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Preface of Editor

The research papers published in this reader were presented to an audience of academicians and practitioners at several international business research conferences.

All of the submitted articles and presentations abstracts were subject to a review by the Editorial Board of the conference, comprised of the following persons: Prof. Dr. Klaus Kellner (University of Applied Science Augsburg, Germany), Prof. em. Dr. Johannes Lachhammer (Augsburg University, Germany) and Prof. Guenther Kress, PhD, California State University. The Editorial Board also reviewed and approved the submitted full papers for publication in this reader.

This reader intends to sustainably stimulate the discussion concerning recent developments in Business Management Research among scholars and practitioners. Each and every feedback, also and particularly from students, is most welcome.

Prof. Dr. Josef Neuert
Chairman, Editorial Board

Fulda, December 2013

Prof. Dr. Josef Neuert
Christopher A. Hoeckel

**MEASURING EFFICIENCY IN MANAGEMENT DECISION MAKING -
THEORETICAL ANALYSIS AND STATE OF RESEARCH**

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Abstract

In the past many authors (cf. Gzuk, 1975; Hauschildt et al. 1983; Simon, 1997; Witte, 1988) have dealt with the issue of efficiency in management decision making and therefore various concepts were proposed on how to measure efficiency in management decision making. But very few, like Neuert (1984), have covered socio-economic efficiency measures within the decision making process, meaning the combination of economic efficiency measures like benefits, costs, time, etc. in decision making with behavioral efficiency measures of managers (Hauschildt et al., 1983). To give a clearer picture on the current status on how to measure efficiency in management decision making, this paper aims to provide an overview of different approaches and outlines the operationalization of a socio-economic efficiency measurement in decision making processes.

The Notion of Decision Making Efficiency

Organizations and respectively their members are interested in satisfying the purposes and aims of the organization so that at least in an indirect manner their own needs are satisfied. In the case of decision making within the organization, Gzuk (1975) believes the purpose or aim is to reach high quality within the decision making process. For Gzuk (1975), quality in this sense, can be substantiated as an activity to reach a purpose or aim. He refers to activity, in this context, also as efficiency. Gzuk (1975) sees the main purpose in managerial decision making in its relevant economic efficiency. Barnard (1938/1968) describes a personal or organizational action as effective, if a specific desired end is attained or a certain aim is reached. This action can also be considered as efficient if it satisfies motives of that aim. In the case that a certain aim is not reached but the motives are still satisfied, the action may not be effective but still efficient and the other way around. For Barnard, efficiency most likely relates to the satisfaction of motives of individuals in an organization and effectiveness relates to the achievement of certain aims of the organization. Hauschildt et al. (1983) see the main causes of efficiency of decision making processes by this complexity, mainly displayed by the type of decision (routine decision, decision of mid complexity or innovative decision), the amount of alternatives, and how much information is requested.

For Gzuk (1988), efficiency in general shows, how well a dedicated target is reached with a minimum of resources (output versus input). Gzuk understands, in this sense, the output as tangible or intangible results, and the input as the deployment of mental or tangible resources. For him efficient decisions are characterized by fulfilling the target with a comparatively low amount of resources (input). Simon (1997) describes efficiency more generally as the ratio between input and output. For commercial organizations, which are generally guided by profits, the criterion of efficiency is the yield of the greatest net income. The simplicity is related to the fact that money provides a common understanding for the measurement of efficiency in terms of output and income. But this concept needs to be expanded for specific activities in commercial organizations (e.g. personell department) or for non-commercial organizations where factors are involved which cannot be directly measured in monetary terms. For Simon (1997), to make an efficient decision, it is necessary to have empirical knowledge of the expected results that are associated with different alternative and possibilities. Neuert (1987) supports this view. He believes that efficiency can be characterized as an expression of a performance rate (output-input relation) and “quality”. He explicitly differentiates the term effectiveness from efficiency. For him, effectiveness characterizes whether a measure is in general suitable to achieve a certain target. In this case efficiency can be seen as the “quality level” of the results within the decision making process. In the context of decisions, Gzuk (1975) sees efficiency as the degree of which a purpose is reached containing two additional conditions: first, the purpose is reached with a minimum use of resources (economic input) and the result of the decision ensures a problem solution which lasts for a longer period of time. It seems not to be enough to measure the efficiency of a decision by itself rather than the outcome of a mental or tangible activity (cf. Bronner, 1973, Gzuk, 1975).

Efficiency within the organization can also be reviewed by different approaches. Within the target approach, organizations have explicit targets and efficiency can be defined by the degree of target achievement. The systems approach considers, besides the targets, also the structures and processes of the system-environment relationship. Efficiency in this case evolves from a “concrete”, uni-dimensional to an “abstract” and multidimensional construct. The organizational member approach considers the interests of the external stakeholders. An organization in this sense is efficient when the expectances of these members satisfied or fulfilled. Closely related to the organizational member’s approach is the interest approach. The interest approach assumes that evaluating the same object will lead to different efficiency evaluations due to different evaluating persons and their individual value and preference structure as well as to their different interests. The management audit approach is a more application orientated approach. Within the management audit approach the organizational efficiency is determined by evaluating the organization through analyzing certain “parts” of it in periodical intervals with relevant questions and by variance analysis (budget-actual) of the key indicators (Grabatin).

Dimensions and Approaches of Decision Making Efficiency and Efficiency Measurement

Decision making in business management can be characterized by different dimensions of decision efficiency. Neuert (1987) describes as one dimension the material efficiency, where

the measurement is a “realistic” input and output comparison in “commercial” activities which can be measured by objective criteria like earnings, profitability, growth and financial independence. Bronner (1973) refers to this part of efficiency as the economic efficiency. As it seems undisputed that the individual behavior also has a major impact on the decision making outcomes, the individual efficiency can serve as a further dimension of the decision making efficiency (Neuert, 1987). For Neuert (1987) in contrast to the material efficiency, the individual efficiency shows rather subjective results of the decision making processes. As “subjective results” he understands expected team outcomes, identification with the team work, self-reflection of the group behavior and the individual role within the group. In sum, he characterizes the individual efficiency as the subjective evaluation of the decision makers concerning the results of their decision making process as well as the self-reflection on their behavior during the decision making process. Bronner (1973) supports this view. For him it is also not possible to measure the individual efficiency on an objective base. He advocates measuring it via the personal activity of the decision maker within a decision making group and the satisfaction of other group members with his activity, in addition to the estimation of the overall achievement of the decision making group. For Bronner (1973), within the decision making process, time or time pressure is usually an influencing factor. He believes, there is also a dimension of “temporal” efficiency. “Temporal” efficiency again is an objective criterion because it can be measured by time. For Bronner time, in this sense, can be a direct measurement (e.g. when trying to reduce lead time in a process) or an indirect measurement (e.g. measuring not quantifiable deployment of persons or material in rather complex mental processes).

Grabatin (1981), reviewing efficiency from an organizational perspective, splits the total efficiency into different efficiency dimensions. For him, the dimensions are the “general” economic efficiency, the efficiency of the internal system, which includes indicators to evaluate organizational processes and the necessary constraints for the realization of the organizational efficiency. Typical criteria for the general economic efficiency (for Grabatin) are turnover, profit, market share, etc. For the necessary constraints he picks criteria like flexibility, growth, communication, etc. Grabatin splits the internal system efficiency dimension again into various dimensions, like the efficiency of the organizational structure, the efficiency of the task fulfillment and socioeconomic efficiency factors. For the socioeconomic efficiency, Grabatin introduces efficiency criteria like satisfaction of individuals, motivation, etc.

According to Nutt (2008), decision makers in real life business report that rapid actions are a key factor for them. In this case he sees the duration of the decision making process as a relevant indicator for measuring efficiency. On the other hand, efficiency also depends on the “quality” of the decision and this also needs to be taken into account. In this sense the duration is measured by the elapsed time from the point of recognition until the time when the decision is adopted or abandoned. To Nutt objective indicators to value the quality of the decision are preferred. But as they are mostly difficult to collect and they need to be converted into common metrics and those conversions again can be argumentative and hard to describe, he advocates for measures by informants who subjectively estimate the values. Therefore the

quality of the decision is rated by an anchored rating scale using five anchors. A rating of 5 (outstanding) is to be given to a decisive contribution which provides an exceptional quality. A rating of 1 (poor) is to be given to a decision which had no impact or merit. The rating of 4 is termed good, the rating of 3 is adequate and the rating 2 is disappointing. To avoid the fact that decision makers can make self-serving estimates on rating the quality of the decision, Nutt advocates that only two secondary informants value the quality of the decision. These two informants value the quality of the decision independently along the rating scale and without discussion. To enhance the precision of rating the quality and move the subjective estimates to a rather true value, Nutt introduces the estimate-discuss-estimate (EDE) procedure. He therefore computes the initial results and then has them discussed by the informants. When the individual results are far off, the informants need to explain this with compulsory arguments, which are then weighted. Taking the average out of the second rating with weighted arguments seems, for Nutt (2008), to raise the rating toward a true value.

To define the concept of efficiency by Gzuk (1975) it is necessary to have a purpose or aim, a realized output or result and an input or the use of resources. For Gzuk (1975), to achieve efficiency in the decision making process there are two conditions which need to be fulfilled: first, a decision must realize the most efficient ratio between output and input and second, a decision must bring results which ensure that the aimed objectives will be achieved. To operationalize the measurement of efficiency in the decision making process, Gzuk (1975) advocates establishing a multi-dimensional indicator model. This multi-dimensional indicator model contains four efficiency dimensions: The target-output relation, the input-output relation, the target-input relation and the provision for the realization of the decision. Within those efficiency dimensions indicators need to be established to enable the operationalization of the model which then allows the measurement of the “total” efficiency of a decision (Neuert, 1987). To achieve an acceptable certainty on the measurement of efficiency, Gzuk (1988) advocates that for each dimension there should be more than one indicator.

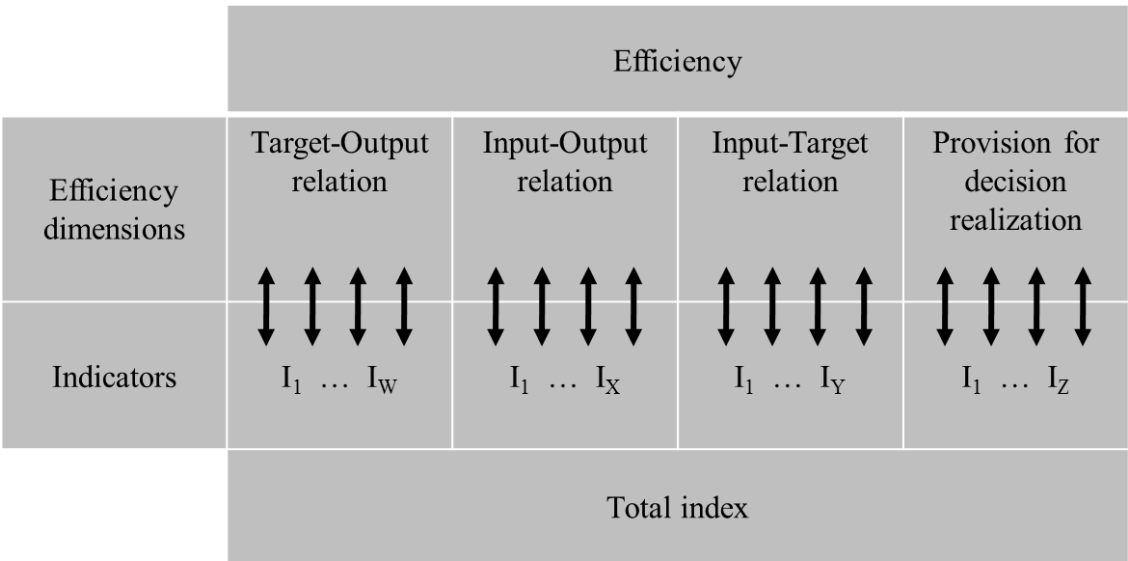


Figure 1: Multi-dimensional indicator model for the efficiency measurement

By definition the decision making process can be understood as a target orientated process (target-output relationship) where from a current/actual state we aim to reach a future/target state. In this sense the decision making with its various sub processes can be seen as a formal instrument for solving problems by taking choices when selecting between alternatives (Gzuk, 1975). The comparison between those alternatives can be described as formal efficiency. The level of the formal efficiency can be determined by comparing the aimed target or the desired situation with the current situation. In this sense a higher coincidence between the targeted and the current state/situation indicates a higher efficiency and in turn a lower coincidence between the targeted and the current situation indicates a lower efficiency.

To measure the total efficiency Neuert (1987) has modified the multi-dimensional model of Gzuk. In Neuert’s multi-dimensional model there are three relevant dimensions, the formal efficiency, the material efficiency and the individual efficiency.

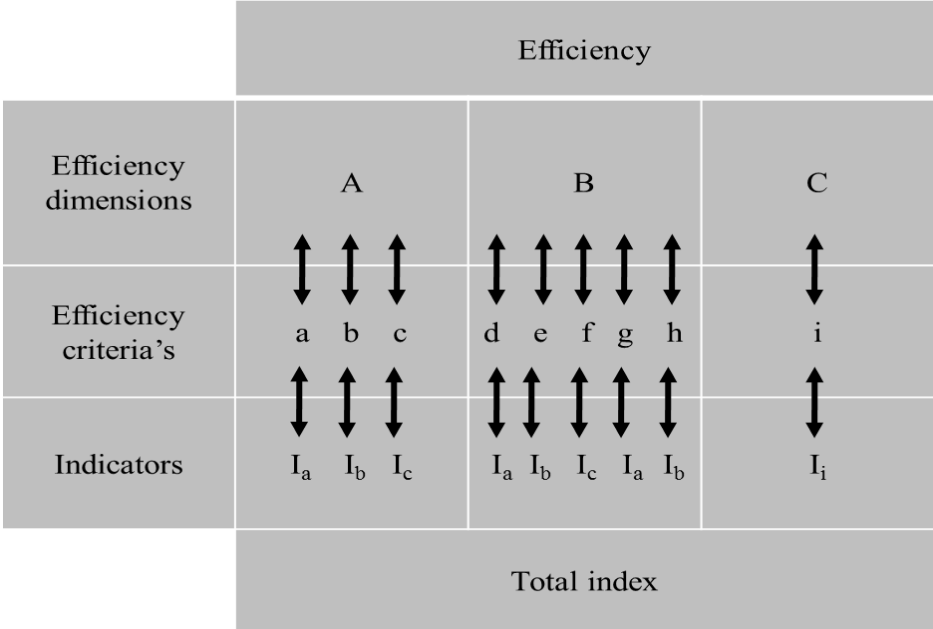


Figure 2: Modified multi-dimensional indicator model for the efficiency measurement

Each dimension can have from one to several efficiency criteria. A criterion for the formal efficiency could, for example, be the comparison between a targeted situation and the actual situation. The formal efficiency in this case reflects more the qualitative aspect of the decision making efficiency. In turn, the material efficiency reflects more the quantitative part of the decision making efficiency. Management science has created a series of key indicators to display the material efficiency in decision making. Mostly these are measures which indicate economic achievements as input-output relationships with performance indicators like profitability, costs and returns or costs and benefits. The formal and the material efficiency rather deal with the “hard facts” and reflect more the economic and therefore the “objective” detectable and reproducible side of the decision making. The individual efficiency reflects more the socio-psychological and “subjective” part in decision making and therefore deals with results which can be considered as “soft facts” and are related to the emotions, feelings, acceptance and satisfaction of individuals. From a more general view the authors see the

individual efficiency here as the subjective expectance of the decision maker when comparing the factual results and the formerly planned results after the decision making processes. The individual efficiency is more characterized by the decision makers hope to fulfill the expectation. The individual efficiency in this sense can also be described as the satisfaction of the decision maker concerning the achieved results (Neuert, 1987).

The classification of the three efficiency dimensions (the formal, the material and the individual efficiency) seem to provide a relevant concept to measure various dimensions of efficiency in the management decision making processes. The single efficiency dimensions are suitable to measure special aspects of the decision making processes under a certain view but still need to be combined to result in a comprehensive efficiency concept, the total efficiency. There are various concepts being developed (cf. Grabatin, 1981, Gzuk, 1975, Neuert, 1987) on how to combine the different efficiency dimensions to satisfy the efficiency concept and to achieve the total “socio-economic” efficiency. Grabatin (1981) advocates an “efficiency analysis of the organization” as an approach to determine the efficiency of organizations in general. In this case he defines an n-dimensional area which is limited by negotiated tolerance (target) limits. As satisfying solutions are in the focus instead of optimal solutions, the tolerance or target limits frame a valid solution space which then can be defined as the area of the efficient organization. Neuert (1987) criticizes this approach, as tolerance (target) limits always need to be known, which does not seem to be the case in reality. Grabatins concept also does not give the possibility to weight the efficiency dimensions differently. Gzuk (1975), in his approach, defines an algorithm for the construction of the total efficiency index, where the total efficiency of a decision is measured by the positive discrepancy of the worst possible efficiency profile. As in this approach the possibility to weight different dimensions of efficiency is up to the user, this concept also does not seem to be suitable for the real life business. Neuert (1987) has conducted a survey, taking a representative sample from the business management population, to evaluate the weighting of different efficiency dimensions as they are present in reality to setup a “amalgamation” concept. The evaluation indicated the material efficiency with a 70% weight, the formal efficiency with a 20% weight and the individual efficiency with a 10% weight.

Exemplary Excursus: Decision Efficiency Distribution Measurement

From an empirical point of view the question arises, how decision making efficiency is comprised of not only from a theoretical angle but particularly how it is “shaped” in “real world cases”. In this context, it is of special interest if in reality business decisions are made according to the requirements of rational conduct and/or to which degree actual decision making behavior and decision making efficiency deviate from the ideal decision making/decision efficiency function, assuming that increasing degrees of decision making rationality induce increased levels of decision making efficiency (cf. Isen, 2008).

The data sets gained from an own laboratory experiment, conducted by Neuert (Neuert, 1987) and replicated in 2007 (in a slightly modified way, Neuert, 2010) provide the following empirical findings:

- There is indeed a functional relation between the degree of rational behavior and the degree outcomes efficiency in strategic business decision making processes;

- however, there is no linear relation observable, but a degressively shaped function, approximately depictable by a second degree function($y=a+bx+cx^2\dots$);
- in addition, by standardizing the described regression function, it is empirically obvious that none of the “tested” decision makers within the experimental sample shows a decision making behavior with a degree of less than ca.20% of “standard rationality”, but also none of them exceeds a degree of more than 80% “standard rationality”;
- also, the degree of decision making efficiency is indeed shaped along the expectations of the formulated degressive regression function, suggesting that none of “tested” decisions was either “totally inefficient” or “totally efficient”.

Given those experimental findings, there is-in particular- another research question evolving, reasoning whether any kind of typical distribution patterns concerning business decision making behavior (and thus decision making efficiency) can be theoretically developed and empirically observed.

Dealing with this research question we utilize the analytical procedures of the Lorenz-curve and the Gini-coefficient in order to form a hypothetical outline of a “generalizable” decision making efficiency distribution and to empirically examine the actual “concentration measures” of the “distributive patterns” of decision making outcomes (Krapp & Kraus, 2013).

Applying the Lorenz-curve approach to our research question, it suggests that the actual distribution of decision making efficiency outcomes within a “population” or a sample of real world decisions more or less strongly deviates from a linear distribution, based on the notion that decision efficiency is “equally” distributed over a sample divided into quintiles (cf. Cowell, 2011). The Lorenz-curve indicates the actual concentration or dispersion of the decision making efficiency measures within the specific quintiles (i.e. 20% of the sample efficiency “very low” up to 20% “very high”) in comparison to the 45-degree line of the coordinate system, depicting the accumulated portions of the sample quintiles of the decisions made on the x-axis, and the respective accumulated average degrees of decision making efficiencies on the y-axis (Krapp & Kraus, 2013).

In order to measure the actual distribution of the empirically gained decision efficiency data within our experimental sample quintiles, we utilize the concept of the Gini-coefficient (GC).The GC measures the areas between the 45-degree y/x -linear line and the “empirical” curve, gained by the experimental data of decision efficiency assigned to the respective sample quintiles.

The experimental data are based on a sample of advanced business students ($n_1=65$) and a “reference” sample of business managers ($n_2=16$) with a total sample size of 81. All of the experimentees had to fulfill 4 strategic business decision rounds each, ultimately providing an overall sample of ca. 320 single decision making measures pertaining to the respective degrees of decision making rationality and the respective degrees of decision efficiencies as well (Neuert, 1987).The results were the following ones:

- The average degrees of decision efficiency vary between 0.2 (meaning 20% of the optimal decision making efficiency) and 0.8 (80% of the optimum);
- those data represent the following distribution of the average decision efficiencies within the sample quintiles (Qn): Q1=0.2; Q2=0.4; Q3=0.5; Q4=0.6; Q5=0.7);
- the accumulated decision efficiency averages are Q1=0.2; Q1-2=0.3; Q1-3=0.37; Q1-4=0.42; Q1-5=0.48.

In order to compute the Gini-coefficient (GC) for our empirical efficiencies distribution, we have to take into account that the “45-degree” line starts out at the 0.2 level on the y-axis and ends at the 0.8 level on the y-axis, because the actual data do neither “deceed” nor exceed the 0.2 resp. the 0.8-echelon. The linear line has to be shaped accordingly and the efficiency average values have to be modified by a 0.2-subtraction as well, accordingly. Thus, the actual modified values read as follows: Q1=0; Q2=0.1; Q3=0.17; Q4=0.22; Q5=0.28. Finally, the relative contribution of each quintile to the overall decision efficiency of the experimental sample has to be computed. Therefore, the single experimentees (n=81) degrees of decision efficiencies per round have to be added up and assigned to each quintile in relation to the total sum of decision efficiencies (x% for each of the 5 quintiles as a relation between the total sum of 320 single efficiency measures divided by the sum of each relative quintile for n=81 that means 16 “lowest” efficiencies up to 16 “highest” efficiencies. The “shares” of each quintile are as follows: Q1=8%; Q2=12%; Q3=40%; Q4=30%; Q5=10%. This empirical distribution approximates a “normal distribution”. The following table depicts the development of the GC:

Table 1: Gini-coefficient of decision efficiency distribution

	Quintiles				
	1	2	3	4	5
Cumulated portion of decision makers (n=81) in %	20	20	20	20	20
Standardized cumulated average decision efficiency degree	0.0	0.1	0.17	0.22	0.28
Relative "share" of decision making efficiencies per quintile (p)	0.08	0.12	0.40	0.30	0.10

Gini-coefficient computation:

$$GC = \frac{2 \times \sum_{i=1}^n i \times p_i - (n + 1)}{n} \quad (1)$$

$$GC = \frac{2 \times (1 \times 0.08 + 2 \times 0.12 + 3 \times 0.40 + 4 \times 0.30 + 5 \times 0.10) - (5 + 1)}{5} \approx 0.09$$

The GC of 0.09 suggests that the distribution of decision making efficiency in our experimental sample shows a fairly equal dispersion of “low”, ”average” up to “high” degrees of decision efficiencies and thus represents a normal distribution of decision making performance.

The concept of the Lorenz-curve and the Gini-coefficient can be further demonstrated by the following graphical representation:

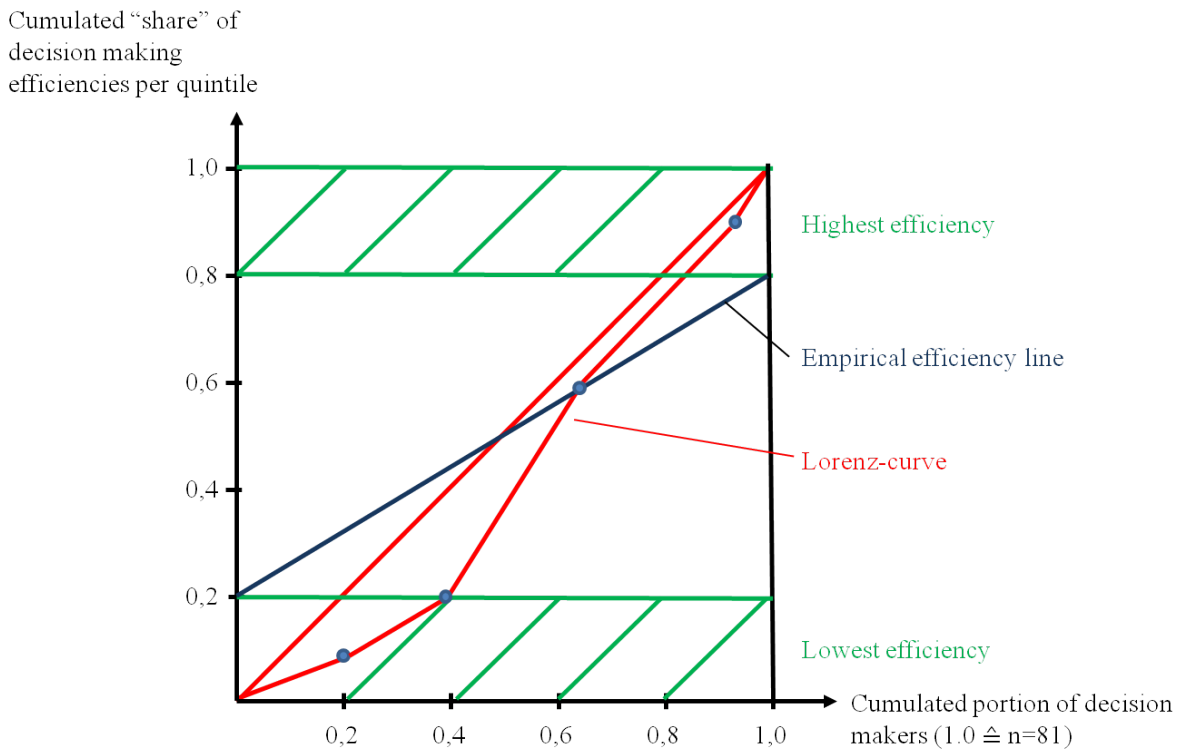


Figure 3: Empirical decision efficiencies and Lorenz-curve

The Lorenz-curve approach and the Gini-coefficient represent one possible concept-among various others (cf. Newell et al., 2011) to measure the distribution of decision making efficiency and decision making rationality, based on the assumption of “rational choice” behavior and in comparison to that the respective deviation of “actual conduct” in “real world” decision making processes.

Remaining Operationalization Issues of the Measurement of Decision Making Efficiency

Management science has created a series of key indicators to display efficiencies in decision making. Mostly these are measures which indicate economic activities as input-output relationships with performance indicators like profitability, costs and returns or costs and benefits (Neuert, 1987). So whenever profitability, costs or returns can be brought into relationship with decision making effort these indicators seem to provide a valid base to measure management decision making efficiencies. But especially in complex environments or decision making situations where rather qualitative issues are addressed it sometimes seems rather difficult to directly measure costs and returns. In this context the time consumption of the decision making process, as an indirect measure for costs, can serve as a

suitable indicator for the material efficiency (cf. Bronner, 1973, Nutt, 2008). As the time as a measurement indicator does not give any indication on quality of the decision making process, which is also a main criterion of efficiency (Gzuk, 1975), the measurement of the formal efficiency can give an indication on the quality of the decision making process. The formal efficiency in this case can be measured by comparing the results of problem solutions to the “optimal results”. The formal efficiency in this case can either be evaluated by quantitative facts like a calculation, if it pertains to a rather mathematical task, or by an expert’s solution, if it pertains to a rather qualitative task.

The socio-psychological efficiency can be represented by the individual or personal efficiency and represents the more “subjective part” within the decision making process, dealing with results which can be considered as “soft facts” and are related to emotions, feelings, acceptance and satisfaction of individuals. The individual efficiency is more characterized by the decision makers hope to fulfill the expectation and in this sense can also be described as the satisfaction of the decision maker concerning the achieved results. As in this case it is rather hard or almost impossible to track personal “attitudes” (like satisfaction, self-reflection, etc.) by observing participants, the utilization of a questionnaire which contains mainly questions about the personal satisfaction of the participants on solving the problem tasks, how systematic they rate their approach solving the task and how they rate their own cognitive style, seems to appropriate. In this case the satisfaction and acceptance of the decision making behavior of the participants describe their individual efficiency.

Examples of phrases within a questionnaire (Neuert, 1987) could have the following structure:

How satisfied were you today with your problem solution process?

very unsatisfied

1	2	3	4	5
---	---	---	---	---

 very satisfied

To which degree can you identify yourself with the final problem solution?

very little

1	2	3	4	5
---	---	---	---	---

 very much

These two questions would measure the satisfaction of the participants concerning their decision making process. According to the needs of the decision making problem the structure of the questionnaire needs to be setup in detail.

Conclusion

Various authors (cf. Gzuk, 1975; Neuert, 1987; Nutt, 2008) in the literature have identified several kinds of efficiency terms and measures, like the material, the formal and the individual efficiency in one or the other way. Therefore, the models of Gzuk (1975) and Neuert (1987) seem to provide a solid foundation for the measurement of decision making efficiencies. Unfortunately, there are not many studies conducted having used this methodology to measure decision making efficiencies and therefore there is not much to compare or to draw deeper conclusions on how these indicators might reflect the “reality”. Therefore more research studies concerning improved measurement approaches of decision making behavior

and decision making performance could provide a deeper insight and would allow for creating more standardized “application” how to measure various kinds of decision problem situations and solutions.

References

1. Barnard, C.I. (1938/1968), The functions of the executive. Cambridge MA, USA, Harvard Univ. Press, p. 334.
2. Bronner, R. (1973), Entscheidung unter Zeitdruck. Tübingen, Germany, Mohr, p. 180.
3. Cowell, F.A. (2011), Measuring Inequality. 3rd ed., Oxford, England, Oxford University Press, p. 233.
4. Grabatin, G. (1981), Effizienz von Organisationen. Berlin, Germany, Walter de Gruyter, p. 341.
5. Gzuk, R. (1975), Messung der Effizienz von Entscheidungen. Tübingen, Germany, J.C.B. Mohr, p. 490.
6. Gzuk, R. (1988), Messung der Effizienz von Entscheidungen. In: Eberhard Witte (Hg.): Innovative Entscheidungsprozesse. Die Ergebnisse des Projektes "Columbus". Tübingen: J.C.B. Mohr, pp. 125–140.
7. Hauschildt, J., Gmünden, H.G., Grotz-Martin, S., Haidle, U. (1983). Entscheidungen der Geschäftsführung Typologie, Informationsverhalten, Effizienz. Tübingen, J.C.B. Mohr, p. 299.
8. Hoeckel, C. (2012), The Impact of Personality Traits and Behavioral Patterns on the Outcomes of Business Management Decision Making – A Framework for an Empirical Study. In: *New Challenges of Economic and Business Development Conference Proceedings*, Riga, Latvia, pp. 259–269.
9. Isen, A. (2008), Positive affect and decision making. In: Goldstein, W., Hogarth, R.: *Research on Judgment and Decision Making*. Cambridge, U.K, Cambridge University Press, p. 768.
10. Krapp, M, Kraus, J. (2013). Konzentrationsrechnung. In: *Das Wirtschaftsstudium 7/13*, pp. 967-972.
11. Neuert, J.O. (1987), Planungsgrade Eine experimentelle Untersuchung zum Zusammenhang zwischen Planungsverhalten und Planungserfolg. Spardorf, Germany, Rene F. Wilfer, p. 359.
12. Neuert, J. O. (2010), The Impact of Intuitive and Discursive Behavioral Patterns on Decision Making Outcomes: Some Conjectures and Empirical Findings. In: *WDSI Annual Conference Readings*, Lake Tahoe, USA, pp. 4471–4496.
13. Neuert, J., Hoeckel, C. (2013), The Impact of Personality Traits and Problem Structures on Management Decision-Making Outcomes. In: *Journal of Modern Accounting and Auditing 9 (3)*, pp. 382-393.
14. Newell, B., Weston, N., Shanks, D. (2011), Empirical Tests of a Fast and Frugal Heuristic. In: Gigerenzer, G., Hertwig, R., Pachur, T.: *Heuristics-The Foundations of Adaptive Behavior*. Oxford, England, Oxford University Press, p. 872.
15. Nutt, P.C. (2008), Investigating the Success of Decision Making Processes. *Journal of Management Studies*, Vol. 45, No. 2, pp. 425–455.
16. Simon, H. A. (1997), Administrative behavior. A study of decision-making processes in administrative organizations. 4. Aufl. New York, USA, Free Press, p. 384.
17. Witte, E. (Ed.) (1988), Innovative Entscheidungsprozesse. Die Ergebnisse des Projektes "Columbus". Tübingen: J.C.B. Mohr.

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PERSONALITY TRAITS, INTUITIVE CONDUCT AND EFFICIENCY MEASURES IN BUSINESS MANAGEMENT DECISION MAKING - A LITERATURE REVIEW

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Abstract

Today there seems to be a consensus that there is a need for intuitive decision making in management. Previous scholars agree that intuition of individuals to a certain point can be developed in their workplace by developing their individual expertise, self-awareness and reflexivity. But due to the natural information-processing tendencies (cognitive styles) the development process has its limitations. One way to overcome these limitations within organizations is to adopt selection practices to ensure that teams are composed in such a way that they have the right mix of analytic and intuitive capabilities to fulfill their tasks efficiently. Based on the conclusion that intuitive decision making scholars missed out on bringing together the personality pre-determination and efficient task fulfillment, this paper reviews the current status of the scientific work in the intuitive decision making field and proposes further research.

Introduction

In the past business leaders and top executives used to be in the position of relying predominantly on their analytical techniques to chart the future course for their businesses. Today's business environment is more and more characterized by a climate of rapid changes (cf. Agor, 1986, p. 49; Hodgkinson et al., 2009, p. 278). To keep track of the dynamic changes organizations face today, they are challenged to move more quickly. Top executives today and increasingly so in the future will therefore have to make major decisions without having the time to gather "all" (enough) information to apply analytical methods (cf. Agor, 1986; p. 49; Patton, 2003, p. 989). Although researchers like Schoemaker & Russo (1993, p. 29) argue that the use of rational decision making yields the best outcome, especially in complex situations (Bonabeau, 2003, p. 117). For others like Simon (1997, p. 139):

"The effective manager does not have the luxury of choosing between an analytic or intuitive approach to problems".

Mintzberg (1994, p. 329) therefore believes that for effective organizations it is necessary to couple analytical with intuitive judgment. Hodgkinson et al. (2009, p. 278) go even a step further when they claim that intuitive judgment is an indispensable component of strategic competence and is essential for decision makers. The exclusivity of the long time dominating rational choice model seems to be outdated for two reasons. First, in complex decision making situations it is difficult for the human mind to understand complexity, conditions and predictability. Second, people differ significantly in real life in their decision making process from the so called "rational choice" model because of the lack of time and resources (Roth, 2009, p. 180-181). Chester Barnard (1938/1982, p. 185) was one of the first in management

literature to distinguish decision making in what he called a “logical” (rational) and a “non-logical” (intuitive) process. Research since then has studied intuitive decision making from various perspectives like neuroscience (cf. Bechara et al., 1997; Liebermann, 2000; 2004), psychology (cf. Epstein, 1991; Epstein 2003) and within a contextual background (cf. Burke & Miller, 1999; Khatri & Alvin Ng, 2000; Simon, 1997). Research shows that there are several factors on how we make intuitive decisions. For Isenberg (1984, p. 87) and Burke & Miller (1999, p. 94) one key for the decision makers choice between the rational and intuitive approach lies in the vagueness of the situation. For others (cf. Dane & Pratt 2007, p. 45; Fields, 2001, pp. 93-94) the task characteristic (e.g. ambiguity of a problem) is one of the main factors for the use of intuition. Pretz & Totz (2007, p. 1248) and Allinson & Hayes (1996, p. 119) see the personal pre-determination as one of the main factors on how people choose a rather intuitive or rational approach in decision making. There is clear evidence that cognitive styles influence the decision making behavior. Decisions seem to be a function of the decision maker’s cognitive setup which varies with different psychological types (Henderson & Nutt 1980). For Appelt (2011, p. 252) the decision making process is mostly affected by the decision features, situational factors and individual differences. Sinclair & Ashkanasy (2002, pp. 7-10) setup a model which assumes that the behavior oriented decision making process is affected by four categories: 1. problem characteristics, 2. decision characteristics, 3. personal disposition, and 4. decision making context. These four categories again include sets of factors which characterize more closely the content of these categories.

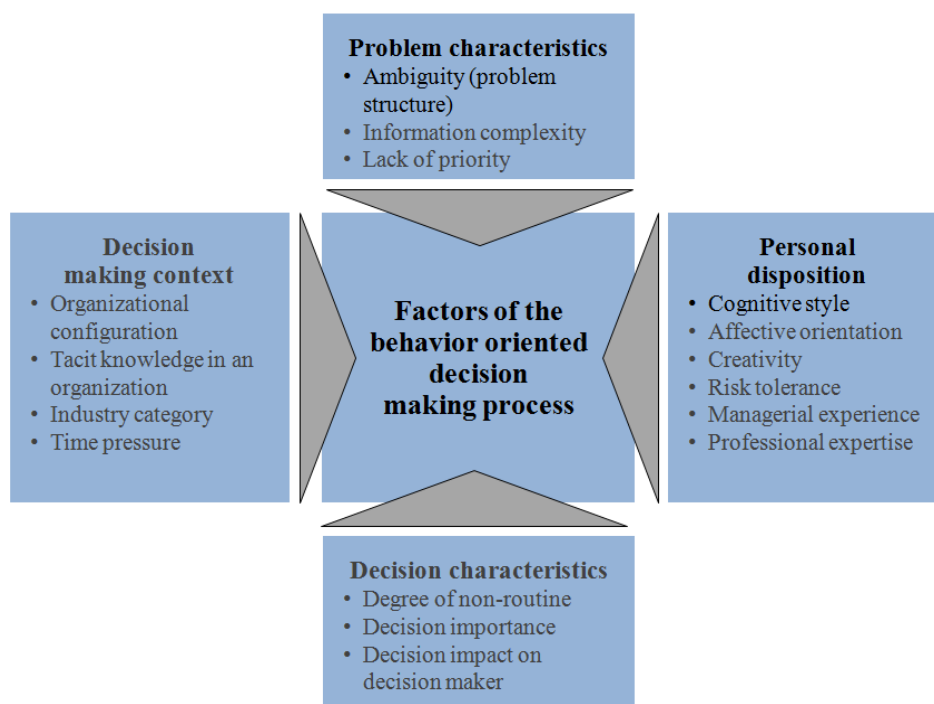


Figure 4. Categories and factors of the behavioral orientated decision making process

For Hodgkinson et al. (2009, pp. 291-292) much progress has already been made in the research of intuition but to provide a more vital scientific foundation as a framework for managers and the increasing role of intuition in organizational life he states that:

“More work still needs to be done to establish a firm base upon which to build application-orientated implications for organizations and managers ...”.

Taking these implications into account the following paper intends to show on the basis of a literature review how personality traits, behavioral approaches and problem characteristics (ambiguity of the problem) influence the efficiency in business management decision making.

Description of intuition

When interviewing 60 experienced professionals holding significant positions in major organizations Burke & Miller (1999, p. 91) findings revealed that 56 percent understood intuitive decisions to be based on previous experiences, together with emotional input. For Burke & Miller (1999, p. 93) intuition is a cognitive conclusion which is based on the decision maker's previous experience and emotional input. Agor (1989, p. 51), Harper (1988, p. 18) and Matzler et al. (2007, p. 14) also see the ability to use intuition as a particular domain which is acquired through experience and learning and relies upon a process of pattern recognition. For Isenberg (1984, pp. 85-86) executives use intuition in five distinctive ways. First, for sensing intuitively when a problem exists, second, to rely on well learned behavior patterns rapidly, third, synthesize isolated bits of data and experience into an integrated picture, fourth, intuition as a check (a belt and suspenders approach) and fifth, to bypass in depth analysis to move rapidly to come up with a plausible solution. For Isenberg intuition therefore is not the opposite of rationality, nor the random process of guessing. For him intuition is based on experience in analysis and problem solving. Khatri & Alvin Ng (2000, p. 62) do not see intuition as an irrational process. For them intuition is a complex phenomenon that draws from our store of knowledge in our subconscious and has its roots in our past experience. Further, it is based on the deep understanding of the situation. Gigerenzer (2007, pp. 17-18) believes that intuition or what he calls “gut feelings” has its own rationale. Rationale in this sense consists of two elements: simple rules of thumb or heuristics and for them to take advantage of the evolved capacities of the brain. Like van Riel et al. (2006, pp. 10-13) with an active sense and common sense style, Gigerenzer (2007, p. 18) understands the nature of intuition in two ways: the first one assumes that intuition solves complex problems with complex strategies and the second one assumes that simplicity relies on the evolved brain. For Klein (2003, p. 23) the expert's intuitive ability derives from cues which rapidly match with more commonly occurring patterns leading then to action steps in ways that lead to effective problem solving or decision making. Klein calls this routine the recognition primed decision (RPD) model which combines two processes: first, how decision makers size up the situation to recognize which course of action makes sense and second, evaluate the course of action by imaging it. This two-part process of pattern matching and mental simulation is to Klein (2003, p. 27) the explanation why we are able to make good decisions without generating and comparing a list of options. To make a good decision Klein believes it is necessary to have good mental models of how things work. To Allinson & Hayes (1996, p. 119) intuition is a cognitive style or trait, Hogarth (2001) reviews it as a cognitive strategy. For Hodgkinson et al. (2008, p. 6) intuition can be conceptualized as one element of the practical intelligence. In the latest research intuition has been viewed as one part of a two part information processing system: system 1 and system 2 (Stanovich & West, 2000, p. 658).

System 1 is believed to be the evolutionary older one that involves the automatic and relatively effortless processing and learning of information without conscious attention. It is described as automatic, tacit and natural associative. The second system is called System 2 and is, on the other hand, determined by being rule based, extensional, intentional and deliberate. System 2 enables individuals to learn deliberately, how to develop ideas and engage in analyses in an attentive manner (Dane & Pratt 2007, p. 36). According to the cognitive-experiential self-theory (CEST), a dual process model developed by Epstein and his colleagues (cf. Epstein, 1991; Epstein 2003), the rational system operates analytic, verbal and relatively affect-free at a conscious level. Epstein and his colleagues believe that these two systems are two parallel interactive modes of information processing which are served by separate cognitive systems. The experiential system is believed to be older and operates automatically, primarily non-verbal in nature and is emotionally driven at a preconscious level. Although management writers use terms as “business instinct” and “intuitive insight” as a synonym for intuition, it is important to recognize that intuition is not the same as instinct or is it equivalent to insight (Seibt, 2005, pp. 10-11). Intuition and insight are related in such a way that they both rely upon non-conscious mental processes (Sadler-Smith, 2008, p. 64). Intuition seems to be an affect laden judgment where as insight is a clear-cut solution. Sadler-Smith (2008, p. 101) believes that insight consist of a creative problem solving process with several stages like preparation, incubation, intimation illumination and verification where at the end the solution pops up as an insight in a “Eureka” moment. He sees insight as process of a “prepared mind” drawing conscious or non-conscious conclusions on problem relevant information. Instincts merely remain to be hardwired, autonomous reflex actions (Hodgkinson et al., 2009, p. 279).

Definition of intuition

The term intuition is defined as “immediate understanding, knowing something instinctively, identifying a pattern without thinking” (Timm, 1992, p. 249). In psychology and management intuition has been associated with many terms and definitions. These include: primary mode of perception which operates subconsciously (Jung, 1921/1971, p. 366), analyses frozen into habit (Simon, 1997, p. 139), gut feelings (cf. Agor, 1989; Harper, 1988; Hayashi, 2001; Isenberg, 1989; Mintzberg, 1994), a problem solving process reached nearly effortless without conscious awareness and involving little or no conscious deliberation (Hogarth, 2001, p. 14), a form of reasoning with the ability to recognize patterns from experience in lightning speed (Matzler et al., 2007, p. 14), affectively charged judgments that arise through rapid, non conscious and holistic associations (Dane & Pratt, 2007, p. 36). For Sadler-Smith (2008, p. 31) intuition is rapid, a judgment, affect-laden, involuntary, holistic, ubiquitous, non-conscious and both powerful and perilous. Pretz & Totz (2007, p. 1248) view intuition as “a product of the tacit system and highlights three distinct aspects of the nature of intuition: affective, heuristic, and holistic”. Hodgkinson et al. (2008, p. 4) view intuition as a complex set of inter-related cognitive, affective and somatic processes in which there is apparently no rational thought, no deliberate process and it can be difficult to articulate. To them the outcome can be experienced as a holistic hunch or gut feeling. For Kahneman & Tversky (1982, p. 124) intuition can be understood in different senses:

“The terms intuition and intuitive are used in three senses. First, a judgment is called intuitive if it is reached by an informal and unstructured mode of reasoning, without the use of analytic methods or deliberate calculation... Second, a formal rule of fact of nature is called intuitive if it is compatible with our lay model of the world.... Third, a rule or procedure is said to be part of our repertoire of intuitions when we apply the rule or follow the procedure in our normal conduct.”

For Roth (2009, p. 197) there are rational considerations but there are no clear rational decisions. Decisions to him are always emotional no matter how much rationality is stacked on the emotions. In this sense for him decision making always includes emotions and therefore is either affective emotional without consideration what he calls “gut feelings” or is a combination of rationality and affective emotions. But for Roth (2009, p. 198) gut feelings are not the same as intuition. For him intuition is implicit knowledge being derived from the preconscious. Ju et al. (2007, p. 64) see intuition within the decision making process as a combination of the decision maker’s knowledge, experience and emotions.

Ambiguity of the problem

The decision making process or its result seems to be dependent on the specific problem characteristics (Witte, 1988, p. 17). Sinclair & Ashkanasy (2005, p. 13) believe that individuals tend to use a more intuitive approach if information is complex, there is high ambiguity or if there is a lack of priority. They describe ambiguity to which degree a problem is ill-defined or lacks clarity. Dane & Pratt (2007, p. 41) see the problem characteristics as one of two factors for the influence of intuitive effectiveness. They postulate that the more increasingly unstructured the problems get the more effective intuitive judgment becomes versus rational analysis. For Dane & Pratt (2007, p. 45) ill-structured problems are conducive to the intuitive decision making process due to the absence of well accepted decision making rules. For Shapiro & Spence (1997, p. 67) the approach of the decision making process (intuitive vs. rational) should also depend on the nature of the task (e.g. structured or unstructured). For them tasks which have a more structured nature, like accounts receivable, order entering and inventory control, are conducive to analytical reasoning because they have typically well-accepted decision rules. Other tasks with less structured problems, like mergers and acquisitions decisions, new product planning and corporate strategy formulation, are typical for the use of intuition. For Fields (2001, p. 84) it is also evident and observable that individuals in the R&D department have a higher level of use of “unpatterned methods” and action modes than individuals in the IT department. Fields links this to the fact that R&D works in advance of current technologies and therefore has a strong need for future orientated, creative and innovative new products and processes, i.e. intuitive behaviors. IT on the other hand works within a well-defined frame work and therefore displays rather rational behavior. Van Riel et al. (2006, pp. 18-19) support this view that the decision task varies with the structuredness of the decision. They also concluded that well-structured problems call for a rational approach as decision makers can make rational calculations. In turn, for them ill-structured problems are not for rational decision making as they are characterized by a high degree of uncertainty about the actual and the desired situation and therefore do not have a base for rational calculations. Beside the structure of the problem van Riel et al. (2006, pp.

19-20) also support the view of Witte that a major condition for the task varies with the complexity of the decision context. Problem complexity can overstrain the physical constitution of our brain. Therefore, rational decision making can experience great difficulty when dealing with complex problems. For Lee & Cho (2007, p. 114) in a well-structured problem, the problem situation is clear and methods to solve the problem are known or present, the problem is already given in a standardized procedure and there is an appropriate algorithm which ensures the right answer. For them within a well-structured problem there is little room for problem finding as the solutions seem obvious and easy to find. In moderate structured problems the overall goals may still be evident but as information, findings and data are implicitly embedded in the problem they must be found and formulated by the individual. Problem findings in ill-structured problems are even more demanding. For the problem situation there is a minimum on given information or basic data and therefore individuals have to use their own resources to solve the problem. Lee & Cho (2007, p. 114) also see a relation between knowledge (declarative and procedural) and problem finding as it is difficult to conceive a problem without being able to draw on existing knowledge. Joanssen (1997, p. 70) describes the problem solving process for well-structured problems with a three step process.

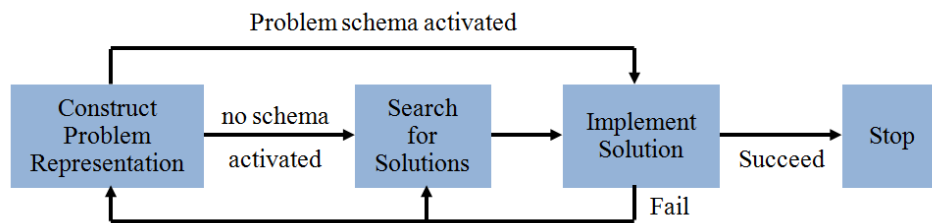


Figure 5. Problem solving process for well-structured problems

For Kirsch (1971, p. 143) in well-defined problem situations a stimulus is recognized by the individual which triggers an execution program or at least an algorithm which can support the decision making process. If this execution program can be directly associated with a situation, this leads to a routine decision. When the execution program cannot be directly associated with a situation but with the help of an algorithm the situation can be clarified. This leads for Kirsch to an adaptive decision. When individuals face well-defined problem situations they are spared of conflict and uncertainty. For Kirsch (1971, p. 143) there are generally two main reasons why a problem situation is ill-defined. First, there is no execution program or algorithm available which allows the individual to complete a routine where the selection of an evoked alternative out of a multitude of alternatives can be realized in an acceptable time frame. Second, the definition of the problem is vague or uncompleted. For Kirsch these kinds of situations call for innovative decisions. Shin (1998, pp. 17-22) describes the dynamic process of solving ill-structured problems by the following steps:

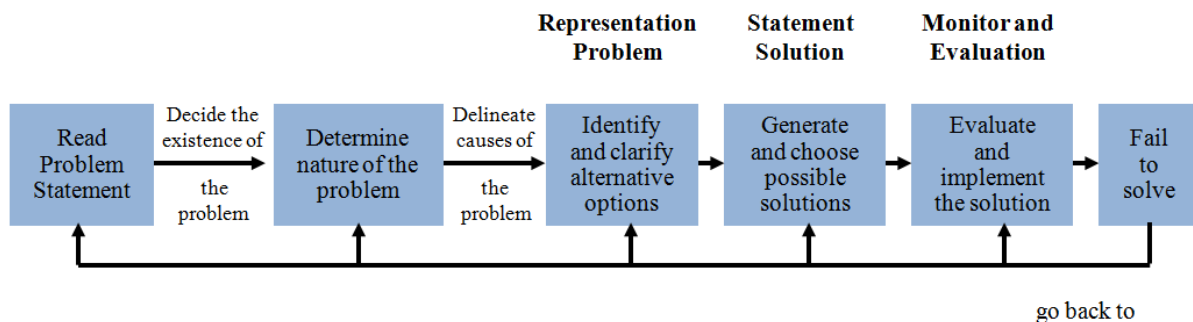


Figure 6. Problem solving process for ill-structured problems

For Smith (1988, pp. 1492-1495) there are various existing conceptualizations of problem structures. At first there is the clarity of the problem's goal state. If the goal is not adequately specified this can produce a weakness in the structure and therefore can result in an ill-structured problem. Further, the problem structure can be conceptualized by how well it is formulated explicitly and quantitatively and how it then can be solved with well-known techniques. In this sense the structure of the problem can be determined on the degree of clarity which the decision maker gets from his task. Next the problem structure can also be conceptualized by the process. In this case a problem is ill-structured when there is no effective solution procedure to solve the problem. In the case of a well-structured problem the problem may still be difficult but there is a clear procedure of how to solve it. Finally the structure of the problem is linked to the knowledge of the problem solver. A problem can be well-structured if the problem solver is familiar with the knowledge needed to solve the problem or in contrast the problem can be ill-structured if the problem solver does not have adequate knowledge of the problem. In this case regardless of the initial description of the structure in the end effect it is the behavior of the problem solver making the ascriptions to the structure of the problem (Smith, 1988, p. 1497). In regard to the foregoing Smith (1988, p. 1498) defines the problem structure as: "...a problem's degree of structure is a measure of the adequacy of an individual's knowledge of how to solve it, adequacy reflecting deep structural aspects of the problem in respect of general human knowledge and capacities".

Personal disposition (cognitive style)

The work of Jung (1921/1971) and Westcott (1968) indicates that intuitive types share distinct personality characteristics. Jung was one of the first psychologists to theorize about intuition. He differentiated people into sensing and intuitive types related to their preference on how they perceive information. For him intuitive types prefer to acquire information by imagining new possibilities and sensing patterns via the unconscious (Jung, 1921/1971, p. 366). Sensing types, in contrast, prefer to notice concrete factual details with their five senses and they depend on objects. Only concrete, sensuously perceived objects attract the attention and are fully accepted into consciousness (Jung, 1921/1971, pp. 362-636). In Jung's view intuition is a basic cognitive mode which varies among individuals (Pretz & Totz, 2007, p. 1248). The more "romantic" view (cf. Allinson & Hayes, 1996, p. 122; Mintzberg, 1994, p. 114; Sauter, 1999, p. 109, Sarmany-Schuller, 2010, p. 286) that formal business planning relies on the left

brain hemisphere's sequential-logical processes, whereas the less formal intuitive and creative aspects of management relies on the right hemisphere cannot be derived from psychological research (Simon, 1997, p. 132). For Bowers et al. (1990) intuition is accessible by everyone; it just differs in speed and accuracy. Reber et al. (1991) see little or no individual differences in implicit learning and hence intuition and therefore suggests that it should not be related to a personality theory as it was done by Jung. In contrast the results of the study of Woolhouse & Bayne (2000, p. 167) indicates that there are individual differences for sensing and intuitive types on how to use strategy and on the performance on implicit learning tasks. For them types with a preference for intuition are more successful in using unconscious information. Types with a preference for sensing tend to prefer information in a concrete format. They clearly support the findings of Westcott (1968, p. 148) and Bowers et al. (1990) that there are individual differences in the use of intuition and these differences can be related to a measure of personality. Westcott (1968, p. 148) found in his study that extreme groups had "distinguishing and coherent patterns of personality". Woolhouse & Bayne (2000, p. 160) see the difference in the level of use of intuition (high or low) in the nature of people exiting associations between words and concepts. The main findings in the study of Shoshana et al. (2002, pp. 425-426) support the evidence that an intuitive or rational approach in decision making can be related to personality traits or cognitive styles. Within their study they show that participants with a rational thinking style were more related to normative judgements and participants with intuitive thinking style were more related to heuristic judgements. According to the Cognitive-Experiential Self Theory (Epstein, 2003, p. 159) human beings operate on two fundamental information processing systems. The experiential system which operates mainly on an unconscious level relates to experiences which have been built up in the past. The experiential system can be characterized as automatic, rapid, effortless, associative and holistic. Although the experiential system is a cognitive system it derives beliefs from emotional experiences (Epstein, 1991, p. 121). Epstein (2003, p. 161) describes the experiential system as:

"The automatic, preconscious experiential conceptual system that regulates everyday behavior is, of necessity, an emotionally driven, dynamic unconscious system".

In contrast the rational system operates predominantly at the conscious level in an analytical, effortful, affect-free and relatively slow manner while demanding high cognitive resources (Epstein, 2003, p. 161). The rational system is more process orientated, logical-reason orientated and requires justification via logic and evidence. The rational system seems to be more suitable when analytic approaches are needed or considerations for long time consequences are at stake (Epstein, 1991, p. 123). Because the rational and the experiential system are independent from each other, people believe that they can think or decide completely rational. But as the two systems can interact and influence each other every rational thought or decision is likely to be biased by the experiential system (Epstein, 2003, p. 164). In this sense the experiential system can influence the rational system also as being a resource of creativity by bringing up ideas which would not be available in a pure logical process of the rational system. Further, the experiential system can also be a useful source of information as it is a learning system. But in turn the rational system can also influence the experiential system (Hogarth, 2001, p. 192). It can reflect spontaneous and impulsive thoughts and override them by recognizing that they are inappropriate. The rational system can also

provide understanding of the operating principles of the experiential system which in turn allows people to train, improve and develop their experiential system. In this case there is also an unintentional way in which the rational system can influence the experiential system by repetitions of thoughts and behavior. Such repetitions become habitualized and therefore shift control from the rational to the experiential system (Epstein, 2003, p. 165). As different levels of cognitive activities have been observed, on how managers in practice use the two information systems, this led to the conclusion that cognitive continuums on a single dimension do not allow independent variations on the intensity of use and the relative use of each system (van Riel et al., 2006, pp. 9-13).

Efficiency in the decision making process

Barnard (1938/1982, pp. 19-20) describes an action as effective if a certain aim is reached and this action can also be considered as efficient if the motives of individuals are satisfied. In the case that a certain aim is not reached but the motives are still satisfied, the action may not be effective but still efficient and the other way around. For Barnard efficiency most likely relates to the satisfaction of motives of individuals in an organization and effectiveness relates to the achievement of certain aims of the organization. For Gzuk (Witte, 1988 pp. 125-127) efficiency in general is how well a dedicated target is reached. An efficient decision in this sense can be characterized by how good a dedicated target is reached with a minimum of resources. For Simon (1997, pp. 250-257) efficiency describes presently and more generally the ratio between input and output. For commercial organizations which are generally guided by profits the criterion of efficiency is the yield of the greatest net income. The simplicity is related to the fact that money provides a common understanding for the measurement of efficiency in terms of output and income. But this concept needs to be expanded for specific activities in commercial organizations (e.g. personnel department) or for non-commercial organizations where factors are involved which cannot be directly measured in monetary terms. According to Simon (1997, p. 262) to make an efficient decision it is necessary to have empirical knowledge of the expected results that are associated with the different alternative possibilities. Neuert (1987, p. 109) supports this view; for him efficiency can be characterized as an expression of performance rate, input-output relation and quality. He explicitly differentiates the term effectiveness from efficiency. Effectiveness characterizes for him whether a measure is in general suitable to achieve a certain target. In this case efficiency can be seen as the quality level of the results within the decision making process. Effectiveness characterizes here the suitability of the solutions to achieve the expected target. In the context of decisions Gzuk (1975, p. 15) sees efficiency as the degree in which a purpose is reached containing two additional conditions: first, the purpose is reached with a minimum use of resources (economical input) and second, the result of the decision should ensure a problem solution which lasts a longer period of time. For Gzuk (1975, p. 16) it does not seem to be enough to simply measure the efficiency of a decision by itself. Important is the outcome of a mental or tangible activity.

Measuring intuitive style and intuitive behavior

Individual differences continue to be one of the main explanatory variables in the field of judgment and decision making (Appelt et al., 2011, p. 252). The broad term of individual difference covers areas from decision making styles to cognitive ability to personality. Therefore the measurement of individual differences can be divided into seven categories: decision making measures, risk attitude measures, personality inventories, personality construct measures, and miscellaneous measures (Appelt et al., 2011, p. 253). A representative set of measures for the study of individual differences in judgment and decision making according to the seven categories have been collected and displayed by Appelt et al. (2011, p. 252) on the online database “Decision Making Individual Differences Inventory” (<http://www.dmidi.net>). Most of these measures differ in their theoretical underpinning and their psychometric properties (cf. Appelt et al., 2011, p. 256; Hodgkinson et al., 2008, p. 17). Therefore it seems questionable if the use of such a wide range of measurements benefits the research of judgment and decision making as the results may lack comparability. To allow a better cross comparison between different studies Appelt et al. (2011, p. 256) recommend using existing measures without modification where appropriate. Some of the most well known and mostly used measures for intuitive style or intuitive behavior (cf. Harper, 1988, p. 15; Henden, 2004; Hodgkinson et al., 2008, p. 17; Langan-Fox & Shirley, 2003; Pretz & Totz, 2007; Ritchie et al., 2007; Woolhouse & Bayne, 2000) include the Cognitive Style Index - CSI (Allinson & Hayes, 1996), the Agor Intuitive Management Test - AIM (cf. Agor, 1986; 1989), the Rational-Experiential Inventory - REI (Pacini & Epstein, 1999) and the Myers-Briggs Type Indicator - MBTI[®] (Briggs Myers et al., 2003). Hodgkinson et al. (2008, pp. 17-18) criticize the CSI and the latest version of the REI since they show factors which are not within their underlying theory. For them the critique of the CSI has three significant respects: first, they see the empirical tests of its factor structure to be inconsistent with the its declared theoretical basis, second, it seems that it is not in line with the state-of-the-art dual-process formulations and third, a semantic analyses has little relation to intuitive domain. For Hodgkinson et al. (2008, pp. 17-18) the REI appears to have item content problems with the experiential subscale as it conflates style or trait with strategy. For Langan-Fox & Shirley (2003, p. 210) when taking a closer inspection of the Sensing-Intuition scale of the MBTI[®], none of the items assess affective or behavioral aspects of intuition. When examining the nature of intuition, by measuring with the MBTI[®] and the REI, Pretz & Totz (2007, p. 1255) findings suggest that both instruments measure affective, heuristic and holistic characteristics of intuition. One serious problem seems to be whether the traits, as measured by personality tests, are consistent across contexts and therefore reflect behavioral aspects. Therefore, and because Hodgkinson et al. (2008, p. 19) see an over-reliance on psychometrically self report instrument measures for intuitive style, they advocate for more direct approaches, designed to force rational and intuitive behavior. For Hodgkinson et al. (2008, pp. 19) the use of self report measures in conjunction with laboratory tasks potentially provides a powerful setting for determining intuitive behavior.

Conclusion - further research

Relying on the previous literature review and especially taking the proposal of Hodgkinson et al. (2009, pp. 291-292) into account to build more application-orientated implications for organizations and managers, there seems to be a need for further research on the impact of personality traits, ambiguity of the problem and intuitive conduct on the efficiency of the decision making processes. Therefore, building on the existing literature and investigating the relationship between the cognitive style (intuitive/rational) of decision makers and the ambiguity of the problem (e.g. structured, mid-structured, unstructured) could provide a vital foundation to determine how different cognitive styles in combination with different structured tasks lead to most efficient outcomes in the decision making process. To overcome the criticism of Hodgkinson et al. (2008, p. 19) who see an over-reliance on psychometrically self report instruments for measuring the cognitive style and of Gigerenzer (2008, pp. 49-50) for whom it is essential not only to capture the personality pre-determination but also how individuals act then in certain situations (environments), it seems appropriate to establish an empirical experiment in parallel to the self report instrument when examining cognitive styles and personality behavior. In this case Appelt et al. (2011, p. 256) also recommend using existing measures without modification, where appropriate, to allow a comparison between different studies.

References

1. Agor, W. H. (1986): How Top Executives Use Their Intuition to Make Important Decisions. In: *Business Horizons*, pp. 49–53.
2. Agor, W. H. (1994): *Intuitives Management: Die richtige Entscheidung zur richtigen Zeit*. 2nd ed. Bremen: GABAL.
3. Allinson, C. W.; Hayes, J. (1996): The Cognitive Style Index: A Measure of Intuition-Analysis for Organizational Research. In: *Journal of Management Studies*, Vol. 33, No 1, pp. 119–135.
4. Appelt, K. C.; Milch, K. F.; Handgraaf, M. J. J.; Weber, E. U. (2011): The Decision Making Individual Differences Inventory and guidelines for the study of individual differences in judgment and decision making research. In: *Judgment and Decision Making*, Vol. 6, No 3, pp. 252–262.
5. Barnard, C. I. (1938/1982): *The functions of the executive*. Cambridge, Mass.: Harvard Univ. Press.
6. Bechara, A.; Damasio, H.; Tranel, D.; Damasio, A. R. (1997): Deciding advantageously before knowing the advantageous strategy. In: *Science* 275, pp. 1293–1295.
7. Bonabeau, E. (2003): Don't Trust Your Gut. In *Harvard Business Review*, pp. 116–123.
8. Bowers, K. S.; Regehr, G.; Balthazard, C.; Parker, K. (1990): Intuition in the context of discovery. In: *Cognitive Psychology*, Vol. 22, No 1, pp. 72–110.
9. Briggs Myers, I.; McCaulley, M. H.; Qenk, N. L.; Hammer, A. L. (2003): *MBTI manual. A guide to the development and use of the Myers-Briggs type indicator*. 3rd ed. Palo Alto Calif.: Consulting Psychologists Press.
10. Burke, L. A.; Miller, M. K. (1999): Taking the mystery out of intuitive decision making. In *Academy of Management Review*, Vol. 13, No 4, pp. 91–99.
11. Dane, E.; Pratt, M. G. (2007): Exploring intuition and its role in managerial decision making. In *Academy of Management Review*, Vol. 32, No 1, pp. 33–54.
12. Epstein, S. (1991): *Cognitive-experiential self-theory: An integrative theory of personality*. In: *Theoretical Convergences in Psychoanalysis and Social Psychology*. New York: Guilford Press.
13. Epstein, S. (2003): *Cognitive-experiential self-theory of personality*. In: T. Millon & M. J. Lerner (Eds.), *Comprehensive Handbook of Psychology, Volume 5: Personality and Social Psychology* (pp. 159-184). Hoboken, NJ: Wiley.
14. Fields, A. F. (2001): *A Study of Intuition in Decision-Making using Organizational Engineering Methodology*. Thesis (DBA). Nova Southeastern University, Florida.
15. Gigerenzer, G. (2008): *Gut feelings. The intelligence of the unconscious*. London: Penguin Books.
16. Gzuck, R. (1973): *Messung der Effizienz von Entscheidungen*. Univ, Tübingen, München.

17. Harper, S. C. (1988): Intuition: What Separates Executives from Managers. In: *Business Horizons*, Vol. 31, No 5, pp. 13–19.
18. Hayashi, A. M. (2001): When to Trust your Gut. In: *Harvard Business Review*, Vol. 79, No 2, pp. 59–65.
19. Henden, G. (2004): *Intuition and its Role in Strategic Thinking*. Thesis (PhD). BI Norwegian School of Management, Oslo.
20. Henderson, J. C.; Nutt, P. C. (1980): The influence of decision style on decision making behavior. In: *Management Science and Engineering*, Vol. 26, No 4, pp. 371–386.
21. Hodgkinson, G. P.; Langan-Fox, J.; Sadler-Smith, E. (2008): Intuition: A fundamental bridging construct in the behavioral sciences. In: *British Journal of Psychology*, Vol. 99, pp. 1–27.
22. Hodgkinson, G. P.; Sadler-Smith, E.; Burke, L. A.; Claxton, G.; Sparrow, P. R. (2009): Intuition in Organizations: Implications for Strategic Management. In: *Long Range Planning*, Vol. 42, No 3, pp. 277–297.
23. Hogarth, R. M. (2001): *Educating intuition*. Chicago: Univ. of Chicago Press.
24. Isenberg, D. J. (1984): How senior managers think. In: *Harvard Business Review*, pp. 81–90.
25. Jonassen, D. H. (1997): Instructional Design Models for Well-Structured and Ill-Structured Problem-Solving Learning Outcomes. In: *Educational Technology Research & Development*, Vol. 45, No 1, pp. 65–94.
26. Ju, B.; Junwen, F.; Chenglin, M. (2007): Intuitive decision theory analysis and the evaluation model. In: *Management Science and Engineering*, Vol. 1, No 2, pp. 63–67.
27. Jung, C. G. (1921/1971): *Psychological Types*. London: Routledge.
28. Kahneman, D.; Tversky, A. (1982): On the study of statistical intuitions. In: *Cognition*, Vol. 11, pp. 123–141.
29. Khatri, N.; Alvin Ng, H. (2000): The role of intuition in strategic decision making. In: *Human Relations*, Vol. 53, No 1, pp. 57–86.
30. Kirsch, W. (1971): *Entscheidungsprozesse II. Informationsverarbeitungstheorie des Entscheidungsverhaltens*. Wiesbaden: Betriebswirtschaftlicher Verlag Dr. Th. Gabler.
31. Klein, G. (2004): *The Power of Intuition: how to use your gut feelings to make better decisions at work*. New York, NY: Doubleday.
32. Langan-Fox, J.; Shirley, D. A. (2003): The nature and measurement of intuition: cognitive and behavioral interests, personality, and experiences. In: *Creativity Research Journal*, Vol. 15, pp. 207–222.
33. Lee, H.; Cho, Y. (2007): Factors Affecting Problem Finding Depending on Degree of Structure of Problem Situation. In: *The Journal of Educational Research*, Vol. 101, No 2, pp. 113–124.
34. Liebermann, M. D. (2000): Intuition: A Social Cognitive Neuroscience Approach. In: *Psychological Bulletin*, Vol. 126, No 1, pp. 109–137.
35. Liebermann, M. D.; Jarcho, J. M.; Satpute, A. B. (2004): Evidence-Based and Intuition-Based Self-Knowledge: An fMRI Study. In: *Journal of Personality and Social Psychology*, Vol. 87, No 4, pp. 421–435.
36. Matzler, K.; Bailom, F.; Mooradian, T. A. (2007): Intuitive Decision Making. In: *MIT Sloan Management Review*, Vol. 49, No 1, pp. 13–15.
37. Mintzberg, H. (1994): The Fall and Rise of Strategic Planning. In: *Harvard Business Review* January-February, pp. 105–114.
38. Neuert, J. O. (1987): *Planungsgrade. Eine experimentelle Untersuchung zum Zusammenhang zwischen Planungsverhalten und Planungserfolg*. Univ, Spardorf, Bayreuth.
39. Pacini, R.; Epstein, S. (1999): The relation of rational and experiential information processing styles to personality, basic beliefs, and the ratio-bias phenomenon. In: *Journal of Personality and Social Psychology*, Vol. 76, pp. 972–987.
40. Patton, J. R. (2003): Intuition in decisions. In: *Management Decision*, Vol. 41, No 10, pp. 989–996.
41. Pretz, J. E.; Totz, K. S. (2007): Measuring individual differences in affective, heuristic, and holistic intuition. In: *Personality and Individual Differences*, Vol. 43, pp. 1247–1257.
42. Reber, A. S.; Walkenfeld, F. F. H. R. (1991): Implicit and explicit learning: Individual differences and IQ. Learning, Memory, and Cognition. In: *Journal of Experimental Psychology*, Vol. 17, No 5, pp. 888–896.
43. Ritchie, W. J.; Kolodinsky, R. W.; Eastwood, K. (2007): Does Executive Intuition Matter? An Empirical Analysis of its Relationship with Nonprofit Organization Financial Performance. In: *Nonprofit and Voluntary Sector Quarterly*, Vol. 36, No 1, pp. 140–155.
44. Roth, G. (2009): *Persönlichkeit, Entscheidung und Verhalten. Warum es so schwierig ist, sich und andere zu ändern*. 5th ed. Stuttgart: Klett-Cotta.
45. Sadler-Smith, E. (2008): *Inside intuition*. London: Routledge.
46. Sauter, V. L. (1999): Intuitive decision-making. In: *Communications of the ACM*, Vol. 42, No 6, pp. 109–115.
47. Schoemaker, P. J.; Russo, E. J. (1993): A Pyramid of Decision Approaches. In: *California Management Review*, Vol. 36, pp. 9–31.

48. Seibt, T. (2005): *Intuitive and rational cognitive styles in the personnels selection*. Thesis (PhD). Ludwig-Maximilians-Universität, München.
49. Shapiro, S.; Spence, M. T. (1997): Managerial intuition: A conceptual and operational framework. In: *Business Horizons*, Vol. 40, No 1, pp. 63–68.
50. Shin, N. (1998): *The relationship between well-structured and ill-structured problem solving in multimedia simulation*. Thesis (PhD). Pennsylvania State University.
51. Shoshana, S.; Efrat, S.; Dana, S. (2002): Individual differences in rational and intuitive thinking styles as predictors of heuristic responses and framing effects. In: *Personality and Individual Differences*, Vol. 32, pp. 415–429.
52. Simon, H. A. (1997): *Administrative behavior*. A study of decision-making processes in administrative organizations. 4th ed. New York, NY: Free Press.
53. Sinclair, M.; Ashkanasy, N. M. (2005): Intuition: Myth or a Decision-making Tool? In: *Management Learning*, Vol. 36, No 3, pp. 353–370.
54. Smith, G. F. (1988): Towards a Heuristic Theory of Problem Structuring. In: *Management Science and Engineering*, Vol. 34, No 12, pp. 1489–1506.
55. Stanovich, K. E.; West, R. F. (2000): Individual differences in reasoning: Implications for the rationality debate? In: *Behavioral and Brain Sciences*, Vol. 23, pp. 645–726.
56. Timm, F. (1992): *Das moderne Fremdwörterlexikon. Unbekannte Begriffe schnell verstehen und sicher anwenden*. Köln: Naumann & Göbel.
57. Van Riel, A. C.; Ouwersloot, H.; Lemmink, J. (2006): Antecedents of Effective Decision Making: A Cognitive Approach. In: *The IUP Journal of Managerial Economics*, Vol. 6, No 4, pp. 7–28.
58. Westcott, M. R. (1968): *Toward a Contemporary Psychology of Intuition. A Historical, Theoretical, and Empirical Inquiry*. New York: Holt, Rinehart and Winston, Inc.
59. Witte, Eberhard (Ed.) (1988): *Innovative Entscheidungsprozesse. Die Ergebnisse des Projektes "Columbus"*. Tübingen: Mohr (Die Einheit der Gesellschaftswissenschaften, 58).
60. Woolhouse, L. S.; Bayne, R. (2000): Personality and the Use of Intuition: Individual Differences in Strategy and Performance on an Implicit Learning Task. In: *European Journal of Personality*, Vol. 14, pp. 157–169.

Gabi Hahne

THE IMPORTANCE OF THE AUDITOR`S INDEPENDENCE FOR THE QUALITY OF HIS SERVICES

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Abstract:

The auditing and especially the profession of the auditor have been put in the spotlight in the last years. Considering the dynamic market development and the change of environmental conditions but also the changes of professional demands and requirements, there is a necessity existing for auditing companies, which requires them to set up a broad quality assurance system.¹

Auditors have suffered a loss of confidence through diverse accounting scandals. All these scandals happened even though the trust in the auditor is the basis of the institution of final audits.² It is of crucial importance to restore this confidence, as external legislation is accessible for the public and the public in return relies on its correctness.³ The annual final audit is the main result of accounting and the investors of the capital market rely on the final audits made by auditors. In my paper I will present the theoretical background of Auditing, the auditor and the role of the auditor and the importance of his independence for his correct judgement.

Key terms:

Auditor, Independence, Quality in Audits

1. Introduction

The auditing and especially the profession of the auditor have been put in the spotlight in the last years. Considering the dynamic market development and the change of environmental conditions but also the changes of professional demands and requirements, there is a necessity existing for auditing companies, which requires them to set up a broad quality assurance system.⁴

Auditors have suffered a loss of confidence through diverse accounting scandals. All these scandals happened even though the trust in the auditor is the basis of the institution of final audits.⁵ It is of crucial importance to restore this confidence, as external legislation is

¹ Lück, 2000, p. 1

² Moxter, 1981, pp. 579

³ Lück, 1999, p. 1

⁴ Lück, 2000, p. 1

⁵ Moxter, 1981, pp. 579

accessible for the public and the public in return relies on its correctness.⁶ The annual final audit is the main result of accounting and the investors of the capital market rely on the final audits made by auditors.

1.1. Auditing, the auditor and the role of the auditor

Auditing basically means the external evaluation of companies, especially the final annual audits. This may include voluntary or legally prescribed annual audits. The term final audit describes “the evaluation of the financial information set up by a company voluntarily or due to legal prescription over a back-dated period“.⁷ According to the two functions fulfilled by the annual audit, namely the informative function and the calculative function⁸, the financial information is to inform different circles of addressees about the entrepreneur’s financial and profit situation. These addressees may stem at that from both company internal and company external circles. The management and employees are main examples for those belonging to the company internal addressees. Owners (both actual and potential equity investors), creditors (debt suppliers), business partners (suppliers), clients, tax offices and the interested public are ranked amongst the company external addressees.⁹

Respective to their different decision situations, the addressees will all have different information needs. Examples are: the management needing information about the company situation and possible development for a profit-oriented remuneration; equity investors needing information about the dividend payments and future profit situation and creditors needing information about the credit worthiness, default risk and the company’s ability to pay back credits. Employees in turn are interested in the safeness of wage and salary payments and their workplace, the financial administration and the amount of deferred tax assets. The public is interested in information about the regional and/or economic importance of the company.¹⁰

The annual audit as the management’s information tool of the management makes these information available, even though the presentation of the company is oriented towards the past. Next to the annual audit, which is composed of balance, gains and losses calculation and attachment (§ 264 HGB), in Germany, a situation report or a management report is made for further information (which includes historical data, data about possible development). This situation report is to offer a true and fair view of the company independent of the annual audit.¹¹ At that, the situation report complements the final annual audit.¹²

⁶ Lück, 1999, p. 1

⁷ Schmidt, 2000, p. 9

⁸ Wagenhofer; Ewert, 2007, p. 4

⁹ Wöhe, Döring, 2008, pp. 712

¹⁰ Wöhe; Döring, 2008, pp. 712

¹¹ Ellrott, 2006, p. 1318

¹² Ellrott, 2006, p. 1318, Ballwieser, 2005, p. 3

In its function as an information instrument, the annual audit set up by the management of the company delivers important information for the aforementioned addressees. However, it can be influenced by different assessment or valuation options and areas of judgment, which are intended by the accounting standards. A balancing decision can be dominated by the self-interest of the management in such a way, that it negatively affects the reliability or relevance of information, if the manager makes self-interest maximizing decisions, which do not correspond with the interests of the other stakeholders.¹³

Due to the differing interests and the information deficit of the other stakeholders towards the management, those in turn may have reasonable doubts towards the credibility of the information, as they are not possible to judge from their position, whether or not the present annual audit was made free from electoral rights or discretionary powers und thus is standard-compliant or not.¹⁴ The voluntary or legally prescribed annual audit through the auditor serves the purpose of being able to verify the reliability of the presented numbers and facts.

1.2. The Auditor and the Basis for his Work

The term “auditor” at that means natural and juridical persons, who are licensed to carry out legal annual audits.¹⁵ To be allowed to work as a professional auditor, there are broad admission requirements in all countries. The type of authorization differs distinctly internationally. In the USA, Germany and Austria, State Boards of Accountancy are responsible for the authorization. They require a personality beyond reproach, various financial conditions according to §10 WPO, completion of studies and practical working experience in the auditing profession as well as passing a general exam. Subsequently the public appointment and swearing in before the Chamber of Auditors follows. The practice of an occupation in a professional society is widely regulated. The Auditors Regulations determine in which legal form the profession is allowed to be practiced. The basis for the practice of an auditor in an auditing company is the approval through the supreme authorities (§§ 1,30 WPO).

1.3 Legal Requirements

The practice of a profession is governed by broad legal restrictions that are stated in the Auditors Regulations and the Commercial Code. Independent, diligent, discreet and independent professionalism is part of the general professional duties (§ 43 WPO). The auditor has to work in an unbiased manner especially when providing audit reports and expert reports (§ 43 Abs. 1 WPO). Even beyond his profession, the auditor needs to prove himself worthy of the trust and respect that the profession requires (§ 43 WPO). In addition broad duties for the implementation of final audits arise from the §§ 318 HGB as well as from the institutional professional supervision. The institutional professional supervision consists of

¹³ Ellrott, 2006, p. 1318, Ballwieser, 2005, p. 3

¹⁴ Weber, 2011, p. 7

¹⁵ Schmidt, 2000, p. 10

the sectors¹⁶ of supervision, which is established by the Chamber of Auditors in Berlin, the system of auditor supervision, which also includes the external quality control by which the internal quality assurance system is controlled to show whether or not it fulfills the legal mandates¹⁷, as well as of the supervision by the law (so-called enforcement laws). One needs to differentiate the system of auditor supervision and supervision by laws, as they focus on the accounts. If any indications of neglect of professional duties are revealed by this, they are to be reported to the auditor`s supervisors for further investigation.¹⁸

Even now, broad legal measures are being discussed as to how the European market for final audits and thereby the quality can be improved. As a reaction to the financial crisis, the EU Commission has presented an EU-green paper for final audits (“Further action in the sector of final audits: Teachings from the crisis”¹⁹) on the 13th of October 2010, which discusses various reform proposals for the profession. At the center of the current discussion is the role of the auditor in public and his independence, strengthening measures like the external mandatory rotation, the separation of auditing and consulting and joints audits are considered.²⁰

1.4 Professional Requirements

Auditors practice, like doctors or lawyers, is also called liberal profession. The special character of a liberal profession is based on the professional understanding, the practice of the profession and the view of the profession as a public service.²¹ Liberal professions all have to comply with certain regulations for their respective practices, which are based on the professional ethic rules. For auditors in Germany these are the German Auditors Regulations (WPO) and the regulations and standards specified by the vocational statutes and statements of the institute. The vocational duties presented in the following profoundly influence the presentation of the auditor in public:

- independence, impartiality, and the avoidance of conflicts of interest
- conscientiousness
- discretion
- personal responsibility
- professional dignity

Independence – the most important characteristic of the professionalism of auditors – is established by the legal and professional duties as well as by the Code of Ethics, so it is examined in the next chapter extensively. Fulfilling the professional principle of the

¹⁶ Paulitscheck, 2009, p. 238

¹⁷ Jehle, 2007, p. 20

¹⁸ Hildebrandt, 2010, p. 2

¹⁹ European Commission 2010, p. 13

²⁰ Waldthausen, von, 2011, pp. 119

²¹ Buhleier, Helmschrott 1998, p. 22

independence is one of the main points of the Green Paper, in the view of the EU-Commission is the independence the basis of the audit.

The principle of **conscientiousness**, regulated by § 43 sect. 1 sentence 1 WPO, is substantiated in § 4 of the Professional Code for Auditors. Conscientious professionalism requires that the auditor complies with legal regulations and technical rules when carrying out his duties. Therefore, employees are placed under the obligation to comply with the regulations of the quality assurance system of the company, as well as to document this accordingly.²² Additionally, professional training, regulated by §4a BS WP/vBP, forms the basis for a conscientious professionalism. When agreeing on the remuneration for audits and reports, it needs to be considered, that the remuneration can guarantee the quality of the professional work.²³

In accordance with §43 sect. 1 sentence 1 WPO, the auditor is obligated to exercise **discretion**. According to the regulations of the professional code (§§ 9,10), auditors are not allowed an unauthorized disclosure or usage for their own purposes of facts and circumstances they are entrusted to them or that they come to know while exercising their profession. This obligation to discretion also applies to final audits. The obligation to secrecy is without time limitation (§9 Abs. 3 professional code) and also holds true for the company's employees.

Personal responsibility, regulated in §44WPO, §11 professional code, means that the auditor exercises his tasks entirely under his own responsibility and free of instructions. He forms his own opinion and makes his own decisions. He must not accept jobs, if he cannot carry out his work with professional responsibility. The compliance with the regulations of personal responsibility serves to secure the quality of the job being done. Moreover, it is meant to contribute to the auditor reaching an independent judgment.²⁴

Professional dignity includes, that the auditor abstains from any work that is incompatible with his vocation or the reputation of the vocation, regulated in §43 sect. 2 WPO. He has to be aware of his special vocational duties resulting from the fact, that he performs legally mandated final audits and that the public and his clients trust his judgment.²⁵ "He therefore has to prove himself worthy of the trust and dignity his profession requires, also beyond his professionalism"²⁶. Concretely, it goes without saying that the auditor is not allowed to agree on success fees, to make or accept the payment of a commission (§55 WPO), and donations. The same applies to all employees of the auditor.

1.5 Code of Ethics

Besides the compliance with all legal and professional requirements, an auditor additionally needs to pay attention to the guidelines of the Code of Ethics.²⁷ Those comprise very

²² Wirtschaftsprüferkammer 2011, BS WP/vBP, § 4, p. 5

²³ § 55 Abs. 1 Satz 4 WPO, § 27 Abs. 1 BS WP/vBP

²⁴ Institut der Wirtschaftsprüfer 2011 p. 31

²⁵ Leffson, 1998, p. 90

²⁶ Institut der Wirtschaftsprüfer 2011, p. 33

²⁷ International Federation of Accountants, 2012

extensively all prerequisites the auditor needs to consider and fulfill in his office while undertaking the different audits. The **professional requirements**, which are predefined in the professional by-laws of the respective countries, contain e.g. the obligation of an objective and diligent professionalism, the obligation of personal ongoing training as well as those of employees and the obligation to confidentiality, to name but a few.²⁸ The **legal requirements** concern the attention to the various independence and exclusion criteria, confidentiality, diligence, independence as well as the obligation of providing an unbiased report and audit certificates, to name but a few here as well.²⁹ The **Code of Ethics** for Professional Accountants applies to all professionals that are members of a member-organization of the International Federation of Accountants (IFAC) and contains the behavioral-standards for auditors applicable worldwide. The purpose of the Code of Ethics, which is published by the IFAC in an up to date version in July 2012, is to “serve the public interest by: contributing to the development, adoption, and implementation of high-quality international standards and guidance; contributing to the development of strong professional accounting firms.”³⁰ They also contain professional obligations such as integrity, objectivity, functional responsibility and diligence, confidentiality and independence, to name the most important.³¹

The Code of Ethics describes in its introduction first, that a professional accountant’s responsibility is more than to satisfy the needs of his clients because he acts in the public interest,³² and therefore has to comply with the Code of Ethics.

It is divided into three parts. Part A initially describes the general use of the codex, Part B contains regulations for those belonging to the auditing professions and Part C contains regulations for those belonging to the accounting profession. In the following only Part A will be mentioned shortly. This part also defines the general professional duties for auditors and wants to present a framework that professionals have to use in order to:

- “identify threats to compliance with the fundamental principles;
- evaluate the significance of the threats identified; and
- apply safeguards, when necessary, to eliminate the treats or reduce them to an acceptable level.”³³

The professional standards established by the Code of Ethics, which any professional has to adhere to, correspond partly to the standards mentioned above and consist of integrity, objectivity, expertise and diligence, discretion and professional dignity.

²⁸ Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer 2010

²⁹ In Germany: § 43f WPO, § 319 HGB

³⁰ Code of Ethics for Professional Accountants, p. 1

³¹ Code of Ethics for Professional Accountants, p. 3

³² Code of Ethics for Professional Accountants, p. 13

³³ Code of Ethics for Professional Accountants, p. 13

1.6 Independence

As it becomes clear in the short explanation above, certain tenets, such as confidence and independence, are to be found in all three divisions as mandatory elements for the auditor. This shows, of course, the great importance the adherence of these tenets has for quality professionalism. Still, the adherence to these legal and professional standards is only to be found among the foundations of this new holistic model of quality, the so-called principles. Quality needs to be more than simply fulfilling these given laws and principles.

Quality can only to be achieved by the auditor if he performs his duties with complete independence and without bias and if he does not allow his judgment to be influenced. The independence of the auditor is the cardinal quality of honesty in the holistic model designed by the author. Only a completely independent auditor is able to guarantee that his judgment is unbiased and free of any external influences. Independence is – as mentioned before – required by all three elements of the principles, but it is part of the professional duties that the auditor has to fulfill. However, independence means more than the fulfillment of a professional duty, it is of utmost importance and the chief aspect of the whole model.

Regarding the different legal and professional regulations of independence, it can be observed that independence is theoretically widely regulated, e.g. through the limitation of shares and voting power an auditor has in a company that he is to assess; through the agreement on a limit to the remuneration; expulsion in case of non-compliance etc. Nevertheless, in practice there are problems of demarcation occurring again and again due to unclear legal terms, such as bias. In the reference, the auditor's independence is divided into "independence in fact or independence of mind" and "independence in appearance". If an auditor is independent "in fact or of mind", he or she has the ability to make independent audit decisions, even if there is a perception of lack of independence or if the auditor is placed in a potentially comprising position.³⁴

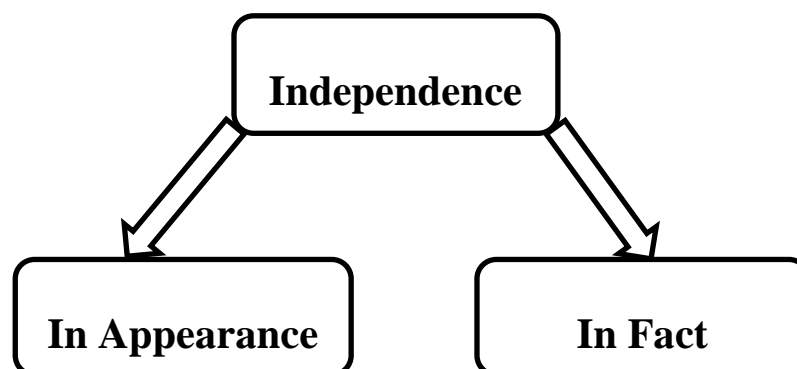


Figure 7: Independence of an Auditor designed by the author, (2012)

³⁴ McGrath; Siegel; Dunfee; Glazer; Jaenicke, 2001, p. 39

Nevertheless it is possible that even when the auditor is “in fact” independent, that there are some facts that may make the public believe, that the auditor does not “appear” to be independent. It could be, that users of financial statements believe, that they cannot rely on annual audits of financial statements.³⁵ Therefore the perception of the public and of users of financial statements it is also an important consideration in the discussion of an auditor’s independence. It is necessary, that a reasonable third party recognizes that there are no conflicting interests that might be prejudicial to the auditor’s independence.

Fulfilling the professional principle of the independence is one of the main points of the Green Paper, in the view of the EU-Commission is the independence the basis of the audit. On October 13th, 2010 the European Commission released its Green Paper with the title “Audit Policy: Lessons to the crisis” to assume leadership in the international discussion about the role of audits in today’s financial life. The commission shares the opinion, that a solid audit is very important to regain confidence in the market and to strengthen the European economy. The aim of the Green Paper should be to strengthen the public confidence in audited enterprise data. Auditors must avoid conflicts to interests to fulfill their tasks according to the rules.

There are already a lot of principles of professional ethics and laws an auditor has to fulfill, it lays down a number of principles for independence, ranging from behavioural aspects to considerations around ownership, fees, rotation or companies governance. Nevertheless the EU-Commission proposes in the Green Paper several measures for ensuring the independence:

- Appointment and remuneration of auditors
- Rotation and
- Non-audit Services

In the profession and in the research there are a lot of different opinions, whether the proposed measure will be able to make the auditors more independent and their work with higher quality.

The statement made by Volker Peemöller³⁶ sums up these facts most comprehensively:

“Legal rules, professional regulations, and reform proposals by commissions aim at the cleverness and the freedom of judgment of the auditor, in order to ensure an appropriate judgment. These efforts **will not be fruitful, if the auditor does not have the commitment to his work to perform it with the highest possible quality.**”

³⁵ Lowe; Geiger; Pany, 2001, p. 90

³⁶ Peemöller, 2012, p. 37, qtq from: Hermann, 2004, p. 706

Literature

1. Ballwieser, W. 2005: Die Entwicklungen im Lagebericht, Anpassung des deutschen Bilanzrechts an internationale Standards – Bilanzrechtsreformgesetz und Bilanzkontrollgesetz, p. 1 - 10
2. Buhleier, C.; Helmschrott, H. 1998: Der Beruf des Wirtschaftsprüfers. Tätigkeit, Bewerbung und Berufseinstieg. Oldenbourg Verlag.
3. European Commission 2010: Green Paper: Audit Policy: Lessons from the Crisis KOM(2010) 561 endgültig, Brüssel http://ec.europa.eu/internal_market/consultations/docs/2010/audit/green_paper_de.pdf, Retrieved on 23.04.2012.
4. European Commission 2011: MEMO/11/856, Press Release, Brussels.
5. Ellrott, H. 2006: Kommentierung zu §289 HGB, Beck'scher Bilanz-Kommentar: Handels- und Steuerbilanz. P. 1314 – 1340, Beck Juristischer Verlag, 8th Edition
6. Hildebrandt, D. 2010: Das System der Prüferaufsicht in Deutschland. § 66a WPO. Primus Seminare, Köln.
7. Institut der Wirtschaftsprüfer 2011: IDW Praxishandbuch zur Qualitätssicherung 2011/2012. IDW-Verlag, 6th Edition, Düsseldorf.
8. International Federation of Accountants 2012: Handbook of the Code of Ethics for Professional Accountants. IESBA, New York.
9. Jehle, N. 2007: Konflikte innerhalb von Wirtschaftsprüfungsgesellschaften. Eine empirische Untersuchung branchenspezifischer Einflussfaktoren. Gabler, Wiesbaden.
10. Leffson, U. 1988: Wirtschaftsprüfung. Gabler Verlag, 4th Edition, Wiesbaden.
11. Lowe, D.J.; Geiger, M.A.; Pany, K. 2001: The effects of internal audit outsourcing on perceived external Auditor independence, Journal of Accountancy, 191 (1), p.90.
12. Lück, W. 2000: Quality Control – Maßnahmen zur Qualitätssicherung in der Wirtschaftsprüfer-Praxis, der Betrieb, 1, p. 1-6
13. Lück, W. 1999: Prüfung der Rechnungslegung - Jahresabschlussprüfung. Oldenbourg Verlag.
14. McGrath, S.; Siegel, A.; Dunfee, T.W.; Glazer, A.S.; Jaenicke H.R. 2001: A framework for auditor independence, Journal of Accountancy, 191 (1), p. 39.
15. Moxter, A. 1981: Wirtschaftsprüfung im Zeitgeist, Die Wirtschaftsprüfung, 34. (19), p. 579–583.
16. Paulischek, P. 2009: Aufsicht über den Berufsstand der Wirtschaftsprüfer in Deutschland. - Eine agencytheoretische Analyse. Gabler Verlag, Wiesbaden.
17. Peemöller, V. 2012: Gebührenordnung für Abschlussprüfer – ein Ansatz zur Qualitätssicherung, WPK-Magazin, 1, p. 37.
18. Schmidt, S. 2000: Externe Qualitätskontrolle zur Sicherung der Abschlussprüfung, IDW Verlag, Düsseldorf, 2000.
19. Waldthausen, J. 2011: Das Grünbuch zur Abschlussprüfung, wp-net Magazin, 34, p. 116–125.
20. Wagenhofer, H.; Ewert, R. 2007: Externe Unternehmensrechnung, Springer Verlag, 2nd Edition
21. Weber, R. J. 2011: Die Entscheidung über die Auftragsannahme in der Wirtschaftsprüfung, Ein qualitätssicherndes Instrument im Rahmen der Jahresabschlussprüfung, Gabler Verlag, Wiesbaden
22. Wirtschaftsprüferkammer 2010: Berufssatzung für Wirtschaftsprüfer/vereidigte Buchprüfer BS WP.
23. Wöhe, G.; Döring, K. 2008: Einführung in die Allgemeine Betriebswirtschaftslehre. Verlag Vahlen, 23rd Edition, München
24. WPK Magazin 2011: Anbieterstruktur, Mandatsverteilung und Abschlussprüferhonorare im Wirtschaftsprüfermarkt 2010, Mitteilungen der Wirtschaftsprüferkammer, 4, p. 19 - 21

Claudia van der Vorst

SELECTION AND ACQUISITION OF ERP SOFTWARE AT MID-SIZE COMPANIES. LESSONS LEARNED FROM EXPERTS.

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Abstract

Managers of mid-size companies know that profitable growth in a global environment is dependent on very efficient business processes and a strong, supporting ERP environment. An actual study shows that 68% of the managers are absolutely aware of that their success and growth are dependent on a powerful IT and even more than 72% believe that flexibility during growth is dependent on the IT landscape (cf. SAP, 2008).

The buying and implementation process of ERP is a fundamental cost factor. In a lot of industries in mid-size companies it is over 5 % of the yearly turnover (cf. Biermann, 2005). Therefore the selection of the standard software is one of the strategic instruments at mid-size companies. The decision for one specific package defines not just the IT framework with hard- and software, the selected system is the backbone for all business processes.

Usually the process of ERP selection and implementation is a very intense and long process for mid-size companies. Most of the problems occur during the second phase of implementation and testing. At this point in time a lot of the key users are involved defining detailed business processes and reviewing functionality of the system. But even if a lot of requirements are not fulfilled it is too late in the process to change (cf. Verville et al., 2003).

For the detailed research an empirical model was developed to review the early stages of the process as well as to define success differently. Setting up the model and challenge it in discussion with experts is a key topic of this paper. Especially these interviews with industry experts provide a clear overview of the current practice, and prove that a structured approach should be followed as well as experience from large entities leveraged for SME considering their specifics.

Key terms: Decision Making Process, Enterprise Resource Planning (ERP), Small and Mid-size Entities (SME), Information Technology (IT), Acquisition.

Introduction and Relevance

The advantages of using Enterprise Resource Planning (ERP) software have been well understood by the large and multinational businesses for a long time. These companies generally have extensive IT departments and their employees are well trained with years of implementation and operation experience. The number of larger businesses now buying and implementing new ERP systems is reaching saturation. For small and mid-size enterprises

(SME's) the situation is very different. A lot of small, mainly local IT companies are implementing a large number of different ERP solutions according to a similar number of different methods.

With globalisation and internationalisation of economy SME companies are forced to adapt their business model and approach according to practices and software adopted by big companies (cf. Shehab et al., 2004 p. 359). A study (2005) of 550 companies showed that 57%-70% of large companies are currently using ERP systems but only 27% of SME companies (cf. Caruso, 2005). There is a significantly rising demand for ERP systems at mid-size companies. There was an additional feedback in the same study, claiming that 50% of the companies are planning to select a new or to modify the existing ERP system within the next 12-18 months. This study obtains more and more relevance in the current turbulent economic markets. Jutras stated at the end of 2009 that over 30% of the mid-size companies are operating without proper tools / ERP systems (cf. Jutras, 2009).

First of all, mid-size companies understand their challenges in the global market. They need to focus on following their growth priorities while they find themselves squeezed in by the effects of an increasingly tough globally competitive environment. To remain in that new market environment they need to expand aggressively but profitably while growing organically. The global and open market is a threat and an opportunity but most companies are forced to look abroad. "Overall the ERP market will grow to 45.2 billion US\$ in 2011 from 30.6 billion US\$ in 2006 according to an October IDC report" (Violino, 2008, p.55).

Definitions

The key terms are defined very high level for the purpose of this paper.

Definition of small and medium-size businesses (entities) - SME

In Germany the medium-size companies, the so called "Mittelstand", are very important for the economy given that about 99% of the companies are small and mid-size companies depended on industry and definition (cf. Wallau, 2011, p.3) and 70% of the positions and 83% of all apprenticeship training position in Germany are held by these companies (cf. Initiative Mittelstand, 2009).

However the interpretation of SME (small and medium entities) or mid-size companies is not consistent throughout literature. In the following sections some comparative, qualitative and quantitative factors are analysed and stated.

The quantitative, comparative factors to be analysed relate to company size, specifically to the number of employees and turnover.

The most relevant definitions are from the EU commission and the IfM Bonn. But even these are different given a different focus. The EU focus on Europe, where the number of medium size family businesses is rather small in comparison to Germany, which is the focus of the

IfM Bonn. The definition of the EU commission is optional for all members but will be used by the European Investment Bank (EIB) and the European Investment Funds (EIF).

Comparing the different papers which are covering the subject IT Systems / ERP Systems and SME and white papers from software providers, show the modified numbers again.

Schmitz and Biermann define the numbers differently for their studies to both of the above definitions. They just focus on numbers of employees and neglect companies under 50 employees explaining that below this, the companies do not have the financial capacity for an ERP implementation. Believing the definition rather needs to be functional than a “right” definition (cf. Schmitz et al. 2007). They used an older Swiss standard selecting medium size companies between 50-499 employees.

A very specific ERP-Study using as well the number of employees as the main indicator defined the numbers again slightly differently:

- Very small Companies up to 49 employees
- Small Companies 50-99 employees
- Medium-size Companies 100-499 employees
- Big Companies over 500 employees (cf. Stegemann, 2011).

In conclusion the definition needs to be specified based on the criteria and subject to analyse. For the matter of the ERP selection and implementation the number of employees is much more relevant than the turnover. As a basis for this paper, all so called small and mid-size companies with up to 250 employees are the target companies. Big entities with more than 250 employees are out of scope.

Definition of Enterprise Resource Planning (ERP) Systems

Enterprise Resource Planning (ERP) is a very specific term. The author would like to avoid any confusion about this term therefore it is specified and analysed in detail.

Term and classification of ERP

The term stands for “Enterprise Resource Planning” a confusing term to express a very simple concept, managing all areas of your business efficiently. The confusion is mainly driven by the high number of different explanations which are based on the impression of software providers, scholars and researchers. Mainly the software providers try to use the term according to their product and adapt the concept according to it. Instead of coming up with an additional expression and usage of the term the author prefers to compare the existing ones and point out the key characteristics of the product. There are a lot of suggestions about the term available in literature; in the following some examples are found.

“The term “Enterprise Resource Planning” was first used by the research and analysis firm Gartner Group in 1990 as an extension of MRP (Material Requirements Planning; later, Manufacturing Resource Planning) and CIM (Computer Integrated Manufacturing). While not supplanting these terms, it has come to represent a larger whole”. Definition: “*Enterprise resource planning (ERP) is an integrated computer-based system used to manage internal and external resources, including tangible assets, financial resources, materials, and human resources*” (<http://www.managingautomation.com/techmatch/erp-buyers-guide.aspx> 06.12.2011 – 13.37h).

“ERP Software is a strategic tool that unifies and manages the core process of a business to improve client and supplier interactions as well as equipping the business with well-defined and controlled processes.” (Dwivedi, 2007).

“Enterprise resource planning (ERP) software systems integrate the main business and management processes within and beyond a firm’s boundary. They support most commercial activities, including purchasing, sales , finance, human resources, and manufacturing resource planning (MRP) in the enterprise. Enterprise resource planning software systems provide a multitude of benefits to businesses, such as inventory reduction, data integration and cost reduction.” (Shiau et al., 2009)

Holsapple and Buonanno support this definition as well (Holsapple et al., 2003) (Buonanno et al., 2005). The fact of adding inventory reduction is added by Sumner (Sumner, 2000).

“Enterprise Resource Planning (ERP), created to conquer the shortcomings of MRP II (manufacturing resource planning), is a system that involved the planning and managing of the entire organisation’s resources in the most efficient, productive, and profitable manner. Unlike an MRP structure, ERP systems are information systems that allow an organisation to run a synchronized configuration that strategically connects all aspects of a business. ERP allows an organisation to gain competitive advantages by saving resources and responding to the ever-changing business environment.” (Barker et al., 2003).

“Enterprise Resource Planning (ERP) is a generic term for integrated systems for corporate computing that supersedes concepts such as Materials Requirement Planning (MRP) of the 1970s and, later, Manufacturing Resources Planning (MRP II) of the 1980s. ERP projects basically represent the implementation of these systems. These systems are embodied in ERP software, which provides a set of functional capabilities in terms of process options that can be chosen to fit one’ s preferred business model, on a specific technological platform. ERP software thus largely profiles ERP projects. However, their specific capabilities and limitations in the organizational context unfold during their implementation, which determines the delivery of ultimate value. Therefore, evaluation of ERP projects essentially encompasses the evaluation of ERP software as well as its implementation.” (Teltumbde, 2000)

“The ultimate in integrated systems is the single vendor Enterprise Resource Planning (ERP) system. An ERP system is a standard consolidated software package integrating all the functional modules of your business (Finance, Production, Sales, Human Resources,

Marketing, etc.) which sit on a common database. Thus ERP systems can provide up-to-date real time information to their users.” (Dempsey et al. 2007)

“ENTERPRISE Resource Planning (ERP) system is a software system for business management encompassing modules that support the functional areas such as planning, manufacturing, marketing, distribution, accounting, finance, human resource management, inventory management, service and maintenance, transportation and e-business. ERP system helps various parts of an organisation to share data and knowledge, reduce costs and improve the management of business processes.” (Perera et al., 2008)

In summary, using all mentioned very valuable interpretation from scientists. The author does not want to come up with something new. The key quality criteria to specify what is meant by an ERP system are firstly it is a software package which covers standardized best practice business processes for the entire enterprise in one system. Secondly on the basis of system modules all important areas of a business are covered in an integrated system. Finally, all business functions are covering actual data real time for the best steering and controlling of the company

Literature Review – State of the art with aligned topics

Business requirements are changing very rapidly specifically for small and medium-size entities (SME) challenged to work in an international environment competing in the global market. Despite the decision for an ERP system is more and more commoditised for big global entities it is very new to SME. It is a strategic decision because it has a long term impact on the organisation. The risk associated with the selection and implementation, is much higher than for big enterprises. SME’s lack critical human and technical capabilities’ and spend a significant amount of money for the ERP system in comparison to their turnover (over 5%). To fail the ERP implementation results often in bankruptcy of the company (cf. Fisher / Fisher, 2004). Therefore it has to be pointed out that the strategic decision of an ERP system at SME is critical and needs to consider in detail the people being involved, the method followed and the criteria defined according to the business requirements.

Selection of an ERP system is very relevant in strategic decision making specifically for SME companies

A review in literature shows that the subject “decision making” is exhaustive and especially “strategic decision making” is getting more and more popular in recent years. One aspect of decision making should be taken into further consideration - rational decision making addresses how a decision should be made rather than how decisions are made (cf. Metts, 2011 and Simon, 1978), which is a very valuable aspect for the subject IT selection. Given the study of strategic decision making is a conglomerate of all intellectual disciplines, this paper and it’s research focus on managerial decision making where Barnard and later theorists like James March, Herbert Simon and Henry Mintzberg laid the foundation for. To make good

choices companies must be able to calculate and manage the risks (cf. Buchanan et al., 2006). Decision making is seen as a functional view driven by rational behaviour (cf. Melé, 2010). Strategic decision making is a non-routine process with long-term consequences (cf. Hedelin et al., 2002). Key for management decisions is to consider the decision as a process not as an event. (cf. Garvin et al., 2001).

Decision making process

There is a variety of identifications of the term decision. In science the term management decision making is very often synonymously treated with the preparation process, the selection and the decision itself. “Decision making comprises three principal phases: finding occasions for making a decision; finding possible courses of action and choosing among courses of action” (Simon, 1960 reference by Harrison).

For the purpose of this paper decision making is illustrated as a process which is finalized with the decision itself in the end. This process needs a specific structure and unfolds over weeks and months, with management political power and role play to conclude in a final result, the event of a decision (see Garvin, 2001).

Strategy – Strategic decision making process

The term strategic indicates something long lasting, using the big picture. In history the term usually was connected to war and military. In the 19th century it became more related to strategic management. So, long term strategies run the businesses. “Eyes wide open” used strategic decision making for SME as a special art to combine strategic, tactical and operational decision making. Just looking at the strategic part it specifies that it focuses on the big picture, on the question “what?” “The focus of strategic decisions is typically external to the business and usually future oriented. Strategic decision-making created the forward thrust in the business.” (cf. eyes wide open 6/2011). The primary focus is on strategic decisions of top managers of a small, possible medium size company.

The strategic view is important for this paper because the decision for an ERP system is a decision with long term impact. The ERP systems are usually used 10-15 years, most of the time even longer. It is one of the most critical strategic decisions for a SME because it usually impacts on all business processes and the organisation of the company.

Strategic decision making and buying behavior at SME companies

The term strategic decision making in management has been discussed just in the 20th century. The foundation of the study of managerial decision making suggests strongly to move away from the traditional approach and to consider aspects of psychologies, economists, sociologists, organisational theorists, statisticians, philosophers and others. Theorists as Barnard, James March, Herbert Simon, and Henry Mintzberg laid the foundation for the study of managerial decision making. The awareness of a dependency on culture,

economy and politic has resulted in a movement away from the traditional approach to consider all aspects of psychologies, economists, sociologists, organisational theorists, statisticians, philosophers and others. Risk is an inescapable part of making a decision, especially a strategic decision, meaning the implications of it might be enormous (cf. Buchanan et al., 2006), (cf. Harrison,1993).

The strategic decision making process for small and mid-size entities (SME) is very critical and more relevant than ever given the need for globalization. Mid-Size companies understand their challenges in the global market. They need to focus on following their growth priorities while they find themselves squeezed in by the effects of an increasingly tough global competitive environment (cf. Jacoby, 2006). Due to the historical approach and set up of these companies, business processes even for these very critical areas are not structured. Especially the question of “who makes the decision and how?” has rarely been analysed. It still follows the same established approach that the owner, CEO or head of the family business decides.

“Selecting the best ERP system is a strategic decision process” (Percin, 2008). It is a one of strategic decision processes and instruments in which usually the decider has little or no experience. The acquisition is a fundamental cost factor. In a lot of industries in mid-size companies it is over 5 % of the yearly turnover (cf. Biermann, 2005). The decision for one specific package defines not just the IT framework with hard- and software, the selected system is the backbone for all business processes.

The need for an ERP system at SME companies

Managers of mid-size companies know that profitable growth in a global environment is dependent on very efficient business processes and a strong, supporting ERP/IT environment. A recent study shows that 68% of the managers are absolutely aware of that their success and growth are dependent on a powerful IT and even more than 72% believe that flexibility during growth is dependent on the IT landscape (cf. SAP, 2008).

The decision for one specific ERP package defines not just the IT framework with hard- and software, the selected system is the backbone for all business processes. Especially mid-size companies will not invest in any system architecture in parallel to the ERP system. An average ERP system remains for 10-15 years.

Thus, the selection of an ERP system is not the responsibility just of the IT department; but for any manager in a leading position of a company (cf. Jacob et al., 1998).

“The current focus on organizational buying behavior continues to be the same, largely ignoring the advent of IT” (Verville et al, 2003). Especially for mid-size companies the buying process and a successful implementation and later service management cannot be decoupled.

Buying behavior and purchasing processes at SME companies

“The term “acquisition” refers to all the stages from buying, introducing, applying, adopting, adapting, localizing, and developing through to diffusion.” (Rahardjo, 2006).

For the purpose of this paper the term “acquisition” should be limited to its original meaning really the procurement of the ERP system. The basic procurement process containing the information gathering, supplier contact, background review, negotiation, and contract finalization.

The structure of a purchasing department or a structured process for acquisition, which are the specific needs for a mid-size buying organization and which information are required for long sustainable decision process in purchasing are not covered by scientists in much detail. The knowledge about the buying behavior is highly important especially for the sales people and an optimization of acquisition is a short term goal. A detailed analysis of cause relations did not take place so far. Empirical studies analyzed the importance of buying centers at SME companies and resulted that the importance of buying centers are related to the size of the company. The bigger the companies the more important is the use of buying-centres, intercompany or cross entities (cf. Biermann et al., 2007, p.243f). Catrin Hinkel, Senior Executive of Accenture, confirmed this statement and added that internet purchasing platforms, auctions and buying centers are used for general purchasing at SME but rather at mid-size companies than at small companies (Hinkel, Interview, 21.12.2009, Accenture Kronberg).

Hypothesis development

Based on the mentioned, relevant literature and all defined factors a model has been developed to support the selection process of an ERP system for SME companies. The model has been provided at the interviews and the relevance has been discussed. Therefore the key research question for this paper is: “The developed model is relevant for the selection of an ERP system for a SME company and the selection of the system influences very much the success with the system in the end”. The hypothesis which has been discussed in the interviews was.

“The developed model would positively support the selection process of the ERP system and would positively impact the success with the system after go live.”

The research question and the underlying hypothesis have been discussed during the interviews with various experts. The detailed analysis of the model with a real life company case study is not part of this paper.

Research methodology

The research method for this study is based on a literature review to ensure a wider picture of the selection process. The selection process as a structure, the selection characteristics and the

influence of the decision making people were reviewed. The discussion is based on an intensive literature review to develop the model and expert interview to prove the relevance.

Development of an ERP life-cycle model connecting satisfaction with selection

The construct model is based on key parameters identified by research in literature over the past years. There is currently not a general, overall valid model available in science or IT practice to measure the satisfaction with an ERP system as the basis for ERP selection. Therefore existing structures have been reviewed and considered for the model development. The first constructs were developed about 35 years ago modeling with a clear focus on various sub-areas of ERP existing at that time. MRP, MRP II than CRM and SCM were the areas scientists focus on. In the next generation of measures, financial and non-financial measures were added to a very diverse picture. Considering that ERP as a term became most popular in the 1990 ties researchers started to concentrate on that field and until the end of 2000 about 200 publications can be found but only very few (ca. 10%) had been journal articles. The authors mention frequently the high outstanding potential in this research field. But until then, most authors focus on the implementation part of the ERP life-cycle, the other parts are almost ignored.

Beginning of the 20th century, the increase of mobility and internet, the “e” wave and the enormous number of startup companies in the IT area, ERP became massively more popular for researchers. The number of publications increased significantly since then to about a hundred journal publications a year. Most of the authors published just one journal article or conference paper only about twenty authors published more than one. Focusing on the last decade the publications covered a wider range of interest. Looking at the ERP life-cycle management the implementation phase and optimization potential remained the highest ranked. The potential on the selection process couldn't be identified in detailed numbers. But some researchers covered that topic as well (cf. Schlichter et al., 2010).

However the objective of this research is to understand how enterprise resource planning systems can be selected for small and medium-size companies using a clear and understandable approach / model while defining a measurable set of criteria to reach satisfaction.

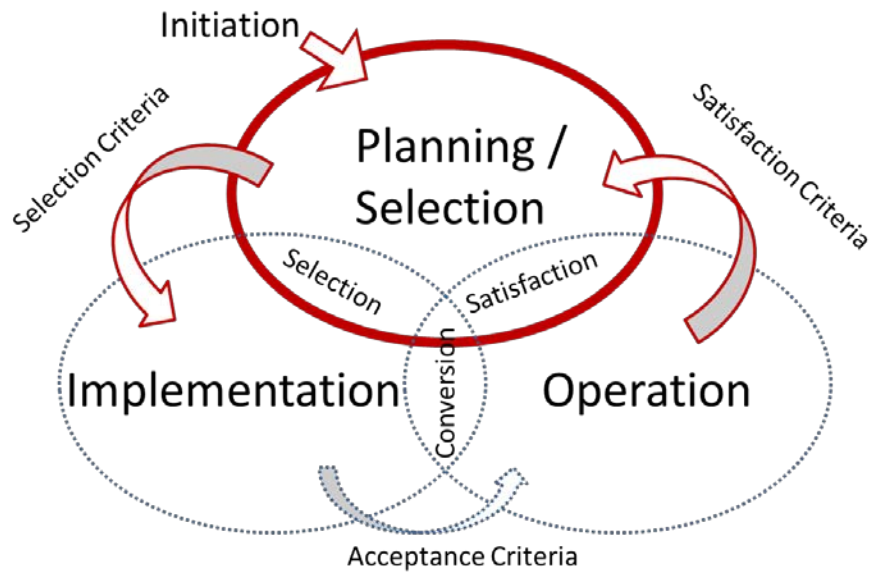


Figure 8: Generic model of the ERP life-cycle, created by author

The author reviewed many existing models and created this very theoretical generic model, as a proposed model for this research. This model shows an ERP life-cycle anticlockwise but covers very specifically the connection of the end with the beginning. The circle in bold called ‘Planning / Selection’ with the aligned selection and satisfaction criteria demonstrate the scope of this research.

The model points out that there is usually an ‘Initiation’ starting the process of planning and selection. The set of selection criteria is generated and at the point of selection of an ERP system hand over in the implementation phase. The set is updated during the cause of the process of implementation at the point of conversion the decision for go live is based on fulfilling the acceptance criteria. While running the business in operation the set of criteria finally gets updated to a set of satisfaction criteria. This set of criteria should be a remaining set of information to measure the satisfaction with the ERP system on a long term basis. This closes the loop and shows in detail how the satisfaction with the system is dependent on the selection.

The model should be more comparable with existing models and comparable cover the ERP life-cycle therefore the view of a cycle or loop is transferred into a process flow.

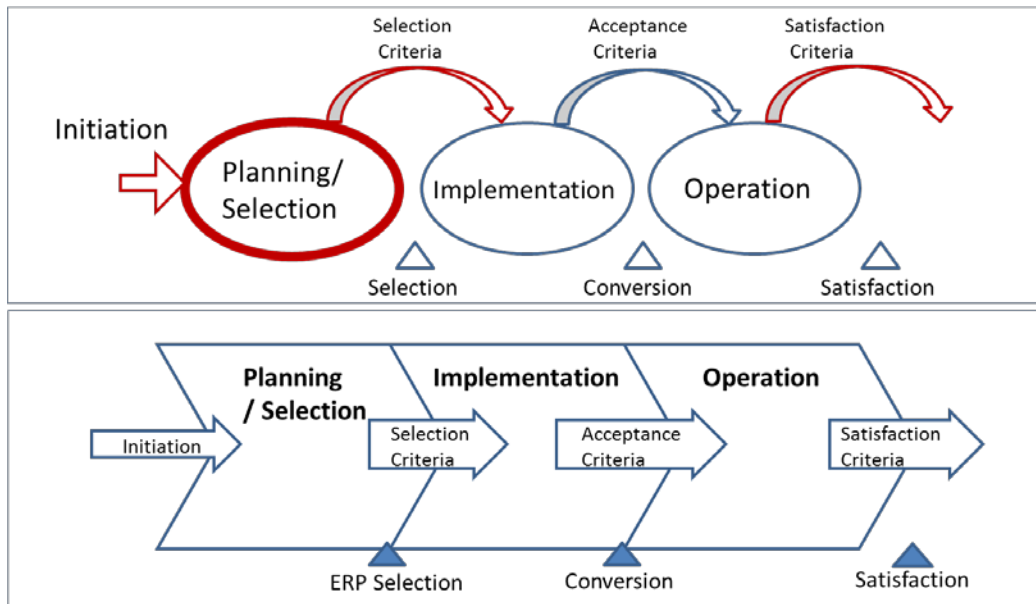


Figure 9: Conversion of the generic model to a practical process, created by author

The developed model can be compared with multiple existing models in terms of steps, phases and milestones. The uniqueness of the model appears easier in the generic illustration (see Figure 1) where the connection of the satisfaction with the early part, the selection appears.

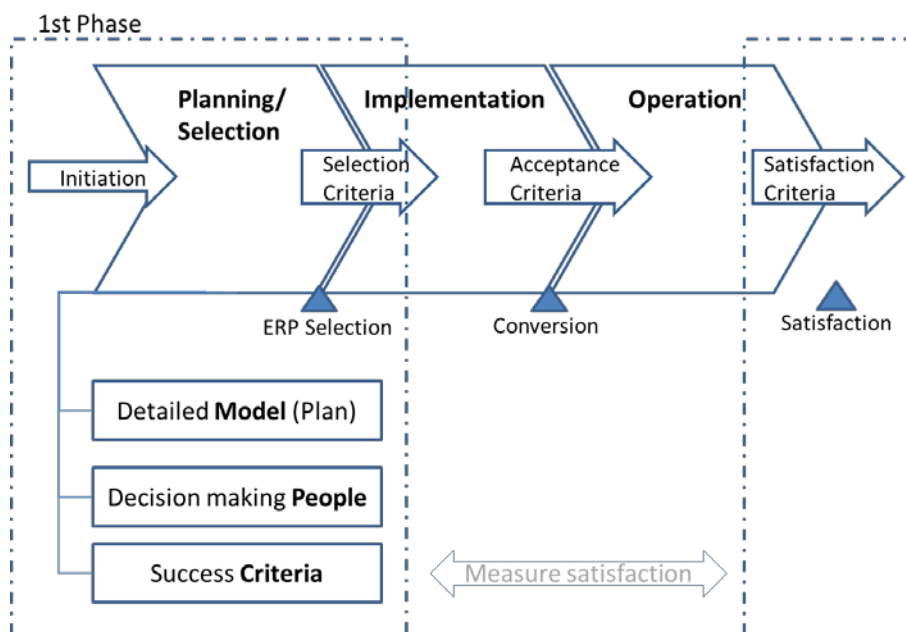


Figure 10: Model with work packages, created by author

It presents in more detail the related phases and work packages of the suggested model. This model is the basis for the research comparing the selection criteria with the satisfaction. In detail the so called 1st phase in dotted lines shows in details the initial step taken during the decision making, the selection of an ERP system. The phase ends with the indicated milestone 'ERP selection' or more precise ERP system selected. The work packages below the phase indicate the areas which need to be considered: executing according to a plan or better to a

suggested model, involving the right people and setting up the selection criteria. Defining, analysing and prioritising the individual set of selection criteria is a key activity during selection. This individual set will be updated and weighted and used later to measure satisfaction precisely according to the individual requirements documented in satisfaction criteria.

Expert Interviews with experts of SME companies

Expert interviews are one method which is usually used in a newer subject and where it is very difficult to get feedback anonymously e.g. via questionnaires. The advantage of semi-structured interviews is the comparability because they are based on a questionnaire which is used as a guideline. 28 expert interviews have been executed. Therefore 41 companies have been contacted. This is a very good result given the tight time schedule of an expert. The experience, the personal contacts and the locations nearby turned out to be of great advantage in order to get the appointments.

Selection:

According to the defined limitations for this research the companies have been selected. The southern part of Germany has been chosen and production companies in this region inquired. As stated and defined in that part of Germany is very representative regarding small and medium size companies. By concentrating on this region possible confronting factors were excluded such as: infrastructure, market and political environment.

Questionnaire

For the interview a questionnaire was created and sent to the interviewee up front. The questionnaire is divided in five sections which are mainly related to the detailed hypotheses.

Section 1: General questions.

Section 2: Information about the ERP System.

Section 3: Implementation.

Section 4: Decision making process (selection) and Model.

Section 5: Some information on satisfaction.

In total there are 28 questions where 25 mainly been asked and discussed. The 3 questions about detailed costs seemed very interesting in the beginning but interviewees did not want to provide the information. After some interviews the details didn't seem that relevant any more. The question about the priorities between time and cost gained interest and supported a very relevant hypothesis.

Results

All interviews have been analysed in detail and compared with the hypotheses. Additional results should be reflected. The last section provided, the lessons learned question, was the most open and honest feedback from the experts. The details of each interview are taken into a summarized document with all detailed statements of the experts.

Subsequent the most findings extracted from the expert interviews are listed into 30 different ERP implementations at a SME production company in south Germany. In summary all expert interviews provided very valid input and feedback to the hypothesis and outlined very good results for the detailed analysis.

Model validity reflected with industry experts

The model has been reviewed and discussed with all experts. All of them confirmed that a structured approach in the very beginning, where all requirements are documented would have been very helpful. Based on their expert experience with one or multiple ERP selections and implementations the provided model would be very good to provide a measurable basis for a long term successful use of the right ERP system. They all positively support the hypothesis and are very interested in the results using the model in real life case studies.

Findings and Conclusions

The hypothesis “The developed model would positively support the selection process of the ERP system and would positively impact the success with the system after go live.” is supported by the 28 semi-structured expert interviews and the detailed research in literature. The use of the model should have a positive impact on the overall success. To finally confirm the overall research question additional results have to be considered, testing the literature results of the criteria and the first results of the semi-structured expert interviews in praxis. With the possibility to execute two projects in real live cases – the selection project with a company was started. Based on the models in literature and current common praxis, the detailed model was developed. This fosters the relation between the selection and the satisfaction with the system along a set of predefined criteria. A major result of the research study is this **developed model which is aligned with a set of criteria**. It will be used as a basis for real life case studies to challenge further hypotheses. In summary, the developed model and the proposed set of selection criteria derived from literature could be taken as a basis for any other ERP selection at a SME company to increase the chance of satisfaction and success.

References

1. Barker, Traci; Frolick, Mark N., (2003). *ERP Implementation Failure: a case study*. Information System Management, Fall 2003, pp. 43-49.
2. Biermann. Phillip (2005). *Marketinglösung für das mittelständische Kundensegment der Schweizer Branche für IT*.
3. Buchanan, Leigh; O’Connell, Andrew (2006). *A brief history of decision making*. Harvard Business Review and Harvard Business School Publishing, pp. 33-41.
4. Business Process Management Journal, Vol.22, No.1, pp. 75-86.
5. Caruso, Dave (November, 2005). *EPR is in the picture for midsize manufacturers*. Manufacturing Business Technology (Ed.), P.20.
6. Dempsay, Sylvia; Griffin Julia. 2007. Integrated Information Systems. Choosing the best system for your organization. Accountancy Ireland. December 2007, Vol. 39, No.6, 64-66.
7. Dwivedi, Devesh (Juni, 2007). *EPR Software for small business*. Better Management Tools, Chemical Business (Ed.) p.27f.
8. EU Commission Paper, Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises. Official Journal of the European Union, Document Number C(2003) 1422, 6 pages.

9. EU Commission Paper, The new SME definition. User guide and model declaration. Enterprise and Industry Publications. ISBN 92-894-7909-4. 2005, 52 pages.
10. Everdingen, Y., Hillegersberg, J. and Waarts, E. (2000). *ERP adoption by European midsize companies*. Communications of the ACM, Vol. 43 No. 4, pp. 27-31.
11. Eyes Wide Open, Tips on Strategic, <http://www.smallbusinesshq.com.au/factsheet/20305-tips-on-strategic-tactical-and-operational-decision-making.htm>. Mon., 27.06.2011, 13.25h
12. Fisher d., Fisher, S., Kiang M., Chi R. (2004). *Evaluating Mid-Level ERP Software*. Journal of Computer Information Systems, pp. 38-49.
13. Garvin, David A.; Roberto, Michael A. (2001). *What you don't know about making decisions*. Harvard Business Review, pp. 108-116.
14. Harrison, Frank E. Interdisciplinary (1993). *Models of Decision Making*, Management Decision, MCB University Press Limited, Vol. 31, No. 8, pp. 27-33.
15. Hedelin, Lisbeth; Allwood, Carl Martin, (2002). *IT and Strategic decision making*. Industrial Management and Data Systems, 2002, 102/3, pp. 125-139.
16. Holsapple, Clyde W.; Sena, Mark P. 2003. The Decision Support Characteristics of ERP Systems. *Internations Journal of Human-Computer Interaction*, 16 (1) p.101-123.
17. Ifm Bonn, Statistics 2010. www.ifm-bonn.org Statistics, www.ifm.uni-mannheim.de (Institute für Mittelstandsforschung)
18. ISO Standard regarding software quality, ISO9126 revised in 2011 to ISO25010. http://www.iso.org/iso/home/store/catalogue_ics/catalogue_detail_ics.htm?csnumber=35733
19. Jacob, O. & Uhink, H-J. 1998. *SAP R/3 im Mittelstand*. Vieweg Verlag. 358 p.
20. Jacoby, David (February, 2006). *Thinking Big, Midsize companies and the challenges of growth*. Economist Intelligence Unit (Ed.).
21. Jutras, Cindy (2009). *Mid-size companies need ERP now more than ever*. MBTmag.com, p. 13.
22. Kommission der Europäischen Gemeinschaften (2003). *Empfehlung der Kommission vom 06.05 2003 betreffend der Definition der Kleinstunternehmen sowie der Kleinen und Mittleren Unternehmen*. (Ed.) Amtsblatt der Europäischen Union, Brüssel.
23. Kumar, Kuldeep; Van Killegersberg Jos. *ERP Experience and Evolution*. Communications of the ACM, Vol.43 No.4, 2000, p.23-26.
24. Melé, Domènec, (2010). *Practical wisdom in managerial decision making*. Journal of Management Development, Vol 29, No. 7/8, pp.637-645.
25. Metts, Glenn A., (2011). *Decision Making and Strategy Development in SME's: An Empirical Investigation into the Role Adaptation*. Department of Management and Marketing, University of the Virgin Islands, U.S. Virgin Islands.
26. Percin, Selcuk, (2008). *Using the ANP approach in selecting and benchmarking ERP systems*. Benchmarkin: An international journal, Vol. 15, No. 5, pp. 630-649.
27. Perera, H.S.C.; Costa, W.K.R., (2008). *Analytic Hierarchy process for selection of ERP software for manufacturing companies*, Journal of Business Perspective, Vol. 12, No. 4, pp. 1-11.
28. Rahardjo, Edhy, (2006). *Decision making in Information Technology Acquisition: A system analysis approach*. Information System Analysis (IS6840), Uni. of Missouri, St. Louis.
29. SAP (Ed.)(2008). *Mehr Leistungsfähigkeit und Effizienz für prof. Wachstum*. SAP Lsg. Mittelstand..
30. Schlichter, Bjarne Rerup; Kraemmergaard Pernille. (2010). A comprehensive literature review of the ERP research field over a decade. *Journal of Enterprise Information Management*. Vol . 23 No.4 pp. 486-520.
31. Schmitz, Christian; Biermann, Philipp (4/2007). *Beschaffungsprozesse mittelständischer Unternehmen*. ZfKE –Sonderdruck.
32. Shehab, E.M.; Sharp, M.W.; Supramaniam, L.; Spedding, T.A., (2004). *Enterprise Resource Planning, An integrative review*. Business Process Management Journal, Vol. 10, No. 4, pp. 359-386.
33. Shiau, Wen-Lung; Hsu Ping-Yu; Wang, Jun-Zhong (2009). *Development of measures to assess the ERP adoption of small and medium enterprises*. Journal of Enterprise Information Management. Vol.22, Nr. 1/2, pp. 99-118.
34. Simon, Herbert A., (1978). *Rational Decision-Making in Business Organizations*. Nobel Memorial Lecture, December 8, 1978.
35. Stegemann, Andrea; Konradin Studie, 2011, Einsatz von ERP-Lösungen in der Industrie. Konradin Mediengruppe, Leinfelden-Echterdingen 2011.
36. Sumner, Mary; Bock, Douglas; Giamartino, Gary (2006). *Exploring the linkage between the characteristics of IT project leaders and project success*. Information System Management. pp. 43-49.
37. Teltumbe, Anand (2000). *A framework for evaluating ERP projects*. International Journal of Production Research, Vol. 38, No.17, pp. 4507-4520.
38. Verville, J.; Harlinton, A (2003). *A six-stage model of the buying process of ERP software*. Industrial Marketing Management. Vol. 32, pp. 585-594.

39. Violino, Bob (2008). *The Next-Generation ERP*, Cioinsight (Ed.), pp. 54-57.
40. Wallau, Frank. 2011. Familienunternehmen- Das Herz der deutschen Wirtschaft. Festrede. BFM Spiegel 3/2011, p. 3.

Sandra Heiden

HOTEL-CUSTOMERS' DECISION-MAKING: EXPOSURE OF INFLUENCING FACTORS

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Abstract

The hotel industry offers services to customers who are characterized by a certain degree of uncertainty. The reason behind this uncertainty is that customers have to experience the service first to be able to evaluate the quality and the degree of satisfaction. Hence, every first stay in a hotel is linked to a decision under uncertainty. Decision-making under uncertainty is a complex task and is influenced by several factors. The following paper gathers different aspects, especially the reason for a hotel booking, which influence customers' decision-making. To enable a comparison between leisure and business bookings, transactional hotel data of both sources are analyzed. This analysis enables a first exposure of some influencing factors.

Introduction and Theoretical Framework

Due to various reasons, hotel companies faced problems in the last years to increase or stabilize their market share. Reasons are different, for instance rising national and international competition, decreasing economic growth rates as well as oversupplied markets (Tepeci, 1999). To ensure economic success, hotel companies are forced to go one step further and learn more about their customers and their behavior. Understanding guests' needs and having a clear picture about the guests will be a prerequisite for hoteliers in the future (Yavas and Babakus, 2005). Only if a company understands why and how their customers make purchase decisions, and what are the influencing factors of these decisions, they will be able to influence these judgments.

Hence, marketing of the future should choose the customers' perspective. Within the service industry, marketing can be regarded as a tool that tries to make customers confident to a greater extent about the services they are going to buy. Especially guest communication as part of the marketing strategy should focus on guests' decisions and purchase behavior in this way. Only if the decision making process is understood by hoteliers and marketers, effective marketing strategies can be developed. Decision behavior can be regarded as the structure upon which marketing must hang (Sirakaya and Woodside, 2005).

Every purchase is linked to a decision where alternatives are compared and the one currently preferred is chosen. If a rather rational process of decision making is assumed, the decision maker is expected to choose the particular alternative that maximizes his personal goal. Usually, not all consequences can be analyzed before acting. The possible alternatives as well as their consequences are often unknown or not known with certainty. Especially in situations where emotions are involved, such as crises, new situations or other emotion-evoking contexts, customers have a set of personal values on which their perspective is based. Hence, customers are forced to choose an alternative without knowing all possible alternatives and

their impacts (Hall and Davis, 2007). The consumption of the service is only possible in the hotel or the place of the service, and nowhere else and due to this *uno-actu principle*, the degree of uncertainty is very high (Dettmer, 2005). Thus, hotel customers are forced to make intuitive judgments and decide under uncertainty, which reduces the quality of their decisions (Tversky and Koehler, 1994).

Hotel guests have to experience the service first to be able to evaluate the quality and the degree of satisfaction. Since the consumption of hotel services is only possible in the chosen hotel and possible alternatives cannot be easily compared, customers are unable to completely avoid risks that are linked to the hotel stay. The awareness of risks differs based on the reason for bookings. Opportunities to regulate risks or decrease potential losses in time and money are very rare. The future hotel customer has reasons to make a booking before the acting itself. The reasons vary based on the purpose of travelling. For leisure hotel customers, a certain basic need for vacation is evident and the customer typically decides to go on vacation before deciding where to go or what hotel to choose. Nowadays, for everyone certain periods of free time on the weekend and vacation, for instance, are common with a norm of at least one vacation per year (Opaschowski, 2008). For business travellers in contrast, they have to travel at a more or less fixed date and a fixed destination, so the range for alternatives is much smaller, but also the linked risks are reduced. Hence, people continuously make vacation and business travel purchase decisions. Customers' behavior and decision making under uncertainty is closely related to psychological theories of perception and cognition (Simon, 1956) and should therefore be regarded in a wider frame.

Purpose

The purpose of this paper is to examine influencing factors which are linked to the reason for bookings of hotel customers' decision making. The focus lies on the differences between business and leisure travellers and the differences in behavior. In general, the model of influencing factors for decision making is very complex and many factors influence differently in different situation. This paper should help to go one step further towards a comprehensive understanding of why and how hotel customers decide. Especially the consequences of the role of the booking reason should be analyzed.

Theoretical Framework

The different influencing factors on decision-making can be summarized in three areas: All factors based on the cognitive level, all factors based on the emotional level of the decision and all factors which can be summarized under personality. The cognitive level consists of the importance of the decision for the decision maker as well as the cognitive capacity of the decision maker. It is well established in science that emotions play an important role in human social decision making (Heilmann et Al., 2008). The rather emotion-based system of decision making is different from a rational system which is totally logic and based on facts and information only (Rolls, 2006).

The emotional level of decisions is determined by the emotions and feeling of the decision maker which are linked to the decision (Lerner and Keltner, 2007). Emotions in this context

are feelings and moods rather than strong emotions such as love or hatred (Werth, 2010). The focus lies on integral emotions, which are feelings that are related to the specific judgment or decision (Han and Keltner, 2007). Another influencing factor in terms of emotions is the potential for dissonance and reactance of the decision. In general, every time people make a conscious decision, they experience dissonance. The reason is that within every decision process, several alternatives are taken into consideration, but only one alternative can be chosen. The chosen alternative is seldom entirely positive and the rejected one is seldom entirely negative. Hence, doubts play an important role within the process and after the choice; people's cognition starts to become dissonant with all the negative things about the chosen alternative. Further-more, simultaneously, one starts to become dissonant with the positive traits of the rejected alternative. The only way for humans, to reduce this so called post decision dissonance is to change the way one feels about the chosen and the unchosen alternatives. To achieve this change in feelings, humans start to enhance the attractiveness of the chosen alternative and devalue the rejected alternatives, so they start to justify their actions. In general, the irrevocability of decisions always increases the personal dissonance and the motivation to reduce it. The more important the decision, the greater becomes the felt dissonance. Furthermore, the more permanent and less revocable the decision is, the greater is the need to reduce dissonance (Aronson et Al., 2010).

Reactance is a similar phenomenon and occurs if the behavioral freedom of a person is reduced or at least endangered. The more important the former free behavior is to the person, the more heavy the phenomenon of reactance will occur and the more heavy the person will struggle to gain back the former behavioral freedom of choice (Brehm, 1966). Also the propensity for risk influences the decision-making process, because risk-avoiding is often linked to the feelings of fear for instance and risk-seeking, which has completely different behavioural motives (Kahneman and Tversky, 2000). In the area of personality, personal values, traits and interests influence the decision-making process. Decision-makers have a set of personal values on which the perspective is based and hence, the process of decision-making is influenced by (March, 1994). The following image should give a brief overview of the above mentioned influencing factors without claiming of being complete, but to show the most important factors especially for hotel service decision-making.

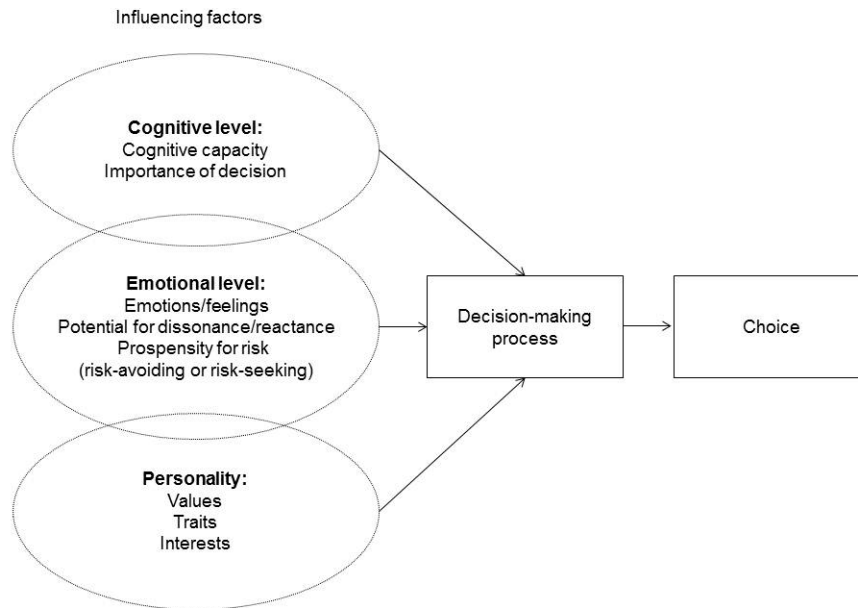


Figure 11: Model of Influencing Factors (own illustration)

From an hotelier's perspective, understanding guests' needs makes it necessary to understand how and why guests choose a hotel (Yavas and Babakus, 2005). Within applied psychology, the tendency for risk aversion is generally assumed when it comes to decisions under uncertainty (Tversky and Kahneman, 1992). Risk can be defined as a consumer's belief about the potential uncertain negative outcome from the purchase transaction (Kim et al., 2008). Hence, uncertainty and risk are interlinked. From the guest's perspective, the wrong decision is not only disappointing but also leads to a certain loss of time and money (Jacoby and Kaplan, 1972).

In the context of hotel decisions, all risks play a decisive role. Consumers' perceived risk has been found to influence their decisions (Antony et al., 2006). The focus of this paper should be the influencing factors of this risky decision and also the differences between different motives for decision-making. Risky choices are made without advance knowledge of their consequences (Kahneman and Tversky, 2000). The importance of the decision itself and hence also of the consequences, is linked to the reason for the choice. In the context of hotel booking, the two major reasons are travelling for business reasons and travelling for leisure reasons. Since leisure hotel stays are more emotional than business stays, more expensive for the individual, more time-consuming and linked to a higher level of arousal, the meaning of this decision to the individual is very high. These emotions are able to influence judgments and decisions even without the potential guests being consciously aware (Lerner and Keltner, 2007). So the level of emotions is much higher in a leisure context than in a business context. Also the cognitive level is different, because the importance of the decision differs due to the reason.

Personality influences individual and personal decisions. Hence, the more individual and especially very personal decision of vacation can be assumed to be more affected than a business travel. Furthermore, hotel decision-making processes are very complex, because they often involve many sub-decisions, such as room category and breakfast; and many of these choices are based on contextual facts. These aspects increase the importance of the fact that no one is certain how satisfying their hotel stay will be until the actual experience (Smallman

and Moore, 2009). Especially for people who travel once a year and thus, who decide about their vacations only once a year, the decision of where to spend the holiday is an important one which is linked to various feelings. A wrong decision could result in a poor experience and a ruined vacation for that year. Hence, decision making is very complex; no single perspective offers a complete theory of consumer decision making, and the process is generally very heterogeneous (Shao et al., 2009).

Model development and hypotheses

The reason for the hotel booking determines the process of decision making, the influencing factors and hence also the possible outcome, the choice. The following research should examine whether the degree of emotionality influences the outcome of the decision. If the emotional level is high, which is assumed to be the case in leisure hotel booking contexts, the decision differs from a decision based on rather logical and unemotional facts what is the case in the context of business bookings. The following hypotheses model shows the relationship between influencing factors, reason for booking, decision making process and the outcome of the decision.

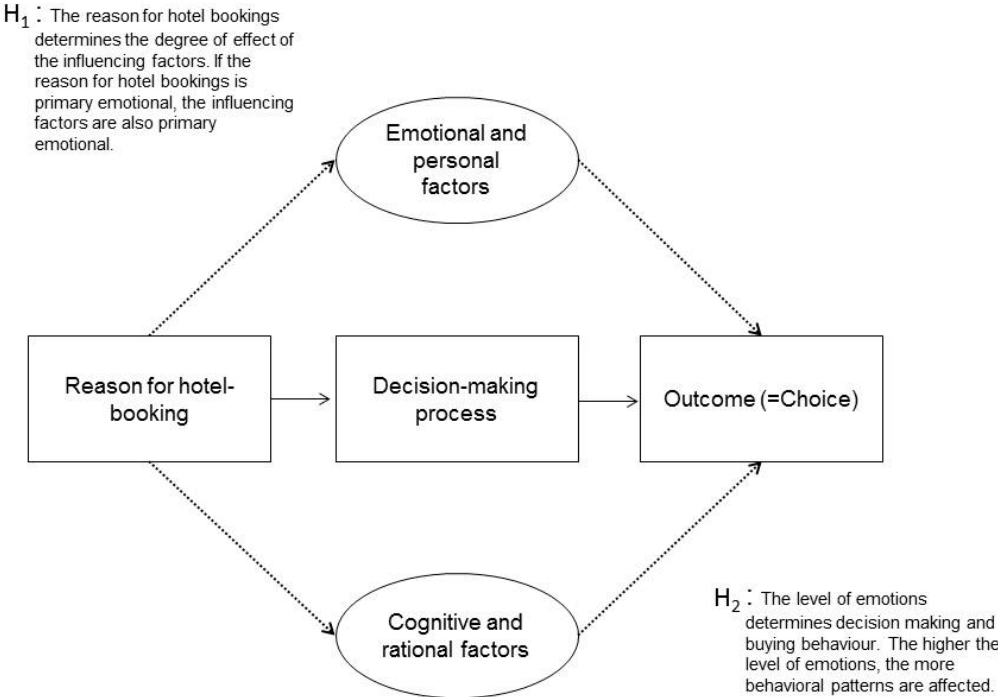


Figure 12: Model of Hypotheses

Thus, the following hypotheses can be postulated:

H1: The reason for hotel bookings determines the degree of effect of the influencing factors. If the reason for hotel bookings is primary emotional, the influencing factors are also primary emotional.

H2: The level of emotions determines decision making and buying behavior. The higher the levels of emotions, the more behavioral patterns are affected.

Empirical design

Data Source and Structure

To accomplish the research purpose of this study, transactional data from four business and four leisure hotels were analyzed³⁷. The following research project was accomplished with secondary data of 8 different hotels in Germany and Austria which have been made anonymous due to data protection laws and company policies. All of these hotels focus on leisure or business stays (four city hotels to examine business stays, four resort hotels to examine leisure stays), earned a four-star rating, and has about 70 to 120 rooms each. The source of these data are the property management systems of the hotels, where names of guests are saved along with address, age, date of reservation, arrival date, departure date, room type, preferences, etc. After the guest's departure, the system stores not only the above-mentioned data but also revenue information, including room revenue, food and beverage revenue and revenue from other services, such as parking or Internet use. For every transaction (one transaction equals one stay of one guest), a new data record is created within the hotel's property management system. If one guest has more than one stay, all stays are linked to the guest profile to show and track the guest's history in the system. Data from the hotels' property management system can be exported for business intelligence purposes as well as marketing. Operational data of the property management system is then used for analytical purposes, but guest data can also be used to inform marketing campaigns, etc. To limit the amount of data and avoid strong biases of price changes and inflation, the study only used data within two years, which is an appropriate time period for examining repeat stays and hence the development of guests' decision making within their customer lifetime. To accomplish the analysis, data were extracted by structured query language (SQL) queries and exported in tables. To avoid strong biases due to extreme values that may have been caused by special events, pay master accounts or wrong accounting within the operative system; these bookings were excluded from the analysis. Tremendous revenues not generated by individual guests would have influenced the results. Hence, only real bookings by individual guest profiles were taken into consideration with a minimum room revenue of 1 € excluding for instance such as complimentary bookings of employees. To avoid other values, data were selected with the help of market and rate codes, which describe the type of stay in a hotel. Leisure bookings are marked differently from business rate codes, so the type of booking can be differentiated.

Analysis design

The data were selected, exported and edited. To create an analyzable database, data of all eight hotels were divided by first stay data (approximately 40,000 data records, in total) and data of following stays (30,000 data records). Hence, two separate tables were created with revenues per stay. To separate the different hotels from each other, these tables were arranged by hotel. To show the structure and distribution of data, values were calculated per analyzed

³⁷ All transactional hotel data are stored within data bases for Marketing purposes, the *dailypoint™* MARKETING DATA BASE of Toedt, Dr. Selk & Coll. GmbH, Munich, where the author was able to access the data by authorization of the hotels for research purposes anonymously.

parameter. Table 2 contains the distribution of leisure stays for room revenue, food revenue, other revenue and nights for all first stays that were examined. The minimum value (Min), maximum value (Max), lower (Q1) and upper (Q2) quartile as well as the median (Median) and interquartile range (IQR) are stated in the table below to show the distribution of data. The next table shows the same numbers, but for the four examined business hotels.

Table 2: values for first stay data, leisure hotels

Labels	Room Revenue in	Food Revenue in	Other Revenue in	Length of stay
Min	1	0	0	0
Q ₁	104	49	7	1
Media	181	84	14	2
Q ₃	313	133	27	2
Max	8,280	4,881	2,880	147
IQR	209	84	20	1

Table 3: values for first stay data, business hotels

Labels	Room Revenue in	Food Revenue in	Other Revenue in	Length of stay
Min	2	0	0	0
Q ₁	90	16	0	1
Media	129	28	8	2
Q ₃	208	49	8	2
Max	4,227	2,355	1,077	31
IQR	118	33	8	1

The room revenue ranges from 1 € for leisure stays and 2 € for business stays to a maximum of 8,280 € (leisure) and 4,227 € (business) with a median of 181 € (leisure) and 129 € (business). The food revenues vary from 0 € (room revenue of minimum 1 € was a prerequisite, but food revenue and other revenue was not compulsory for both leisure and business) to a maximum of approximately 5,000 € (4,881 € leisure) and 2,355 € (business) with a median of 84 € (leisure) and 28 € (business). The values of the parameter ‘other revenue’ range also from 0 € (not compulsory for both leisure and business) to nearly 3,000 € (2,880 € leisure) and 1,077 € (business). Regarding the length of stay, measured in nights, the span ranges from a minimum of 0 (also day use rooms where taken into consideration) for leisure and for business stays to 147 (leisure) and 31 (business) nights with a median of two nights for leisure and for business. The following graph shows the distribution of data without outliers because of certain extreme values. These extreme values of individual guest bookings were bookings of long-stay guests or bookings where one guest has paid the invoices for several others or the whole family, for instance, which were not excluded by the filters set. Obviously, the range of room revenue is much wider than the ranges of food and other revenues. The line within the box illustrates the median for the certain aspect. The values for “Room”, “Food” and “Other” are expressed in the currency Euro, “Nights” are calculated in nights. “Room” equals room revenue, “Food” equals food and beverage revenues, “Other” equals other revenues and “Nights” the average number of nights.

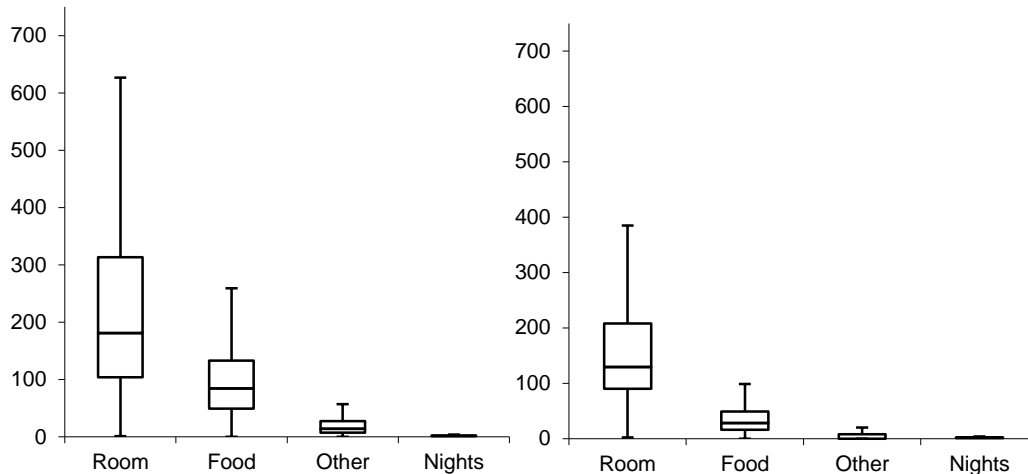


Figure 13: Box plot first stay without outliers (€and nights), leisure and business

The next table contains the same values as above, but for subsequent stays. These stays were generated by guests who had a minimum of one repeat stay within the time frame which was taken into consideration. The room revenue ranges from 1 €to 9,570 €for leisure stays and 5 €to 8,445 €for business stays with a median of 205 €(compared to a lower median of 181 € for first stays) for leisure stays and 141 €(compared to a lower median of 129 €for first stays) for business stays. The values of food revenue start again at 0 € for both (again not compulsory) and end around 5,000 €(4,776 €) for leisure and about 2,500 €for business. Regarding ‘other revenue’, the maximum is even higher with 2,976 € but starts again with no revenue and a median of only 17 € which is clear evidence that only a certain part of guests spend money for other services during their stays for leisure. In terms of business stays, the values also start with no revenue, the maximum is only about 654 €which is even lower than for first stays. This shows a contrary buying behavior of business guests. The average nights range from 0 to 88 for leisure, which is significantly lower than the 147 nights of the first-stay values. For business stays, the values range from 0 to 69, this is higher than the maximum of 31 for first stays. The median lies again at 2 nights, what supports the thesis of an unchanged buying behavior of business guests.

Table 4: values for repeat stay data, leisure

Labels	Room Revenue in	Food Revenue in	Other Revenue in	Length of stay
Min	1	0	0	0
Q ₁	130	51	7	1
Media	205	103	17	2
Q ₃	350	178	51	3
Max	9,570	4,776	2,976	88
IQR	220	127	44	0

Table 5: values for repeat stay data, business

Labels	Room Revenue in	Food Revenue in	Other Revenue in	Length of stay
Min	5	0	0	0
Q ₁	97	17	3	2
Media	141	32	8	2
Q ₃	220	52	19	1
Max	8,445	2,489	654	69
IQR	123	35	16	0

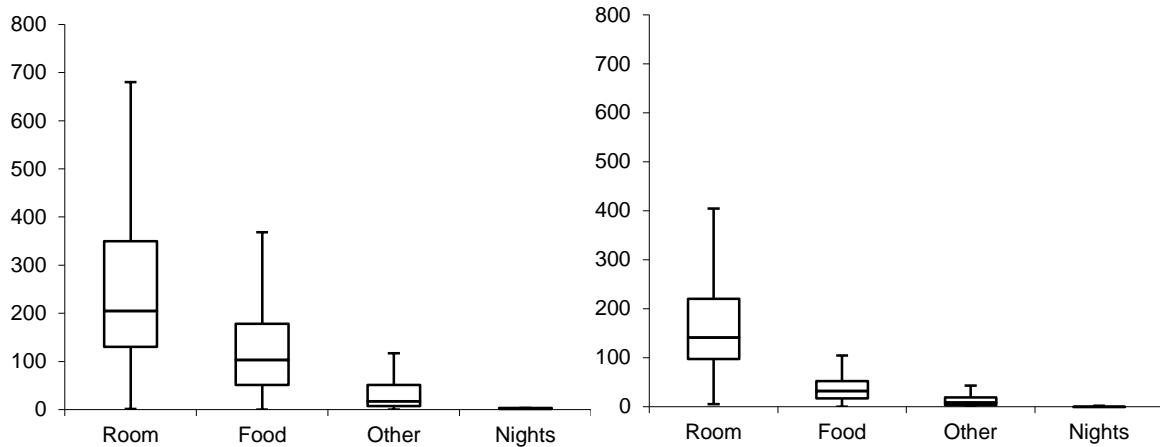


Figure 14: Box plot following stays without outliers (€and nights), leisure and business

Figure 13 and 14 show the overall distribution from lower to upper quartile of all repeat stays, again without outliers. The line within the box illustrates again the median for the certain aspect (for explanations of labels and values, see table above).

Findings

In the first step, the arithmetic averages of room revenue, food revenue, other revenue and average number of nights were calculated for each of the eight hotels, separated into the categories of ‘first stay’ and ‘repeat stays’. The next table contains the means for first stays by hotel (means for room revenue, food revenue, other revenue and number of nights). Averages were calculated by adding all separate values of revenues and nights of individual stays and dividing by the total number of stays.

Table 6: First stay means by hotel (1 to 8)

Hotel 1-8	Room Revenue	Food Revenue	Other Revenue	Length of stay
Leisure 1	€364	€142	€27	2.5
Leisure 2	€333	€159	€81	2.9
Leisure 3	€390	€113	€23	3.2
Leisure 4	€497	€206	€97	3.9
Business 1	€184	€30	€5	1.9
Business 2	€250	€43	€9	1.7
Business 3	€105	€40	€6	1.7
Business 4	€195	€50	€26	2.2

Table 7 contains the same information listed by hotel, but for all repeat stays. The calculation was accomplished as above: to calculate the means, the sum of all revenues and nights was divided by the total number of repeat stays.

Table 7: Repeat stay means by hotel (1 to 8)

Hotel 1-8	Room Revenue	Food Revenue	Other Revenue	Length of stay
Leisure 1	€389	€188	€54	2.7
Leisure 2	€470	€213	€97	3.5
Leisure 3	€518	€140	€30	3.5
Leisure 4	€647	€259	€146	4.2
Business 1	€167	€28	€3	1.8
Business 2	€247	€42	€10	1.7
Business 3	€108	€37	€6	1.9
Business 4	€196	€50	€27	2.2

In the next step, the deviation (in percentage) of repeat stays compared to first stays was calculated. This step was accomplished to show the changes in revenue patterns and length of stay of following stays compared to the initial hotel stay and expense behavior. The results in the table 7 show that the means of all leisure room revenues of repeat stays are higher than the room revenue values of the initial stays. The values range from nearly 7% (hotel 1: 6.7%) to 41% (hotel 2). Regarding the food revenues, the values are also higher, as well as the values for other revenues. The maximum deviation of average number of nights lies at nearly 20%, which is lower than the other maximums of the different revenues and also the average deviation is lower. These results illustrate that the average revenues increase after the first initial stay in a hotel as well as average number of nights (i.e., length of stay) in all examined leisure hotels. In terms of the business stays, the values are completely different. The average deviation of room revenue is nearly 0, as well as the deviation in food revenue. Values range from -9% for room revenue and -7% for food revenue to a maximum of 3% and 1%. Regarding other revenue, the range is much broader (-34% to 7%), but the deviation is also contrary to leisure stays. In terms of average length of stay, the deviation ranges from -11% to 14%, which also underlines an opposed buying behavior of business guests.

Table 8: Deviation analysis by hotel (1 to 8)

Hotel 1-8	Room Revenue	Food Revenue	Other Revenue	Length of stay
Leisure 1	6.7%	32.7%	98.5%	7.9%
Leisure 2	41.1%	33.9%	19.7%	19.6%
Leisure 3	33.0%	23.7%	33.4%	8.3%
Leisure 4	30.1%	26.0%	50.0%	7.6%
Business 1	-8.9%	-6.9%	-34.0%	-10.7%
Business 2	-1.4%	-3.2%	6.9%	1.1%
Business 3	3.1%	-6.7%	-2.1%	13.8%
Business 4	0.8%	1.4%	2.1%	-0.3%

Figure 15 depicts the deviation per hotel (for business) for each analyzed type of revenue (i.e., 'Room Revenue', 'Food Revenue', 'Other Revenue') and the average number of nights

(‘Average Number of Nights’). The highest overall deviation was in hotel 5, followed by hotel 7. In each of the hotels that were examined, a minimum of one aspect of revenue or length of stay of repeat bookings was nearly similar or lower, compared to first stay behavior. Figure 6 shows the same for leisure stays and illustrates a complete change in buying behavior compared to the first stay. All deviation is positive. Hence, guests started to spend more after they already knew about the product and were confident about the service quality. The results of the analysis of these hotels’ secondary data support H1 as well as H2. If the reason for hotel bookings is leisure, the degree of effect of the influencing factors such as risk aversion is different from the behavior of business guests. Leisure guests change their behavior after having experienced the service for the first time; business guests seldom change the decision-making process in terms of spending behavior for instance. Hence, if the reason for the booking is primary emotional, the influencing factors are also primary emotional and have a larger impact on decision-making. This supports also H2, because the level of emotions for leisure bookings is much higher and this level determines the decision making and buying behavior significantly. The higher the levels of emotions, the more behavioral patterns are affected. This analysis supports the thesis that guests tend to spend less and stay fewer nights due to uncertainty and risk aversion in an emotional context, if they do not know the hotel product. If guests start to trust the product and service, and are satisfied enough with the services to book repeat stays, then the spending behavior changes, guest spending increases and the duration of further stays increases as well. This emotional effect only takes place for leisure stays, but not in a business context.

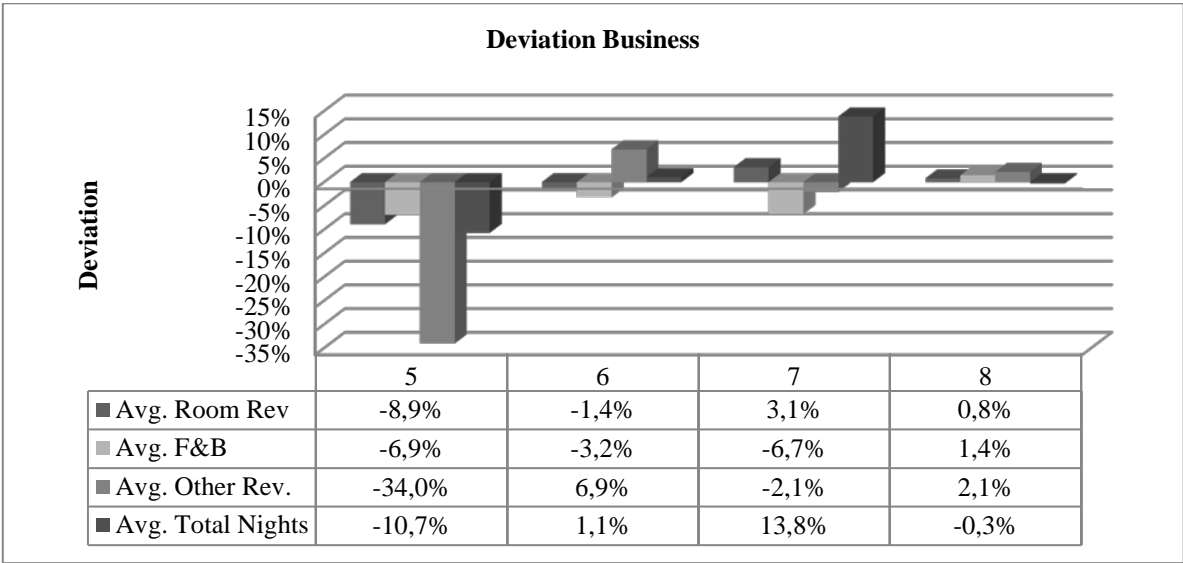


Figure 15: Deviation analysis per revenue and average number of nights per hotel, business

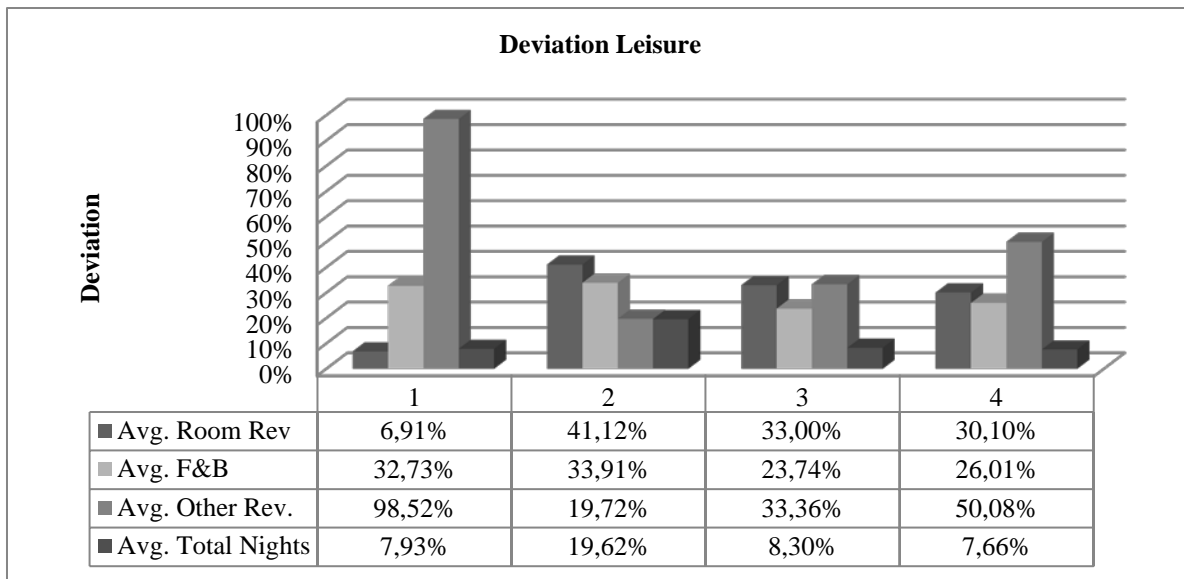


Figure 16: Deviation analysis per revenue and average number of nights per hotel, leisure

Research limitations

So far, research in this area is very limited and this examination also suffers from some limitations. Different hotels within European countries (Germany and Austria) were analyzed, but it may be necessary to separate the analysis in the first step by country to identify differences in behavioral patterns from country to country. Furthermore, the data source was reduced with different filters, but certain tremendous outliers were still included. For that reason, the filters of revenue should be set more comprehensively and the results should be compared to evaluate the effect of very high bookings of groups, for instance, which may influence the results. The overall analysis with means of revenues and nights tend to neglect certain outliers, but the analysis should be repeated with a changed data source to further validate the results.

Conclusion

Several studies have shown that tourists' decision making seems not to be entirely congruent with the usual theories of decision making, not at least since vacations are depending on people's preferences very individualistic. Hence, further research seems necessary to understand or at least gain more insights into decision making in these situations and its impacts on purchasing in the hotel industry (Smallman and Moore, 2009). It will always be very difficult to fully examine a process that is unobservable and one only partially known to the decision maker himself. In order to develop effective marketing strategies, it is absolutely necessary to understand consumers' decision making processes as much as possible because decision behavior can be regarded as the structure upon which marketing must hang (Sirakaya and Woodside, 2005). This paper was able to make a contribution to the fact that especially the reason for bookings determines the role of influencing factors. Guests who book stays for leisure behave totally different compared to business travellers. The level of emotions is much higher and hence, especially personal factors play a far more decisive role. Further research is

necessary to examine the different aspects in depth and more detailed than it was able within this limited research project. It is necessary to examine what factors in particular influence business bookings and what factors influence leisure bookings. Furthermore, not only the factors, but also the extent of the factors has to be analyzed.

References

1. Antony, S., Lin, Z., and Xu, B. (2006). Determinants of escrow service adoption in consumer-to-consumer online auction market: an experimental study. *Decision Support Systems* 42 (3). 1889-1900
2. Aronson E., Wilson T. D., Akert R. M., 2010, *Social Psychology*, Prentice Hall International, USA
3. Brehm, J. W. (1966). *A theory of psychological reactance*. Academic Press.
4. Dettmer, H. (2005). *Managementformen im Tourismus*. Munich. Oldenbourg
5. Hall D. J., and Davis R. A. (2007). Engaging multiple perspectives: A value-based decision-making model. *Decision Support Systems* Volume 43 Issue 4, 1588-1604. El Sevier Publishers. Amsterdam. The Netherlands
6. Han S., and Lerner J. S. (2007) Feelings and Consumer Decision Making: Extending The Appraisal-Tendency Framework. *Journal of consumer psychology* Volume 17 Issue 3, 184-187. El Sevier Publishers. Amsterdam. The Netherlands
7. Han S., Lerner J. S., and Keltner D. (2007) Feelings and Consumer Decision Making: The Appraisal-Tendency Framework. *Journal of consumer psychology* Volume 17 Issue 3, 158-168. El Sevier Publishers. Amsterdam. The Netherlands
8. Heilmann R., Crisan L. G., Houser D., Miclea M., and Mius A. C. (2010) Emotion Regulation and Decision Making Under Risk and Uncertainty. *Emotion* Volume 10 Issue 2, 257-265. El Sevier Publishers. Amsterdam. The Netherlands
9. Jacoby, J., and Kaplan, L. (1972) The components of perceived risk: A cross-validation. *Journal of Applied Psychology*. Vol. 59 Issue 3, 287-291
10. Kahneman and Tversky, *Choices, Values and Frames in Choices, Values and Frames*, 1984
11. Kim C. N., Yang K. H., and Kim J. (2007) Human decision-making behavior and modeling effects. *Decision Support Systems* Volume 45, 517-527. El Sevier Publishers. Amsterdam. The Netherlands
12. Kim D. J., Ferrin D. L., and Raghav Rao H. (2008) A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support System* Volume 44 Issue 2. El Sevier Publishers. Amsterdam. The Netherlands
13. Kwortnik J. K., and Ross W. T. (2007) The role of positive emotions in experiential decisions. *International Journal of Research in Marketing* Volume 24 Issue 4, 324-335. El Sevier Publishers. Amsterdam. The Netherlands
14. March J. G. (1994) *A Primer on Decision Making: How decisions happen*. The Free Press, New York City, USA
15. Opaschowski, H. W. (2008) *Einführung in die Freizeitwissenschaft*. 5th Edition, Verlag für Sozialwissenschaften, Germany
16. Rolls E. T. (2006) Brain mechanisms of emotion and decision-making. *International Congress Series* 1291, 3-13. El Sevier Publishers. Amsterdam. The Netherlands
17. Simon, H. A. (1956) Rational Choice and the Structure of the Environment. *Psychological Review* Volume 63 Issue 2, 129-138
18. Sirakaya E., and Woodside A. G. (2005) Building and testing theories of decision making by travellers, *Tourism Management* Volume 26 Issue 6, 815-832. El Sevier Publishers. Amsterdam. The Netherlands
19. Slovic, P., Fischhoff, B., and Lichtenstein, S. (1980) Facts versus fears: Understanding perceived risk. In: Kahneman, D., Slovic, P., and Tversky, A. (Eds.) (2008) *Judgment under uncertainty: Heuristics and biases*, 24th edition, Cambridge University Press
20. Smallman C., and Moore K. (2009) Process Studies of tourists' decision-making: The riches beyond variance studies. *Annals of Tourism Research* Volume 37 No. 2, 397-422. El Sevier Publishers. Amsterdam. The Netherlands
21. Tepeci, M. (1999) Increasing brand loyalty in the hospitality industry. *International Journal of Contemporary Hospitality Management* Volume 11 Issue 5, 223-230. El Sevier Publishers. Amsterdam. The Netherlands
22. Tversky, A., and Fox, R. C. (1995) Weighing Risk and Uncertainty. In: Kahneman, D. and Tversky, A. (2009) *Choices, Values, and Frames*, (Eds.), 10th edition, Cambridge University Press
23. Tversky, A., Kahneman, D. (1992) Advances in Prospect Theory: Cumulative Representation of Uncertainty. In: Kahneman, D. and
24. Tversky A. (Eds.) (2009) *Choices, Values, and Frames*, 10th edition, Cambridge University Press

25. Tversky, A., and Koehler, D. J. (1994) Support Theory: A Nonextensional Representation of Subjective Probability. *Psychological Review* Volume 101 No. 4, p. 547-567. American Psychological Association Inc.
26. Werth, L. (2004) *Psychologie für die Wirtschaft – Grundlagen und Anwendungen*, Spektrum Akademischer Verlag Heidelberg, Germany
27. Yavas U., and Babakus E. (2005) Dimensions of hotel choice criteria: congruence between business and leisure travelers, *International Journal of Hospitality Management*, Volume 24, Issue 3, 359-367. El Sevier Publishers. Amsterdam. The Netherlands

Helene Eller
CORPORATE GOVERNANCE IN ALPINE CLUBS
A MUST HAVE?

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Abstract

Corporate Governance is an important topic within the science, today. Corporate governance came into the field of high interest because of many worldwide crashes of corporations. Nonprofit-organizations face the challenge of being multiple-stakeholder organizations. There exist no single owners on which an organization's mission could be adjusted. Because of the absence of the owner an alternative system has to be found to look at interest of the named multiple stakeholders. On behalf of whom has a nonprofit-organization to be lead? Famous Alpine Clubs in Europe were founded as small associations starting in 1862. Today they represent more than one million of members. It is obvious for these organizations to adopt the philosophy of corporate governance? Could it be a helpful answer to cope with challenges in the future?

Keywords: corporate governance, nonprofit organization, voluntary board

Introduction

Nonprofit-Organizations are an important social, political and cultural part of a civil society. The nonprofit-sector has become an important part of the society as third sector in addition to the profit sector and the government sector. It covers requirements which are disregarded by public or profit organizations. These organizations close this gap and justify therefore their work field (Priller 2004, p. 129).

When talking about nonprofit-organizations within this paper, it concentrates on associations being the most important legal framework for nonprofit-organizations in Europe. Other frameworks being used to build nonprofit-organizations in Europe are foundations and cooperatives (Freise, Pajas 2004, p. 134). The presentation of scientific material concentrates on Austria and Germany being the home country of the Alpine Clubs under research.

Corporate governance – definition

Corporate Governance is an important topic within science, today. Corporate governance came into the field of high interest because of many worldwide crashes of corporations due to a lack of guidance and supervision. It seemed to be that the existence of balance sheets and their rules to establish them should be enough to show investors a “true and fair view” of a business. It did not (Mallin 2010, p. 1).

There exist a lot of scientific papers for corporate governance although it was not possible up to now to create a unique definition. NIPPA shows that there exist two mainstreams in thinking about corporate governance (Nippa et al. 2002, p. 11):

The originally narrow meaning of direction and control of managers considering corporations listed on the stock exchange: “*Corporate Governance is the system by which companies are directed and controlled*” (Cadbury 1992).

The more widespread meaning of corporate governance considering all stakeholders: „*Corporate Governance is the system by which organizations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders, and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs*“ (Anheier 2005, p. 230).

Corporate governance refers to arrangements of guidance and supervision

(Siebart, Reichard 2004, p. 271) of an organization whether for profit-organizations or nonprofit-organizations. The question is if the concept of corporate governance of for-profit organizations can be transferred to nonprofit-organizations without any adaption.

Corporate Governance in nonprofit-organizations – distinctive features

As mentioned above corporate governance can be understood as a framework, as a synonym or overall term for an integrated management concept. Reflecting the original meaning of corporate governance which was established in the field of for-profit organizations first it has to look at distinctive features of nonprofit-organizations to answer the question of use for nonprofits.

The following table looks at various features to distinguish for-profit organizations from nonprofit-organizations according to the concept of corporate governance:

Table 9: Distinctive features

	Corporate Governance in for-profit-organizations	Corporate Governance in nonprofit-organizations
Legal framework	Corporations listed on the stock exchange	Associations, Foundations, Cooperatives
Property rights	Private owner, corporate owners, shareholder	Founder but no legal personal owner
On whose interest will the organization be governed?	Private owner, corporate owners, shareholder	Multiple stakeholder
Distribution of earnings	Annual distribution of earnings to shareholders	Non distribution constraint
Performance	Financial bottom line	Several bottom lines
Structure of governing	Two-tier model	Voluntary board-“One-tier

bodies	Separation of executive board and supervisory board Separation of decision-making and control	model” No separation of executive board and supervisory board Scope of control?
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Source: own table

The issue of corporate governance in for-profit organizations concentrates on corporations listed on the stock exchange. These organizations are in the centre of interest because of a certain amount of founding capital and number of shareholders (v. Werder, Talaulicar 2006, p. 30). On the contrary limited liability companies are legally not forced to dual system of governing bodies, shares are not dealt at the stock exchange consequently their scope is often much smaller so the concept of corporate governance might not be of high interest.

The **legal framework** of nonprofit-organizations can be different. In Europe the most popular frameworks are associations, foundations, cooperatives (Freise, Pajas 2004, p. 134). These frameworks differ in detail (Heitzmann, Simsa 2004, p. 716), (Zimmer et al. 2004, p. 690), so the issue of corporate governance may concentrate on different aspects.

A further important feature to differ for-profit organizations from nonprofit- organizations with consequences on appliance of corporate governance are the **property rights**: The owners of for-profit organizations may be private owners, corporate owners or shareholders.

Nonprofit-organizations have founders but no owner. In young nonprofit-organizations the founders may play an important role within the organization, in mature organizations founders are only part of their history. Legally, nonprofit-organizations are juridical persons (Nowotny, Fida 2007, p. 215), too but the very important difference to for-profit-organizations is that they have no owner as natural or legal person who could be entitled to a part of the organization’s profit (Jegers 2009, p. 144).

There exist various groups of individuals, so-called stakeholders, who can be affected by the achievement of the organizations’ objectives (Freeman 2010, 46). Nonprofit-organizations face the challenge of being **multiple-stakeholder** organizations (Simsa, Patak 2008, p. 30), (Schröer 2009, p. 148). Stakeholders could be: members, customers, volunteers, employees, board, interest groups, government, etc. (Haddad et al. 2003, p. 24). The question is which stakeholders are to be considered as important for the nonprofit-organization. For the question on whose interest the organization will be governed MALIK shows impressively that the concept of multiple stakeholders is not helpful to for-profit organizations: The organization itself is the centre of leadership and management. Considering various stakeholders the organization is the victim of changing power relations. Uniform guidelines to measure the performance are lost (Malik 2007, p. 154).

A distinctive feature of nonprofit-organizations is their **nondistribution constraint** (Hansmann 2010, p. 61). There is no pie to divide (Speckbacher 2008, p. 313) on several stakeholders. But the annual distribution of earnings to shareholders including private or corporate owners is one important feature of the corporate governance discussion in the field of for-profit organizations.

When talking about performance there is also an important difference to discuss: The financial bottom line depicted in the balance describes the **performance** of a for-profit organization in two ways: First it shows if the business mission is accepted on the market –

doing the right things - and second it shows how efficient the goals are reached – doing the things right (Malik 2007, p. 169). The performance will be controlled by the owner (private owner, corporate owner, shareholders). On the contrary to profit-organizations it is not enough to look at profit or loss as unique bottom line. According to the characteristic as multiple-stakeholder organization nonprofit-organizations have **several bottom-lines**, too (Schröder 2009, p. 148), (Anheier 2005, p. 227). They concentrate on task goals and the economic performance is only the basis (Schuhen 2005, p. 230). „*Nonprofit organizations lack the simple elegance of a financial measure...*“ (Kaplan 2001, p. 354). The performance of a nonprofit-organization will be evaluated by the multiple stakeholders (Balsler, McClusky 2005, p. 295). These groups of stakeholders interpret the fulfillment of the mission, i.e. performance of their organization, on their specific expectations.

The structure of the governing bodies is also a distinctive feature of nonprofit-organizations and has a great impact on the appliance of the philosophy corporate governance. The for-profit organizations in question to corporate governance can apply either the one-tier model with a unitary board or the two-tier model with a dual board (Mallin 2010, p. 122). In German and Austria the appliance of corporate governance presumes the two-tier model with the dual board (Roth 2006, p. 3). The characteristic of this model is that it consists of two governing bodies: The executive board consisting of employed manager being inside the organization and the supervisory board or outside directors with members who are not employed (Siebart, Reichard 2004, p. 276). Nonprofit-organizations normally have only one governing body. The board consists mainly of volunteers who are not employed to the organization. Within this one-tier model guidance and supervision are united in one body (Siebart 2006a, p. 197).

The discussion about corporate governance in the for-profit area concentrates on the description of tasks of the management board and the supervisory board as well as the cooperation between the two governing bodies (Cromme 2007, p. 176). According to the upcoming importance of corporate governance in for-profit organizations supervision is an important goal to create confidence for investors. In nonprofit-organizations supervision, control is tricky because of the not existing separation of the two bodies and the consequences of control when working with volunteers. This question will be discussed in detail in a later chapter.

What is corporate governance for nonprofit-organizations about?

The chapter above showed a detailed description of distinctive features of nonprofit-organizations. According to the given general definition of corporate governance it is now to find out the value of the concept for nonprofit-organizations, especially Alpine Clubs.

„*The word corporate in corporate governance is no longer restricted to for-profit organizations*“ (Jegers 2009, p. 144). Within this article the term corporate governance is also used for nonprofit-organizations. Scholars sometimes use the term nonprofit governance (see Hilb. 2004, p. 11)

The most important area of corporate governance in nonprofit-organizations as a result of the above chapter is to look at the impact of the various stakeholders as they substitute the owner.

They assess the effectiveness of an organization on their personal point of view. A multiple system of goals represents various interest of stakeholders (Matul 2003, p. 504).

Furthermore nonprofit-governance has to look also at the governing body – the voluntary board. As the members of this body are not employed governance of an organization is different. The challenge is the communication between the members of the board and paid or voluntary staff because of the built-in information asymmetry (Herman 2005, p. 155).

The scope of control is of high importance as there is no owner to fulfill this task and the absence of an owner gives it a high priority. There are installed bodies for this function but the question is the scope and effectiveness of it.

The distinctive feature of associations is that there are members. Members can hold different functions: Members of an association have certain rights and obligations, e.g. they are allowed to elect the governing body of their association. Additionally, members are customers or they are elected as body of their organization.

In nonprofit-organizations there are people who wish to contribute their time, assets, and idealism in order to achieve an objective in cooperation with other people. According to SPECKBACHER the purpose of corporate governance from an economic point of view is to make the cooperation efficient (Speckbacher 2008, p. 298).

An exclusive definition of Corporate Governance for nonprofit-organizations?

In fact there is no need for an exclusive definition of corporate governance for nonprofit-organizations. The main topics of corporate governance – competence, responsibility of the governing bodies, rules of communication among the governing bodies – creating confidence for all stakeholders are the same.

Corporate governance is about ensuring that the organization has a clear mission and strategy, but not necessarily about developing it; it is about ensuring that the organization is well managed, but not about managing it (Anheier 2005, p. 231).

The challenge is to transfer value of this concept to nonprofit-organizations, specifically to Alpine Clubs within this paper.

Structural elements

The structure of a nonprofit-organization has to correspond to its environment, its area of engagement, its size and its goals. The country's law on association has to be considered as legal frame but the governance concept of an association is determined by the constitution. It is the most important building block of an organization's governance structure (Siebart, Reichard 2004, p. 278).

One-tier model or two-tier model

Generally, there exist two different models to structure a board: The one-tier model with a unitary board of directors is the form of board structure in the UK and USA and is characterized by one single board comprising both executive and non-executive directors. The difference to the two-tier model with a dual board is that there exists a clear separation

between management and supervision by an executive board and a supervisory board (Mallin 2010, p. 122).

Most of the nonprofit-organizations in Europe, i.e. associations are governed by a voluntary board. Only in larger organizations the board is assisted by an executive director. This structure corresponds to the one-tier model. It is to state that associations do not apply the mere one-tier model consisting of executive and non-executive directors or inside and outside directors (Siebart, Reichard 2004, p. 275). Voluntary board members are in one and the same person executive and supervisory director (Siebart 2006a, p. 230). According to the Austrian law on associations it is possible to install a supervisory board (Kossak 2009, p. 37) but the composition and size of the board matter more than a separate supervisory board (Hopt 2010, p. 545).

The voluntary board

The voluntary board is the governing body of a nonprofit-organization. Volunteer leaders are responsible, accountable for the performance of an association as well as they represent legally their organization (Axelrod 2005, p. 134). This responsibility is also laid down in the law on associations, see for example (Kossak 2009, p. 82). Strategic work of the voluntary board is about being the point of final accountability for all actions, being the employer of staff, formulating policy, securing resources (Rochester 2003, p. 121).

Associations working with voluntary board members face a lot of challenges as the following: Because of not being employed they are not available for regular working hours. If they are not retired time for working for an association is restricted. These “honorary manager” are not in a steady process of thinking about goals, problems, business fields. They may have a lack of continuous information for decision making. To face these obstacles the emphasis has to put on excellent communication. The most important difference is the remuneration compared to manager of for-profit organizations. The range of tasks and duties, strategic knowledge and accountability is the same. They donate time or specific skills (Hopt 2010, p. 540). According to common motives of working as volunteer, e.g. having fun, having a good time, helping other people (Nowotka 2007, p. 16), the position of volunteer leaders require high commitment, i.e. emotional attachment and identification with an organization (Preston, Brown 2004, p. 223)

The role of the voluntary board is crucial to the success of a nonprofit-organization and therefore a lot of considerations are to take in: terms of board members, frequency and organization of board meetings, size and composition of the voluntary board (Siebart, Reichard 2004, p. 281). ROCHESTER shows in her article that in small nonprofit-organizations all these points are in fact different: For example the board in small nonprofit-organizations has to do both jobs, i.e. operational jobs and strategic jobs (Rochester 2003, p. 126).

The executive director

Big nonprofit-organizations support their board by an employed executive director. It is the highest ranking of paid staff. The executive director has limited rights compared to a CEO

(Chief Executive Officer) of a for-profit-organization. The limitation of rights will be written down in so-called bylaws to the constitution of an association (Siebart, Reichard 2004, p. 278). Consequently the executive director is legally only an assistant, a subordinate to the board (Siebart 2005, p. 857) according to the principal-agent theory.

HERMAN et al. point out that the relationship between the board and the executive director is very crucial to the success of a nonprofit-organization and better to describe as partnership or team-work. The board retains their legal and hierarchical superiority while the executive director normally has greater information and a greater stake in and identification with the organization (Herman 2005, p. 155). AXELROD describes this situation as the central paradox of nonprofit organizations: The board holds the ultimate power but does not ordinarily wield it operationally (Axelrod 2005, p. 134).

SCHUHEN also discusses this situation and suggests two solutions to cope with this evidence: Either adapt the legal framework to replace voluntary board members by employed manager which might be a long-lasting process of changing the law on associations or educate voluntary board members that they gain skills to do their managing job (Schuhen 2009, p. 103).

The role of the executive director is a very central one: He enables the boards' abilities to carry out their duties and responsibilities (Herman 2005, p. 157) by providing information as well as advising the board about decision-making (Siebart, Reichard 2004, p. 287). Further the executive director might be responsible for his paid staff unless this function is subject to the board. The challenge of the executive director is to find a balance in his leadership function to the board to avoid the board to become a rubber stamp board.

Scope of supervision and control?

The definition of corporate governance according the Cadbury Report - Corporate Governance is the system by which companies are directed and controlled – includes the claim for supervision and control. The discussion of the corporate governance concept within nonprofit-organizations discusses the topic control, too; especially the scope of control and its effectiveness. The question for nonprofit-organizations is who is responsible for this control, which instruments are installed? Are these instruments effective?

According to the historical based freedom of assembly government has not installed a lot of control mechanisms (Heitzmann, Simsa 2004, p. 722), ({Zimmer 2004 #212}, p. 691): An association has contact to a legal authority mainly in the state of foundation. After the incorporation in the Association Register there is no further contact by an annual control by filing a balance sheet compared to registered companies to the commercial register. Contact to the legal authority will be only in case of changing the constitution of an association or change of legal representatives.

The Austrian law on associations executes control only by defining accounting standards for small, middle and large associations and the nomination of two auditors or an auditing company in case of a large association. The auditors are responsible for checking the daily business, the financial conduct in respect of its compliance with accounting principles and its proper use of resources in ways compatible with the constitution (Höhne et al. 2009, p. 143). This type of control is a very formal one, e.g. checking if documents are available for any

business transaction, if the balance within the accounting system corresponds with the bank statement, the check of the cash etc. The auditors look also on the execution of made board's decisions corresponding to the minutes. It is not the duty of the auditor to check the activities of an association concerning profitability, usefulness, economy or purpose. The function of an auditor must not mixed with managerial accounting (Höhne et al. 2009, p. 144).

The function of members and their amount of control will be discussed in the next chapter.

All these instruments do not aim at the claimed supervision meant by corporate governance – the performance. These instruments stress only a formal control.

According to corporate governance' most important underlying theories, it is a big difference if a nonprofit-organizations acts according to principal-agency theory (Caers et al. 2006, p. 26) or according to stewardship theory. The main difference between these two theories is the necessity of control because of the assumptions of these theories. Agency theory assumes a conflict between interests of the principal to those of the agent. Consequently supervision and control is a very important task of a board. Stewardship theory could be seen as an opposite part of agency theory. It assumes that board members want to do a good job and will act as effective stewards of an organization's recourses (Cornforth 2003, p. 8). In large nonprofit-organizations the board is supported by an executive director as above mentioned. The relationship between these two bodies can be analyzed as principal-agency whereby the board being the principal and the executive director being the agent. As board members are outside directors and not being employed they are not available all the time consequently they have a lack on important information in contrast to the executive director. This information asymmetry (Caers et al. 2006, p. 27) is a disadvantage for the board being responsible for the supervision of the executive director (Siebart 2006b, p. 198). The role of the board according to stewardship-theory is primarily strategic, i.e. driving forward organizational performance (Cornforth 2003, p. 13).

KRÖNES shows that in nonprofit-organization supervision and control is very sensible as volunteers in general are namely intrinsically motivated and this motivation could be destroyed by stressing the control or supervision according to principal-agency theory (Krönes 2006, p. 169).

The advantage of the concept of corporate governance for nonprofit-organizations is the focus on the needs of multiple stakeholders – performance – as representative of the not existing owner.

The members

Characteristic feature of associations is that there are members on the contrary to foundations being also a legal frame for a nonprofit-organization (Freise, Pajas 2004, p. 134). Members of an association play a significant role, they can be classified as one important group of stakeholders: With their money they support the organization financially they contribute to the success of an association. Members are not classified as owner from the juridical or legal point of view although they have certain rights, e.g. they elect the members of a board at the annual general meeting and after each period they approve the members of the board. The rights enabling members to exercise influence at the annual general meeting are less

developed according to a weak information right (Kalss 2010, p. 808). The members execute a certain control over the voluntary board but the question is about the content of their control according to the definition of objectives and measuring the achievement of them (Siebart 2006b, p. 204).

The motives to become a member of an association are dependent on the purpose or offered services of an association. It may be the case that only few members of an association are interested in the annual general meeting and make use of the voting right. ZIMMER compares this lack of interest of being an “active member” with the existing political disinterest (Zimmer, Basic 2006, p. 147). The question could be if active and passive members represent different groups of stakeholders.

External stakeholders

As already mentioned nonprofit-organizations face the challenge of being **multiple-stakeholder** organizations. A stakeholder is „*any group or individual who can affect or is affected by the achievement of the organization's objectives*“ (Freeman 2010, p. 46). Stakeholders could be: members, customers, volunteers, employees, board, interest groups, government, etc. The question is which stakeholders are to be considered as important for the nonprofit-organization. SPECKBACHER shows in his article that stakeholders are the most important group to be considered when talking about corporate governance in nonprofit-organizations. He narrows the general definition of FREEMAN according to the theory of incomplete contracts, i.e. the party's claim on the return from the investment is incompletely specified by contract, to the following: A stakeholder of an organization is a party, a group that contributes specific resources that create value for the organization (Speckbacher 2008, p. 302). There are at least two groups of stakeholders: primary stakeholders and ordinary stakeholders.

As already mentioned nonprofit-organizations stakeholders replace the missing owners. And it is the board members who should be representatives of different stakeholders of the organization (Siebart 2005, p. 859). Stakeholders play an important role for nonprofit-organizations as they judge the organization's effectiveness, i.e. performance (Herman, Renz 1998, p. 25).

According to the characteristic of being a multiple-stakeholder organization nonprofit-organizations are obliged to deal with different interest although stakeholders represent a source of uncertainty (Balsler, McClusky 2005, p. 296). As already mentioned above the concept of multiple stakeholders is vital to nonprofit-organizations but not practicable for profit-organizations (Malik 2007, p. 154). The solution is a consistent approach to stakeholders as the dynamic of their interactions may be better anticipated (Balsler, McClusky 2005, p. 298).

Corporate governance in Alpine Clubs – a must have!

Famous Alpine Clubs in Europe, e.g. in Austria, Germany, Italy including South Tyrol, Switzerland in the legal frame of associations build a community of members being interested

according to their constitution in mountaineering, alpine training courses, protection of the alpine environment etc. Alpine Clubs have a great history, e.g. the Austrian Alpine Club celebrates its 150th anniversary in 2012. Alpine Clubs are very successful according to their membership figures (see for example Oesterreichischer Alpenverein 2011, p. 15). These Alpine Clubs were founded as small associations starting in the year of 1862. For further detail see www.alpenverein.at, www.alpenverein.de, www.alpenverein.it, www.sac-cas.ch. Today they represent more than one million of members. Alpine Clubs contribute in their working field to the society as other nonprofits do.

Alpine Clubs are nonprofit-organizations, specifically associations. They face the challenge of all distinctive features of this organizational framework. Alpine Clubs are governed by voluntary boards. According to the changing society it is a challenge to recruit volunteer leaders otherwise these organizations could not offer services and fulfill their mission.

Alpine Clubs are dependent on subsidies of their countries as they offer services, e.g. huts which are available for the public not only for members. They are responsible for tracks in the Alps which are also available for the public not only for members.

Alpine Clubs get donations. And so they have to prove the effectiveness of their use.

According to the general value of corporate governance Alpine Clubs can also strengthen the confidence in their stakeholders by defining competences, responsibilities of governing bodies, by establishing rules of communication among governing bodies.

Applying the concept of corporate governance Alpine Clubs can communicate better, straighter the contribution to their stakeholders. In the end Alpine Clubs are evaluated by their stakeholders in fulfilling the mission.

Alpine Clubs are constructed as a federal system of sections with an umbrella association on the top. The concept of corporate governance can be seen as guidelines (Schuhen 2005, p. 234), (Bachert 2006, p. 19) with a clear straight message inside the organization to its sections and outside the organization to its stakeholders. It completes the organization's mission as general code of conduct.

Conclusion and further prospect

The purpose of this paper is to show that corporate governance is a valuable concept for nonprofit-organization in general and Alpine Clubs specifically. The distinctions of nonprofit-organizations are the challenges in applying the concept. The paper can only cover a few aspects because of the limited space. Corporate governance can be seen as buzzword today and the term alone is no guarantee for a successful appliance but it covers a lot of topics which are to be considered when talking about an integrated management concept.

With my dissertation I focus corporate governance on the mentioned Alpine Clubs. Within an empirical work with Alpine Clubs in Austria, Germany, Switzerland, Italy I want to find out possible governing problems, further I go for a possible governance structure in Alpine clubs. Alpine Clubs have a long tradition. Their historically grown governance structure might be adapted. The focus will be on the stakeholders of Alpine Clubs and their influence on the governing structure.

Publication bibliography

1. Anheier, Helmut K. (2005): Nonprofit organizations. Theory, management, policy. London ;, New York: Routledge.
2. Axelrod, Nancy R. (2005): Board Leadership and Development. In Robert D. Herman (Ed.): The Jossey-Bass handbook of nonprofit leadership and management. 2nd. San Francisco, CA: Jossey-Bass, pp. 131–152.
3. Bachert, Robert (Ed.) (2006): Corporate Governance in Nonprofit-Unternehmen. Planegg: WRS-Verl.
4. Balsler, Deborah; McClusky, John (2005): Managing stakeholder relationships and nonprofit organization effectiveness. In *Nonprofit Management & Leadership* 15 (3), pp. 295–315.
5. Cadbury, Adrian (1992): Report of the Committee on the Financial Aspects of Corporate Governance. London: Committee and Gee.
6. Caers, Ralf; Du Bois, Cindy; Jegers, Marc; Gieter, Sara de; Schepers, Catherine; Pepermans, Roland (2006): Principal-agent relationships on the stewardship-agency axis. In *Nonprofit Management & Leadership* 17 (1), pp. 25–47.
7. Cornforth, Chris (Ed.) (2003): The governance of public and non-profit organisations. What do boards do? London ;, New York: Routledge.
8. Cromme, Gerhard (Ed.) (2007): Corporate governance report 2007. Vorträge und Diskussionen der 6. Konferenz Deutscher Corporate-Governance-Kodex ; (Deutsch/Englisch). Stuttgart: Schäffer-Poeschel.
9. Freeman, R. Edward (2010): Strategic Management. Cambridge: Cambridge University Press.
10. Freise, Matthias; Pajas, Petr (2004): Organizational and Legal Forms of Nonprofit Organizations in Central Europe. In Annette Zimmer, Eckhard Priller, Matthias Freise (Eds.): Future of civil society. Making Central European nonprofit-organizations work. 1st ed. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 129–146.
11. Haddad, Tarek; Horak, Christian; Ebner, Heinz; Prisching, Erich; Tweraser, Stefan; Nowak-Tran, Thy (2003): Instrumente für das strategische Management in NPOs. In Rolf Eschenbach, Eschenbach-Horak (Eds.): Führung der Nonprofit Organisation. Bewährte Instrumente im praktischen Einsatz. 2., überarb. und erw. Stuttgart: Schäffer-Poeschel, pp. 13–65.
12. Hansmann, Henry (2010): The economics of nonprofit organizations. In Klaus J. Hopt, Thomas von Hippel (Eds.): Comparative corporate governance of non-profit organizations. Cambridge [U.K.] ;, New York, N.Y: Cambridge University Press, pp. 60–72.
13. Heitzmann, Karin; Simsa, Ruth (2004): From Corporatist Security to Civil Society Creativity: The Nonprofit Sector in Austria. In Annette Zimmer, Eckhard Priller, Matthias Freise (Eds.): Future of civil society. Making Central European nonprofit-organizations work. 1st ed. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 713–731.
14. Herman, Robert D. Heimovics Dick (2005): Executive Leadership. In Robert D. Herman (Ed.): The Jossey-Bass handbook of nonprofit leadership and management. 2nd. San Francisco, CA: Jossey-Bass, pp. 153–170.
15. Herman, Robert D.; Renz, David O. (1998): Nonprofit Organizational Effectiveness: Contrasts Between Especially Effective and Less Effective Organizations. In *Nonprofit Management & Leadership* 9 (1), pp. 23–38.
16. Hilb., Martin (2004): New corporate governance. Successful board management tools. Berlin [etc.]: Springer.
17. Höhne, Thomas; Jöchl, Gerhard; Lummerstorfer, Andreas (2009): Das Recht der Vereine. Privatrecht, öffentliches Recht, Steuerrecht. 3., aktualisierte und stark erw. Wien: LexisNexis.
18. Hopt, Klaus J. (2010): The board of nonprofit organizations: some corporate governance thoughts from Europe. In Klaus J. Hopt, Thomas von Hippel (Eds.): Comparative corporate governance of non-profit organizations. Cambridge [U.K.] ;, New York, N.Y: Cambridge University Press, pp. 531–563.
19. Jegers, Marc (2009): “Corporate” governance in nonprofit organizations. In *Nonprofit Management & Leadership* 20 (2), pp. 143–164.
20. Kalss, Susanne (2010): The protection of members and creditors of nonprofit organisations. In Klaus J. Hopt, Thomas von Hippel (Eds.): Comparative corporate governance of non-profit organizations. Cambridge [U.K.] ;, New York, N.Y: Cambridge University Press, pp. 789–812.
21. Kaplan, Robert S. (2001): Strategic Performance Measurement and Management in Nonprofit Organizations. In *Nonprofit Management & Leadership* 11 (3), p. 354.
22. Kossak, Wolfgang (2009): Handbuch für Vereinsfunktionäre. Vereinsrechtlicher Ratgeber für Ehrenamtliche. Wien: LexisNexis-Verl. ARD Orac (Orac kompakt).
23. Krönes, Gerhard V. (2006): Vertrauen ist gut, Kontrolle ist besser - ode umgekehrt? Überlegungen zur Führung von Nonprofit-Organisationen. In Reinbert Schauer (Ed.): Public- und Nonprofit-Management. Arbeitsberichte und Forschungsergebnisse aus Deutschland und Österreich. Linz: Trauner, pp. 157–176.
24. Malik, Fredmund (2007): Management. Frankfurt, M, New York: Campus-Verlag.

25. Mallin, Chris A. (2010): Corporate governance. 3rd. Oxford ;, New York: Oxford University Press.
26. Matul, Christian (2003): Besonderheiten der Implementierung von Managementinstrumenten in NPOs. In Rolf Eschenbach, Eschenbach-Horak (Eds.): Führung der Nonprofit Organisation. Bewährte Instrumente im praktischen Einsatz. 2., überarb. und erw. Stuttgart: Schäffer-Poeschel, pp. 503–514.
27. Nippa, Michael; Petzold, Kerstin; Kürsten, Wolfgang (Eds.) (2002): Corporate governance. Herausforderungen und Lösungsansätze. Heidelberg: Physica-Verlag.
28. Nowotny, Christian; Fida, Stefan (2007): Rechtliche Gestaltungsformen für NPOs. In Christoph Badelt (Ed.): Handbuch der Nonprofit Organisation. Strukturen und Management. 4., überarb. Stuttgart: Schäffer-Poeschel, pp. 202–230.
29. Nowotka, Dietmar (2007): Ehre, wem Ehre gebührt. Erfolgreich Ehrenamtliche leiten. 1st ed. Kassel: Oncken.
30. Oesterreichischer Alpenverein (2011): Jahresbericht 2010. Innsbruck.
31. Preston, Jennifer Bright; Brown, William A. (2004): Commitment and performance of nonprofit board members. In *Nonprofit Management & Leadership* 15 (2), pp. 221–238.
32. Priller, Eckhard (2004): Das Verhältnis von Staat und Nonprofit-Organisationen. In Dieter Witt (Ed.): Funktionen und Leistungen von Nonprofit-Organisationen. 6. Internationales Colloquium der NPO-Forscher, Technische Universität München, 25. und 26. März 2004. 1st ed. Wiesbaden: Dt. Univ.-Verl., pp. 129–146.
33. Rochester, Colin (2003): The role of boards in small voluntary organisations. In Chris Cornforth (Ed.): The governance of public and non-profit organisations. What do boards do? London ;, New York: Routledge, pp. 115–130.
34. Roth, Günter H. Büchele Manfred (2006): Corporate Governance: Gesetz und Selbstverpflichtung. In Manfred Büchele, Thomas Mildner, Katharina Murschitz, Günter H. Roth, Ulrike Wörle (Eds.): Corporate Governance in Deutschland und Österreich. Wien, Münster: Lit, pp. 1–16.
35. Schröer, Andreas (2009): Professionalisierung und Nonprofit Leadership. In Johannes Eurich, Alexander Brink (Eds.): Leadership in sozialen Organisationen. 1st ed. Wiesbaden: VS Verlag für Sozialwissenschaften / GWV Fachverlage, Wiesbaden, pp. 141–158.
36. Schuhen, Axel (2005): Kontrollprobleme in Nonprofit-Organisationen und Lösungsansätze - Überlegungen auf Basis der Theorie und Praxis der Nonprofit Governance. In Klaus J. Hopt, Thomas von Hippel, W. Rainer Walz (Eds.): Nonprofit-Organisationen in Recht, Wirtschaft und Gesellschaft. Theorien, Analysen, Corporate Governance. Tübingen: Mohr Siebeck, pp. 221–241.
37. Schuhen, Axel (2009): Leadership und Nonprofit Governance. In Johannes Eurich, Alexander Brink (Eds.): Leadership in sozialen Organisationen. 1st ed. Wiesbaden: VS Verlag für Sozialwissenschaften / GWV Fachverlage, Wiesbaden, pp. 101–110.
38. Siebart, Patricia (2005): Corporate Governance of Nonprofit Organizations: Cooperation and Control. In *International Journal of Public Administration* 28 (9/10), pp. 857–867.
39. Siebart, Patricia (2006a): Corporate Governance von Nonprofit-Organisationen. Ausgewählte Aspekte der Organisation und Führung. Bern: Haupt.
40. Siebart, Patricia (2006b): Corporate Governance von Nonprofit-Organisationen: Ausgewählte Aspekte zur Kontrollfunktion. In Reinbert Schauer (Ed.): Public- und Nonprofit-Management. Arbeitsberichte und Forschungsergebnisse aus Deutschland und Österreich. Linz: Trauner, pp. 195–211.
41. Siebart, Patricia; Reichard, Christoph (2004): Corporate Governance of Nonprofit Organizations. In Annette Zimmer, Eckhard Priller, Matthias Freise (Eds.): Future of civil society. Making Central European nonprofit-organizations work. 1st ed. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 271–296.
42. Simsa, Ruth; Patak, Michael (2008): Leadership in Non-Profit-Organisationen. Die Kunst der Führung ohne Profitdenken. Wien: Linde (Fachbuch Wirtschaft).
43. Speckbacher, Gerhard (2008): Nonprofit versus corporate governance: An economic approach. In *Nonprofit Management & Leadership* 18 (3), pp. 295–320.
44. Werder, Axel v.; Talaulicar, Till (2006): Corporate governance developments in Germany. In Chris Mallin (Ed.): Handbook on international corporate governance. Country analyses. Cheltenham: Edward Elgar, pp. 28–44.
45. Zimmer, Annette; Basic, Anton (2006): Governance in und mit Nonprofit-Organisationen. In Reinbert Schauer (Ed.): Public- und Nonprofit-Management. Arbeitsberichte und Forschungsergebnisse aus Deutschland und Österreich. Linz: Trauner, pp. 135–155.
46. Zimmer, Annette; Gärtner, Janne; Priller, Eckhard; Rawert, Peter; Sachße, Christoph; Strachwitz, Rupert Graf; Walz, Rainer (2004): The Legacy of Subsidiarity: The Nonprofit Sector in Germany. In Annette Zimmer, Eckhard Priller, Matthias Freise (Eds.): Future of civil society. Making Central European nonprofit-organizations work. 1st ed. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 681–711.

Markus Baur
**METHODOLOGICAL PROBLEMS ASSOCIATED WITH RESEARCHING
FAMILY BUSINESSES**

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Abstract

This review article discusses methodological aspects in family business research by asking whether there are specific factors in the context of family firms that influence research approaches. The paper concentrates on the description of family firm idiosyncrasies that – seen as constraining problems - should be considered when designing research. These aspects are either family firm system related or related to the evolutionary stage of the scientific discipline.

Key words: family firm research, methodology, research design, influencing contextual factors

Introduction

When researching family businesses, one must consider certain contextual factors that are influencing the research process. On the one hand those factors are due to the existence of the reciprocal effect of the systems *family* and *business*; a basic definitional element of the family business. For example, families behave different than shareholders; they prefer privacy and confidentiality – public companies are supposed to provide a high level of transparency. So if one is intending to study a business where a business family is (highly) involved, he/she has to consider the family system respectively the behaviour of the family in the data gathering process. On the other hand, there are factors that are related to the evolutionary stage of the scientific discipline such as the missing framework guiding the research process. These factors are influencing research designs and should hence be considered when designing a study. This work tries to identify those factors that are existent in the context of family firms.

Multidisciplinary of academic fields

The Germany based WIFU Wittener Institut für Familienunternehmen being active in the field since over ten years determines the research in the field to be complex and recognises the existence of the multitude of academic disciplines, methods and research questions (WIFU.de, 2011). This comes from from the overlap of various different academic fields such as systems theory, family therapy, gender, psychology and business management studies to just name a few. This mesh of academic fields is increasing the complexity of the field as researchers are coerced to think multidisciplinary and apply more than one field of expertise. Working with more than one scientific discipline is generally critical as the researcher opens an easy target for criticism.

Definitional problem and heterogeneity of the object of investigation

The circumstance of heterogeneity of *the family business* bears the problem that quantitative approaches have a lack of timing and eventfulness. Dawson & Hjorth (2011, p. 3) argue that “*the empirical is transformed into the temporality of the rhythms of asking questions, of taking notes, or of responding to propositions*”. The authors suggest to rather studying the processes of a family business using a narrative approach in order to attend to the social dynamics of relational constructs, such as roles, resources, projects, organizations, and goals³⁸. Whereas case studies are the dominating method in qualitative research designs, the authors suggest supplementing case study methodology with biographies of business families because “their life stories confirm and supplement case studies”. The strength of this method lays in the comprehensive investigation of the business’s respectively the family’s history and would therefore provide a deep look inside the bibliography. The weakness of this method is the – besides an extensive analysis – the openness the approach demands.

When trying to capture the main points within a given framework – that is the systems concept family businesses existent of three sub-systems family, ownership and business – one needs to frame the interview according to this framework. A narrative approach bears the pitfall that the interviewee switch the topic or cut short the process in case of intimate or private issues that arise. However, in the editor’s note of 2010 of the Family Business Review, Sharma identified to field to “tackle the heterogeneity of family enterprises” (Sharma, 2011, p. 6). Researchers are reported to beginning to differentiate between family-owned and family-managed firms.

Family business studies are furthermore typically centred on theoretical concepts such as “culture”, “values”, “familiness”, reciprocity of “family” and “business” or “stewardship”. Operationalizations of such concepts can too easily been made and understood different. Authors – working with the framework of the resource-based view – usually promote “the uniqueness of a family business” as the basis of comparative advantages (so for example Gibb Dyer, 2006; Habbershon & Williams, 1999; Naldi et al., 2008). How can such a heterogeneous group be operationalized? As Zwack asserts (2010, p. 105), most of those quantitative studies are undertaking research on constructs – such as “entrepreneurship, stewardship or culture of family commitment – which are *too narrowed in their conception*”.

Succession as no one-time-event

Lambrecht argues that studies that try to investigate the connection of planning and successful successions are basically wrong because they try to capture a phenomenon in a short time slice (Lambrecht, 2005, p. 267 f.). But that is exactly what family businesses and business families are not: Businesses that react simply to business decisions. Family businesses differ from others. Successful successions may have there roots on decisions that were made decades ago. Studying transgenerational issues by capturing a short time sclice is limiting the research. Lambrecht lamented that (Lambrecht, 2005, p. 267 f as cited in. Dawson & Hjorth, 2011):

³⁸ A narrative approach and method recognizes that life and knowledge are told, storied, narrated, and proposes that we study them in this way and analyze them accordingly (Dawson & Hjorth, 2011, p. 3).

“Several researchers have highlighted the fact that there is no connection between planning and successful succession... According to these researchers, succession has been presented as a one-time event, whereas transfer to the next generation must be regarded as a lifelong, continuing process. We must, as it were, step into a time machine that carries us to all corners (e.g., cultural, financial, strategic, and social) of the family business and the business family. Our knowledge about how family business is successfully transferred to following generations is still in its infancy” (Lambrecht, 2005)

Quantitative approaches bear the disadvantage to usually only capture a short time slice. These approaches typically hide historical material (Zwack, 2010, p. 104). Thus, research that is concerned with succession should be aware of the range their investigation covers.

Tendency for privacy

The majority of family firms – no matter how one might define them – are not listed publicly. Instead, they are privately held firms and usually under full control of a family. Clearly and by law, a summary of the fiscal year’s balance sheet and profit and loss statement have to be filed. However, family firms have become known for letting someone from outside into their company as far as a family usually lets someone external in into their family sphere; which is naturally not far. Privacy is one of the key attributes that are resulting from the overlap of the systems family and business³⁹. This wish for privacy results in more research of publicly traded family (mostly big) firms⁴⁰. And this is again where the heterogeneity of the object can be displayed quite impressively. Studying the usage of financial controlling systems in family businesses can be estimated to be quite different between “the mom-and-pop-family business” and a publicly traded big family firm like BOSCH.

Lack of secondary data

Brockhaus (2004, p. 171) mentions the lack of secondary data sources, “*forcing researchers to conduct field research studies*”. Meanwhile, the research community is building up a shared research platform (e.g. STEP) in order to gain a deep and internationally comparable insight on family firm. Field studies, in turn, are difficult to achieve because of the family business owners’ lack of interest in participating in such studies, the wide spectrum of family businesses, the lack of theories for hypothesis testing, and the lack of commonly accepted definitions of an entrepreneur or a family business.

³⁹ (cf. Tagiuri & Davis, 1996)

⁴⁰ To name a few examples in the area of Austria, Germany and Switzerland: HILTI, BRAUN, LIEBHERR, BOEHRINGER, BOSCH

Lack of rigor

The research in the field has highly profited from the contributions of the early authors⁴¹. However, the fact that the research area has no long (academic) history makes it important to listen carefully to the suggestions concerned with research methodology and strategy coming from the academic field. Brockhaus for example suggests learning from other (young) disciplines in order to avoid making the same mistakes (cf. Brockhaus, 2004).

The lack of a definitional framework and insufficient operationalizations lead to “stand-alone”-studies where a chronology of explored and tested structures can’t be represented. Researcher will consequently not be able to build in each others work. In their strategic reflection about family business research, Zahra & Sharma call for a more coherent and disciplined use of variables and there operationalizations and “concepts of distinctiveness”.

“Without adopting such stringent discipline for ourselves and applying a more coherent view of what this field of study is all about, we will continue to struggle and persistently disagree over definitions and remain trapped in the preparadigmatic state being experienced at the moment” (Zahra & Sharma, 2004, p. 333).

Chrisman et al. identified the most influential works in the field by using citation analysis (cf. Chrisman et al., 2010). In a follow up work, Pearson & Lumpkin found that out of 12 of the 25, 10 provided no evidence of validity or reliability of the measures used (2011, p. 288). Shanker & Astrachan (1996) found out that a majority of statistics concerned with the US family business’ collective economic impact were not rooted in formal research. First of all, the definitions were “ambiguous, or omitted all together”.

Knowledge lost in translation

Zahra & Sharma claim that – from the very beginning – family business research has “drawn heavily from other disciplines” (Zahra & Sharma, 2004, p. 288) and that “...transferring knowledge from different disciplines has confronted with the problem that the ideas are lost in transition as translations can never be perfect” (Zahra & Sharma, 2004, p. 339) Scholars are therefore encouraged to search for the original source that generated the theory.

Missing framework guiding the research process

The community does not provide an overarching and commonly accepted research framework that would help scholars to structure their work. One attempt was made by Sharma, Chrisman and Chua in 1996 by using the strategic management perspective. In their annotated literature review Sharma, Chrisman and Chua (1996, p. 8 ff.) provide an organizing framework for family business research using the strategic management approach to discover some aspects of family firms that are likely to be different against nonfamily firms. However, Moores concluded in 2009 that the field has achieved “paradigm consensus” and is now engaged in the work of Stage 3 – “normal science”. The normal science stage includes experimentation,

⁴¹ The early authors often came from the consulting industry with a tendency to describe their experienced cases rather than apply sophisticated empirical science resulting in a bold flood of mainly biographies.

fact gathering, and what Kuhn named “puzzle solving”⁴² along with proceeding to articulating theory (Moore, 2009 as quoted in: Pearson & Lumpkin, 2011, p. 287).

Disinterest in academic studies

Besides the tendency for privacy an additional idiosyncrasy makes it difficult to gather data. Family firms are known to have some disinterest in academic studies. It seems like that the firms’ managers and stakeholders have been somehow left aside too long as scholars were focussing on big and publicly traded corporations. They seem to simply being not used to getting questioned and investigated. Additionally, I assume that a lot of pioneers have not had the time to experience an academic environment which builds principally barriers of understanding. Knowing that these are all assumptions, I further assume that this might also being in a process of change at the moment as successors are reported to having had a broader and more academically oriented education as their antecessors. Still, family firms might have evolved a critical attitude towards academic studies.

Non-financial goals making it difficult to measure performance

What is performance and what does it mean to family firms. The early works of Taiguri and Davis (cf. 1989; cf. 1992; cf. 1985) have initiated the discussion about the potential of divergence of stakeholder’s goals. The authors demonstrated that many of the goals were noneconomic in nature, such as employee, satisfaction, financial security, products, personal advancement, corporate citizenship, and job security. This may also be a reason why the field has been irritated by contradictory evidence in the literature regarding the performance of family-owned firms⁴³.

Baur for example has argued that transferring the family business to the next generation is a key definitional element in family business research. Therefore, performance of a family business should consequently include the balancing of the business family strategy. Responsibility of initiating, pushing and developing the business family strategy and balance with the business strategy is best supported by the owner manager who is involved and connected to both fields of interest, the business and the family system. Baur proposes to enhance quantitative measures with the owner managers’ efforts and results of balancing the family strategy in order to measure performance of family firm mangers more holistically (cf. Baur, 2011).

Summary

The family firm as the object of study is characterized by a set of specialities that have to be considered when designing research. First, it is the definitional problem and the subsequent problem of operationalizations for quantitative approaches. Second, the heterogeneity of the object of investigation (e.g. size, shareholder structure, history, transgenerational knowledge)

⁴² See Kuhn (cf. 1970) for a discussion about the seven stages of evolution of a scientific discipline

⁴³ so for a comprehensive summary of performance-related studies Gibb Dyer (2006).

demands for a clear guiding definition within the research design. Third, the lack of secondary data in the field hinders from cross-testing and comparing results. Fourth, the lack of rigor in research quality has led the field in a preparadigmatic state. Fifth, business families often have a tendency to privacy and six business families are assumed to show some disinterest in academic studies – both issues making it difficult to gather data.

Seven, the academic field does not offer a common framework guiding the research process. Eight, transgenerational issues – a major field of interest – usually have related processes and phenomena that can't be captured in a short time slice coercing the need for longitudinal studies which are seldom practicable. Nine, the interaction of various academic fields – for example business management and family therapy – confront researchers with a highten complexity which opening targets for criticisms. Ten, the transfer of theories that originated in other disciplines are running danger to be lost in translation.

The issues described above can be sorted by being either related to the evolutionary stage of the scientific discipline or related to the idiosyncrasy of the system family firm. The following figure is aimed to summarize the factors that have to be considered when researching family businesses. The following figure summarises the discussed factors:

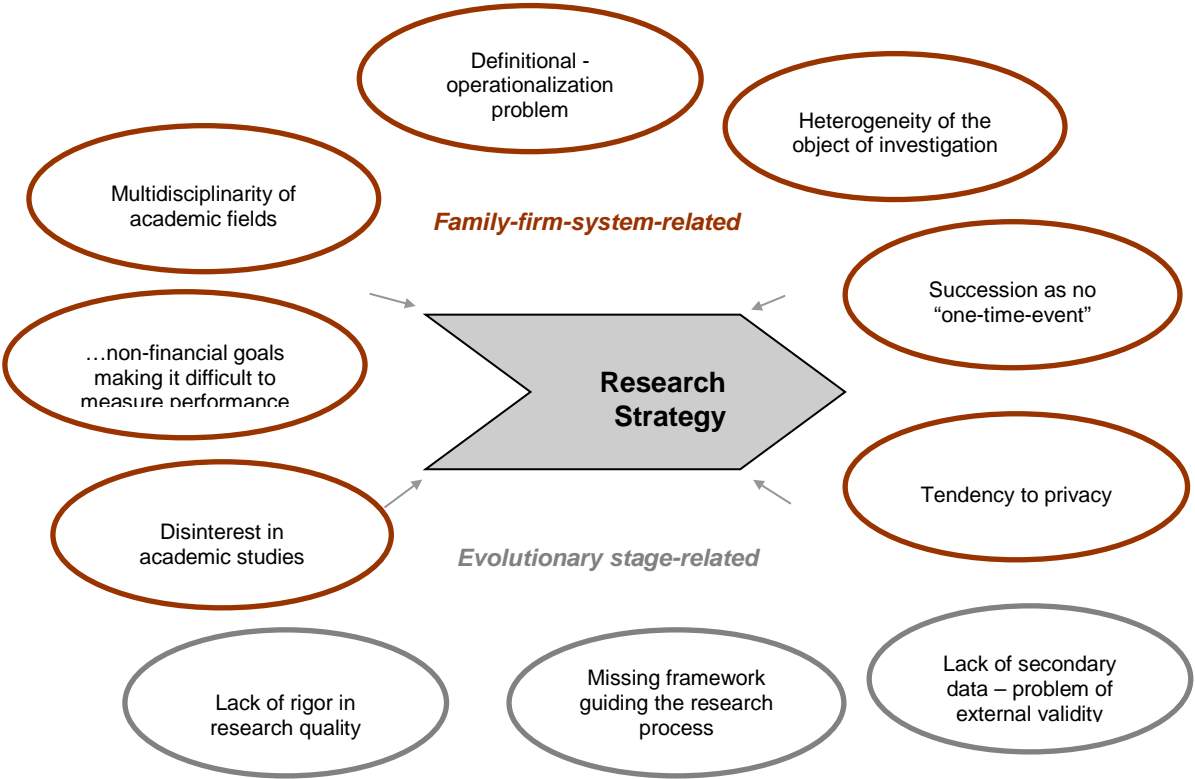


Figure 17: Influencing Factors on Family Business Research

Bibliography

1. Baur, M. (2011). Performance Indicators for owner-managed family firms: theoretical analysis and development of an evidence-based evaluation model. Presented at the International Conference Current Issues in Management of Business and Society Development, Riga: University of Latvia.
2. Brockhaus, R. H. (2004). Family Business Succession: Suggestions for Future Research. *Family Business Review*, 17(2), 165 -177.
3. Chrisman, J. J., Kellermanns, F. W., Chan, K. C., & Liano, K. (2010). Intellectual Foundations of Current Research in Family Business: An Identification and Review of 25 Influential Articles. *Family Business Review*, 23(1), 9 -26.
4. Davis, J. A., & Tagiuri, R. (1989). The Influence of Life Stage on Father-Son Work Relationships in Family Companies. *Family Business Review*, 2(1), 47 -74.
5. Dawson, A., & Hjorth, D. (2011). Advancing Family Business Research Through Narrative Analysis. *Family Business Review*.
6. Gibb Dyer, W. (2006). Examining the “Family Effect” on Firm Performance. *Family Business Review*, 19(4), 253 -273.
7. Habbershon, T. G., & Williams, M. L. (1999). A Resource-Based Framework for Assessing the Strategic Advantages of Family Firms. *Family Business Review*, 12(1), 1 -25.
8. Kuhn, T. (1970). *The structure of scientific revolutions*. Chicago, IL: Chicago University Press.
9. Lambrecht, J. (2005). Multigenerational Transition in Family Businesses: A New Explanatory Model. *Family Business Review*, 18(4), 267-282.
10. Moores, K. (2009). Paradigms and Theory Building in the Domain of Business Families. *Family Business Review*, 22(2), 167 -180. doi:10.1177/0894486509333372
11. Naldi, L., Nordqvist, M., & Zellweger, T. (2008). Intangible resources and Performance in Family Firms: The moderating Role of Familiness. *Frontiers of Entrepreneurship Research*, 28(14), 1.
12. Pearson, A. W., & Lumpkin, G. T. (2011). Measurement in Family Business Research: How Do We Measure U?p, *Family Business Review*(24(4)), 287-291.
13. Shanker, M. C., & Astrachan, J. H. (1996). Myths and Realities: Family Businesses’ Contribution to the US Economy A Framework for Assessing Family Business Statistics. *Family Business Review*, 9(2), 107-123.
14. Sharma, P. (2011). Editor’s Notes: 2010—A Year in Review. *Family Business Review*, 24(1), 5 -8.
15. Sharma, P., Chrisman, J. J., & Chua, J. H. (1996). *A review and annotated bibliography of family business studies*. Boston: Kluwer Academic Publishers.
16. Tagiuri, R., & Davis, J. (1996). Bivalent Attributes of the Family Firm. *Family Business Review*, 9(2), 199 -208.
17. Tagiuri, R., & Davis, J. . (1992). On the goals of successful family companies. *Family*, (5), 43-52.
18. WIFU.de. (2011). Wittener Institut für Familienunternehmen. *Forschung. Information*, . Retrieved November 8, 2011, from <http://www.wifu.de/>
19. Zahra, S. A., & Sharma, P. (2004). Family Business Research: A Strategic Reflection. *Family Business Review*, 17(4), 331 -346.
20. Zwack, M. (2010). *Die Macht der Geschichten Erzählungen als Form der Wertevermittlung in Familienunternehmen* (1st ed.). Heidelberg: Verl. für Systemische Forschung im Carl-Auer-Verl.

Klaus Venus

THE IMPACT OF LEADERSHIP AND TRUST ON SUPPLY CHAIN MANAGEMENT STRATEGY IMPLEMENTATION

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Abstract

This literature based study investigated the relationship between leadership aspects of transformational and charismatic leadership and their impact on SCM-Strategy implementation. SCM-Strategy implementation is very much about change and commitment to change. Most of the change management is depending on leadership commitment, trust and a clear vision which gives sense and motivates the entire organization and drives implementation of SCM behaviour. Besides top management as well the cohesion within the organization (in teams and between teams) and a positive tone and climate is highly important because it enforces trust of followers into management and motivation amongst team members. It shows as well that a positive tone in teams is an important contextual factor for change. Transformational and charismatic leadership can be trained although training methods still lacking quality. The construct to measure the influence on SCM-Strategy implementation shall be developed in a separate model and carried out by a questionnaire to be tested in a further research project.

Introduction

Supply Chain Management Strategy execution describes the process by which employees become capable and committed to using the practices and principles defined in the Supply Chain Management Strategy. It requires adaption: “a decision, typically made by senior organizational managers, that employees within the organization will use the practices and principles in their work [1], Implementation failure occurs when, regardless this decision, employees do not act accordingly.

The cause for an organization to fail in implementation and realization of the intended benefits of a Supply Chain Management Strategy (SCM Strategy) may, therefore result from either a failure of implementation or a failure of the SCM Strategy itself. Increasingly, organizational analysts support the former explanation suggesting that implementation failure, not SCM-Strategy failure, leads to an organization’s inability to achieve the intended benefits of the SCM-Strategy they adopt [1].

The understanding of factors that promote employees SCM-Strategy implementation behaviour – an individual’s consistent and committed use of the practices and principles defined in the SCM-Strategy [2] – is, therefore needed.

Supply Chain Management is understood as per following definition of Stock and Boyer, which is a synthesis of a literature review on SCM definitions: “The management of networks of relationships within and between interdependent organizations and business units consisting of material suppliers, purchasing, production facilities, logistics, marketing, and related systems that facilitate the forward and reverse flow of materials, services, finances and information from the original producer to final customer with the benefits of adding value, maximizing profitability through efficiencies, and achieving customer satisfaction” [3]. Supply Chain Management therefore cuts across all business functions and SCM-Strategy implementation needs therefore high level of leadership commitment. As only 30% of the implementations of SCM-Strategies are successful [4] I see the necessity to develop a concept to measure the leadership and trust impact on successful SCM-implementation.

Review of Literature

A review on literature by [5] has identified several factors which play a critical role in influencing new practices and principles implementation behaviour: the team’s or organizations for innovation implementation, management support for SCM-Strategy implementation; and managerial patience. Reviewing the above described key situational factors, leaders’ behaviours may substantially influence employees` SCM-Strategy implementation behaviour.

The purpose of this paper is to examine transformational and charismatic leadership [6] [7] and employees’ trust in top management and how they affect employees’ SCM-Strategy implementation behaviour.

Transformational leadership theory has captured the interest of many researchers in the field of organizational leadership over the past three decades. This theory was developed by Burns [8] and later enhanced by Bass [6] and others [9], [10]. The major purpose of the transformational leadership theory is the leader’s ability to motivate the follower to accomplish more than what the follower planned to accomplish.

The four components of transformational leadership

Transformational leadership is composed of four components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration [6] [11]:

- Idealized influence involves setting an example or acting as a role model for employees to follow. It can be regarded in terms of behaviours and attributions.
- Inspirational motivation refers to identifying new opportunities and developing, articulating, and inspiring in followers a vision of the future.
- Individualized consideration focuses on followers’ development. It involves showing respect and concern about their personal feelings, needs, initiatives, and viewpoints.

- Intellectual stimulation involves challenging followers to re-examine some of their assumptions about the status-quo, encouraging problem reformulation, imagination, intellectual curiosity, and novel approaches [11]

Burns [8] postulated that transformational leaders inspire followers to accomplish more by concentration on the follower's values and helping the follower aligning these values with the values of the organization. [11] definition of transformational leadership primarily focuses on the leader's effect on followers and the behaviour used to achieve this effect.

Followers of transformational leaders feel trust, admiration, loyalty, and respect toward the leader, most importantly, they do more than they are expected to do. Three principal leadership processes are involved to achieve these outcomes [6]

1. These leaders heighten followers' awareness about the importance and value of designated goals and the means to achieve them;
2. They induce followers to transcend their own interests for the sake of the organization
3. They stimulate and meet their followers' higher order needs through leadership, the leadership process and the mission.

Transformational leadership involves different behaviours that are measured with the Multifactor Leadership Questionnaire (MLQ). The MLQ is usually administered to followers who rate how frequently their leader uses each type of behaviour.

Charismatic leadership

Max Weber [12] originally formulated the theory of charismatic leadership, in which he described how followers attribute extraordinary qualities (charisma) to the leader. The original theory has been modified and extended multiple times in order to describe charismatic leadership in formal organizations [13] [14] [15]. These theories focus on charismatic leadership in terms of leaders influence over followers and the type of leader-follower relationship that emerges [16].

The most three influential theories on charismatic leadership, and those that have evoked the most research [13] [17]. The key behaviours in the Conger and Kanungo theory [13] include

- articulating an innovative strategy vision,
- showing sensitivity to members' needs, displaying unconventional behaviour,
- taking personal risks, and showing sensitivity to the environment (identifying constraints, threats, and opportunities).

The theories of House [17] [18] include articulating an appealing vision, emphasizing ideological aspects of the work, communicating high performance expectations, expressing

confidence that subordinates can attain them, showing self-confidence, modelling exemplary behaviour, and emphasizing collective identity as key behaviours. The basic notion of Shamir and colleagues theory [18] is that charismatic leaders tie the self-concepts of followers to the goals and collective experiences associated with their missions, so that the goals and collective experiences become valued aspects of the followers' self-concepts.

The theory hypothesizes that charismatic leadership transforms follower's self-concepts and achieves its motivational outcomes through at least four mechanisms:

1. Changing followers perceptions of the nature of work itself;
2. Offering an appealing future vision;
3. Developing a deep collective identity among followers; and
4. Heightening both individual and collective self-efficacy.

The most established questionnaire for testing charismatic leadership is the C-K-Scale. Developed by Conger and Kanungo [13] it demonstrated relatively good support for the overall measure of charismatic leadership. Felfe [19] developed a German scale to assess charismatic leadership. His validated scale builds on the idealized influence attribute dimension in the MLQ and focuses on the emotional attachment of the follower to the leader.

Following the perspectives of Yukl [16] and Judge [20] transformational and charismatic leadership are partially overlapping processes.

Empirical research on the consequences of transformational and charismatic leadership found a consistent pattern of relationships between transformational and charismatic leadership and performance outcomes [21].

Early research concentrated on self-reports of extra effort, satisfaction with the leader, and perceived leader effectiveness as potential consequences of transformational and charismatic leadership [11] [22].

Many other outcome variables have been demonstrated to be positively influenced by transformational and charismatic leadership, including: trust in the leader (e.g., Podsakoff, MacKenzie, & Bommer, 1996); trust in management and coworkers (Conger et al., 2000), organizational commitment (e.g. Felfe & Goihl, 2002; Podsakoff et al., 1996), leader performance (Bass 1993), business unit performance (e.g. Howell & Avolio, 1993), follower/work group performance [23] organizational citizenship behaviour voice [24] innovation performance [25], creativity, and organizational innovation.

In addition to these findings, a meta-analysis conducted by Lowe and colleagues [26] found that transformational leadership reliability predicts work unit effectiveness, both for follower perceptions (.80) and for objective organizational measures of effectiveness (.35).

Transformational leadership and performance outcomes

Many empirical and theoretical studies linked leadership variables with attitudes and behaviours. There are two different approaches:

1. Social identity theory, which builds on the relational model of authority developed by Tyler and Blader [27] the model explains why employees demonstrate cooperative or beneficial behaviours towards the group. According to the relational model of authority, employees who feel positive about the group they identify with (e.g. feel pride), work harder for the group's success in order to maintain their favourable identification with the group.

The model argues that a follower may see the group's status and effectiveness as a source of their own positive self-identity. This leads to motivated followers who try to maintain or even enhance the group's status to maintain and even enhance their own. They work hard for the success of the group, conform to group rules, and engage in extra-role-behaviour.

One basic notion of transformational and charismatic leadership theory is that transformational and charismatic leaders tie the self-concepts of followers to the goals and collective experiences associated with their missions so that they become valued aspects of the follower's self-concept. According to social identity theory these processes lead to followers with higher levels of motivation and, consequently, with higher levels of performance outcomes, and

2. Theory of planned behaviour, which has been employed in many studies linking attitudes and behaviours. A review of nine meta-analysis, for instance, which included the theory of planned behaviour or its predecessors, the theory of reasoned action, provides strong evidence that person's attitudes determine behavioural intention or behaviour. The theory of planned behaviour is determined by three components [21] [28] that drive behavioural intention:
 - a. Attitudes, attitudes toward a behaviour determine a person's evaluation of that behaviour.
 - b. Subjective norms, subjective norms address the perceived social pressure to perform or not perform a behaviour, and
 - c. Perceived behavioural control, perceived behavioural control describes a person's perception of the feasibility of performing a behaviour.

Behavioural intention defines the degree to which a person exerts efforts to perform a behaviour and includes the motivational forces that produce planned behaviour. As behavioural intentions increases, a person is more likely to perform a behaviour.

This is highly important because transformational and charismatic leaders influence attitudes, subjective norms, and followers' perceived behavioural control through changing follower's perceptions of the nature of the work itself, offering an appealing future vision, developing a deep collective identity among followers, and heightening both individual and collective self-efficacy.

This might therefore explain how transformational leaders indirectly influence followers' performance outcomes through affecting the three components of Ajzens' theory [28] that determines behavioural intentions.

Transformational leadership, commitment, cohesion, and potency

Transformational leadership has generally found a positive association with followers' performance on the individual level [20] [26]. Researchers have noted that these individual findings cannot easily be generalized to higher levels of analysis. Yukl and colleagues [29] , noting that research on transformational leadership has focused too narrowly on dyadic processes, have called for greater attention to leadership climate studies.

In their view, leadership is not only evident in the relationship between an individual and the leader and his or her followers. Unit cohesion refers to unit members' social bonds that develop among those who share common tasks and collective activities.

In particular transformational leaders typically have the ability to develop a collective attitude and spirit among their employees and to foster collaboration. As a boundary condition the positive affective tone has an impact on transformational leadership effectiveness. Positive affective tone reflects the collective feeling of a group [30].

Transformational leadership has been shown to contribute to cohesion among laboratory groups [31], light infantry platoons [23] and work groups in Korean firms [32]. Social bonds, or cohesion, among members of a unit lead to higher motivation to perform well. In addition, due to their social bonds, they are better able to coordinate activities for successful performance [33] . The measures for transformational leadership climate are developed by McColl-Kennedy & Anderson [34] – e.g. “leaders of our unit give personal attention to their subordinates.” and positive affective tone by the Job-related affective well-being scale – e.g. emotions: “cheerful, content, elated, and satisfied”.

Unit task accomplishment is assessing behaviour that focuses directly on or is supportive of task accomplishment. Commitment to change, “ a mind-set that binds an individual to a course of action deemed necessary for the successful implementation of a change-initiative” [35] and a climate for initiative, “which refers to formal and informal organizational practices and procedures guiding and supporting a proactive, self-starting, and persistent approach toward work [36].

Transformational and charismatic leadership and trust

Trust has been defined as a willingness to be vulnerable to others, based on the prior belief that others are trustworthy [37]. Research demonstrates that trust in top management provides employees with an understanding of management's good intentions. Employees who trust their top management believe in the value of SCM-Strategy and think that they and the organization will benefit from it; consequently, trust in top management should enhance followers' affective commitment to change.

According to the social exchange theory, the relationship between the organization and followers consists on the one hand of followers' perceptions of organizational obligations such as advancement opportunities, training and job security, and on the other hand their perceived obligation such as loyalty, hard work, and commitment [38].

When followers feel high trust in top management, they are more willing to cooperate within and have greater attachment to this exchange relationship leading to higher levels of affective commitment to change. As SCM-Strategy implementation is normally a massive change process affecting the entire organization "end to end" from customer to supplier or even one tier beyond, it is highly valuable to prepare with the right leadership concept for implementation.

Leadership can be trained although review studies of leadership training literature consistently conclude that there is a scarcity of meaningful research on how the best leadership can be identified and then developed [39]. Most leadership developments have also ignored that leadership constitutes a complex interaction between leaders, followers, and the context in which they operate.

Conclusions:

Transformational and charismatic leadership contributes to performance outcomes. Based on the extensive literature review, it is proven by research studies that transformational and charismatic leadership energizes groups to persist when conditions are unpredictable, difficult and stressful.

It is proven as well that transactional and charismatic leadership impact on climate on unit and organizational level [40] and the unit level leadership climate is a meaningful predictor of important unit level variables, like unit cohesion, and units task performance. The more followers perceive their leaders commonly engaging in transformational leadership behaviours, the more they collectively work on the tasks they need to fulfil.

Therefore organizations may want to recruit leaders who possess this leadership ability to ensure successful SCM-Strategy implementation. Field experiments have as well shown that transformational leadership could be developed for positive impact on unit performance 6 months after the closing of training [41] So organizations may also consider to train and strengthen the respective leadership behaviours.

By being trained in idealized influence and inspirational motivation, leaders improve their ability to articulate a shared vision and to motivate followers to identify with common goals. The literature reviewed showed as well that organizations have to give attention to the mechanisms and boundary conditions of the transformational leadership climate – units' task performance linkage.

Organizations need to consider leadership as a dynamic process necessitating adaptive changes in leader behaviour, as opposed to treating leadership as a fixed set of static and universal behavioural dimensions. Last but not least transactional leadership is not only a top management topic it has to be spread on various levels of leadership. The impact on SCM-implementation will be tested in further research work.

References

- [1] Klein, K.J., & Sorra, J.S. (1996) The challenge of innovation implementation, *Academy of Management Review*, 21(4), pp. 1055-1080.
- [2] Choi, J.N., & Price, R. H. (2005) The effects of person-innovation fit on individual responses to innovation. *Journal of Occupational & Organizational Psychology*, 78(1), pp. 83-96.
- [3] Stock J. R., Boyer S. L. (2009) Developing a consensus definition of supply chain management: a qualitative study, in *International Journal of Physical Distribution & Logistics Management* Vol. 39 No. 8, pp 690-711.
- [4] Cohen, S./Roussel, J.: *Strategic Supply Chain Management: the 5 disciplines for top performance*, New-York, 2005.
- [5] Klein, K. J., & Knight, A. P. (2005) Innovation implementation: overcoming the challenge, *Current Directions in Psychological Science*, 14(5), pp. 243-246.
- [6] Bass, B.M. (1985) *Leadership and Performance Beyond Expectation* (New York: Free Press).
- [7] Bass, B.M. (1990b) From transactional to transformational leadership: learning to share the vision, *Organizational Dynamics*, 18(3), pp. 19-31.
- [8] Burns, J.M. (1978) *Leadership*, Oxford England, Harper & Row.
- [9] Avolio, B.J. and Bass, B.M. (1995) Individual consideration viewed at multiple levels of analysis: a multi-level framework for examining the diffusion of transformational leadership, *Leadership Quarterly*, 6(2), pp. 199-218.
- [10] Avolio, B.J., Bass, B.M. and Jung, D.I. (1999) Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire, *Journal of Occupational and Organizational Psychology*, 72(4), pp. 441-462.
- [11] Bass, B.M., & Avolio, B. (1995) *Multifactor Leadership Questionnaire: Technical Report*, Redwood City, CA, Mind Garden Inc.
- [12] Weber, M. (1947) *The theory of social and economic organization*, In A. M. Henderson, & T. Parsons (Eds.), Glencoe, IL, Free Press.
- [13] Conger, J.A., & Kanungo, R.N. (1988) The empowerment process: Integrating theory and practice, *Academy of Management Review*, 13(3), pp. 471-482.
- [14] Conger, J.A., & Kanungo, R.N. (1998) *Charismatic leadership in organizations*, Thousand Oaks, CA, Sage Publications, Inc.
- [15] House, R. J., & Shamir, B. (1993) Toward the integration of transformational, charismatic and visionary theories. In M.M. Chemers, & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions*, San Diego, Academic Press.
- [16] Yukl, G. A. (2002) *Leadership in Organizations*, Englewood Cliffs, NJ, Prentice Hall.
- [17] House, R. J. (1971) A path goal theory of leader effectiveness, *Administrative Science Quarterly*, 16(3), pp. 321-339.
- [18] Shamir, B., Zakay, E. Breinin, E., & Popper, M. (1988) Correlates of charismatic leader behaviour in military units: subordinates attitudes, unit characteristics, and superiors appraisals of leader performance, *Academy of Management Journal*, 41(4), 387-409.
- [19] Felfe, J., & Gohl, K. (Eds.) (2006) *Deutsche überarbeitete und ergänzte Version des Multifactor Leadership Questionnaire (MLQ)*, Vol. ZIS-Version 10.00, Mannheim, Zentrum für Umfragen, Methoden und Analysen.

- [20] Judge, T.A., & Piccolo, R.F. (2004) Transformational and transactional leadership: A meta-analytic test of their relative validity, *Journal of Applied Psychology*, 89(5), pp. 751-765.
- [21] Avolio, B.J., Walumbwa, F.O., and Weber, T.J. (2009) Leadership: Current Theories, Research and Future Directions, *Annual Review of Psychology*, 60, pp. 421-449.
- [22] Bryman, A. (1993) Charismatic leadership in business organizations, Some neglected issues, *Leadership Quarterly*, 4(3), pp. 289-304.
- [23] Bass, B.M., Avolio B.J., Jung, D.I., Berson Y. (2003) Predicting unit performance by assessing transformational and transactional leadership, *Journal of Applied Psychology*; 88(2), pp. 207-218.
- [24] Podsakoff, P.M., MacKenzie, S. B., & Bommer, W.H. (1996) Meta analysis of the relationships between Kerr and Jermier's substitutes for leadership and employee job attitudes, role perceptions, and performance, *Journal of Applied Psychology*, 81(4), pp. 380-399.
- [25] Bono, J. E., & Judge, T. A. (2003) Self-Concordance at Work: Toward Understanding the Motivational Effects of Transformational Leaders, *Academy of Management Journal*, 46(5), pp. 554-571.
- [26] Lowe, K. B. Kroeck, K.G., & Sivasubramaniam, N. (1996) Effectiveness correlates of transformation and transactional leadership, A meta-analytic review of MLQ literature, *Leadership Quarterly*, 7(3), pp. 385-425.
- [27] Tyler, T. R., & Blader, S.L. (2000) Cooperation in groups: procedural justice, social identity, and behavioural engagement, Philadelphia, PA, Psychology Press.
- [28] Ajzen, I. (1985) From intentions to actions: a theory of planned behaviour, in: J. Kuhl and J. Beckmann (eds) *Action Control: From Cognition to Behavior*, pp. 11-39 (New York: Springer-Verlag).
- [29] Yukl, G.A., Gordon, A., & Taber, T. (2002) A hierarchical taxonomy of leadership behaviour: integrating a half century of behaviour research, *Journal of Leadership and Organizational Studies*, 9, pp. 15-32.
- [30] George, J. M. (1990) Personality, affect, and behaviour in groups, *Journal of Applied Psychology*, 75(2), pp. 107-116.
- [31] Hoyt, C.L. & Blascovich, J. (2003), Transformational and transactional leadership in virtual and physical environments, *Small Group Research*, 34(6), pp. 678-715.
- [32] Jung, D.I. & Sosik, J.J. (2002) Transformational leadership in work groups: The role of empowerment, cohesiveness, and collective-efficacy on perceived group performance, *Small Group Research*, 33(3), pp. 313-336.
- [33] Cartwright, D. (1968) The nature of group cohesiveness. In D. Cartwright, & A. Zander (eds), *Group Dynamics*, 3rd ed. Oxford, Harper & Row.
- [34] McColl-Kennedy, J.R., & Anderson, R. D. (2002) Impact of leadership style and emotions on subordinate performance, *Leadership Quarterly*, 13(5), pp. 545-559.
- [35] Herscovitch, L., & Meyer, J. P. (2002) Commitment to organizational change: Extension of a three component model, *Journal of Applied Psychology*, 87(3), pp. 474-487.
- [36] Baer, M. & Frese, M. (2003) Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior*, 24(1), pp. 45-68.
- [37] Mishra, A.K. (1996) Organizational responses to crisis: the centrality of trust. In R.M. Kramer, & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research*, pp. 261-287, Thousand Oaks, CA, Sage Publications.
- [38] Sonnentag, S., & Frese, M. (2002) Performance concepts and performance theory. In S. Sonnentag (Ed.), *Psychological management of individual performance: A handbook in the psychology of management in organizations*, pp. 3-25, Chichester, Wiley.
- [29] Day, D.V. (2000) Leadership development: A review in context, *Leadership Quarterly*, 11(4), pp. 581-613.
- [40] Menges, J. I. Walter, F. Vogel, B., & Bruch, H. (2008) Mechanisms and boundary conditions for performance effects of transformational leadership climate, *Academy of Management Proceedings*, 1-6.
- [41] Dvir, T., Eden, D., Avolio, B.J., & Shamir, B. (2002) Impact of transformational leadership on follower development and performance: A field experiment, *Academy of Management Journal*, 45(4), pp. 735-744.

Hans Brenninger

**COMPANY VALUE AND EMPLOYEE SATISFACTION:
EXEMPLARY FINDINGS FROM THE USA AND POSSIBILITIES
FOR COMPUTING COMPANY VALUE**

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Abstract

Numerous studies and authors support the idea that there is a link between employee satisfaction and customer satisfaction, leadership, productivity, and financial results. The main hypothesis of the underlying research paper is that the increase of company value can be influenced by employee satisfaction. Thus, the current research aims to investigate these interactions by comparing the results of different research papers done in the USA and the possibilities of computing company value for companies in Germany. Based on this implications for further research and management implications can be elaborated.

Keywords: Employee satisfaction, company value, Great Place to Work

“Great Place to work” - The Great Place to Work[®] Institute (www.greatplacetowork.de, www.greatplacetowork.com)

The Great Place to Work[®] Institute, Inc. is a research and management consultancy based in the U.S. with International Affiliate offices throughout the world. At the Great Place to Work[®] Institute, they have been listening to employees and evaluating employers since 1980, to understand what makes a workplace great. They know that the foundation of every great workplace is trust between employees and management. Their ongoing research, measurement tools, and educational services have made them leaders in helping build high-trust workplaces.

In the USA a study which also uses the results of the Great Place to Work Institute and financial data is already done.

Ingrid Smithey Fulmer from the Edi Broad Graduate School of Management Michigan State University, Barry Gerharad from the School of Business University of Wisconsin-Madison and Kimberly S. Scott from the Wm. Wrigley Jr. Company did a very interesting study named “Are the 100 best better? An empirical investigation of the relationship between being a “Great Place to Work” and firm performance”.

They argued that positive employee relations effectively serves as an intangible and enduring asset, and may, therefore, be a source of sustained competitive advantage at the firm level. They surveyed a number of measures of firm-level performance and conceptualize how each measure is likely to be affected by highly positive firm-level employee relations. They then empirically investigated whether positive employee relations is related to firm performance, focusing on publicly traded firms included in the “100 Best Companies to Work for in

America.” The relative performance of these “Best Companies” is examined via comparisons to both companies in the broad market and a group of matched firms. Their analyses suggested that companies on the 100 Best List enjoy not only stable and highly positive workforce attitudes, but also performance advantages over the broad market, and in some cases, over matched group. (Personnel Psychology, 2003, 56, 965-993)

In “Competitive Advantage”, Michael Porter noted that “Human resource management affects competitive advantage in any firm, through its role in determining the skills and motivation of employees” and that “In some industries, it holds the key to competitive advantage” (Porter Michael, Competitive Advantage, 1985, p. 43). The growing importance of good employee relations is underscored by the suggestion that firms disclose information on employee attitudes in their financial reports (Litan, 2000). Similarly, strategy tools such as the Balanced Scorecard (Kaplan & Norton, 1992) presuppose that tomorrow’s financial performance depends to an important degree on how well internal business processes are managed, including the relationship with employees. Indeed, McKinsey & Company’s study of nearly 6,000 managers concluded that “talent” will be the most important firm resource over the next 20 years (Fishman, 1998).

Growing competition for talented workers has given firms added incentive to review their employee relations strategies in order to more effectively attract, motivate, and retain the type of workforce that will help them be successful (Gubman, 1998). Such efforts typically include benchmarking against companies that are considered to be leaders in employee relations, such as those included in Fortune magazine’s annual list of “100 Best Companies to Work for in America” (Levering & Moskowitz, 1998). The wisdom of benchmarking against firms like those on the 100 Best List depends on the validity of two assumptions: First, that companies on the 100 Best list really do have better-than-average employee relations, and, second, that strong employee relations are indeed beneficial to the organization.

In their study Ingrid Smithey Fulmer, Barry Gerhard and Kimberly S. Scott established three hypotheses (Personnel Psychology 2003, 56, 965-993):

Hypothesis 1: Companies included on the 100 Best List will exhibit stable levels of positive employee attitudes over time.

Hypothesis 2: Companies included on the 100 Best List will exhibit better performance relative to other companies because of their emphasis on employee relations.

Hypothesis 3: The superior performance of 100 Best firms relative to other companies as captured by ROA will be more persistent over time than superior performance as measured by market-to-book value of equity or by annual stock returns.

Firm performance measurement:

The January 12, 1998 Fortune article “The 100 Best Companies to Work for in America” (Levering & Moskowitz, 1998, p. 84) was the source of the “best companies” that are the focus of this study. Two hundred thirty-eight companies were invited to submit information

supporting inclusion in the 100 Best. This particular group was selected by the authors, Levering and Moskowitz, from their own “database of more than 1.000 companies” because they met certain minimum criteria (firms had to have been in existence for at least 10 years and employ a minimum of 500 people) and because they were considered the “most viable candidates for the list”. Of those invited, 161 agreed to participate.

Employee attitude measurement:

The majority of employee survey questions used in selecting the 1998 100 Best list were created and administered by the Great Place to Work Institute® of San Francisco and this instrument is referred to as the Great Place to Work® Trust Index© has a Web site (www.greatplacetowork.com) which describes a number of sample items from the survey along with the dimensions they are intended to capture.

Examples include:

In their work in their study Ingrid Smithey Fulmer, Barry Gerhard and Kimberly S. Scott elaborated the results and pointed out some issues for discussion and future directions:

They found that organization-level employee attitudes of the 100 Best firms are both highly positive and stable over time (supporting Hypothesis 1), bolstering the case for the characterizations of positive employee relations as strategic assets as described in the strategic management literature. Then they found that accounting ratios (ROA and market-to-book value of equity) of publicly traded companies included on the 100 Best list are generally better than those of a matched comparison group, supporting Hypothesis 2 and establishing a link between employee attitudes and organization-level financial performance, which has previously been unstudied. As for stock returns, they found that the 100 Best companies outperform the broad market when considering cumulative (longer-term) returns, though not consistently for annual returns. They did not find that the 100 Best significantly outperform their matched peers in most annual return comparisons other than 1998; they do outperform their peers in the 1995 – 1997 cumulative return period. Taken together, these results suggest that 100 Best companies are able to successfully manage relationship with multiple stakeholder groups (Freeman, 1984; Jones, 1995), in this case, both employees and shareholders. At a minimum, these companies are able to create attractive workplaces without hurting the bottom line, and in many cases the 100 Best exhibit superior performance. Our hypothesis that different measure of performance would be affected differently over time is partially supported (Hypothesis 3).

For example, although the high performance / high involvement work systems paradigm (Batt, 2002; Ichniowski, Shaw & Prennushi, 1997; MacDuffie, 1995) has identified a range of HR practices that may be beneficial, there is a lack of consensus regarding which of these practices is most relevant (Becker & Gerhard, 1996; Godard & Delaney, 2000; Personnel Psychology 2003, 56, 965-993).

In the article “Are the Great Places to Work also Great Performers? Eric J. Romero, University of Texas—Pan American analyzed the study of Ingrid Fulmer of Michigan State

University, Barry Gerhard of the University of Wisconsin-Madison, and Kimberly Scott of the William Wrigley Jr. Company.

In their study Fulmer, Gerhard and Scott tried to correct for these weaknesses when addressing the question of performance in the 100 Best firms. Fulmer and her colleagues used both stock market and accounting data to assess firm performance. Stock prices include the market value of a firm's future income streams from intangible assets such as positive employee relations.

Indeed, the difference between a firm's book value and its market value is affected, in part, by the perceived value of its intangible assets such as employees. The 100 Best List is a source of valuable information about employee relations in the listed firms. As a result, the stock price of a particular company on the list may be based not only on objective data from financial statements, but also on investors' subjective assessments of employee relations and other non-financial assets. Given these observations, stock returns, return on assets (ROA), and the ratio of market to book value of equity were all used to measure performance.

In terms of predictions, Fulmer and her colleagues felt that firms with positive employee relations should have more productive employees at all levels. This should produce higher company income, which should be reflected in a higher ROA. So if the hypothesized relationship between positive employee relations and better performance is true, then ROA should be higher for the 100 Best firms than for peer firms not on the list. And since high ROA has a favorable effect on market prices, Fulmer and her associates predicted that the 100 Best firms would have higher market to book value than peer firms. In addition, this measure is useful in assessing the value of positive employee relations since market to book value also reflects the price that the market places on intangible assets.

A key element of the study's design was that the performance of publicly traded 100 Best companies was compared to the performance of peer firms that were not on the list. Peer firms were selected based on their similarity to the listed companies (e.g., on criteria such as size, industry, and operating income). Based on the selection criteria, fifty peer firms were chosen and then compared to fifty firms on the 100 Best List, focusing on accounting and stock market performance. The stock performance of the fifty 100 Best firms was also compared with the performance of a broad market index. The financial analyses indicate that the 100 Best companies generally had a higher ROA than the peer comparison firms over the 6-year period studied (1995-2000). The 100 Best firms also generally had higher market-to-book ratios than their peer firms in the same period. Likewise, when examining 100 Best firms as a group, their six-year cumulative stock returns outperformed a composite market index (376 per cent vs. 193 per cent). Cumulative stock returns were also higher for the 100 Best than for peers, but the sample size for this comparison was fairly small, which may have affected (reduced) the statistical significance of the results. In terms of annual stock returns, the results were somewhat mixed. The 100 Best companies had higher annual returns compared to the composite market index for 5 out of 6 years (significantly higher in 2 years). Compared to their peer firms, the 100 Best companies had better market returns in 4 out of 6 years (significantly better in one year). Overall, Fulmer and her associates showed that positive employee relations are beneficial for companies and may be related to improved performance (as measured by both accounting and market data). In companies with positive employee

relations, we can reasonably expect to find lower turnover, increased commitment, and enhanced work performance. Higher employee commitment may lead to greater employee participation in the organization. Over time, this may result in outcomes such as improved customer service and stronger relationships with customers.

And since people want to work in a pleasant environment, firms on the 100 Best List are able to attract superior employees. Despite the additional costs associated with providing employee-friendly practices, the benefits appear to more than compensate. Among the benefits likely to be enjoyed by the 100 Best companies is a workforce that, when compared to peer firms, is more creative, better at solving problems, experiences lower stress, is more closely aligned with organizational goals, and provides a talented pool of employees for higher-level positions.

In summary, the study of Fulmer and his colleagues served to remind But in the long run, the firms that stay the course and make the investment are not likely to regret it (Romero Eiiic J., Academy of Management Executive, University of Texas, Pan American, May 2004 p. 150-152).

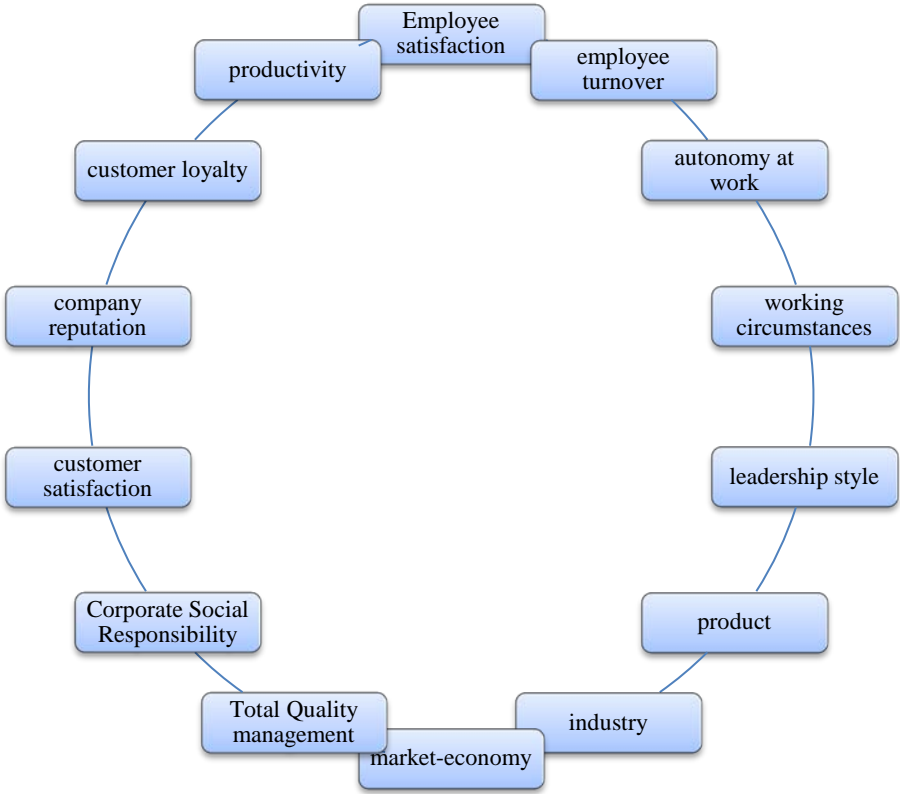


Figure 18: Issues influencing on financial results

Managerial implications

- This study gives evidence that employee satisfaction leads to better company performance and financial results, therefore managers have to give their employees a workplace environment which leads to staff satisfaction.
- This research was made in the United States, therefore managers have verified if these methods also fit to their country and culture where their company is located.
- Managers should know that the time and money spent to create and support positive employee relations are a worthwhile investment - one that will be repaid with significant returns to the firm.
- Positive employee relations tend to be stable and difficult to copy, they provide a unique and sustainable competitive advantage for companies.
- Developing positive employee relations is no easy matter and requires a long-term perspective.

Company Value

There are different possibilities for calculating company value.

→ The Discounted Cash-Flow-Model

For computing the different company values the **Discounted-Cash flow-Model** can be used. (WP-Handbuch: Zu den DCF-Verfahren vgl. grundsätzlich Drukarczyk, WPg 1995, S. 329-334; Drukarczyk/Schüler (Fn. 45), S. 153-304; Hachmeister, Der Discounted Cash Flow als Maß der Unternehmenswertsteigerung, Frankfurt a. M. 2000, S. 91-147 und S. 153-268; Hachmeister, ZfbF 1996 S. 251-277; Ulrike Eidel, Moderne Verfahren der Unternehmensbewertung und Performance-Messung, Hemel Berlin 1999, S. 30-48; Baetge/Niemeyer/Kümmel (Fn. 349), S. 266-362; Weber, FB 2000, S. 464-473; Küting/Eidel, FB 1999, S. 225/226-228; Kußmaul, StB 1999, S. 332/335-346; Gräfer/Ostmeier, BBK 2000, S. 1241/1246-1251; Steiner/Walimeier, FB 1999, S. 1-10; Kirsch/Krause, Zffi 1996, S. 793-812; Richter, ZfbF 1996, S. 1077-1097; Bender/Lorson, BuW 1997, S. 1-9; Heurung, DB 1997, S. 888/889-892; Volkart, Zffi-Ergänzungsheft 21/1997, S. 105-124; Drukarczyk, ZBB 1997, S. 217-226; Richter, ZBB 1997, S. 226-237; Coenenberg/Schultze in: Matschke/Schildbach (Hrsg.), Unternehmensberatung und Wirtschaftsprüfung, FS Sieben, Stuttgart 1998, S. 269-299; Schildbach (Fn. 328), S. 301-322; Ballwieser, WPg 1998, S. 81-92; Siepe, WPg 1998, S. 325/329-332; Böcking/Nowak, DB 1998, S. 685-690, speziell zum WACC-Ansatz Bühner/Weinberger, BfuP 1991, S. 187/191-195; Sanjleber-Decher, WPg 1992, S. 597/601-603; Ballwieser (1993) (Fn. 284), S. 151/164-167; Ballwieser in: Ballwieser

u.a. (Hrsg.), Bilanzrecht und Kapitalmarkt, FS Moxter, Düsseldorf 1994, S. 1377-1405; Ballwieser, WPg 1995, S. 119/121-126; Börsig, ZfbF 1993, S. 79/84-88; Copeland/Kolier/Murrin (Fn. 284), S. 171-359; Helbling, Schweizer Treuhänder 1993, S. 157-164; Helbling (Fn. 52), S. 105-113; Rappaport (Fn. 284), S. 39-70; Jonas, BFuP 1995, S. 83-98; Knüsel, Schweizer Treuhänder 1995, S. 621--628; Schmidt, ZfbF 1995, S. 1088-1118; Sieben (Fn. 404), S. 717-737; Arbeitskreis "Finanzierung" der Schmalenbach-Gesellschaft Deutsche Gesellschaft für Betriebswirtschaft e. V, ZfbF 1996, S. 543/569-571; Großfeld/Egert in: Baetge u.a. (Hrsg.), Rechnungslegung, Prüfung und Beratung, FS Ludewig, Düsseldorf 1996, S. 365-383; Kußmaul, StB 1996, S. 395/396-399; Wagner (Fn. 284), S. 309/329-352; Busse von Colbe, ZGR 1997, S. 271/274-283; Küting/Lorson, BB 1997, Beilage 8, S. 11/18-25; speziell zum APV-Ansatz Drukarczyk/Richter, DBW 1995, S. 559-580; Luehrmann, Harvard Business Review 1997, S. 145-154. Zur Verbreitung der DCF-Verfahren in Deutschland vgl. die empirischen Untersuchungen von Peemöller/Bömelburg/Denkman, WPg 1994, S. 741-749; Pellens/Rockholtz/Stienemann, DB 1997, S. 1933/1934-1936).

A firm's value is determined by its ability to generate cash flow, both now and in the future. The DCF-Method computes company value by discounting cash flows. Therefore DCF-Methods use a risk adjusted interest rate the discounted cash flows can be seen as future values (vgl. Ballwieser, WPg 1998, S. 82; Baetge/Niemeyer/Kümmer (Fn 349), S. 278).

→ The concept of Weighted Average Cost of Capital

The total capital value of a company with the WACC- concept is a result of discounting free cash flows (vgl. Ballwieser, 1993, Fn. 284, S 151/164, Bender/Lorson, Buw 1997, S. 1; Ballwieser, WPg 1998, S. 81/85 f.). These can be set as a constant or estimated in the phase model to the planning horizon (vgl. Rappaport, Fn. 284, p. 40 f; Bühner/Weinberger, BFuP 1991, p. 187/192, Volkart, ZfB-Ergänzungsheft 2/1997, p. 105/106). For the following phase a Residual-value based on simple assumptions is determined (vgl. Copeland/Koller/Murrin, Fn. 284, S. 186, Rappaport, Fn. 284, p. 40 und p. 48-56, ferner Tz. 355 ff.). For generating the total market value of a company the net present value of the not operating assets of a company is to be added (vgl. IDW ES 1 i.d.F. 2007, Tz. 86).

The market value of a company based on the “Phase Model”:

$$GK = \sum_{t=1}^T \frac{FCF_t}{(1+WACC)^t} + \frac{RW}{(1+WACC)^T} + NBV$$

GK	=	Market Value of total capital
FCF	=	Free Cash Flow
t	=	Time index
T	=	Duration of the planning period
WACC	=	Weighted average cost of capital
RW	=	Residual Value
NBV	=	Present Value of not operating assets

In a second step the complete capital value has to be divided to equity and dept. The market value of the dept can be computed by discounting the cash flows to the outside creditors with a risk adjusted interest rate. The difference between complete capital value and market value of the dept is the **market value of equity which means company value** (IDW ES 1 i.d.F. 2007, Tz 126).

→ The Corporate Value Model

The corporate Value Model (Brigham & Huston: Fundamentals of Financial Management, Tenth Edition, Page 326 ff.) also based on the WACC is nearly the same for generating company value:

Market value of company = V_{Company} = PV* of expected future free cash flows
 (* Present value)

$$= \frac{FCF_1}{(1+WACC)^1} + \frac{FCF_2}{(1+WACC)^2} + \dots + \frac{FCF_{\infty}}{(1+WACC)^{\infty}}$$

To find a company’s cost of capital, we need to calculate the weighted average of the costs of different sources of financing. The weights we use reflect the proportion of these sources of financing that a company uses, or that it plans on using going forward (e.g., target debt-equity ratio).

The **WACC** is calculated as:

$$WACC = (E/(D + E)) * r_E + (D/(D + E)) * r_D * (1 - T_C)$$

Where D is the value of Debt
 E is the value of Equity
 r_D is the cost of debt
 r_E is the cost of equity
 T_C is the corporate tax rate
 $r_D (1-T_C)$ is the “after-tax” cost of debt

- The appropriate cost of debt is the after-tax yield on the company’s debt.
- The best way to compute cost of equity is to assess the risk premium that shareholders require.

Or:

$$WACC = r_{EK, verschuldet} \cdot \frac{EK}{GK} + R_{FK} \cdot \left(1 - S \frac{U/E}{FK}\right) \cdot \frac{FK}{GK}$$

WACC = Weighted average cost of capital

r_{FK} = from the market expected dept interest

$S \frac{U/E}{FK}$ = discharge of dept from corporate tax and personal tax

FK = market Value of dept

→ The EBIT-Multiple Model

The EBIT- Multiple Model is a simple model used very often in M&A Transactions for computing a rough but also reliable company value.

The basic principle itself is simple - based on sustainable EBIT (earnings before interests and taxes) a Company value is computed by multiplying EBIT with an Industry typical multiplier.

Additionally at a price indication the so-called net financial debts are reducing the purchase price and the stock of cash or cash equivalents will be higher the purchase price. This is to take account of the individual financial structure of the company at the transaction date, i.e. for example, that the higher liquidity from retained earnings enhance the purchase price.

Sample calculation:

	amount per thousand €
Earnings before taxes	3.000
- interest income	-50
+ interest expense	550
= EBIT	3.500
x industry typical multiplier	6

= company value	21.000
- bank debts	-2.500
- additional interest bearing debts (e.g. mezzanine)	-5.000
+ cash resources (fixed deposits, cash, etc.)	500
(subtotal net financial indebtedness)	(7.000)
= purchase price / equity value	14.000

The multipliers themselves are usually derived empirically from transactions made by major investment banks and consulting firms or the business press as well. Listed companies also offer through its disclosure requirements, the possibilities to derive on the basis of published budgets and the stock market values the corresponding multiplier.

The multipliers vary widely from industry to industry and thus reflect the general expectations of the future for that industry again. Therefore they reflect to medium-term fluctuations. How far a particular company's EBIT multiplier at the top or bottom of the range applies, depends on multiple and sometimes subjective factors.

Representatives mentioned:

- **Market:** competitive position, market coverage, strategic positioning, general firm size, etc.
- **Product and range of power:** product range and depth, R & D, Technology, New Products, USP, flexibility, dependence on suppliers, etc.
- **Customer structure:** regional distribution, industry mix, ABC-profile economic performance of key accounts, etc.
- **Management / Organization:** sustainability of the management or the workforce, personnel, loyalty / employee turnover, flexibility, particularly in post-merger issues, etc.
- **(Economic) Risk Profile:** investment requirements, risk of default / processes, capital requirements, tax position, ownership structure, anticipated changes in legislation, environmental risks, customer structure (regional, industries), management and shareholder structure.

It is easy to see that it is the positioning of the entity within the spectrum of industry-EBIT multipliers allows room for interpretation and therefore also makes very good use as a negotiating tool as well. The business valuation via EBIT multiples generally offers the advantage that, contrary to other policies, the "reality factor" prevails. Not infrequently, the EBIT multiplier is an essential subject of the purchase price formula in the transaction agreements (HJK Management Consultancy www.hjk-mc.de).

Implications for further research

There are a lot of studies which supports the positive influence of employee satisfaction to company value. But there are also some which assumes that there is no relation between satisfied employees and financial results or company value.

Therefore, the following directions can be suggested for further research:

- What is employee satisfaction and how can it be measured. The “Great Place to Work Institute” is specialized in measuring employee and staff satisfaction and is able to give reliable results.
- What is the appropriate measurement for company value? There are some definitions in a social or moral context but also possibilities to compute company value out of balance sheets and “Profit and Loss Accounts”.
- In an exemplary empirical research over some years should be made comparing the results of employee satisfaction from some German companies based on “The Great Place to Work Institute”.
- Financial results and therefore company value has to be computed out public balance sheets and Profit and Loss Accounts for the same period and companies.
- These results have to be compared for each company and each year.

Conclusion:

In a next step a research in Germany should be made where a comparison between employee satisfaction and the development of financial result or company value based on hard figures out of balance sheets and profit & loss accounts is to be done.

Therefore the “Elektronische Bundesanzeiger” and Great Place to work Institute will build the base for the further research.

That means to have a look in which domain they are better, how one measures and evaluates these items, to generate potentials for improvement. Based on the Great Place to work study and companies balance sheets, which they have to release in the “Bundesanzeiger”, one has to proof if the company value of the winning companies changed from the study 2006 until 2009 and find the connection between their leadership style, organisational culture and the better results.

After all these steps the Hypothesis “There is a relationship between employee satisfaction and company results” can objectively be tested.

References:

1. Arbeitskreis "Finanzierung" der Schmalenbach-Gesellschaft, Deutsche Gesellschaft für Betriebswirtschaft e. V., ZfbF 1996, p. 543/569-571
2. Baetge/Niemeyer/Kümmel, Fn. 349, p. 266-362
3. Ballwieser in: Ballwieser u.a. (Hrsg.), Bilanzrecht und Kapitalmarkt, FS Moxter, Düsseldorf 1994, p. 1377-1405
4. Ballwieser, 1993, Fn. 284, p. 151/164-167
5. Ballwieser, WPg 1995, p. 119/121-126
6. Ballwieser, WPg 1998, p. 81-92
7. Batt, 2002;
8. Becker & Gerhard, 1996;
9. Bender/Lorson, BuW 1997, p. 1-9
10. Böcking/Nowak, DB 199&, p. 685-690
11. Börsig, ZfbF 1993, p. 79/84-88
12. Brigham & Huston: Fundamentals of Financial Management, Tenth Edition, Page 326 ff.
13. Bühner/Weinberger, BFuP 1991, p. 187/191-195
14. Busse von Colbe, ZGR 1997, p. 271/274-283
15. Coenenberg/Schultze in: Matschke/Schildbach (Hrsg.), Unternehmensberatung und Wirtschaftsprüfung, FS Sieben, Stuttgart 1998, p. 269-299
16. Copeland/Kolier/Murrin, Fn. 284, p. 171-359
17. Drukarczyk, WPg 1995, S. 329-334;
18. Drukarczyk, ZBB 1997, p. 217-226
19. Drukarczyk/Schüler, Fn. 45, S. 153-304
20. Drukarczyk/Richter, DBW 1995, p. 559-580
21. Fishman, 1998
22. Freeman, 1984;
23. Godard & Delaney, 2000
24. Gräfer/Ostmeier, BBK 2000, p. 1241/1246-1251
25. Großfeld/Egert in: Baetge u.a. (Hrsg.), Rechnungslegung, Prüfung und Beratung, FS Ludwig, Düsseldorf 1996, p. 365-383
26. Gubman, 1998
27. Hachmeister, Der Discounted Cash Flow als Maß der Unternehmenswertsteigerung, Frankfurt a. M. 2000, p. 91-147 und p. 153-268
28. Hachmeister, ZfbF 1996 p. 251-277;
29. Helbling, Fn. 52, p. 105-113
30. Helbling, Schweizer Treuhänder 1993, p. 157-164
31. Heurung, DB 1997, p. 888/889-892
32. HJK Management Consultancy, www.hjk-mc.de
33. Ichniowski, Shaw & Prennushi, 1997;
34. IDW ES 1 i.d.F. 2007, Tz 86 & 126.
35. Jonas, BFuP 1995, p. 83-98
36. Kaplan & Norton, 1992
37. Kirsch/Krause, Zffi 1996, p. 793-812
38. Knüsel, Schweizer Treuhänder 1995, p. 621—628
39. Kußmaul, StB 1999, p. 332/335-346, 395/396 - 399
40. Küting/Eidel, FB 1999, p. 225/226-228
41. Küting/Lorson, BB 1997, Beilage 8, p. 11/18-25
42. Levering & Moskowitz, 1998
43. Litan, 2000
44. Luehrmann, Harvard Business Review 1997, p. 145-154.
45. MacDuffie, 1995
46. Peemöller/Bömelburg/Denkman, WPg 1994, p. 741-749;
47. Pellens/Rockholtz/Stienemann, DB 1997, p. 1933/1934-1936
48. Personnel Psychology 2003, 56, 965-993
49. Porter Michael, Competitive Advantage, 1985, p. 43
50. Rappaport (Fn. 284), p. 39-70
51. Richter, ZBB 1997, p. 226-237
52. Richter, ZfbF 1996, p. 1077-1097
53. Romero Eiic J., Academy of Management Executive, University of Texas, Pan American, May 2004 page 150-152

54. Sanjleber-Decher, WPg 1992, p. 597/601-603
55. Schildbach, Fn. 328, p. 301-322
56. Schmidt, ZfbF 1995, p. 1088-1118
57. Sieben (Fn. 404), p. 717-737
58. Siepe, WPg 1998, p. 325/329-332
59. Steiner/Walimeier, FB 1999, p. 1-10
60. Ulrike Eidel, Moderne Verfahren der Unternehmensbewertung und Performance-Messung, Hemel Berlin 1999, p. 30-48
61. Volkart, ZfB-Ergänzungsheft 2/1997, p. 105/106
62. Volkart, Zffi-Ergänzungsheft 21/1997, p. 105-124
63. Wagner (Fn. 284), p. 309/329-352
64. Weber, FB 2000, p. 464-473
65. www.greatplacetowork.de, www.greatplacetowork.com

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BIG DATA – CHALLENGES FOR THE HOSPITALITY INDUSTRY

– How the Big Data Phenomenon Influences the Quality of Strategic Decisions and Marketing Communication –

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Abstract

The phenomenon of Big Data has the potential to significantly influence the structure of organizations and the way companies work and interact with their customers in the following years. So far an IT structure disregarding the needs of a modern marketing compared with a lack of managerial knowledge have led to data silos dispersed in the different departments. IT decision making processes are operational driven not following an overall marketing oriented strategy.

Marketing Departments should take over the lead of Big Data which would influence significantly the role of marketing managers playing today leading to an increase of competences and responsibilities. Especially the quality of marketing can be influenced positively by Big Data and push direct distribution resulting in improved profit margins for hotels. The faster organizations focus on Big Data the more competitive advantage they gain. The biggest hurdle seems to be the lack of knowledge and the necessary organizational changes.

The paper evaluates the distinctive value of Big Data for the hotel business and reveals the key areas for success. The paper is of interest for both academic researchers as well as for practitioners.

Keywords: Big Data, Decision-Making, Customer Journey, CRM, Organizational Change

An Introduction into Big Data

The dropping storage costs and the triumphant success of social media have led to an exponential growth of data over the last years. The volume of data is expanding by 35%-50% on an annual base. This leads to the fact that company's process today about 1000 times more

data than a decade ago.⁴⁴ Accordingly to McKinsey in 15 of the US economy's 17 sectors, companies with more than 1,000 employees store, on average, over 235 terabytes of data.⁴⁵ One terabyte is about 1,024 gigabyte. This phenomenon of an on-going growing amount of data is called "Big Data".

Big Data is a new aspect to the economy which should be in the future a central part of the modern organizational theories (OT). Taylor, Weber or Fayol with their classical approach of Organizational Theories with the emphasis on bureaucracy and administration, the neoclassical approach where individual and group behaviors play a central role to the modern theories with the focus on organizations regarded as systems continuously adapting to the environmental changes - Big Data is such a change. The social technical approach based on the premise that an organization consists of people, technical systems and the environment has now a new element.

McKinsey believes that Big Data may become a new type of corporate asset that will cut across business units and function much as a powerful brand does, representing a key basis for competition.⁴⁶ In a recent study from IBM 1700 marketing experts agreed that the phenomenon of Big Data will change significantly their work environment.⁴⁷ It is assumed that companies using Big Data efficiently will be able to increase their profit margins by up to 60%.⁴⁸

In general Big Data is characterized by three aspects: volume (huge amount of data), velocity (data should be available almost in real-time) and variety (structured and unstructured data from different sources have to be collected and linked).⁴⁹ These three elements of Big Data make clear how complex the topic is. Especially the way of how to clean and link an ongoing growing number of data sources, combined with the needed organizational changes are especially for larger companies topics for conflicts. The structure must be completely adapted to the new environment.

⁴⁴ C.F. Beath C., Beccerra-Fernandez I., Ross J., Short J. (2012). 'Finding Value in the Information Explosion'. MIT Sloan Management Review, Vol. 53, No. 4, P. 2

⁴⁵ C.F. Brown B., Chui M., Manyika J. (2011). 'Are you ready for the era of 'big data''. McKinsey Quarterly, Oct 11, P. 2

⁴⁶ C.F. Brown B., Chui M., Manyika J. (2011). 'Are you ready for the era of 'big data''. McKinsey Quarterly, Oct 11, p. 2

⁴⁷ C.F. IBM (2012). 'Willkommen in der Ära des Chief-Executive-Kunden'. Retrieved from <http://www.ibm.com/smarterplanet>

⁴⁸ C.F. Gneiting S. (2013). 'Komplexität beherrschen'. *acquisa*, No. 01/2013. Haufe-Lexware, Freiburg, P. 15

⁴⁹ C.F. Gneiting S. (2013). 'Komplexität beherrschen'. *acquisa*, No. 01/2013. Haufe-Lexware, Freiburg, P. 18

Big Data in the Hotel Business

Data throughout the Customer Journey

Sustainable success of tourism organizations rely significantly on the collection, storing and processing of relevant data.⁵⁰ The potential which data can provide is summarized by the following statement from the inventor of the Tesco Loyalty Card program who said “Data is the new oil”.⁵¹

The increase of systems combined with the fact of dropping storage costs and the triumphant success of social media have led to an exponential growth of data over the last years. At least today 44 % of the German companies calculate with an exponential increase of data.⁵²

Especially hotels have access to mind-boggling customer data. Collected during the customer journey everything from basic personal information to preferred meals, interests, booking patterns or preferences is stored somewhere.⁵³ The availability of such a massive amount of customer data is clearly an asset for the hotel industry especially for decision making and marketing.

Organizations must understand that the customer experience begins before the time of sale — and even before the time of search — but also extends well after purchase and travel.⁵⁴ For the travel industry the customer journey of a consumer starts therefore far before the travel itself, contains the actual travel experience followed by a reflection period. Processes like planning, marketing, sales, controlling and customer relationships are intertwined with the delivered services.⁵⁵ Instead of this traditional approach Google the dominant search engine divides travel into five stages: from dreaming, over planning, booking, experiencing and finally to sharing.⁵⁶ From the point of view of the author both approaches do not cover the overall complexity of the customer journey in the hospitality.

⁵⁰ C.F. Fuchs M., Mathies C. (2005). 'Informationstechnologie als Quelle von Innovationen'. in "Erfolg durch Innovation". GWV Fachverlag, Wiesbaden, pp. 295-296

⁵¹ Eisenbrand R. (2012). 'Aus dem Weg aus der Ahnungslosigkeit'. ONEtoOne, No 12. J&S Dialog Medien, Hamburg, P. 11

⁵² C.F. von Lieven S. (2011). 'Raus aus dem Datensumpf'. in direkt marketing 02-2011. Acquisa, Freiburg, P. 32

⁵³ C.F. Carey R., Kang D., Zea M. (2012). 'The trouble with travel distribution'. McKinsey Quarterly, February, P. 5

⁵⁴ C.F. Carey R., Kang D., Zea M. (2012). 'The trouble with travel distribution'. McKinsey Quarterly, February, P. 2

⁵⁵ C.F. Werthner H. (2005). 'Informationstechnologie und touristische Innovationen'. in "Erfolg durch Innovation". GWV Fachverlag, Wiesbaden, P. 502

⁵⁶ C.F. Google (2012). 'The five stages of travel'. Retrieved from <http://www.thinkwithgoogle.com/insights/featured/five-stages-of-travel/>

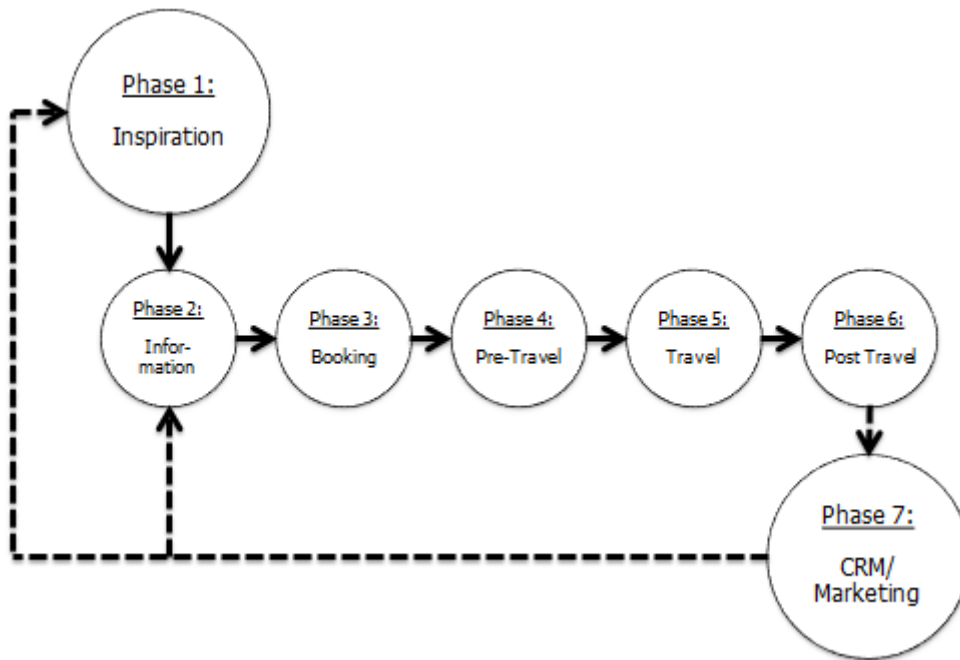


Figure 19: The “Hotel Customer Journey” (own image)

The “Hotel Customer Journey” model described in the image above divides the customer journey into seven phases. The “Hotel Customer Journey” model shows the different areas where data occurs which should be collected and transformed into usable information. The journey starts with an inspiration phase in which intrinsic or external processes generate some kind of need for a new travel which triggers phase 2 in which the consumer starts the search for information consciously and unconsciously; phase 3 includes the booking process itself followed by the timespan until the arrival (phase 4) and the actual travel (phase 5); a short period of only several days after the travel is the phase of reflection (phase 6). Phase 7 represents marketing and CRM activities only applicable for qualified customers.

The Reality and the needed Changes on the Organizational Structure

The usage of Big Data respectively the information and knowledge coming from analysis based on a Big Data approach is manifold. Especially marketing and sales will benefit significantly even in the short run.

The message below from Steigenberger Hotels shows the current situation and data handling in the hotel industry. An English message delivering special offers to loyal guests. The problem: the recipient is German and has not stayed in a Steigenberger Hotels for many years.



Figure 20: Mass Communication in Direct Marketing⁵⁷

The quality of communication in the hospitality in respect of individualization (time and content) is far below online retailers like Amazon. Almost no company in the hotel business so far provides individual marketing messages based on the transaction history and the individual consumer behavior. The result is a uniform mass communication on direct marketing channels. The reason for this poor quality is mainly the inability to consolidate different systems and create a central customer profile. Although all needed data is available it is dispersed in different sources and systems.

The question to rise is will the importance and therefore the standing of the marketing department improve through Big Data? It is clear someone has to take the lead; the responsibilities have to be centralized. New IT investments in the different departments have to follow a central strategy approved by the responsible Big Data department. If organizations drive their initiatives based on consumer needs and market environment it seems to be logic that the marketing department should be the head of a Big Data initiative. But this would mean a change of the classical description of the marketing departments not only in the hotel business. The functions would be much more technical and analytical resulting in the need for a new type of marketing managers.

The knowledge and the ability to leverage technology generate competitive advantage; but only a few companies really leverage it effectively.⁵⁸ It can be doubt that many companies

⁵⁷ Newsletter Steigenberger Hotels & Resorts, April 2011

have the needed managerial excellence at the moment. The McKinsey Global Institute assumes that by the year 2018 alone on the US market 190.000 data experts are missing and more than 1.5 million managers who are able make decision based on Big Data.⁵⁹ “Big Data” is therefore first a management and organizational issue as the creation of the required knowledge and an adjusted organizational structure can be regarded as the pre-requisites for success.

At the Heard of Big Data - The Central Data Ware House

Technology is a central part of Big Data. Many internal and external sources with structured and unstructured data have to be linked and brought together to create the fundamental basis, data – as much as possible.

Big Data follows the data warehouse approach. A data warehouse stores systematically all transactions, reactions and the customer behavior to continuously optimize client related business processes. It should be a learning system (closed loop architecture) to adopt products, services and communication to the need of the customer base.⁶⁰ A data-warehouse is a further stage of a marketing data base. A marketing data base collects a pre-defined set of data; a data warehouse instead collects data from different sources without having a pre-defined reason.⁶¹

For marketing purposes especially customer data about transactions, behavior, satisfaction, demographic, communication and the consumer reaction on marketing messages is of interest. A central customer profile is required to work efficiently, to create clean reports for decision making, and to run a qualitative marketing and controlling. This leads also to the conclusion that a qualitative CRM implementation starts with a Big Data initiative. Big Data is the basis for Customer Relationship Marketing.

A Re-Thinking of IT-Investments is needed

Between 1995 and 2000 the hotel industry spent almost 7.6 billion US\$ in Information Technology (IT). The result: no increase in revenue, no improvement in profitability.⁶² IBM came to the conclusion that only 7% of campaign management tools are finally successful.⁶³

⁵⁸ C.F. Maklan S., Knox S, Peppard J. (2011). 'Why CRM Fails - and How to Fix It'. MIT Sloan Management Review, Vol. 52, No. 4, P. 85

⁵⁹ C.F. Gneiting S. (2013). 'Komplexität beherrschen'. *acquisa*, No. 01/2013. Haufe-Lexware, Freiburg, P. 16

⁶⁰ C.F. Hippner H., Wilde K. (2006). 'Grundlagen des CRM'. Gabler Wissenschaftsverlag, Wiesbaden, P. 49

⁶¹ C.F. Hoepner G. A., Schminke L. H. (2012). 'Dialog-Marketing und E-Commerce'. uni-edition, Berlin, PP. 36-37

⁶² C.F. Piccoli G. (2008). 'Information Technology in Hotel Management'. *Cornell Hospitality Quarterly*, August 2008, P. 283

⁶³ C.F. M. Badget; S. Ballou; S. LaValle (2004). 'Doing CRM right: What it takes to be successful with CRM'. IBM Business Consulting Services, Somers, NY, US, P. 18

Nevertheless over the last years more and more IT systems have been introduced in almost all areas of a hotel (operations, sales, marketing).

An investment in IT, respectively Big Data should be regarded as a system consisting of the elements IT, people, organizational structure and processes.⁶⁴ Finally only about 40% of the success of a project relates to the technology itself.⁶⁵ First decision makers have to shift their focus from an operational oriented IT strategy to a marketing oriented IT strategy. Operations has to follow marketing, the opposite is the reality in the majority of organizations.

In almost all hotel companies a non-marketing focused IT strategy has led to data silos and an uncontrollable number of independent systems dispersed in the different hotel departments. The management has to understand at least the essentials of modern information technology to be able to make sustainable decisions in respect of a Big Data initiative.

The CEO of the HTNG (Hotel Technology Next Generation) where all major IT and hotel companies are members mentioned at the ITB 2012 the number of 40 different IT systems a hotel today has in use.

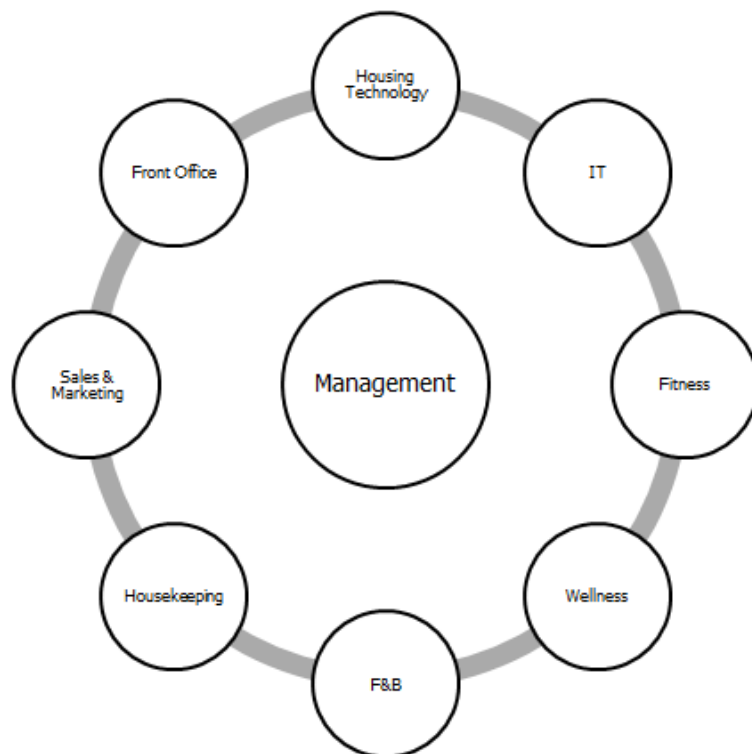


Figure 21: Hotel Software Map⁶⁶

⁶⁴ C.F. Piccoli G. (2008). 'Information Technology in Hotel Management'. Cornell Hospitality Quarterly, August 2008, P. 283

⁶⁵ C.F. Raab G., Werner N. (2009). 'Customer Relationship Management'. Verlag Recht und Wirtschaft GmbH, Frankfurt am Main, P. 13

⁶⁶ Own Image based on Toedt M. (2013). 'ÖHV Leitfaden Kunden-Bindungs-Management'. ÖHV Touristik Service GmbH, Wien, P. 24

The “Hotel Software Map” above lists the different departments and areas of IT systems in the hotel business.

Big Data and Customer Relationship Marketing

The main barrier to introduce an overall CRM strategy is the lack of an integrated system.⁶⁷ Big Data can be called as the basis of a sustainable CRM strategy. The following image lists the different needed elements.

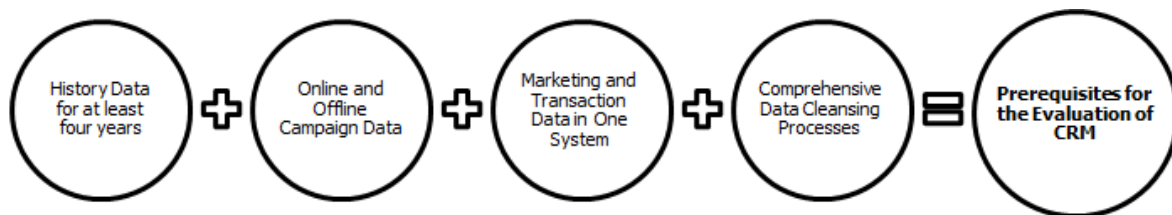


Figure 22: Prerequisites for CRM (own image)

The prerequisites are: One a central system containing at least four years of history data; two the system must have all campaign relevant data of online and offline marketing actions for at least four years,⁶⁸ which means who received what and when through which channel; three the system must be also connected to the reservation data in order to track the result of the communication actions and four a complex data cleansing process must have been implemented to not only collect the high volume of data but also to make them usable.

In general the complexity of data management is highly underestimated⁶⁹ although data quality is regarded as the key element of success.⁷⁰ Adriaans, Zantinge writes that “without the right data there is little gold to be mined; here again, we must apply the rule ‘garbage in, garbage out’”.⁷¹ A study from 2010 revealed that only 40% of SAP users trust the data they have in their system.⁷²

It seems that hotel companies today have no overall control about their data and their marketing and CRM activities. This situation makes it so difficult respectively almost impossible to find qualified researches about the long-term effect and the value of Customer Relationship Marketing for the hotel business.

⁶⁷ C.F. Client Vela (2010). 'Frischer Wind für Ihren Erfolgskurs'. Swiss Post, München, P. 11

⁶⁸ C.F. Toedt M. (2012). 'THE ROLE OF COMMUNICATION WITHIN CUSTOMER RELATIONSHIP MARKETING'. in "Innovative Approaches of Management Research for Regional and Global Business Development". FH Kufstein, Kufstein, P. 6

⁶⁹ C.F. Schnake A. (2010). 'Potenzial ausschöpfen'. Acquisa No.03, P. 20

⁷⁰ C.F. Neckel P., Knobloch B. (2005). 'Customer Relationship Analytics'. dpunkt.verlag GmbH, Heidelberg, P. 97

⁷¹ Adriaans P., Zantinge D. (1996). 'Data Mining'. Addison-Wesley, Harlow, P. 9

⁷² C.F. Schnake A. (2010). 'Potenzial ausschöpfen'. Acquisa No.03, P. 16

Conclusion and Recommendation

The “Big Data” phenomenon combined with the existence of data stored in departmental silos⁷³ respectively dispersed in pockets across a dysfunctional ecosystem,⁷⁴ yet only a few companies – if any - truly maximize the potential of the data at their disposal.⁷⁵ The majority of hotel managers so far are not aware of the data assets they have.

Hotel companies who are able to deal with Big Data will create a sustainable competitive advantage. With the intelligent usage of customer data hotel companies should be able to reduce especially the soaring distribution costs through indirect channels like Expedia or HRS. Between 10 and 30% commissions are due for each booking and the commission tendency is ascending. The average commission payment 2011 was 14.85%.⁷⁶ In 2013 the share of electronically generated bookings are prognosticated by 40% which would be an increase from 2008 to 2013 of 290%.⁷⁷ The prognosticated increase of profitability of up to 60% by McKinsey⁷⁸ should be a realistic bench mark for the hotel business.

To reach this goal organizational changes are necessary which will potentially lead to an increased standing of the marketing department within an organization. The biggest hurdle which can be identified is a lack of managerial knowledge and leadership. This is where researchers, educational institutes and companies should start at to provide the needed theoretical foundation to generate value coming from Big Data.

Literature

1. Adriaans P., Zantinge D. (1996), 'Data Mining', Addison-Wesley, Harlow
2. Beath C., Beccerra-Fernandez I., Ross J., Short J. (2012), 'Finding Value in the Information Explosion', MITSloan Management Review, Vol. 53, No. 4
3. Brown B., Chui M., Manyika J. (2011), 'Are you ready for the era of 'big data'', McKinsey Quarterly, Oct 11
4. Carey R., Kang D., Zea M. (2012), 'The trouble with travel distribution', McKinsey Quarterly, February
5. Client Vela (2010), 'Frischer Wind für Ihren Erfolgskurs', Swiss Post, München
6. Eisenbrand R. (2012), 'Aus dem Weg aus der Ahnungslosigkeit', ONEtoOne, No 12, J&S Dialog Medien, Hamburg
7. Fuchs M., Mathies C. (2005), 'Informationstechnologie als Quelle von Innovationen', in "Erfolg durch Innovation", GWV Fachverlag, Wiesbaden
8. Gneiting S. (2013), 'Komplexität beherrschen', *acquisa*, No. 01/2013, Haufe-Lexware, Freiburg
9. Google (2012), 'The five stages of travel', Retrieved from <http://www.thinkwithgoogle.com/insights/featured/five-stages-of-travel/>

⁷³ C.F. Brown B., Chui M., Manyika J. (2011). 'Are you ready for the era of 'big data''. McKinsey Quarterly, Oct 11, P. 4

⁷⁴ C.F. Carey R., Kang D., Zea M. (2012). 'The trouble with travel distribution'. McKinsey Quarterly, February, P. 6

⁷⁵ C.F. Carey R., Kang D., Zea M. (2012). 'The trouble with travel distribution'. McKinsey Quarterly, February, P. 5

⁷⁶ C.F. Sponsel D. (2011). 'Preispolitik der führenden Buchungsportale wirft neue Fragen auf'. in HDV DEPESCHE; Nr 73. HDV, Bad Honnef, PP. 6-7

⁷⁷ C.F. Spalteholz B. (2011). 'Die Wertschöpfungskette aus Sicht des Hoteliers'. Spalteholz Hotelkompetenz GmbH & Co. KG, P. 3

⁷⁸ C.F. Gneiting S. (2013). 'Komplexität beherrschen'. *acquisa*, No. 01/2013. Haufe-Lexware, Freiburg, P. 15

10. Hippner H., Wilde K. (2006), 'Grundlagen des CRM', Gabler Wissenschaftsverlag, Wiesbaden
11. Hoepner G. A., Schminke L. H. (2012), 'Dialog-Marketing und E-Commerce', uni-edition, Berlin
12. IBM (2012), 'Willkommen in der Ära des Chief-Executive-Kunden', Retrieved from <http://www.ibm.com/smarterplanet>
13. M. Badget; S. Ballou; S. LaValle (2004), 'Doing CRM right: What it takes to be successful with CRM', IBM Business Consulting Services, Somers, NY, US
14. Maklan S., Knox S, Peppard J. (2011), 'Why CRM Fails - and How to Fix It', MIT Sloan Management Review, Vol. 52, No. 4
15. Neckel P., Knobloch B. (2005), 'Customer Relationship Analytics', dpunkt.verlag GmbH, Heidelberg
16. Piccoli G. (2008), 'Information Technology in Hotel Management', Cornell Hospitality Quarterly, August 2008
17. Raab G., Werner N. (2009), 'Customer Relationship Management', Verlag Recht und Wirtschaft GmbH, Frankfurt am Main
18. Schnake A. (2010), 'Potenzial ausschöpfen', Acquisa No.03
19. Spalteholz B. (2011), 'Die Wertschöpfungskette aus Sicht des Hoteliers', Spalteholz Hotelkompetenz GmbH & Co. KG
20. Sponsel D. (2011), 'Preispolitik der führenden Buchungsportale wirft neue Fragen auf', in HDV DEPESCHE; Nr 73, HDV, Bad Honnef
21. Toedt M. (2012), 'THE ROLE OF COMMUNICATION WITHIN CUSTOMER RELATIONSHIP MARKETING', in "Innovative Approaches of Management Research for Regional and Global Business Development", FH Kufstein, Kufstein
22. Toedt M. (2013), 'ÖHV Leitfaden Kunden-Bindungs-Management', ÖHV Touristik Service GmbH, Wien
23. von Lieven S. (2011), 'Raus aus dem Datensumpf', in 'direkt marketing' 02-2011, Acquisa, Freiburg
24. Werthner H. (2005), 'Informationstechnologie und touristische Innovationen', in "Erfolg durch Innovation", GWV Fachverlag, Wiesbaden

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