  $\beta_i$  coefficient difficult to interpret. To establish the marginal effects of independent variables on the purchasing decision, the following equation was estimated:

$$\frac{\partial P}{\partial X} = \beta_i P(1 - P) \qquad 1.4$$

Where:  $\beta_i$  is the corresponding coefficient and

P is the probability that one moves from no purchase category to purchase

#### Data Analysis.

The study objective was to establish the influence of brand equity on consumer choice of brand bottled water in the NCBD. This objective was empirically analysed using a mean measure of consumer choice frequencies across the set of brand equity variables.

Descriptive statistics was conducted to provide salient features and characteristic of each variable of interest. According to Mugenda and Mugenda (2003) descriptive statistics assist in evaluating participant's attitudes, value judgment and other distinctive patterns. It therefore, provides meaningful information for policy formulation. To this end, the mean, standard deviation and variance of each of the key variables were obtained and evaluated.

The following diagnostic tests were conducted to measure the predictive strength of the logistic regression models; Pseudo R square and log likelihood tests. The former were used to test the goodness of fit while the later was used to test whether the coefficients are jointly significant. Lastly, link test was used to test whether the model was correctly specified. Therefore in the presentation of results on the various objectives diagnostic tests are discussed before discussing the study findings. To address the research objectives binary logit models as provided in

model 1.3 and 1.4 were estimated. Marginal effect and coefficients significance were used to draw inferences relevant to the study. Both SPSS version 19 and STATA 11 software were used as appropriate.

Analysis of the response rate and descriptive statistics

A total of 400 questionnaires were distributed, 373, were correctly filled and returned, and in addition 13 managers and employees of supermarkets were interviewed. This represented a 96.5% response rate which was above the adequate 50% as recommended by Mendenhall et al., (2003). There were approximately more female respondents than male with a ratio of 53.1 percent female to 46.9 percent male. This is consistent with the fact that there are generally more women shoppers than men. Age distribution had a mean of 1.93 and standard deviation of 0.823 showing that on average the respondents were aged between 26 to 40 years. Therefore, majority of shoppers are relatively young an observation that is consistent with the average age group of shoppers within the Nairobi Central Business district (Euromonitor, 2012).

#### **Results of the Logistic Regression**

The table below presents the study findings based logistic regression. Firstly, relevant diagnostic tests

are discussed in order to show the reliability of the model. The variables used in the model were as follows; age of the respondents, gender, income, brand awareness, brand loyalty, proprietary brand assets, and perceived quality.

Goodness of fit	Test Statistic			
Log likelihood	-190.384			
LR test: Chi(df)	24.43	(df=7)		
Prob> chi2	0.001***			
Pseudo R square	0.06			
Dep Var.= Consumer choice	Logistic regression			Marginal effect $dy$
	Coefficients	Wald Stat	P Value	$\frac{\overline{dx}}{dx}$
Sex	-0.536	3.98	0.046**	-0.091
Age	-0.279	2.73	0.099	n/a
Income	0.178	4.73	0.03**	0.03
Brand Awareness	2.528	13.33	0.000***	0.42
Brand Loyalty	3.628	5.46	0.019**	0.61
Proprietary Brand Asset	1.861	5.6	0.018**	0.31
Perceived Quality	2.665	8.54	0.004***	0.44
Constant	0.0056	7.11	0.008***	n/a

<sup>\*\*</sup> significant at 5 percent

Table 1 Logistic regression results

The log-likelihood of -190.38 and Log-likelihood ratio test (LR test) statistic of 24.34 with a probability value of 0.001 was significant at 1 percent. This indicates that all the independent variables are jointly significant and influence the dependent variable. Scrutiny of the coefficients of the individual independent variables shows that all the coefficients were significant at 5 percent with exception of the coefficient of age.

Demographic variables were included as control variables in the model since attributes such as gender, age and income level influence consumer choice. Table 1 shows that of the three, the coefficient of age insignificant at five percent. The coefficient for gender was -0.536 with p-value of 0.046 meaning that it is significant at five percent. Its associated marginal effect was -0.091 meaning

that apart from being a significant predictor of consumer choice a change from female to male decreases the probability of purchasing branded bottled water by approximately 9 percent. This implies that female customers prefer branded bottled water than their male counterparts.

Income level was a significant predictor of consumer choice with a corresponding marginal effect of 0.03. Therefore, an improvement from one income group to another increase the probability of purchasing branded bottled water by 3 percent. The succeeding discussion is based on the influence of brand equity components on consumer choice.

Influence of brand Loyalty on consumer choice in Branded bottled water

<sup>\*\*\*</sup> significant at 1 percent

A hypothesis was formulated with the null assumption of no significant effect. The results in table 1 show that the coefficient of brand loyalty was 3.628 with the Wald statistic corresponding p value as 5.46 and 0.019 respectively: the null hypothesis was rejected. Thus, at five percent level of significance that brand loyalty has a significant contribution to prediction of consumer purchasing decision. The associated marginal effect is 0.61, which means that an increase in brand loyalty score by one unit increases the probability of purchasing by 61 percent. Using table 1 as a reference, 61% of consumers claim that they always buy a particular brand of bottled water, which is the highest statistic among the three other variables of brand equity, this finding is similar to Atilgan et al., (2009) who regards brand loyalty as the most crucial element in enhancing brand equity amongst consumers, followed by perceive quality 44%, brand awareness 42%, and proprietary brand assets with 31%.

Brand Loyalty demonstrated the strongest impact, indicating the essential role of building brand equity in the bottled water industry in Nairobi Kenya market. This result affirms other research findings, such as Steven *et al.*, (2004) and Atilgan et al., (2009), whose findings asserted that brand loyalty as the strongest element of brand equity on consumer choice. To add to that this model results also share similar findings with Salinas et al., (2007), Hanzaee (2012), Malik (2013) that showed positive significant relationship of brand loyalty on consumer choice.

#### **Discussion and Conclusion**

The study benefits brand research in several ways. First, brand equity's potential antecedents brand awareness, brand loyalty, perceived quality, and proprietary brand assets, demographic and economic factors such as age, gender, income can

be used to see how brand equity results in choice. More specifically, the impact of each dimension of this scale on consequent variables have been identified.

The theoretical understanding of brand loyalty influence on repeated purchase and product referrals by consumers of bottled water. It should be noted, however, that this aspect of brand equity had the highest rating. Subsequently, most of the three other aspects of brand equity built upon the consumer's perception of a particular brand, ultimately bringing forth loyalty when they experience satisfaction. The first major contribution pertains to understanding the intervening processes that underline repeated purchases as an aspect of brand loyalty. Although the literature generally suggests a direct impact of brand loyalty attitude on reciprocal repeated purchases, this study is among the first empirical attempts to decompose this effect in the bottled water industry in Kenya. It is observed that repeated purchases are as a consequence of value perceptions of a particular brand of bottled water and the product referrals due to inherent causality in the brand.

In this study we compared brand loyalty against other four constructs of brand equity, in terms of their strengths. Brand loyalty was found to be a positive and statistically significant factor of brand equity in influencing consumer choice, whose findings had the highest indicator. The growth of brand loyalty emerges as a result of the marketing transformation of awareness, knowledge, and perception of quality, purchase situation and satisfaction of the product. The predominant factors of these elements bring out the process of customer perceptions, attitude formation and level of satisfaction in a brand of bottled water. The outcome of this research has given precious assessment which can be used for designing disparate strategies to beguile consumers with

emphasizing on brand equity in fast moving consumer goods. Marketers should remember that there are some factors influence consumer's choice towards brand loyalty. Based on the results from this research finding, marketers should prioritize on the brand loyalty constructs as their strategy to attract potential customers because it does show significant direct and indirect relationships between the dimensions of brand equity.

The managerial implications of this research has given precious assessment which can be used for designing disparate strategies to beguile consumers with emphasizing on brand equity in fast moving consumer goods. Marketing Managers

should remember that there are some factors influence consumer's choice as a result of brand equity. Based on the results from this research finding, marketers should prioritize brand equity constructs and how they influence each other ultimately in building consumer choice as their strategy to attract and retain potential customers because focusing attention on one brand equity construct might not yield the results of retaining consumers. Furthermore regardless of which measure an investigator selects, a single unidimensional measure is probably insufficient for measuring such a complex multidimensional phenomenon as brand loyalty research has to be done from a multidimensional context.

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# DEVELOPMENT OF A SOFTWARE-BASED MANAGEMENT SUPPORT SYSTEM FOR GERMAN HOSPITALS

# Manuel Heurich

## **Abstract**

Objectives: The main purpose of this study is the transformation of existing theoretical knowledge about management support systems (MSS) into an innovative software application that can solve management problems more effective. By using the application, managers should be able to control their hospitals as well as find strategies more easily and thereby improve the performance of their organisations.

Methods: The study provides a short literature review of the existing theories and practical applications in the field of MSS as well as viable system models (VSM). Further, the study outlines an action research design considering the development of the MSS tool as well as the software application. Data of 2,000 hospitals with more than 300 different variables are collected to build up the required databases for the MSS-Tool. Therefore, different data sources have been used. On the one hand official statistics from the federal statistical office and on the other hand public available data such as public quality reports, patient satisfaction statistics, public available annual reports and data from the hospital report published by the health insurance AOK.

## Results and Conclusion

The developed software will present a new way of transforming existing management knowledge to managers and their teams. The opportunity of generating a strategy based on the data of the best performing hospitals in the market and the possibility for managers to individualize these strategies to their own institution is innovative. The implemented communication tool will give managers the ability to collaborate with their teams in an efficient way. The software application will be online at the end of 2015. Further research will be needed to validate the software application. Therefore, researcher can use the already drawn research design (action taking part) and the collected data. The objective is to test whether the developed MSS Tool can indeed improve the performance of hospitals significantly.

Key words: Management support systems, software, hospital, Germany

# Introduction

The main purpose of this research is the transformation of existing theoretical knowledge about management support systems (MSS) into an innovative software application that can solve management problems more effective. According

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to Newman et al. transformation is one of the categories for social science research (Newman et al., 2003). This category can be used for research purposes of measuring changes as well as research that have social, institutional or organizational impacts (Newman et al., 2003). According to the American philosopher Charles Sanders Peirce this paper takes an inductive approach in transforming

and applying already researched theory to the practical needs (Bryman and Bell, 2011; Peirce *et al.*, 1931-1934).

This paper puts its focus on one main question of the wide field of management theory:

How can the decision making process of hospital managers in the health care sector can be improved by a MSS as a software application?

This study focuses on two aspects in answering the above question. First, a system of performance control for hospital managers will be developed which can be used to analyse an institution. Second, based on this system a software application will be developed that gives managers the opportunity to analyse their institutions as well as finding a fitting strategy. Furthermore a collaboration tool will be designed that can improve the effectiveness of team working processes.

# Literature review

The application of management principles and concepts to profit and non-profit organisations does play an important role in this study. This short narrative literature review puts its focus therefore on MSS in hospitals respectively service oriented organisations. Furthermore, the study examines existing literature in the field of VSM in order to identify theories coming up against the increasingly complex environment. At last, the effectiveness of communication in organizations is reviewed.

There is a lot of literature in the field of MSS but not much research that put hospitals in the focus of the MSS.<sup>1</sup> Maglio and Spohrer define a service system as "a configuration of people, technologies,

<sup>1</sup> Searching the EBSCO and Google scholar databases for key word "management support systems" leads to 60 (EBSCO) and 3,990 (Google scholar) results whereas by adding the word "hospital" or "hospitals" it remains just one (EBSCO) and 667 (Google scholar) results.

organization and shared information, able to create value to providers, users and other interested entities, through service" (Maglio and Spohrer, 2008, 2008, pp. 18-20). Forgionne and Kohli did a lot of research in this field. They developed a hospital management support system (HMSS) and investigates the decision value of MSS for strategic hospital management (Forgionne and Kohli, 1995, pp. 355-373, Forgionne and Kohli, 1996, 1996, pp. 209-229). The HMSS is well designed but due to the age of the tool, which was developed in 1996, it has to be improved by new features and new software architecture. Forgionne and Kohli did an experiment to test if MSS can improve both the outcomes from, and the process of, strategic hospital decision making (Forgionne and Kohli, 1995, p. 358). The study was able to show substantial improvements in return on revenue in hospitals that use the MSS (Forgionne and Kohli, 1995, p. 369). It was also a significant improvement in the process of decision making evidenced (Forgionne and Kohli, 1995, p. 371). Applegate et al. designed a MSS for hospital strategic planning as well and names in contrast to Forgionne and Kohli many external data that can be integrated (Applegate et al., 1986, p. 86).

Yolles gives an application oriented overview of management systems (Yolles, 1999). In many case studies, Yolles applies the theoretical knowledge to verify and improve it. Yolles gives an extensive overview of different methodological and individual cognitive purposes for inquiry (Yolles, 1999, p. 499). By this he offers a framework of mixing methods in inquiring management systems (Yolles, 1999, pp. 499–503).

Unfortunately there are no current studies in the field of MSS for hospitals it has already been shown that MSS can be very useful for hospital executives. Nevertheless, it is necessary to build up new MSS with modern software architecture as well as new scientific findings in management theory.

The creation of a new and up-to-date MSS for hospital managers does make it essential to consider organisational as well as environmental influences on the strategy. To describe and diagnose the complexity of the management of an organisation the viable system model can be used. Firstly introduced by Stafford Beer (Beer, 1962; (Beer, 1994). The basis for Beers viable system models are the principles of cybernetic science introduced by Norbert Wiener an American mathematician and philosopher (Beer, 1962, p. 21; Wiener, 1961). One important notification of Beer, which is mentioned not quite often, is that the definition of every system is arbitrary. This means that every system belongs to a superordinate system and this system in turn goes with another superordinate system and so forth (Beer, 1962, p. 24). The Main issue of the model is simply illustrated by Walker (Walker, 1995): " The VSM looks at an organisation interacting with its environment."<sup>2</sup> Golinelli and Gatti give a definition of a viable system as follows: "It is a system that survives, remains united and entire; it is omeostatically equilibrated internally and externally; lt contains mechanisms and opportunities to grow, learn, develop and adapt becoming more efficient in a proper context" (Golinelli and Spohrer, 2010, p. 38).

The VSM was enhanced by Espejo and Harnden (Espejo and Harnden, 1989) as well as Christopher (Christopher, 2007). Golnam et al. developed a modelling framework for the analysis of viability in service systems like hospitals (Golnam et al., 2011, 2011, pp. 31-44). They developed the so called SEAM (Systemic Enterprise Architecture Method) in order to understand how a service system maintains its identity as well as remains viable in its environment (Golnam et al., 2011, p. 1). The SEAM combines theoretical insights of the General **Systems** Theory (GST) from Bertalanffy (Bertalanffy, 1968) as well as the variable system model developed by Beer (Beer, 1984, pp. 7–25).

Of course, there are also critical tones within VSM or economic modelling in general. Forrester for example expresses criticism to economic model building because in his opinion most economic models has shortcomings in reflecting adequately the structure of the regenerative loops of the economic system (Forrester, 2003, p. 332). Since the emphasis of this paper is on a more micro level the criticism of Forrester, which is on a more macro level, does not concern the development of our MSS for hospitals.

Beside the principles of MSS and VSM, the paper puts an emphasis on the usability and communication components. General studies in the field of MSS - unfortunately with no further specification to hospitals - are summarized by Eom and Kim, who analysed more than 30 years of continued efforts of researchers (Eom and Kim, 2006, pp. 1264–1278). They did a survey on decision support system (DSS) applications with the conclusion that the complexity of DSS development increases with a shifting from single-user to a multi-user focus (Eom and Kim, 2006, p. 1274). This is important for the software architecture of the communication feature.

Furthermore, transduction theory has to be considered when developing the communication tool of the MSS software application. This means that: "Wherever information enters a communication channel, what goes into the channel has to be entered into the channel language or form that can be understood by the receiver" (Christopher, 2007, p. 25)(Christopher, 2007, p. 24).

This makes clear that the way and process of communication and collaboration is an important point because in almost every organisation multiuser focus is relevant.

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<sup>&</sup>lt;sup>2</sup> This paper will come to the explicit components of the model in the software development part.

#### Methods

Considering the purpose of this study, an action research design as well as a case study design may possible to use. Both designs are very popular in business research (Bryman and Bell, 2011; Masters, 1995). Table one shows according to Yin, when it is possible to use action or case study research designs (Yin, 2009).

Focuses

Table 1 Relevant situation for different research designs

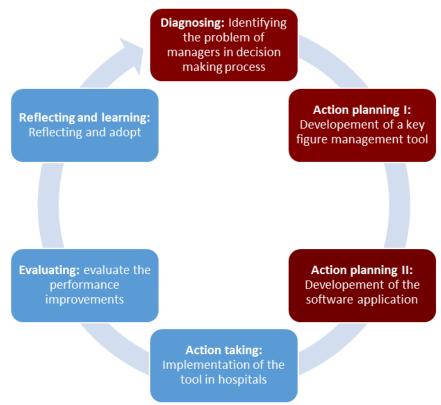
Research Design	Form of Research Question	Requires Control of Behavioural Events?	Contemporary Events?
Case Study design	how, why?	no	yes
Action Research	how, why?	yes	yes/no

Source: Own illustration according to Yin 2009, 8

Nevertheless there are similarities between action and case study research (Blichfeldt and Andersen, 2006) the action research approach is more process oriented (McKay and Marshall, 2001) and is also increasingly being used in healthcare settings (Meyer, 2000; Heurich, 2014). That is why an action research design is used for this study. The founder of action research design Kurt Lewin, an American psychologist (Masters, 1995), defines action research as "...a comparative research on the conditions and effects of various forms of social action, and research leading to social action" (Lewin, 1946). Important for this paper is the application of the "spiral of steps" which is a circle process of planning, action and fact-finding (Lewin, 1946). Figure one shows this spiral of steps adopted for the issue of this research. The main body of this study deals with the first three parts, which are shown marked red in figure one. A

Diagnosing part carves out why an intelligent MMS needed both in the microeconomic (organisational) as well as the macroeconomic (social system) point of view. The literature review as a segment of the diagnosing part expresses the tools that already exist in the field of MSS and VSS. The Action Planning Part I contains the development of the MSS that can be used to improve the performance of hospitals. The Action Planning Part II describes the development of the web-based software tool and how this tool can improve teamwork. Considering the limits of this study the action taking, evaluating and reflecting processes of the action research spiral will be drawn but not conducted. Due to this further research will be needed to proof the developed tool. This further research can follow up at the point this paper ends by using the outlined research architecture.

Figure 1 Spiral of steps; action research cycle



Source: Own illustration according to Hart, Bond 2000, 90 (Hart and Bond, 2000)

# Diagnosing

The literature review has shown that hospital managers are confronted with both a very complex environment and not minor complex organisations to manage. Independent of being a non-profit or for profit institution the challenge for all managers is to develop and pursue a strategy to ensure their future existence and sustainable success in the market.

The challenge for the decision makers is handle the complexity of their institution. Reducing the amount number of information and data to wisely chosen key figures by which the organisation can be controlled and a fitting strategy can be found is the first step to success. At the same time, the complexity of the constantly changing environment including the government regulation and the competitors has to be considered. Managers are faced to the task of applying the right management tools to ensure the appropriate

strategy for their organisations. There are several operative and strategic controlling instruments but very less that combine both elements in one tool. This is why German hospitals need an intelligent MSS, which combines operative and strategic management requirements in one tool.

As opposed to open markets, the government regulates the hospital sector. This implies some complicating factors such as fixed prices and quantity restrictions that needed to be kept in mind when developing the MSS.

Action Planning I: Developing the Management Support System

The Action planning part in this study puts its focus on the development of the MSS. The idea is to create a tool, which enables managers to benchmark their own clinic against others in order to learn from the best. Learning from the best does mean to gain insight in all areas of a hospital

in order to adopt the best solution in the market for each area.

The tool is to be constructed as a system of performance control, which gives managers the possibility by using intelligent key figures to improve the performance of their hospitals. In contrast to most MSS, which use a resource based approach as shown in the literature review, the MSS developed in this paper applies a resource as well as market based view.

By integrating further features such as a strategy tool in the MSS the request of Forgionne and Kohli for further research and features in the field of HMSS is considered (Forgionne and Kohli, 1996, p. 226). The strategy tool suggest managers the possibility to adopt new strategies for their clinics by learning from the best performer.

Especially in regulated markets such as the German hospital market, best practice methods

are very useful. This is because innovations do not securely lead to a better performance as it is in liberalised markets (Heurich, 2015, p. 4) and the consequences of the Schumpeterian theory of creative destruction often doesn't take place (Schumpeter, 1942). Therefore, it is an adequate strategy to follow the best performers in the branch.

The prerequisite for benchmarking is to get the required data of the peer group hospitals. Therefore first of all the required data for the key figures has to be defined. Table 2 describes all key figures, the key figure area, and the evaluation.

The return on investment (ROI) is used as *financial key figure* to measure and control the financial performance. ROI is the key performance indicator in the DuPont system of financial control and very well suited for financial controlling (Almazari, 2012, p. 86).

Table 2 System of performance control

Key figure	Key figure	Evaluation	
area	-1 0		
Financial ROI		Higher	is
Value	Shareholder Value	Higher	is
value	Enterprise value	Higher	is
	Food costs per case, per days covered, per CMP	Lower	is
Procurement	Fixed costs (excl. Personal) per case, per days covered, per CMP	Lower	is
	Material cost for medical needs per case, per days covered, per CMP	Lower	is
	Case and CMP per FTE (full time employee)	Higher	is
Service	Case and CMP per FTE (full time employee) medical service	Higher	is
(output	(output Case and CMP per FTE (full time employee) nursing service		is
related)	Case and CMP per FTE (full time employee) medical-technical service	Higher	is
	Case and CMP per FTE (full time employee) non-medical-service	Higher	is
	Personal costs per case, per CMP	Lower	is
Service (cost	Personal costs (medical service) per case, per CMP	Lower	is
related)	Personal costs medical-technical service) per case, per CMP	Lower	is
	Personal costs (nursing service) per case, per CMP	Lower	is
	Personal costs non-medical service) per case, per CMP	Lower	is
Processes and logistics	Bed occupancy rate	Higher	is
	Occupied beds per FTE,	Higher	is
	FTE (medical service), FTE (nursing service), FTE (medical-technical	better	
	service) Length of stay per case, per CMP	Lower	is
	Outsourcing cost per CMP	Lower	is
	Turnover ratio of current assets	Higher	is

	Modified Days-Sales-Outstanding	Lower	is
Risk	Equity ratio	Higher	is
	Equity ratio (without "Sonderposten")	Higher	is
	Cash ratio	Higher	is
	3. Degree liquidity	Higher	is
	Probability to default	Lower	is
Strategy	Revenue growth	Higher	is
	EBITDA margin growth	Higher	is
	Ratio of outpatient operations	Lower	is
	Specialisation Gini-coefficient	Higher	is
	Specialisation TOP 5 MDC	Higher	is
	Bundling MDC-groups	Higher	is
	DRG market share	Higher	is
	Market share after Herfindahl-Hirschman-Index	Higher	is
Innovations	Investment activity	Higher	is
	Number of new methods (NUB § 6 Abs. 2 KHEntG)	Higher	is
	Number of special services (§ 6 Abs. 2a KHEntG)	Higher	is
	Special equipment	Higher	is
Quality	Quality data QSR marks 1-3	Higher	is
	Patient satisfaction	Higher	is
	Quality data BQS	Lower	is

Source: own illustration

Because of its multitude composition almost every financial perspective is converted. For the MSS tool, the system of financial control is slightly modified.

EBITDA is used instead of net income as numerator because in the dual financed health care system in Germany investments in fixed assets are financed by the government. Consequently, managers are just able to influence the EBITDA directly but not net income.

Shareholder Value is used as a *value key figure*. The shareholder value is a pivotal key figure for investors as well as managers in the evaluation of a company. Even for managers do it play a central role if the valuation of their hospitals grow or shrink. That is why the shareholder value approach become more popular in controlling and MSS (Lingau, 2009). The discounted cash flow model is used for the calculation of the shareholder value as shown in appendix 1.

Procurement key figures are first a measure for cost efficiency because of its input oriented focus. For the MSS food costs, material costs, cost for

medical needs as well as fix costs are essential to analyse. In order to compare these cost variables against each other they will be put in relation to outpatient cases, case mix, and day covered.

Output related service key figures such as case-mix per full time employee (FTE) put the creation of value, the output, in the focus. Cost related service key figures on the other hand mainly regard on the input and costs. Process and logistic key figures are collected to analyse the supply chain. Bed occupancy rate, occupied beds per FTE or turnover ratio of current assets shall provide an overview of the organisational and operational efficiency.

The MSS do further consider potential risks by integrating *risk key figures* such as equity quotes, cash ratio, or 3<sup>rd</sup> degree liquidity. *Strategy key figures* are designed to help managers to develop and pursue effective strategies. Growth, profitability and market share are the most important strategic criteria for being sustainable successful in the market. Therefore, data of revenue growth, EBITDA margin development,

market share and the level of specialisation are collected.

The importance of innovations for companies was impressively characterized by Joseph Schumpeter an Austrian economist (Heurich, 2015, p. 2).3 Schumpeter defines innovation simply as the existence of a new production function which leads to the creation of new products as well as the development of new markets (Schumpeter, 1939). The innovation key figures measure if a hospital compared to the benchmark group is innovative or not. At last, quality key figures are used for performance evaluation. The MSS uses patient satisfaction as quality key figure. Patient satisfaction can be seen as most important quality indicator because of the consumer (patient) orientation. Although there is information asymmetry between physicians and patients in the field of medical diagnosis and interventions, patients are definitely able to evaluate their confidence, nursing quality, service quality, and so forth. In addition to patient satisfaction, there is the possibility to evaluate the routine data for quality assurance of the health insurance AOK as well as the BQS data of the institute for quality and patient security.

Beside the benchmarking possibility, the MSS tool will also suggest a strategy tool. This means that hospital managers get the opportunity to find an adequate strategy for their hospital based on data of the best performers with similar size, patients, and medical departments.

Action Planning II: Development of the software application

The MSS software application is developed based on the defined key figures and tools mentioned in the action planning part I. The development was done in cooperation with the software company BinDoc. <sup>4</sup> The following provides a very short overview of the software application. A huge database with an amount number of information constitutes the basis for the software application. To build up this database it was necessary to use the extract, transform, and load (ETL) process. The ETL process is applied to integrate data from different sources into a single form of data (Inmon and Linstedt, 2014, p. 104; Heurich, 2015, p. 12). The user interface is web based which means that every user gets access from anywhere weather with mobile devices or desktop computer. Intelligent algorithms evaluate the relevant information and illustrate it in the web application for the user. Every user is able to compile his key figures and starting page individually. This provides the user with a maximum of intuitive working. The software application will be available by the end of 2015. Details of the software architecture and the development process will be published online.<sup>5</sup> Beside intelligent algorithms and big databases, the collaboration among diverse actors is considered in the development process. Managers in every branch are faced with the challenge to organize, motivate, and develop teams, in which people have multiple skills, broad and less experience as well as different working behaviours. They are not only confronted with the optimization of internal know how but also with the challenge to acquire external management knowledge. For reducing internal organisational complexity, the MSS includes a team collaboration tool. This enables team members to communicate with each other in real time and gives managers to

External communication to other organisation and managers is important as well even not as

opportunity to award tasks to other users (employers). In Addition, a chat function will be

implemented to make teamwork even over

distance as easy as possible.

<sup>&</sup>lt;sup>3</sup> Heurich, M.: Innovations and its impact on the performance of acute care hospitals in Germany – will be published in Economics and Sociology

<sup>&</sup>lt;sup>4</sup> Find more information about the company at www.bindoc.de

<sup>&</sup>lt;sup>5</sup> www.bindoc.de

important as internal. The software application will suggest the possibility to be connected to other users in real time. Hannan and Freeman mentioned in their popular disquisition on the population ecology of organizations, that there is a "collective rationality problem" (Hannan and Freeman, 1977, p. 932). This means that strategies, which are rational for a single decision maker, need not necessarily be rational for all decision makers. This problem can be solved by hospitals using the MSS and getting the best-standardized strategy for their company by the developed strategy tool in the software application. By using individual data of the hospitals, the best fitting solution of the peer group can be found and suggested. By building huge data bases with data of more than 2,000 hospitals with more than 300 different variables the MSS-Tool contains an amount of management know how. This represents a new communication tool of acquiring management knowledge.

## Action taking and evaluating

The empirical part will take place in the action taking and evaluating part. The objective is to test whether the developed MSS Tool can indeed improve the performance of hospitals significantly in order to create internal and external validation. This empirical part will shortly be outlined as follows but does not take place in this paper.

1.) First, a random sample out of the directory of German Hospitals has to be collected. This sample has to be divided in an experimental and a control group.

- 2.) Afterwards, both groups have to be asked if they are willing to participate the study. Hospitals in the experimental group has to implement and apply the MSS Tool for at least two years, whereas hospitals in the control group does not get any new management features. Every hospital of the experimental group will get an introduction and will be supervised for these two years. This period of at least two years is necessary to give the hospitals the opportunity to improve their performance.
- 4) For both the experimental and the control group the key figures of table 2 has to be evaluated before conducting the study.
- 5.) After the two-year application period of the MSS Tool the key figures of table 2 will be evaluated again for the experimental and the control group. Thereafter it can be stated if there are significant differences in the performance trends of the experimental and the control group. After evaluating the results there is one more step in the spiral of action research. This part, called reflecting and learning, aims to sum up the results in order to give an additional scientific input.

# **Data**

Different data sources have been used to build up the MSS software application. Figure 2 gives an overview over the different data sources. The application uses the "BinDoc Analytics" database as well as the individual data of the hospitals (if given). The data collection took place both manually as well as automated depending on the sources.

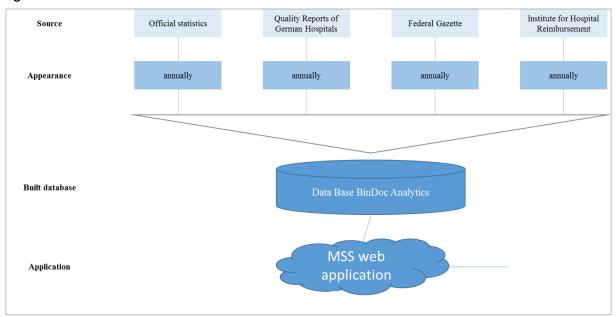


Figure 2 Databases

Source: Own illustration

## Conclusion

The main purpose of this research was the transformation of existing theoretical knowledge about MSS into an innovative software application that can solve management problems more effective.

Therefore, an action research design was outlined. In a first step, the needs of a MSS were evaluated to develop an effective tool on this basis that can improve the management decision-making process. 64 key figures were defined that cover all areas of a hospital relevant management tasks. Subsequently huge databases containing many different variables of hospitals had to be built in order to generate these key figures.

Afterwards the software application was programmed whose algorithms represents the heart of the MSS. Using intelligent procedures the software gives hospital managers the opportunity to benchmark their hospital in every key figure area against other hospitals. This enables the user to find best market solutions. Furthermore, users can upload their hospital data to let the software

find yesterday's best working strategies for them based on peer group data.

Beside the benchmarking and strategy tool, the software application contains a communication and collaboration feature. This feature gives managers the opportunity to collaborate with their teams by defining strategies and using the cybernetic cycle tool to control them.

By being completely web based, the software fulfils all requirements of portability. This means that users are not limited to one workstation and can effort from anywhere if they have internet access. The software will be introduced at the end of 2015.<sup>6</sup>

Further research will be necessary to conduct the empirical confirmation for the validity. This action taking part of the study is already drawn and can be done with the data collected in this study. The objective will be to assess whether the developed MSS Tool can indeed improve the performance of hospitals significantly.

<sup>&</sup>lt;sup>6</sup> The software will be available at www.bindoc.de

Shareholder Value	Value ./. value of debts
Enterprise value	$\sum_{t=1}^{n} \frac{FCF_1}{1 + WACC_1} + \dots + \frac{FCF_n}{1 + WACC_n} + \frac{FCF_{n+1}}{WACC - w}$
	$\cdot \frac{1}{1 + WACC^{n+1}}$

# **Free Cash-Flow**

Net operating profit (EBIT)

- Tax
- = EBI
- +/- Amortization and depreciation
- +/- Change in provisions
- +/- Liquidity
- +/- Investments/ Disinvestments
- = Free Cash Flow

$$\begin{array}{ll} \textbf{Weighted average cost} & r_{EK} \cdot \frac{EK}{GK} + (1-s) \cdot \sum_{i}^{n} r_{FKi} \cdot \frac{FKi}{GK} \;\; ; \;\; r_{EK} = 8\%; \; r_{FK} \;\; \text{market} \\ \textbf{of capital (WACC)} & \textbf{based} \\ \\ \textbf{Value Added} & \sum_{t=1}^{\infty} \frac{FCF_t}{1 + WACC_t} > 0 \\ \end{array}$$

Source: Own illustration according to Gladen 2014

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