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# User Acceptance of Customer Self-Service Portals

L. Hartmann, F. Kerssenfischer, T. Fritsch, and T. Nguyen

**Abstract**—The attitude of users towards an online customer self-service portal, which is newly introduced by one of the biggest finance companies worldwide, is the focus of this article. The Technology Acceptance Model (TAM), proposed by Davis in 1986, is applied to evaluate 521 customer responses to a questionnaire consisting of 22 questions.

The authors choose partial least squares (PLS) as statistical instrument and define “attitude of customers towards the online self-service portal” as the dependent variable. Apart from this, six factors are specified to directly or indirectly correlate with attitude.

It is found that self-efficacy, innovation anxiety and innovation affinity correlate both directly and indirectly with attitude whereas the mediator for the indirect impact is perceived ease of use. Furthermore, value of paper form correlates directly and indirectly with attitude whereas in this case perceived usefulness is the mediator for the indirect link. Comparing both mediators, perceived usefulness is found to influence attitude of customers towards the online portal by more than 50% than perceived ease of use does.

The article is structured into an introductory part where the applied methods are investigated shortly and a description of the theoretical background of the TAM, followed by a description of the applied model. Afterwards, the reader finds a description of the generated results while the last parts discuss and conclude the stated findings. The leading question of research within this paper is: Which factors influence user acceptance of a new customer self-service portal?

**Index Terms**—Customer self-service portal, user acceptance, Technology Acceptance Model (TAM), partial least squares (PLS), consumer behaviour, insurance company.

## I. INTRODUCTION

The following article discusses the results of a study regarding the user acceptance of a newly introduced self-service portal for customers of an insurance company. It is undertaken in the context of a new customer self-service portal which is introduced by a finance company six weeks prior to the research. The introduction of the customer portal is meant to simplify the communication between company and customers and to replace all administrative paperwork. Furthermore, the portal is developed in order to provide an alternative tool to communication via telephone or letter. The portal enables its users to manage insurance contracts online,

to access insurance-specific e-mails, to change personal data when necessary and to report claims. The aim of the research is to analyse the factors which influence the decision of customers to accept or reject the new portal. The portal can be adapted by customers voluntarily and free of charge. In addition, to give an incentive to users to implement the program, they automatically participate in a competition in which high-quality digital cameras and tablet PCs can be won.

In order to investigate our research objectives, this article is structured in the following five parts: The first section gives a short overview of the theoretical background concerning the TAM and its implications for economic research. Among other things, different versions of the TAM starting with the introductory stage and ending with the status quo are described. The second part is devoted to the description of the methods the authors apply in their research. Hence, the reader finds the questionnaire and how its results are converted into a model by means of partial least squares. Third, the research results are documented. Accordingly, the respective path coefficients are named. Furthermore, this part describes the implications of the bootstrapping analysis. This is followed by a discussion of the stated results. The last part, the conclusion, critically sums up the implications of our results, challenges the applied method and gives an outlook for future research concerning user acceptance of new technologies and its influencing factors.

## II. BACKGROUND

The TAM developed by Davis (1986) is used to explain user acceptance of an online service portal [1]. He wanted to draw some implications for practitioners about how to adapt the design of system characteristics in order to improve user acceptance [2]. His model was meant to give answers to two questions: Which factors determine the attitude of people towards using newly introduced information systems? How strong is the impact of system characteristics on user acceptance? Both questions are closely related to our leading question which we answer in the discussion section of this paper after having analysed the data collected through the questionnaires.

Aligned with the theory of reasoned action (TRA), which was proposed by Fishbein and Ajzen (1975), the TAM examines the causal relationship between external stimuli, cognitive response, affective response and behavioural response [3]. It specifies perceived usefulness and perceived ease of use as the two most important determinants of system use whereas the first is found to be 50% more influential than the latter [2]. As it is defined by Venkatesh et al. (2008), perceived usefulness is an indicator for the extent of job

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performance improvement perceived by a person who applies the new system. Instead, perceived ease of use measures the degree to which a person assumes that using the new information system will be free of effort [5].

In this context, we conclude from the results mentioned above that people favour to have an added value rather than not to have any efforts with using the new portal. As image, job relevance, output quality and result demonstrability are found to be determinants for perceived usefulness, the influence of the program on the quality of work and the goodness of achieved results respectively seem to be the most decisive factors regarding the decision for or against applying a new technology. This implicates that the customer portal should enable users to communicate with their insurance and to manage the matters of their insurance contracts more efficiently. Processes have to be faster and the results are supposed to be optimised with respect to the situation of not using an online customer portal.

Furthermore, the model confirms not only direct causal effects which external stimuli have on perceived usefulness, perceived ease of use and attitude towards using, the online portal also specifies a significant impact of perceived ease of use on perceived usefulness. Instead, usefulness does not influence ease of use [6]. Knowing this, we can partly answer our leading question of which factors influence customer attitude towards using the portal.

To define attitude towards using, principles from the TRA from Fishbein and Ajzen (1975) are employed [3]. Their theory is mainly characterised by the following: First, it concludes how to measure the components of attitudes which are relevant for a person's behaviour; second, it differentiates between beliefs and attitudes and third, it explains how external stimuli like system characteristics are causally interrelated to behaviour, attitudes and beliefs. The TAM was developed over time. Thus, three different versions exist in literature. While the original TAM does not differentiate among external variables and just names four elements (external variables, usefulness, ease of use and attitude towards using) in a functional chain explaining actual system use, two model components are added in the TAM 2 [7]. On the one hand, it examines five different external stimuli effecting perceived usefulness which are subjective norms, image, job relevance, output quality and result demonstrability. On the other hand, experience and voluntariness are defined as additional mediating factors influencing the causal effect of subjective norm on attitude towards using. Besides, experience also appears to be a mediator on the path from subjective norm towards perceived usefulness. It implicates that experience influences the user's perception of the added value with regard to his or her job performance. People who are familiar with the specific system seem to evaluate perceived usefulness differently from those who are not.

For the future, this means that people's evaluation of the usefulness of a new software is steadily improving. As the number of online customer portals on the market is rapidly increasing, experience with technology is accumulated which leads towards enhanced perceived usefulness.

Subjective norm and image as determinants for perceived usefulness present the processes of social influence. Instead,

the influence of cognitive instrumental processes on perceived usefulness is represented by the other three external determinants and the ease of use of the TAM 2. Using these determinants, the model takes into account that persons judge perceived usefulness by cognitively comparing what the information system can theoretically contribute to their job tasks and what actually has to be done in their job [7].

The second modification of the TAM, the TAM 3, was introduced by Venkatesh and Bala in 2008 [4]. It includes six determinants of perceived ease of use and differentiates between anchors and adjustments. Anchors are general beliefs about computers and computer usage and are represented by computer self-efficacy, perceptions of external control, computer anxiety and computer playfulness. Adjustments, which are perceived enjoyment and objective usability, are defined as beliefs that are developed on the basis of direct experience with the respective system [8].

In general, the path characteristics found in the TAM and the TAM 2 also hold for this model but additionally, experience is found to mediate the relationship between anchor and adjustment determinants, perceived usefulness and perceived ease of use respectively. The only exceptions are computer self-efficacy and the perceptions of external control. They influence perceived ease of use directly without a mediator. Furthermore, in the TAM 3 experience mediates the relationship between perceived ease of use and perceived usefulness and that between perceived ease of use and behavioural intention. Hence, experience is found to be a crucial mediator when examining the functional paths from external independent variables to the dependent variable of actual system use. Venkatesh and Bala (2008) assume that users with greater hands-on experience have more information about how easy it is to use an information system [4].

The research of this paper is done in order to find out which determinants influence the decision of IT-users whether to accept or reject a customer self-service portal which is introduced by an insurance company. Since "attitude of customers towards the online self-service portal", the variable in question, is indirectly and directly dependent from external variables as well as from perceived usefulness and perceived ease of use, the authors choose regression analyses as methodological basis for their research. This statistical instrument enables the applicant to quantify the extent to which different independent factors have an effect on one or more dependent variables. It is examined which factors correlate to which extent with the dependent variable and how independent variables do influence each other. As a result, significant correlations in manifold directions are found and illustrated in a path model.

As a result, we answer the question of which factors affect the attitude of users concerning the newly introduced customer self-service portal. The motivation for the research is to deduce valuable implications for the leaflet design and marketing of customer self-service portal. Customers are asked to fill in a questionnaire. The answers are evaluated applying the Technology Acceptance Model (TAM) which was introduced by Davis (1986) in his doctoral thesis [1]. This statistical tool is applied because it provides a highly

valid measurement for testing user acceptance and addresses the application purpose of this research. It is meant to exclusively investigate the introduction of new technologies [9]. The study analyses the essential motives, which influence customer decisions whether or not to use the newly introduced portal. Additionally, regression analyses is used to measure the magnitude and direction of customer influence on the dependent variable “attitude of customers towards using the new software”.

In comparison to the theory of the TAM the findings of this article give important implications for answering the research question that is which factors determine the attitude of users towards applying a new technology to which extent. This research supplies worthwhile knowledge for the optimization process of developing online customer portals as the research generates highly valid results.

### III. METHOD

As mentioned before, the customer self-service portal which is the object of this study enables its users to manage insurance contracts online, to access insurance-specific e-mails, to change personal data when necessary and to report claims. Furthermore, the decision to invest into this software is connected to the abdication of any paper for the whole communication process between customer and insurance company. The adoption of this software is linked to an automatic participation in a competition where gifts like iPad2s, digital cameras and USB-sticks can be won.

After six weeks of introduction, ten thousand customers were asked to answer a questionnaire concerning their decision for or against the new portal. They got a letter with the description of the background of the survey and additionally, just as a reminder, the original flyer which advertised the new portal six weeks ago. From the base of ten thousand possible participants, 521 customer responses are evaluated. Thus, the research is done with a data base of  $N=521$ .

The questionnaire mentioned above consists of nine categories of questions which are perceived ease of use, perceived usefulness, individual innovation affinity, perceived self-efficacy, computer-based innovation anxiety, value of paper form, attitude towards the new program, risk-based conviction and actual behaviour. The last category is integrated just to find out if the respective customer buys into the innovation or not. Other categories contain up to four questions which can be answered on a scale from 1 to 7 (1 = “I do absolutely not agree” and 7 = “I absolutely agree”).

On the basis of the answers handed in, partial least squares path modelling (PLS) is applied to generate a technology acceptance model. As it is supposed by Davis (1986), we differentiate between external variables (in this case defined as self-efficacy, innovation anxiety, innovation affinity and value of paper form), two measures for internal customer beliefs which are perceived usefulness and perceived ease of use and a variable standing for customer attitude towards the new program [9].

We conduct a regression analysis and investigate the relationships between the external variables perceived ease of use, perceived usefulness and attitude. The found

correlations are described in the next section. The extensiveness of the model parameters is conducted from the questionnaire with the questions used as observable variables.

The method of PLS is an iterative method which applies alternating least squares algorithms in order to analyse high dimensional data in a low-structure environment [10]. It differentiates between an inner and an outer model whereas relationships among unobserved (or latent) variables are considered in the inner model and those between unobserved variables and their observed (or manifest) parameters in the outer model. In the case of our research, the named parameters of the TAM are unobservable. Thus, the construct consisting of the external variables perceived ease of use, perceived usefulness and attitude builds the inner model. Instead, the outer model investigates the linkages between questions from the questionnaire and the model's seven (unobservable) variables.

In this research, the reflective mode of PLS, as it is explained by Henseler (2009), is applied which means that each observed variable ( $X$ ) can be expressed as a linear function of its corresponding latent variable ( $Y$ ) plus a residual term  $\varepsilon$ , like  $X = \Omega Y + \varepsilon$  [10].

The iterative process proceeds in four steps: First, outer approximations of latent variable scores are generated (outer proxies of latent variables are expressed as a linear function of their respective indicators whereas the weights result from the last step of the previous iteration). Second, inner weights (intensity of connection between one latent variable and another) are estimated. Third, inner proxies of latent variables are calculated (inner proxies are generated with the help of linear combinations from outer proxies of their respective adjacent latent variables). Fourth, the method of PLS estimates outer weights (covariance's between inner proxies of latent variables and its indicators). These steps proceed as often as convergence is obtained. That means outer weights between two iterations change to an extent which is below a predefined limit.

With the process described, latent variable scores are provided and for the determination of path coefficients PLS conducts a (multiple) linear regression for each dependent unobservable variable [10].

Using this method, we generate the results which are shown in the next section.

### IV. RESULTS

The following section serves to sum up the results of the research using some tables and figures to illustrate the major findings most accurately.

Firstly, see Table I for all variables integrated in the PLS regression.

TABLE I: VARIABLES OF THE PLS REGRESSION

TABLE 1. VARIABLES OF THE PLS REGRESSION		
independent variables	mediator variables	dependent variables
self-efficacy	perceived ease of use	attitude towards using the new system
innovation anxiety		
innovation affinity	perceived usefulness	
value of paper form		

The PLS regression analysis shows that three external

components correlate with perceived ease of use namely self-efficacy, innovation anxiety and innovation affinity (see Fig. 1 and Table II). A positive coefficient (0.368) is only measured for innovation anxiety, the coefficients for self-efficacy and innovation affinity are negative (-0.360 and -0.172). Additionally, direct correlations of these three factors with the variable “attitude towards using” can be found. Innovation affinity correlates with attitude with a coefficient of 0.1054, innovation anxiety correlates with -0.1696 whereas self-efficacy has a path coefficient of -0.3019.

Furthermore, the method of PLS analysis generates a coefficient of 0.157 for the path from perceived ease of use to attitude towards using. The model calculates a value for R<sup>2</sup> of 0.638 with respect to perceived ease of use which is relatively high.

The model includes value of paper form as fourth external factor. This factor correlates with attitude towards using and

perceived usefulness. The path coefficients are 0.0804 and 0.0895 which indicates that the degree of correlation is low.

TABLE II: PATH COEFFICIENTS

path coefficients	perceived ease of use	perceived usefulness	Attitude towards using
self-efficacy	-0,3600***	0	-0,3019***
innovation anxiety	-0,1716***	0	-0,1696***
innovation affinity	0,3682***	0	0,1054**
value of paper form	0	0,0895***	0,0804***
perceived ease of use	0	0,7355***	0,157 ***
perceived usefulness	0	0	0,2197***
attitude towards using	0	0	0

Note: \*\* =  $p < .05$ , \*\*\* =  $p < .01$

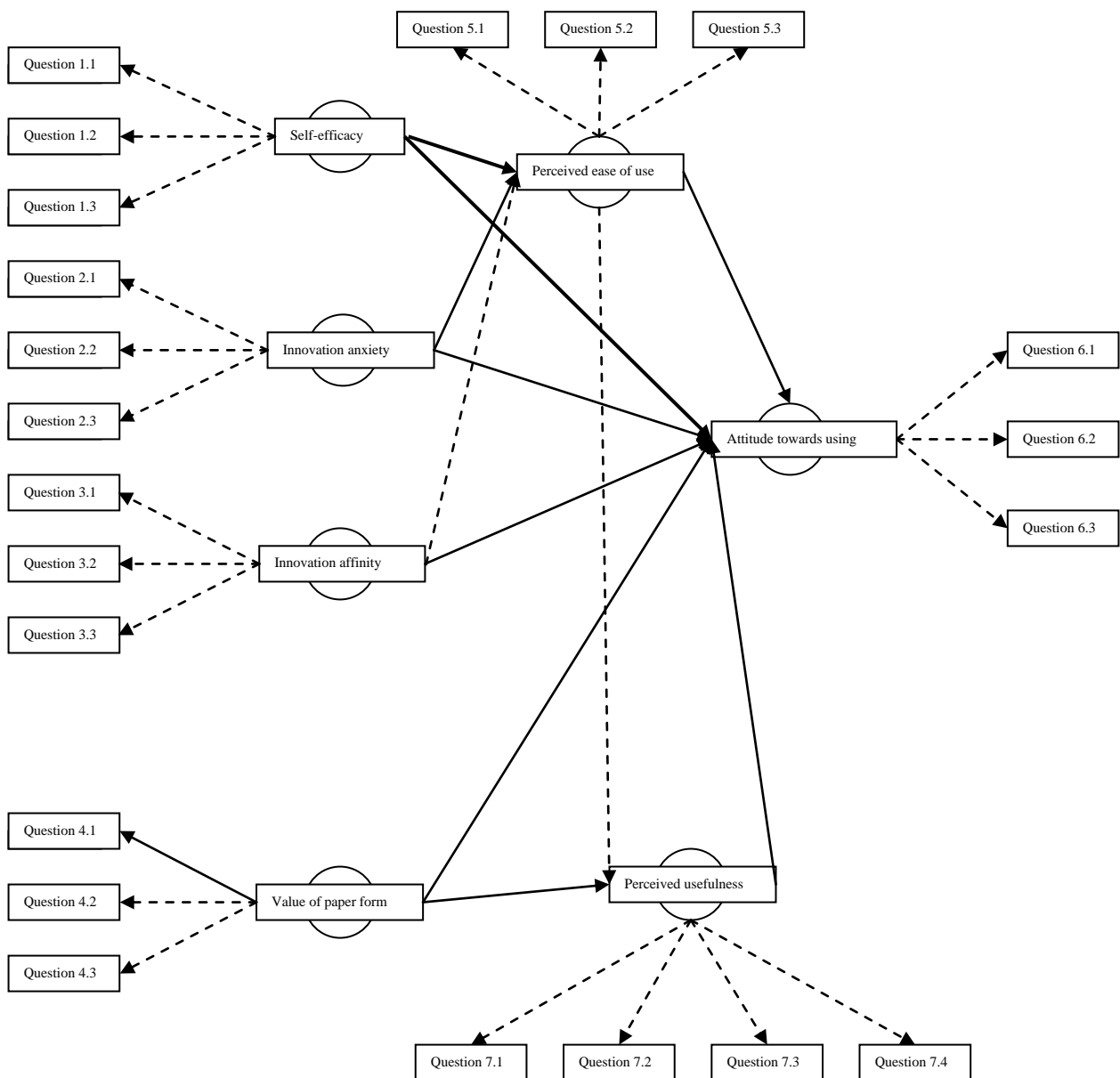


Fig. 1. Resulting path model (with path coefficients:  $< -0.2197$  bold,  $\geq -0.2197$  and  $\leq 0.2197$  regular,  $> 0.2197$  dashed).

Another path to perceived usefulness is determined from perceived ease of use. The coefficient of 0.7355 is the highest

in the whole model. The value of R<sup>2</sup> for perceived usefulness amounts to 0.5757 which is indeed lower than that of

perceived ease of use but still above 50%.

Finally, a coefficient of 0.2197 is found for the path from perceived usefulness to attitude towards using. This correlation is higher than the correlation between perceived ease of use and attitude towards using so that the relationship between those variables must be stronger. Altogether, the variance of attitude towards using is explained by more than 50%. The model generates a value of 0.7238 for  $R^2$ .

As already stated in the model description, every variable

is defined by three questions in the questionnaire except for perceived usefulness which is determined with the help of four questions. All questions have path coefficients above 0.8 with again some exceptions: Question WP1 which is the first question corresponding with the variable value of paper form has a coefficient of 0.209. The coefficient of the third question (Question WP3) corresponding with the variable value of paper form is as well lower than most coefficients and amounts just to 0.626.

TABLE III: RELIABILITY ANALYSIS

	$R^2$	Average Variance Extracted (AVE)	Cronbach's Alpha (CA)	Communality	Composite Reliability (CR)	Redundancy
self-efficacy	0	0,7316	0,8166	0,7316	0,891	0
innovation anxiety	0	0,6916	0,7768	0,6916	0,8705	0
innovation affinity	0	0,6813	0,7660	0,6813	0,865	0
value of paper form	0	0,4157	0,6091	0,4157	0,6323	0
perceived ease of use	0,6383	0,6941	0,7794	0,6941	0,8718	0,2761
perceived usefulness	0,5757	0,6855	0,8468	0,6855	0,897	0,0238
attitude towards using	0,7228	0,7592	0,8404	0,7592	0,9041	0,1019

In addition to examining the path coefficients, the study also analyses how reliable the model results are (see Table III). The research investigates five measures apart from  $R^2$ . These are average variance extracted (AVE), composite reliability (CR), Cronbach's alpha (CA), communality and redundancy. It can be seen that only the AVE for value of paper form (0.4157) is lower than 0.5 which means that less than 50% of the variance of this indicator can be explained with the latent variable which in this case is technology acceptance of users. Other values for AVE are above 0.5 which implicates that the model generates reliable values for the remaining indicators. CA measures the internal consistency of a scale. It is defined as the average correlation among different sample items. The value should be higher than 0.56, otherwise the model's scale is expected to be inconsistent. For the indicators of this study value of paper form is again the only critical measure. Its CA amounts to 0.6091. Other values are close to one which implicates the scale's consistency. Communality which measures the percentage of variance in a given variable which

is explained by all unobserved variables jointly is also high for all indicators in the model except for value of paper form (0.4157). The same is true for composite reliability which is defined as the average realized variance. For value of paper form, CR is determined to be 0.6323 which is the lowest value for CR in the model.

Others are close to one which gives positive implications for the reliability of the model.

Last, the value of redundancy is highest for perceived ease of use. It is 0.2761. The remaining values for this measure are close to zero or even zero. We interpret that the model is not distorted by information spillover.

## V. DISCUSSION

The research had one main objective namely to identify

factors which influence the decision of users for or against using the new portal. To accomplish these objectives, we used the TAM and generated the results described in the previous section.

Looking at the upper part of Fig. 2 the set of correlations illustrated by the different arrows is intuitive which means that the directions of the algebraic signs are expected whereupon the factor of self-efficacy constitutes an exception. The degree of self-efficacy correlates negatively with both perceived ease of use and attitude towards using. Whereas self-efficacy is defined by Bandura (1982) as "judgments of how well one can execute courses of action required dealing with prospective situations", this means that people who look upon their own competencies with regard to internet-based applications as favorable tend to reject using the new technology [11]. Taking a closer look at the mediator variable perceived ease of use, we find a respectively high value for  $R^2$ . This gives implications for the quality of the regression analysis for this variable. It can be interpreted that the regression explains the gross of the variable's variance.

The value of  $R^2$  for perceived usefulness is lower than that of perceived ease of use. The reason might be that the model just found two variables which correspond with perceived usefulness compared to three paths with respect to perceived ease of use. As the correlation between perceived usefulness and attitude towards using is higher than the correlation between perceived ease of use and attitude towards using, we assume that the relationship between those variables must be stronger.

The results reveal that the path coefficients of the questions WP1 (0.209) and WP3 (0.626) are low compared to the other ones. Though, the relationship is rather low and it can be interpreted that those questions, especially question WP1, give only few implications for the degree of value of paper form which is perceived by the survey's participants. The authors realize that the independent variable value of paper form falls out of line with respect to reliability. All of

the investigated six measures are lowest for value of paper form which therefore is the critical variable.

The results for value of paper form can have different reasons. It might be the questions that were chosen wrongly to give implications for the value that customers assign to this form of communication. The values of the path coefficients with respect to the questions confirm this thesis. Looking at the direct path from value of paper form to attitude towards using and the indirect path via perceived usefulness, we notice a low but significant correlation which indicates that value of paper form is not a very meaningful indicator for the interviewed consumers. The conclusion that should be drawn from these results might affect the way of advertising the new customer self-service portal. The flyer that promoted the portal emphasised the benefit from eliminating the use of paper repeatedly which seems, however, not to be the crucial factor that influences perceived usefulness and acceptance of customers. On the other hand, the results of the reliability analysis confirm these results.

In summary, our research provides very intuitive results with respect to the variables of the regression except for value of paper form. Our major finding is that value of paper form doesn't have a considerable impact on user acceptance of a new customer self-service portal as the results are lowest for this variable. Nevertheless, this variable should be taken into account in other contexts. Value of paper form might still affect actual user numbers driven by other factors like environmental awareness and social acceptance. To achieve better user acceptance value of paper form, however, isn't the first factor to focus on.

## VI. CONCLUSION

New self-service portals are becoming more and more interesting as current research topic, not only in connection with insurance companies. Kumar and Telang (2011) e.g. examined the challenges and opportunities of self-service technologies at a prominent U.S. health insurance firm [12]. They found out that the utilization of web-based self-service portals saves a lot of costs of interacting with customers. On the other hand, if information about, for impact, customer health policies is ambiguous the introduction of self-service portals can lead to even more calls and therefore increasing service costs. Van Riel et al. (2001) explored consumer evaluations of e-services by conducting an empirical study of an Internet portal [13]. They found a strong positive effect of customers' overall satisfaction on the intention to continue using the portal. Lin and Hsieh (2006) examined how technology readiness influences customers' perception and adoption of self-service technologies [14]. Results indicate that technology readiness influences perceived self-service technologies, service quality and behavioral intentions. In the context of our research we applied the TAM to identify the factors which most influence user acceptance of customer self-service portals. The authors used data of 521 completed questionnaires to analyse the influence of six variables on attitude towards using the portal. It is value of paper form that provides least information regarding user acceptance. The bootstrapping analysis confirmed the value of the research. It should be emphasised that the results just reflect the observed attitude of users towards the new self-service portal and not

their actual behaviour. Moreover, the study concentrates on the results of a questionnaire among the customers of an insurance company within Germany. Therefore the results are just reliable under the specific circumstances we implemented the survey. Clients of other companies might have a different approach to a new portal like the one we examined. As a first step, the authors collected relevant practical data that illustrate the opinion of users on the new portal. It is conceivable to look at the user numbers to validate the results regarding the actual utilization of the new portal. Further studies should concentrate on the implications that go hand in hand with the results. Further research questions might be related to questions about how to adapt the design of system characteristics and marketing concepts in order to improve user acceptance. Therefore this study can only represent a small cutout of the current situation.

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# The Culture of Sharing Knowledge: The Road to Organizational Success

Mônica Figueiredo de Melo, Zenáia Maria de Almeida, Ana Carolina Silva, Ana Beatriz de Souza Gomes Brandão, and Michelline Freire Moraes

**Abstract**—This article discusses the culture of knowledge sharing as a factor of business success of an engineering company. Based on the key concepts of culture and theories of knowledge in organizations, it aimed to identify the predictors of success of an engineering company and to analyze the culture of knowledge sharing and its impact on organizational growth. After conducting semi-structured interviews with managers and employees, qualitative analyses were performed and the indicators of success were defined, which allowed for an assessment of the knowledge sharing culture and its relevance for the organization's success. The findings indicate that knowledge sharing is part of the organization's culture and represents an important factor for its success. Innovation, training, quality management and the values established from the foundation are key elements that fostered organizational growth.

**Index Terms**—Knowledge, knowledge sharing, organizational culture.

## I. INTRODUCTION

Since ancient times we have discussed knowledge. It was, possibly, in the work of Plato, that one of the first definitions of knowledge appears. Over the centuries, many philosophers have failed in their attempts to define the meaning of knowledge [1].

In the early 90's many organizations suffered from "learning disability" and it was only through systemic thinking that reason and intuition were reconciled. It was found that organizational success would be linked to the ability to learn faster than competitors [2].

Then, knowledge management arises and brings together three learning processes in organizations: acquisition and development of knowledge and dissemination of construed memories in a process of developing the skills necessary for the organization [3].

There was a significant increase in information available to support decisions in organizations after the development of communication technology and information technology. Organizations now have new characteristics: the rapid increase in the number of knowledge workers when compared with production workers; those employees who are in production depend more and more of knowledge workers and knowledge becomes the key to a competitive effort [4].

Some researchers say that in order to manage the large flow of information it is not enough to make diverse information technologies available, but it is necessary to

stimulate the creation of a knowledge-oriented environment with appropriate systems to face problems, supporting strategies and procedures in the company [5].

Other researchers confirm the importance of IT for knowledge management, but emphasize that because knowledge is a complex process, it is essential to involve people in order to change culture [6].

Therefore, it is expected that, in the future, companies build organizational structures based on processes, rules and values directed to sharing knowledge and to creativity, with a positive culture. Decentralization and flexibility stimulate integration between company teams and help strengthening this kind of culture [7].

The company focused in this study emphasizes knowledge sharing as one of its strong features, a value that has been present since its foundation. In this context, the study aimed to identify the critical success factors of Maia Melo Engineering and the relevance of culture for the organization's growth.

This paper is divided in five sections. The first one is the introduction, theme formulation, context and purpose of the research. The second segment covers the theoretical basis for the theme and the problem being investigated; the third part presents the methodology used to implement the study; the fourth section indicates the data analysis and, lastly, the fifth section presents the final remarks of the research.

## II. THEORETICAL

For the company to be competitive it must maintain over the years competitive advantages obtained through innovation that is based in knowledge. It is through knowledge that we can minimize the uncertainties generated by innovation. Knowledge is socially constructed by the individual through learning that seeks the solution of problems arising in the workplace. An innovative action depends on the efforts of its initiatives to be competitive [8].

Knowledge is related to beliefs, commitments, attitudes, perspectives or any specific intent. Knowledge is about purpose and meaning. Information does not exist in relation to action, nor to beliefs and attitudes. There is, however, a relation with meaning as well as in knowledge such [9].

Considering the constant changes in a competitive environment and also in the internal environment of an organization, it is possible to observe what is necessary to have effective participation in order to make the company more agile and better prepared to fulfill its competitive needs. The way to success is through learning that will lead to knowledge [10].

Yet their theories distinguish between two types of

knowledge: tacit and explicit. Explicit knowledge is one that can be verbalized or written, thus can be easily transmitted among individuals. Tacit knowledge is difficult to be articulated in formal language, it is personal knowledge incorporated to the individual's experience, involves intangible factors such as personal beliefs, perspectives and value systems. Tacit knowledge, subjective knowledge, is experience - body, while explicit knowledge, objective knowledge, is rationality - mind and both kinds of knowledge complement each other. Tacit knowledge is highly personal and subjective, developed and internalized over time by the individual, especially through the experiences he or she went through.

Researchers defend that knowledge that comes from a practical work is largely tacit. In the words of tacit knowledge they say: *"is deeply rooted in the actions and experiences of an individual as well as their emotions, values or ideals. Opinion, insights and subjective hunches fall into this category of knowledge."* [9]-[11].

In this sense, tacit knowledge consists of cognitive and technical elements. The cognitive elements related to mental models of individuals are the schemes, paradigms, perspectives, beliefs and perceptions that shape how individuals perceive reality. The technical elements correspond to the skills, techniques and concrete know-how, difficult to define and articulate.

The biggest challenge for organizations is to transform tacit knowledge into explicit, and organize it in order to make it available. Knowledge has no value in the organization if it is not accessible, it must be externalized and available to be effectively used as in [12].

They also say that information is all the competitive advantage a company needs, experience, skills, values and insights from its members. Companies should create conditions for the knowledge accumulated by everyone in the organization to be effectively shared. The terms share, transmit, exchange and transfer are frequently used in this study preserving the idea that sharing involves providing certain knowledge that is absorbed by the recipient. A strategic approach to communication is the effective way to transfer knowledge, so it is necessary to choose the best key methods for each specific kind of knowledge. Organizational culture is understood by the norms and values that help determine what is appropriate and inappropriate. These norms and values which can be considered control systems direct us to achieve effectiveness.

Reference [13] shows uphold that the beliefs represent what people understand as reality and thus influence what individuals perceive, think and feel. The author emphasizes that values are the basis for people to judge what is right and wrong on a conscious level, and argues that the core of an organizational culture is formed by values and beliefs. Beliefs are beyond the level of awareness and help the individual to predict how things are and how new facts may occur.

Changes in culture do not occur by means of words or decrees, but by influencing the beliefs and values of people who join a corporation. In order to think about knowledge organizations must aim at a culture of learning with the support from top management [14].

### III. RESEARCH METHODOLOGY

The information collected in the survey was analyzed using a qualitative approach, by means of a case study with exploratory and descriptive focus. This case study helped to understand more broadly and thoroughly the processes related to sharing knowledge in the company researched.

The organization studied is Maia Melo Engenharia Ltda. It is a consulting engineering company, founded on May 31, 1982, operating with studies and projects, management / supervision / building inspection and other technical services. The company's effort has been directed towards the development of projects and supervision of highways and railway construction, which represents about 85% of its activities and has contributed with innovative solutions such as the use of types of low cost pavement. The company is a pioneer in the field of Quality certificate and was the first organization to get certified by ISO 9001/1994, in the North and Northeast of Brazil on September 29, 2000 and the first national consulting engineering firm to get the certification of adequacy of its quality system to the NBR ISO 9001/2000 in 2001.

For this research, four project managers and four employees were interviewed. Those were intentionally chosen because of the time they had been in the company, considering the changes of CEOs.

The criteria for choosing the sample was the following: representativeness (interviewing all 4 project coordinators), availability (interviewing four employees who were present at the institution and were available for interview during the stage of data collection) and accessibility (interviewing people residing within the city of Recife).

The managers interviewed are bachelors in civil engineering, one of them has a master's degree, and the other three are still taking the master certificate. Two of the employees are engineers, and two have technical training.

The instrument used for analysis was a qualitative interview guide with open questions in order to make it possible for the interviewee to express their views and opinions about the topics as in [15].

The responses were categorized with the application of qualitative tools and a system of categories was established pursuant to the objectives.

### IV. RESULTS

To analyze the critical factors of success, it was necessary to list items considered as indicators of success by the interviewees (Table I).

As the interviewees describe, historically the company presents attitudes to socialize information, experiences and ideas. Knowledge sharing has been a priority.

*Dr. Antônio was a teacher, he always looked forward to upgrading; he organized seminars, courses; to all the engineering people, his ultimate objective was the development of engineer knowledge."* (Interviewee 1)

The culture of the company researched has presented since its creation a special concern with matters of innovation and that makes a difference. Perceptions on the company's success today are related to the founder's innovative

behavior, which was oriented towards improving and acquiring new knowledge

TABLE I: INDICATORS OF SUCCESS

VARIABLE	F	SUCCESS INDICATORS
SUCCESS	6	Founder: Future Vision, Innovative Spirit
	5	Founder implanted Culture of knowledge sharing
	3	Productive capacity of Human Resources.
	2	Technological Innovation
	2	Professionalism
	2	Quality of services
	2	Current Directors
	2	Technical Improvement
	2	Quality Certifications
	1	Founder's National Recognition
	1	Founder: Trained and effected the board
	1	Pioneering several products (Innovation)
	1	He come from a strong company in the industry
	1	Good environment
	31	TOTAL

*"Our founder has left a thought that consist in doing your best always, this philosophy we try to put into our practice and what we have today is what was planted yesterday with serious work."* (Interviewee 3)

*"That was our difference, because Dr. Antão was a teacher, he constantly liked to bring news, his mentality was always innovative, he was passionate about books, innovative ideas, and he loved to create, these things were the seed that he gave us and guided us, they're still here today. His spirit of bringing new ideas is still alive; they'll be welcome and accepted."* (Interviewee 2)

*[...] "The culture of delegating and teaching is an important feature of the company, and nowadays the company remains as one of the top competitors in North and Northeast regions of Brazil."* (Interviewee 4)

The values left by the founder were not forgotten over the years, for what can be noticed, and are still present even for those employees who weren't part of the organization at the time the founder was present. The fact is that the meaning of how the work should be carried out remains the same, being considered a critical factor of success for the interviewee, according to his testimony below.

*"[...] I did not work here at that time, the staff say that the entrepreneurial spirit, vision, and innovation of Dr. Antão made us go ahead with new ideas. [...] so he had the initiative to create new solutions and I think that was one of the things that made us have this competitive advantage. Because if we just wanted to imitate others or do the same always, Maia Melo would not be where it is today, and he encouraged people by saying "look, let's do it in a different way!" The texts that he wrote, the personal comments that he always tried to make, his own identity for each of the projects, while other companies do not do that [...]"* (Interviewee 5)

*We changed completely the way to make projects. [...] Our library has grown and has always been extremely organized."* (Interviewee 2)

*"I joined during a phase in which many changes were made ... because the world asked for it, computers, software being developed. Dr. Antão and the staff before me, had done many things in preparation for the 2000s in which technological changes were tremendous!"* (Interviewee 5)

*The biggest step was the computerization, and with it, Maia Melo was soon investing, the managers never waited, there was no one to teach us. We were ahead of our competitor in this area."* (Interviewee 8)

To conclude, it can be noticed that at Maia Melo Engineering things haven't been different from what was mentioned for over 25 years, tacit knowledge was stimulated through research, readings, insight through the creation of new technologies. Another important point to be noted was the founder's enthusiasm to learn and enrich their tacit knowledge and transform it into explicit through wanting to teach, move and exchange information. These attitudes laid the foundation and the culture gave support to face economic crises and achieve success.

#### A. Culture as a Critical Factor of Success

Maia Melo's culture of knowledge sharing was described by respondents as being a predominant factor for its success. It derived from the values of the founder who used to direct the efforts to transmit and share information, experience, ideas and knowledge demonstrated in the testimony below.

*"At the time of Dr. Antão, he really shared, he usually called employees, designers, for example, to know their opinions and views, and he asked "what do you think?". Today it's still like that. I see one or another coordinator asking the opinion of their team."* (Interviewee 7)

*"I've seen interesting things, sometimes on Saturdays, Dr. Antão looked at drivers outside and called them to watch the slides, he projected and explained everything to the drivers."* (Interviewee 2)

Reference [16] shows further defines the influence of mentoring on learning and establishes that this interaction could happen between people who are close or even between employees and people who are considered an authority in the area, which is the case of mentors.

The importance of the director's authority created positive impacts to the perpetuation knowledge sharing as a key aspect of the company's success today.

*"How many times I have come as a student, to seminars organized by the teacher, right here in this organization and had access to the company's works. Classes in the field, we saw what was being developed on site, having field trips."* (Interviewee 3)

*"Each employee tells the engineer what he would like. Then, the coordinator sees what is compatible with the vision of the company, analyzes the employee's request and the company's needs. So it is great! We always make progress and courses happen with our own employees as teachers"*. (Interviewee 1)

The company culture, its customs and traditions rely heavily on what was done before success was achieved and its primary source is the founder [17].

The managers emphasized that the founder sought

competitive differential, and according to them, this created today's atmosphere of respect and prominence in the field of engineering as a legacy left by the founder.

In short, on what regards the culture, the most important teachings left by the founder were the importance of disseminating knowledge, innovation, and the value given to employees' professional development, which positively impacted on organizational success at Maia Melo Engineering.

TABLE II: CULTURA AS A CONDUCTOR OF SUCCESS

VARIABLE	F	SIGNIFICANT ASPECTS
CULTURE (Values and beliefs)	8	Teaching left by the founder, the importance of disseminating knowledge.
	8	Value in the professional growth.
	7	Founder stimulated creativity.
	7	Believed in innovation as a differentiator
	4	The ideas are always welcome.
	3	TOTAL
	4	

## V. CONSIDERATIONS TERMINAL

The present study showed that knowledge sharing is part of the organizational culture of Maia Melo Engineering and represents a critical factor of success for the organization. In this study we could trace a line that went as far back as the company's foundation and were able to understand the dynamics in the formation process of the organization's cultural values and beliefs that are held in this company.

During the research, it was possible to investigate the factors that accounted for the success of the organization from the point of view of the managers and explore the field of knowledge sharing, involving issues of human interaction.

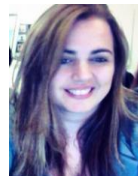
The findings indicate that the vision and innovative spirit of the founder, who implemented a culture focused on sharing knowledge, are the most relevant variables for the organization's success. Now, there is knowledge sharing but it happens informally, there are no norms to help institutionalize it. In this case, as the company already presents a culture of knowledge sharing it shouldn't be hard for them to document and reinforce their current practices. Competitiveness requires a differential. Right before succession, the founder distributed shared among key employees, creating a board of directors, "rewards in terms of results". It was an achievement of the past, of its visionary founder, and this measure supported the organization during periods of instability.

The managers interviewed in this study have a strong vision towards training their teams. This was seen as a significant point defended by employees who feel privileged to acquire knowledge and evolve professionally.

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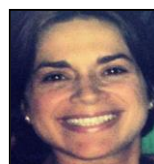


Coaching and Mentoring

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# The Relationship between Foreign Direct Investment, Institutional Quality and Poverty: Case of MENA Countries

Ahmad Assadzadeh and Javad Pourqoly

**Abstract**—Capital scarcity is known to be one of the main causes of many countries' entrapment in vicious cycle of poverty and underdevelopment. In addition, the existence of appropriate institutional quality has an impact on the poverty rates in these countries. This paper examines the effects of foreign direct investment and institutional quality (rule of law) on reducing poverty. To do so, a random effect panel econometric technique is applied using MENA countries' data for 2000–2009. The Human Development Index is used as an indicator of poverty reduction. The findings show that the foreign direct investment and appropriate institutional quality have significant positive effects on reducing poverty and increasing welfare.

**Index Terms**—Poverty, foreign direct investment, institutional quality, human development index.

## I. INTRODUCTION

After World War II, trying to rebuild devastation of the war, many developed countries concentrated on combating poverty using the World Bank and other international aids. At the same time, a wide range of research, aiming at identifying the causes and eradication methods of poverty, was welcomed by researchers and policy makers in many countries. According to The World Bank poverty is deprivation in well-being, and comprises many dimensions. It includes low incomes and inability to acquire basic goods and services necessary for survival with dignity. Poverty also encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one's life [1].

Today, many countries, especially least developed and developing countries, suffer problems such as unemployment, population growth, economic recession, poverty and income inequality. In such circumstances, achieving economic stability and joining to the global competition require creation of new job opportunities through utilization and deployment of modern technology and investment in various economic sectors. In other words, industrialization becomes a key agenda for economic survival for these countries. Needless to say that, industrialization requires adequate investment and foreign exchange, both of which are scarce in developing countries.

The lack of investment in capital stock is known to be one of the main causes of many countries being caught in the vicious cycle of poverty and underdevelopment. If the governments cannot access financial resources properly, their economic activities will be challenged with difficulties in development process. National saving remains the main source of financing investment, though in most developing countries, this does not meet the level of investment needs and it often does not lead to capital formation. Ineluctably, these countries have turned to foreign investment and participation in economic activities as a way to overcome investment shortfall and break vicious cycle of poverty and underdevelopment.

There are several definitions for foreign direct investment (FDI). According to the United Nations Conference on Trade and Development (UNCTAD), foreign direct investment is a capital that ensures long terms and reflects continuous profit of natural and legal personality that is resident in a company outside the investor's country. Foreign direct investment in the US Department of Commerce is defined as whenever an individual or a group of American citizens have at least ten percent of the shares or voting rights of foreign economic institutions, their ownership of the institution is considered as a foreign direct investment in USA.

Since FDI affects poverty through an employment creation process, it is useful to examine its impact on poverty. Many researches have studied the effect of FDI on economic growth but its relationship with poverty has been little surveyed. In this paper the relationship between FDI and poverty reduction will be examined. First, the theoretical basis and an overview of studies are expressed. Then, the methodology, estimation techniques in panel data, analysis and stability of findings are examined. Finally, a summary of results and conclusions are presented.

## II. THEORETICAL BASIS

After World War II, two trends can be observed in the evolution of FDI in developing countries. The first trend includes times from the end of World War II until the end of the Cold War in the 1990s. In this period, FDI and stocks were increased around the world especially in the developed countries. During this period, FDI was governed primarily by political objectives instead of economic incentives. The second trend began from the 1990s onwards when FDI was concentrated in countries where financial benefits, subsidies and other incentives were offered.

The FDI impact on human development has at least two social and economic aspects. The social aspect includes

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reducing poverty and improving welfare that are a priority for developing countries. The FDI can help reach major economic objectives including creating jobs, developing local skills and improving technical progress. In describing economic aspect, recent literatures suggest that FDI may be the main factor for sustainable growth in per capita GDP.

Foreign direct investment impacts on welfare through direct and indirect ways (Sumner, 2005). FDI impacts on the creation of welfare directly by generating new jobs. For the effectiveness of this channel, the number of jobs created must be greater than the number of jobs lost (following the expulsion, consolidation or merger or closure of local companies, etc.) as a result of FDI related activities. Indirect effects of FDI on welfare occur at macro level. If there is a transfer of net income in a country, it is likely that FDI increases total investments. In this case, economic growth will increase that shows its indirect relationship with welfare [2]. Also FDI through reducing instabilities and production costs and thus increase international competitiveness, directly affects the efficiency of industrial enterprises.

On one hand, FDI removes restrictions on foreign trade system of a country, causing further increase in export. On the other hand, the quality of institutions that generally is defined as the quality of rules governing economic, social and political interactions can affect economic performance through several mechanisms. Institutional quality limits corruption and inefficiency in government bureaucracy since good and stable institutions encourage more private investment (North, 1990). Establishing democracy in a country depends on its wealth [3]. Moreover, democracy affects economic growth indirectly through its effect on political stability [4].

In this study the role of institutional quality and foreign direct investment on poverty reduction is examined. It is assumed that in developing countries institutional quality through the rule and implementation of law (preventing gender discrimination, age, race, ethnicity and etc.) and FDI directly and indirectly lead to poverty reduction.

### III. LITERATURE REVIEW

Several studies have analyzed the relationship between FDI and economic growth to determine the effects of FDI on economic development. A common premise in all of them is that economic growth improves welfare while FDI is a factor that stimulates economic growth. Numerous methodological and conceptual factors such as; lack of comprehensive and coordinated data collection, use of different definitions for FDI and differences in the application of econometric methods result in diverse findings.

Chang and Calderon [5] reviewed the effect of institutional quality on poverty during 1960-1990. Their results suggest that institutional effectiveness reduce the incidence and severity of poverty. They considered indicators of institutional development as index of expropriation risk and bureaucracy quality.

Carkovic and Levin [6] have studied the relationship between FDI and economic growth for 72 countries. The study does not approve that FDI accelerate economic growth. This finding contrasts with the above study.

Hosseini and Mowlae [7] studied the effects of foreign

direct investment on economic growth for 1978-2002 using three econometric models. Different variables were applied in different models. In the first ones, foreign direct investment, domestic investment, human capital and openness of the economy, in the second model combined effect of foreign direct investment and domestic investment, human capital and foreign trade and in the last ones inflation, taxes and government spending used as indicators of economic structure. Their results show that foreign direct investment has a positive effect on economic growth but its effect is reinforced by status of human capital.

Chowdhury and Mavrotas [8] applied Yamota test to determine the causal relationship between attracting FDI and economic growth in Chile, Malaysia and Thailand from 1969 to 2000. In the case of Chile, the causality test suggests the presence of a unidirectional causality from FDI to GDP but a bilateral relationship is established in Malaysia and Thailand.

Hansen and Rand [9] investigated the relationship between FDI and economic growth in 31 developed countries during 1970-2000, using a two-variable autoregressive model for the rate of FDI and GDP. They find evidence that there is a strong causality between FDI and GDP in long run.

Apergis et al [10] examined the impact of FDI on economic growth in 27 European transitional countries, using panel data on from 1991 to 2004. Their results show that in conditions of high income and privatization programs, FDI has a positive relationship with economic growth.

Rivera [11] examined the effect of institutions on poverty; showing that institutional quality has a strong positive effect on poverty reduction. Moreover income growth is necessary but not sufficient factor for poverty reduction.

Azerbaijani et al [12] examined the impact of foreign direct investment and trade on economic growth in Iran for the period 1974 to 2005, using ARDL approach. Results indicate that in short term, foreign direct investment affects the growth negatively but trade as well as capital and labor has a significant positive effect on economic growth in Iran both in the short and long term.

Gohou and Soumare [13] investigated the effect of FDI on poverty reduction in five regions of Africa between 1990 and 2007. Net flow of FDI per capita and the HDI (as an indicator of poverty reduction and improved well-being) applied as concerning variables. Their results indicate a strong positive relationship between FDI and poverty reduction with more effect on poor countries than rich ones.

### IV. METHODOLOGY

The paper studies effects of FDI and institutional quality on poverty reduction in MENA countries between 2000 and 2009, using panel data. The model is based on theoretical framework and Gohou and Soumare (2012) model as follows:

$$HDI_{it} = \alpha + \beta_1 FDI_{it} + \beta_2 Kafman_{it} + \beta_3 CL_{it} + \beta_4 Credit_{it} + \varepsilon_{it} \quad (1)$$

where  $HDI_{it}$  indicates human development index in country  $i$  at time  $t$ ,  $FDI_{it}$  stands for foreign direct



investment in country  $i$  at time  $t$ ,  $Kafman_{it}$ ,  $CL_{it}$  and  $Credit_{it}$  represent index of institutional quality, index of civil liberties and domestic credit allocated to private sector in country  $i$  at time  $t$  respectively.  $\varepsilon_{it}$  is vector of residuals.

Although poverty indices offers criteria for a comprehensive measuring of country's welfare and standard of living, these indices are not published annually for all countries, therefore poverty cannot be surveyed effectively across the countries. Based on Gohou and Soumare's work and Rivera's study, HDI index is used as an indicator of poverty. According to UNDP definition, HDI is a composite statistic of health, knowledge, and standard of living indices. Health is measured by life expectancy at birth. Knowledge is measured by a combination of adult literacy rate and combined primary, secondary, and tertiary gross enrollment ratio[14]. Standard of living is defined by GDP per capita. FDI is measured by FDI net inflows, that is, the sum of equity capital, reinvested earnings, long-term capital, and short-term capital as shown in the balance of payment. Three definitions of FDI is applied in studies: (i) per capita FDI (the ratio of FDI net inflows over total population); (ii) the ratio of FDI net inflows over GDP; and (iii) the ratio of FDI net inflows over gross capital formation (GCF). The first definition is used in this study. The Data for FDI is derived from the World Bank database [15].

*Kufman* indicates institutional quality index which is calculated by Kaufman and colleagues. It is a composite of different indexes such as voice and accountability, political stability, government effectiveness, property right and rule of law and control of corruption. In this study, the rule of law is used as a representative of institutions quality which is obtained from WGI [16]. It is worth nothing that control variables are as follows:

- 1) Financial market development which is measured in two ways:
  - Total credit by financial intermediaries to the private sector over GDP
  - Stock market capitalization over GDP
- 2) Political risk variables include two items:
  - Political rights rating which measures freedom for political activism
  - Civil liberties rating which measures latitude for the exercise of civil freedoms

In this study, we use total credit by financial intermediaries to the private sector over GDP as financial market development index and civil liberties as political risk variables. The following summarizes each of them:

Variable of civil liberties (CL) is a tool for measuring enjoyment of civil liberties ratings in different countries. This index is estimated by Freedom House, ranking from one to seven. Countries with full freedom are in the first rank and countries with a minimum freedom are in the seventh rank. Credit by financial intermediaries to the private sector ( $Credit_{it}$ ) is the amount of funds allocated by government to private sector. This index is obtained from World Bank Group. The study includes data in for ten years (2000-2009) for MENA countries<sup>1</sup>. The STATA11 software is used for

estimation.

#### A. The Panel Data Estimation Method

Before entering into discussion, analysis and model estimation, we explain why the study is done as panel data. In other words, are the countries surveyed homogeneous? If they are, we can use generalized least squares method and otherwise, the panel data fixed effects or random effects will be used. The F-test statistic is often used to examine the homogeneity of countries.

$$Y_i = Z_i\delta + U_i \quad \text{Restricted model}$$

$$Y_i = Z_i\delta_i + U_i \quad \text{Unrestricted model}$$

$$i = 1, 2, \dots, N$$

The statistic for the hypothesis testing is;

$$F(N-1, NT-N-K) = \frac{(R_{UR}^2 - R_R^2)/(N-1)}{(1-R_{UR}^2)/(NT-N-K)} \quad (2)$$

where,  $N$  is the number of cross-sectional units,  $K$  is the number of explanatory variables and  $T$  is the number of observations over time. Rejecting null hypothesis determines the fixed or random effects method [17].

Panel data estimation techniques include three types: between group, within group (fixed effects) and random effects. In between type, the regression is done over averages and usually it is used to estimate long-run coefficients. Within type is not considered the time and just specific effects of each of individual can be considered. In the estimation of random effects it is assumed that the intercept ( $\alpha_i$ ) has a joint distribution with mean  $\alpha$  and variance  $\sigma^2$  and unlike previous methods are uncorrelated with the explanatory variables. In this technique time factor is considered and individual effects are entered the model over time as explanatory variables separately [18].

In applying fixed or random effects it should be noted that the fixed effects approach is usually effective when all statistical population are considered. However, if a random sample is selected from a large population, using a random effect will be more efficient.

Test statistic for the random effects method is Breusch and Pagan test, defining as follows:

$$LM = \frac{NT}{2(T-1)} \cdot \left[ \frac{\sum_{i=1}^N (\sum_{t=1}^T e_{it})^2}{\sum_{i=1}^N \sum_{t=1}^T e_{it}^2} \right]^2 - 1 \sim \chi^2 \quad (3)$$

The null hypothesis  $H_0: \sigma_U^2 = 0$  means that there are no random effects. For this test, the  $LM$  statistic with  $\chi^2$  distribution and a single degree of freedom is applied.

## V. ANALYSIS OF THE RESULTS

Before estimating the model the data is examined for cross sectional homogeneity. According to the results in Table I, the null hypothesis of the homogeneity of the cross sections is rejected, this suggest that the panel data methods must be used.

TABLE I: TESTING HOMOGENEOUS PROPERTIES

P-Value	F-statistic
Prob > F=0.000	F (12,107) =164.95

SOURCE: OWN CALCULATIONS

Now the Breusch and Pagan test is used to select between fixed and random effect model. The results are presented in

<sup>1</sup>Includes Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Marco, Oman, Qatar, Saudi Arabia, Tunisia, United Arabic Emirates, Gaza, Yemen.



Table II.

TABLE II: RESULTS OF BREUSCH AND PAGAN TEST	
P-Value	Chi Square Statistics
Prob > chi2 = 0.000	354.28
SOURCE: OWN CALCULATIONS	

The results suggest that the null hypothesis (the absence of heteroscedasticity) is rejected in the data. Therefore, the GLS method is applied for the model estimation. Table III presents model estimation applying the random effects.

TABLE III: SUMMARY OF ESTIMATION (RANDOM EFFECT MODEL)

Variable	Coefficient	Z-statistics	Prob > Z
Constant (c)	0.64	18.70	0.000
<i>FDI</i>	5.09-e06	1.77	0.066
<i>Kafman</i>	0.028	2.20	0.028
<i>Credit</i>	0.001	4.54	0.000
<i>CL</i>	-0.007	-1.66	0.098
$R^2 = .51$		<i>no. obs:</i> 124	
SOURCE: OWN CALCULATIONS			

#### A. Robustness of the Results

There are several methods to examine the robustness of the estimates; among the most common are addition or removal of explanatory (control) variables, use of alternative criteria for explanatory variables and changing of the study period. In this section, to ensure the robustness of the results, the removal of explanatory variables (control) is examined.

TABLE IV: SUMMARY OF ESTIMATION (RANDOM EFFECT MODEL)

MODEL (1)			
Variable	Coefficient	Z-statistics	Prob>Z
Constant (c)	0.717	2.15	0.000
<i>FDI</i>	6.66e-06	2.15	0.031
<i>Kafman</i>	0.033	2.39	0.017
<i>Credit</i>	-----	-----	-----
<i>CL</i>	-0.012	-2.66	0.008
$R^2 = .51$		<i>no. obs:</i> 124	
MODEL (2)			
Variable	Coefficient	Z-statistics	Prob>Z
Constant (c)	0.599	25.53	0.000
<i>FDI</i>	5.79e-06	2	0.045
<i>Kafman</i>	0.0314	2.43	0.015
<i>Credit</i>	0.001	5.03	0.000
<i>CL</i>	-----	-----	-----
$R^2 = .51$		<i>no. obs:</i> 124	
MODEL (3)			
Variable	Coefficient	Z-statistics	Prob>Z
Constant (c)	0.658	29.17	0.000
<i>FDI</i>	8.18e-06	2.63	0.009
<i>Kafman</i>	0.037	2.61	0.009
<i>Credit</i>	-----	-----	-----
<i>CL</i>	-----	-----	-----
$R^2 = 0.64$		<i>no. obs:</i> 125	

As mentioned in the model, the basic model consists of two main variables of per capita foreign direct investment and institutional quality, the other two variables namely, credit by financial intermediaries to private sector and civil liberties have been used as control variables. To examine the robustness of results in Table 3, the first model is estimated excluding credit by financial intermediaries to private sector. It can be seen that all coefficients are significant and the

signs of the original variables is not changed. In the second model, the inclusion of credit by financial intermediaries to private sector and exclusion of civil liberties variable have not changed the sing and significance of the results. Finally, estimating the model while excluding both of the control variables, leaves the sing and significance of the coefficients unchanged. This simply means that, the robustness is achieved for the estimated results.

The results presented in Table 4 confirm that  $FDI_{it}$  has a positive impact on poverty reduction and this result is consistent with Gohou and Soumare's findings. In explaining this phenomenon it can be stated that attracting foreign direct investments in sectors that are more productive through technological progress has led to job creation and skills development. This issue has led to poverty reduction and welfare improvement.

Also, the results indicate that high institutional quality and increase in legitimacy have led to reduce poverty and improve welfare. This result is consistent with the results obtained by Rivera (2009). In explaining this phenomenon it can be stated that the higher political stability in a country leads to high level of investment security which in turn raises private investment in the country and leads to growing middle income class.

Civil liberties and credit by financial intermediaries to the private sector variable have positive effects on poverty reduction (it should be noted that the civil liberties index is defined as an inverse, this means that a higher degree is assigned to the countries with low civil liberties).

Civil liberties impact on poverty reduction is consistent with the results obtained by Feng (1997) and Lipsets (1959). It is argued that democracy, through its effects on political stability, stimulates economic growth and increases society's welfare. Also, the findings show that the higher is the credit by financial intermediaries to the private sector, the greater will be the impact on poverty reduction. Therefore it can be justified that increase in the credit by financial intermediaries to the private sector can increase private investments in the productive sectors, which ultimately leads to a rise in the middle class incomes and reduces poverty in the society.

## VI. CONCLUSION

In most developing countries, poverty is still considered a great problem. Proper planning and collective efforts are needed to combat poverty. To do so, countries need adequate investment for job creation, workforce training (in order to increase productivity and improve human capital), and education and health improvements. These countries often lack sufficient investment due to low national savings; therefore, there is an urgent need to attract foreign investment.

This paper examined the effects of foreign direct investment and institutional quality (rule of law) on reducing poverty. The research included 21 members of the MENA countries surveyed in 2000-2009 period. To deal with the problem of heteroscedasticity the random panel data method is used for the model estimation. In the absence of an appropriate poverty indicator across all the countries, the study used the human development index as an indicator for

poverty reduction; the foreign direct investment was used in per capita form. The research findings suggest that foreign direct investment, institutional quality and rise in legitimacy have positive and significant impact on poverty reduction. Also, credit by financial intermediaries to the private sector and civil liberties variables have positive and significant impact on poverty reduction. Attracting foreign direct investment particularly in production sectors leads to an increase in employment and middle income earnings. The political stability in a country boosts the amount of foreign investment which in turn reduces poverty. Hence, an important policy implication for the developing countries is that, in order to fight poverty, along with efforts to attract foreign investment, the countries must work on improving institutional quality.

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# A Web System for Farming Management

Glaubos Climaco, Fernando Chagas, Valéria M. Silva, Gentil V. Barbosa, and Patrick Letouze

**Abstract**—This paper presents a web system for farming management that implements a conceptual framework for modeling the production system at a farm scale. The web system supports the design of the production system, which is logically split in three parts: the decision support sub-system, the technical sub-system, and the bio-physical sub-system. Additionally, the web system was designed using interdisciplinary research project management (IRPM) concepts, with an architecture known as Model-View-Controller (MVC), that is, it was developed applying the MVC Evolutionary Acquisition IRPM.

**Index Terms**—Agribusiness, IRPM, production system, web system.

## I. INTRODUCTION

Farming systems are demanding innovative design to increase production, and given the complexity of intervention, their modeling is requiring: the representation of the biophysical, technical, and decision processes involved; and the evaluation ex-ante of the impacts of technical or organizational innovations that are difficult to measure experimentally [1]. Hence, a modeling framework was proposed by Gal *et al.* in [1] that focuses first on the field and herd level where biotechnical models associating biophysical processes with technical interventions are conceived.

The framework's aim is to support farmers in the design of their production systems at the farm level. However, poor farming families or communities usually do not have the means or knowledge to make use of such framework. In that case, governmental intervention may be required. This is the case of the state of Tocantins – Brazil, especially in the regions called “territórios da cidadania” (citizenship territories).

A possible solution for governmental intervention is a web-based system that supports the interaction between the farming family and the technicians specialized in the innovative design of farming systems. In particular, this work presents such web-based management application focusing on Gal *et al.* in [1] on designing dairy farming systems.

This web system was developed by NDS – Software Development Nucleus of UFT (*Universidade Federal do Tocantins* – Federal University of Tocantins), and it is called EESTO (<http://comp.uft.edu.br/eesto>). Hence, it was

employed NDS' standard strategy for developing interdisciplinary research web-based systems, our previous work, the MVC Evolutionary Acquisition IRPM [2], which intends to provide adaptability to the research [3].

The pattern Model-View-Controller (MVC) [4], [5] separates the business logic – Model, the user interface – View, and the user input – Controller. Consequently, it provides a way to split functionalities to independent development, testing and maintenance. That is, the Model represents the application data and business rules that command data access and its modification, which also keeps business state and provides to the Controller the ability to access encapsulated functionalities. The View displays the system's state and the Controller sets the application behavior. Hence, the MVC pattern is suitable because it has been widely adopted to develop web services [6], and because the biophysical, technical, and decision processes involved are part of the business logic.

Our research methodology, the Interdisciplinary Research Project Management (IRPM) [7], makes use of project management concepts [8] and combined with the Evolutionary Acquisition [9] forms another previous work, the Evolutionary Acquisition IRPM (EA-IRPM) [10] to provide interdisciplinary systems architecture the ability to evolve, which is an important feature for systems to accommodate future changes [11], while promoting the increase of scientific results. The EA-IRPM was previously employed to develop a social network to provide free internet access for public schools' communities [12] and the MVC Evolutionary Acquisition IRPM was implemented as a web-based academic project manager [13].

The authors organized this paper in accordance to the IMRAD structure: introduction, methods, results and discussion; which is adopted as part of the Uniform Requirements for Manuscripts Submitted to Biomedical Journals of the International Committee of Medical Journals Editors, 2008 update. The authors believe that adopting this structure would help search engines in international databases to store and to retrieve information within research papers in order to facilitate meta-analyses and systematic reviews.

## II. METHODS

### A. Tools and Techniques

The system's architecture adopts the MVC pattern, and Java is the object-oriented programming language, see Table 1. Moreover, Javasever Faces is the standard for building the user interface [14], PrimeFaces is the source for Javasever Faces components [15], Glassfish is the application server [16], and Netbeans as development environment (IDE) [17].

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Then Scrum was the process of iterative and incremental strategy for an agile software development [18]; Hibernate is the employed object-relational mapping library for the Java language [19]; Spring: security framework 3 is the framework for access control and authentication [20]; Maven is the tool used for management and automation of projects in Java [21]; Prettyfaces is the system's filter-based servlets extension with support to JSF to create URLs [22]; and PostgreSQL [23] is the relational database management system.

TABLE I: TOOLS AND TECHNIQUES

Field of expertise	Tool or Technique
Software architecture	MVC
Programming language	Java
Server	JavaServer
Application server	Glassfish
IDE	NetBeans
Development	Scrum
Object-relational	Hibernate
Application framework	Spring: security framework 3
Build automation tool	Maven
URL rewrite filter	PrettyFace
Database	PostgreSQL

### B. MVC Evolutionary Acquisition IRPM

The Interdisciplinary Research Project Management (IRPM) [7] is an approach for conducting interdisciplinary research of real problems using Project Management concepts [8] and problem-based learning [24]. Evolutionary Acquisition (EA) is a system design methodology [15] and MVC is a software architecture pattern [4],[5]. Their integration is called MVC Evolutionary Acquisition IRPM and to explain it, this subsection starts with explaining IRPM followed by Evolutionary Acquisition resulting in EA-IRPM, and in the sequence, MVC Evolutionary Acquisition IRPM.

IRPM's schematic is present in Fig. 1, and for a better understanding of it, let us review the Project Management phases [8]: (1) Initiation: to determine project goals, deliverables and process outputs, to document project constraints and assumptions, to define strategy, to identify performance criteria, to determine resource requirements, to define the budget and to produce a formal documentation; (2) Planning: to refine project, to create a work breakdown structure, to develop the resource management plan, to refine time and cost estimates, to establish project controls, to develop the project plan and to obtain the plan approval; (3) Execution: to commit resources, to implement resources, to manage progress, to communicate progress and to implement quality assurance procedures. (4) Control: to measure performance, to refine control limits, to take corrective action, to evaluate effectiveness of corrective action, to ensure plan compliance, to reassess control plans, to respond to risk event triggers and to monitor project activity; (5) Closing: to obtain acceptance of deliverables, to document lessons learned, to facilitate closure, to preserve product records and tools, and to release resources.

In IRPM, Initiation phase begins with choosing the real problem to solve and identifying at least two fields for an interdisciplinary approach. These fields are necessary to:

document the real problem constraints and assumptions; define strategy; identify performance criteria; determine resource requirements; define budget; and produce formal documentation. Planning phase consists of refining project and analyzing the real problem through studying the chose fields. These studies may produce a new fundamental or methodology. Then in Execution phase, even if new concepts are not obtained, an educational material may be prepared and used in class for a problem-based learning approach, or else the new technology may be implemented and applied. Moreover, if in Planning phase controls were established then educational, technological, economics and social parameters may be available for measurement, allowing Control phase to be performed. Finally, after analyzing measurements, papers should be written as part of Closing phase.

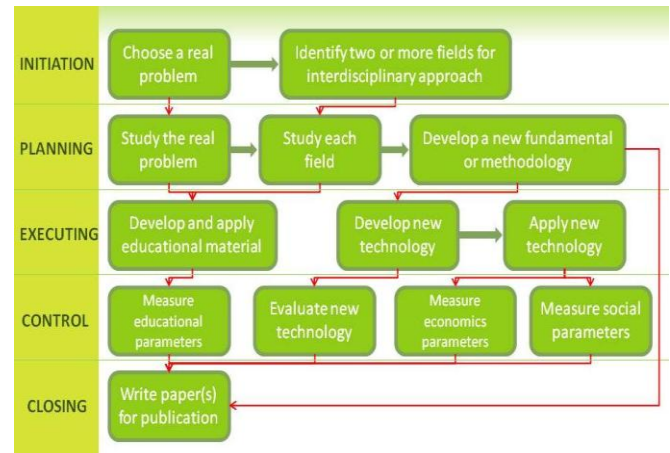


Fig. 1. IRPM – Interdisciplinary research project management.

Evolutionary Acquisition starts with the requirements analysis [9], see Fig. 2. After defining the “general” requirements for the system and the “specific” requirements for the core, the concept of operations is elaborated. Then together with a requirements analysis of user feedback, technological opportunities and threats evaluation, the preliminary system architecture is developed. From the system architecture a core is produced. New definitions and developments with an operational test may result in a new version of the core. Then with experience and use, new requirements refinements and updates may be identified and used to develop a new core, or improve it.

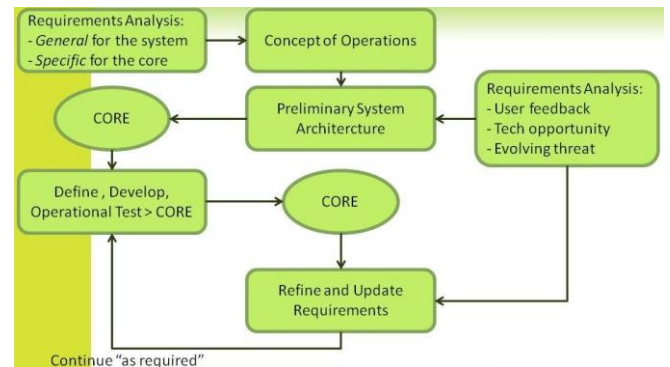


Fig. 2. The evolutionary acquisition model.

Additionally, Evolutionary Acquisition separates the core of the system into blocks. A particular block can have several



releases. If the system is a software, then software engineering techniques may be applied.

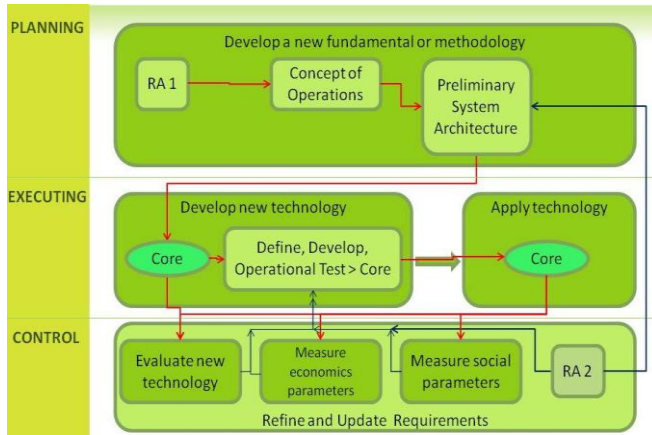


Fig. 3. The incorporation of the Evolutionary acquisition model into the interdisciplinary research project management diagram.

The incorporation of Evolutionary Acquisition into IRPM is presented in Fig. 3. It shows that it is inserted into phases Planning, Executing and Control, where RA means Requirements Analysis of: (1) general for the system and specific for the core; and (2) user feedback, technological opportunities and evolving threat. Hence, in Planning phase the attempt to develop a new fundamental or methodology consists of generating a preliminary system architecture beginning with RA 1, and then elaborating the concept of operations, and when available, also considering RA 2. Executing phase consists of implementing the core from the preliminary system architecture followed by new definitions and developments of operational tests. Afterwards, the system is applied in a real life situation. Control phase is about refining and updating requirements, which implies in evaluating technology, measuring economic and social parameters, and verifying users' feedback, technological opportunities and evolving threats, that is, RA 2.

The Model-View-Controller (MVC) pattern is a software architecture [4],[5]. It intends to separate the business logic – Model, the user interface – View, and the user input – Controller. As a consequence, it provides a way to split functionalities to independent development, testing and maintenance. Basically, the Model represents the application data and the business rules that command data access and its modification. It also keeps business state and provides to the controller the ability to access encapsulated functionalities. The View displays the system's state and the Controller sets the application behavior.

The idea of incorporating MVC into Evolutionary Acquisition is presented in Fig. 4. The core architecture of the web service is a modified MVC pattern that is connected to the Requirement Analysis – RA2 of Fig. 3, through the user feedback, which should be an independent database system. The letter links means: A – to query the model state; B – to notify view of change in model state; C – state view; D – user actions/commands; E – invoke methods in the models public APIs; F – output to user; G – input from user; H – to report problem/suggestion/requirement (psr).

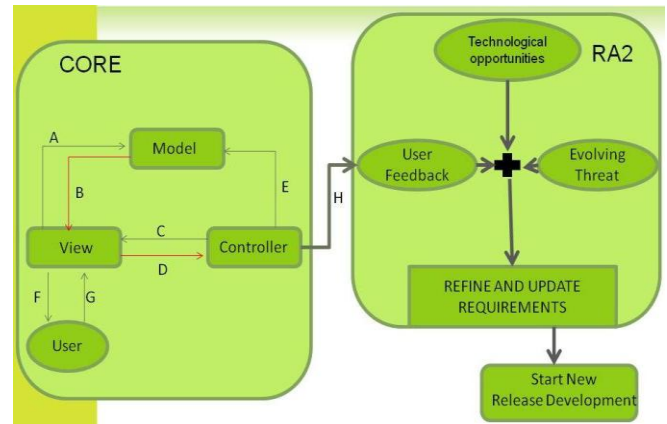


Fig. 4. The model-view-controller evolutionary acquisition.

The connection between web services' core and Requirement Analysis occurs in the following way: (1) user identifies a system's psr; (2) then user access the view to report psr, for instance, by pressing a specific button available in the user interface; (3) View queries Controller state about psr; (4) Controller notifies View of change to psr state; (5) View displays psr state to user; (6) user reports psr through View; (7) View transmits user's report to Controller; (8) Controller accesses users' feedback database system to report psr; (9) refinements and update requirements are defined using users' feedback, technological opportunities and evolving threats considerations; (10) a decision to start a new release may be taken. Hence, MVC is also incorporated to the Evolutionary Acquisition IRPM, which is presented in Fig. 5. It is worth noticing that a new release may imply in a change in the system's architecture or a new block release. The decision of releasing a new version of the core or a block is not automatic, and considerations of technological opportunities and evolving threats are still independent parts, that is, they are not necessarily part of the users' feedback database system.

Hence, MVC Evolutionary Acquisition IRPM presents evolution as an important factor in interdisciplinary web services systems. Actually, according to Breivold et al. in [11] "the ever-changing world makes evolvability a strong quality requirement for the majority of software architectures", that is, MVC Evolutionary Acquisition IRPM intends to increase productivity and to facilitate software evolution.

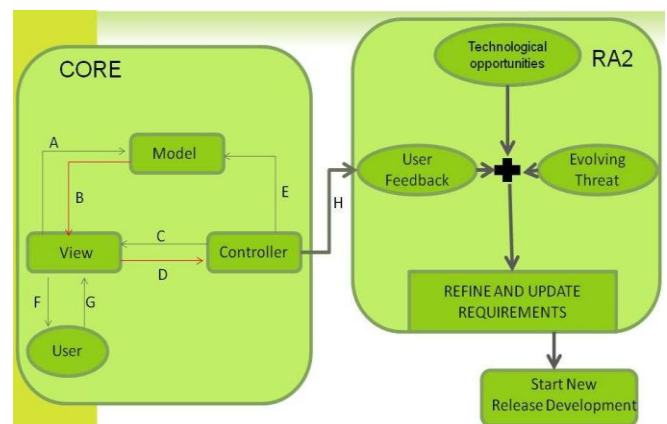


Fig. 5. The MVC evolutionary acquisition IRPM.

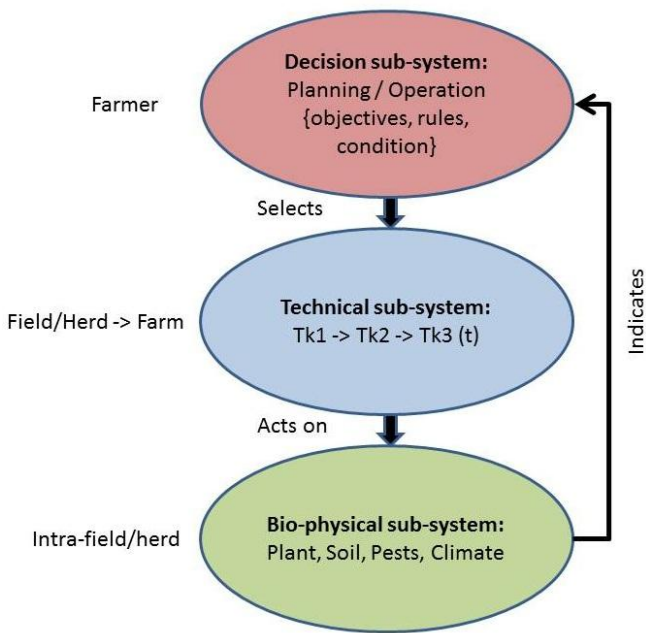


Fig. 6. Schematic representation of the agricultural production system framework.

### C. General Structure of the Framework for Modeling Production Systems at the Farm Scale

According to Gal *et al.* [1] the agricultural production system is a combination of productive activities at the farm level that use available resources. Its management includes a range of decisions regarding crops and livestock structuring activities, allocating resources to individual operations over time and space. Decisions are made on interconnected time scales: strategic (several years), tactical (seasonal), and operational (daily/weekly). For instance, a rainfall is an unpredictable event that may induce periodic adjustments on a daily basis, though still following the tactically planned operations for the following season.

The conceptual framework is represented in Fig. 6. The crops and livestock system is divided in three sub-systems: biophysical, technical and decisional). The first is defined by the interactions of elements such as water, soil, climate and pests. The second is a combination over time and space of techniques applied sequentially by farmers to the biophysical system from the field/herd to farm level to accomplish production objectives. The third represents how farmers select and implement their technical interventions. Hence, this framework may be applied to analyze a production system's operation and to evaluate ex-post its outputs; also, it may be used to assist farmers to design their production system [1].

### III. RESULTS

The new web-based system is called EESTO (<http://comp.uft.edu.br/eesto>) and it can be used to support Gal *et al.* modeling production system at the farm scale.

Basically, it has four user's classes: the system's administrator; the production system coordinator; the technician; and the farmer. More classes can be implemented, but in an ex-ante evaluation, it is an unnecessary feature.

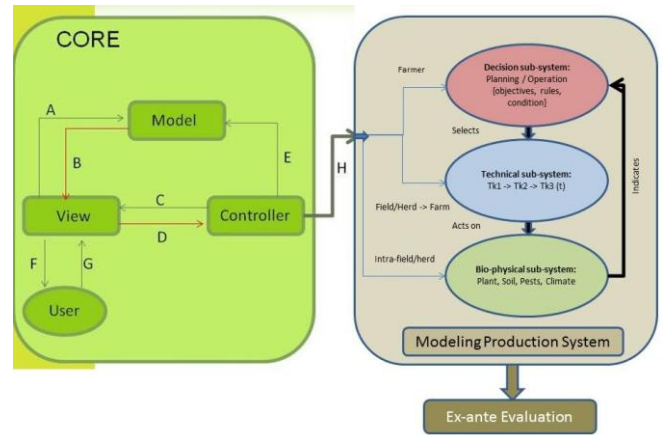


Fig. 7. EESTO diagram for its supportive use for modeling production systems at the farm scale.

The EESTO web system is represented in Fig. 7, and in comparison to Fig. 5, the RA2 system becomes the modeling production system at the farm scale. Coincidentally, the RA2 system also has three categories, so it is sufficient to map each RA2's category into the production system, that is, the user feedback becomes the decision sub-system, the technological opportunities becomes technical sub-system, and the evolving threats becomes the bio-physical sub-system; to refine and update requirements is equivalent to modeling the production system; and to start a new release development means the ex-ante evaluation.

Two examples of the EESTO interface are provided in Fig. 8 and Fig. 9. The first is an example of the administrator's screen for inserting production associations and regions; and the second is an example of the coordinator's screen for his/her own evaluation of production systems initial proposal's evaluation.



Fig. 8. EESTO administrator's interface.



Fig. 9. EESTO coordinator's interface.

#### IV. DISCUSSION

This work is part of a project that intends to support small farmers in poor regions of Brazil called “territórios da cidadania” (citizenship territories). Specifically, it intends to aid government agencies related to the agribusiness to support the development of these economically endangered communities by providing the proper guidance to design and manage their production system at farm scale.

The goal is to increase production using resources available on the farm or supplied by the environment, eventually also provided by the government. The expected result is to achieve sustainable development outcomes that can benefit the entire local population, particularly the poorest, while limiting ecological impacts.

In order to accomplish this, the conceptual framework divides the farm structure organization in three sub-systems: the bio-physical, the technical and the decision support. The sub-systems are mapped into the MVC Evolutionary Acquisition IRPM software architecture, which is suitable to interdisciplinary research with an evolutionary acquisition approach using project management concepts.

The system plays a role as an interface between government and specialized technicians and farmers. In that way, technical support and guidance could be provided in a long distance form or reducing on site activities. Furthermore, to improve support, future works includes not only the simulation ability into the system, but also risk assessment to prevent critical events, and optimization functionalities for maximizing results.

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# Balanced Scorecard as a Tool for Sustainable Management Control: A Case Study of the Brazilian Air Force

Ana Beatriz de Souza Gomes Brandão, Ana Carolina Silva, Michelline Freire Moraes, and Zenáida Maria de Almeida

**Abstract**—The amount of waste generated in the current society has undertaken the necessary balance between the economic, social and environmental objectives. The law number 12.305, from August 2, 2010, which instituted the National Solid Waste Policy (PNRS) was regulated by Decree 7.404 of December 23, 2010, originating the Inter-ministerial Committee of solid waste policy. Its approval has initiated a process of seeking solutions to reduce the amount of solid waste and the impacts generated by it. In view of the paucity of studies on sustainability policies adopted by the public sector and multiplicity of waste generated by the Brazilian Air Force, this institution has been chosen for this case study. The method chosen for this research makes it possible to identify the holistic characteristics of an organization. The investigation relied on direct observation, semi-structured interviews, bibliographical and documental research as secondary sources of information. As a result, the paper presents a map of strategic goals and a map of tactical objectives, defining sustainability policies and the design of a sustainable Balanced Scorecard to drive a sustainable vision to be deployed in the Brazilian Air Force.

**Index Terms**—Sustainability, solid waste policy, sustainability policies, balanced scorecard, Brazilian Air Force.

## I. INTRODUCTION

The concern with sustainability extrapolated academic borders to become the main ingredient for the development of institutions that have as their goal the balance between the economic, social and environmental objectives. Today, the public and/or private institutions need to spread the idea and make a commitment to reduce the volume of waste generated in society, since production and consumption are two faces of the same problem: the need to reduce the amount of waste and inefficient management of environmental resources.

The multiplicity of environmental waste from the Brazilian Air Force (FAB) and the necessary enforcement of legislation for the integration of sustainable development principles sparked the need to conduct a research to identify and monitor the impacts generated, aiming at environmental quality control. The provision of guidelines and strategies for policy action can add value to waste increasing the competitive capacity is established within the National Solid Waste Policy (PNRS) culminating in August second, 2010 and in the Public Administration's Environmental Agenda (A3P) of the Ministry of Environment [1].

In this context the research seeks to answer: how

sustainability policies relating to law n. 12.305 which deals about the Brazilian Solid Waste Policy (PNRS) and the Public Administration's Environmental Agenda (A3P), through the Directorate of Aeronautical Engineering (DIRENG), the Central Organ of the Brazilian Air Force Engineering, can be implanted in the Brazilian Air Force (FAB) [1]-[2]?

The overall objective of this study was to introduce, through the making of strategic maps and the drawing of a Balanced Scorecard (BSC) sustainable character, within the framework of the Brazilian Air Force (FAB), sustainability policies relating to law n. 12.305 which deals about the Brazilian Solid Waste Policy (PNRS) and the Public Administration's Environmental Agenda (A3P), through the Directorate of Aeronautical Engineering (DIRENG), Central body of Engineering System of the Brazilian Air Force [1]-[2].

In order to achieve the desired objective, the following specific objectives were established:

- Define strategic goals related to sustainability national policy to be implemented in the Brazilian Air Force, through the Directorate of Aeronautical Engineering;
- Suggest a plan of action based on law n. 12.305 which presents the Brazilian Solid Waste Policy (PNRS) and Public Administration's Environmental Agenda (A3P) [1]-[2];
- Suggest a plan of targets based on compliance with the law n. 12.305 which present the Brazilian Solid Waste Policy (PNRS) and Environmental Agenda of Public Administration (A3P) for the Brazilian Air Force, to be implemented by the Directorate of Aeronautical Engineering (DIRENG) [1]-[2]; and
- Create measurement Indicators and Evaluation to the suggested goals.

The following steps have been fulfilled in the case study on DIRENG: bibliographical and documental analysis; qualitative, exploratory and content analysis technique; interviews (semi-structured) with the managers and servers of Aeronautical Engineering (DIRENG). The ultimate goal is to propose a strategic map setting sustainability policies and the design of a balanced sustainable character Scorecard, under the Command of aeronautics.

## II. THEORETICAL FRAMEWORK

Historically, sustainability has been discussed since the decade of 60 in the Club of Rome, where politicians, industrialists and scientists who felt frightened with the impact that economic growth could cause society established

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this landmark discussion.

The first major discussion of sustainability was the Stockholm 72 [3]. Twenty years later Rio 92 takes place, which, in addition to the environmental approach, also addressed the social question. The main document generated from this meeting was the agenda 21. This way, every nation would have its agenda that would be linked to their needs and desires.

Discouraged with the impartiality of Rio 92, Rio+10 took place in Johannesburg. Little publicized, yielded a great unease among the participants before the United States refusal to sign the Kyoto Protocol on the reduction of CO<sub>2</sub> emissions until 2012.

Given the above, the changes in the paradigms of competitiveness, globalization, new technologies and issues focused on the environment, society and the economy have meant that companies needed to be sustainable and therefore seek a balance between the economic, environmental and social dimensions, with the purpose of generating profit for their business by producing more efficient and sustainable goods, corroborating with the concept of corporate sustainability.

This way, the information age has brought to the corporate world the emerging need of an organizational change that will outlast many of the premises of industrial competition. According to Kaplan (1997) the organizations as a whole can no longer obtain sustainable competitive advantages only with rapid implementation of new technologies and fixed asset, or with the excellence in effective management of financial assets and liabilities [4].

The new business scenario requires organizational sectors, public and private, methodologies each time more modern and efficient management, suggesting new techniques which allow a better orientation not only focused on the financial aspect, but also to the social and environmental aspects, seen today by businesses as competitive differentiators.

Kaplan and Norton (2001) argue that only financial data cannot determine if a firm or organization is or is not on the right track. In this sense, the BSC system seeks to work its analysis in four dimensions: financial, customer, business and learning and growth [5].

The reality of the worldwide environment of organizations, both in Brazil and in the world, goes through an identity crisis between growth and sustainability, having as main paradigm the pursuit of economic growth through social and environmental responsibility. According to J. E. Santos (1996: 41) "The humanity of today has the ability to develop in a sustainable manner however we need to ensure the needs of the present without compromising the ability of future generations to meet their own needs" [6].

According to Kaplan and Norton (1997, p. 25), "the Balanced Scorecard reflects the balance between short-term and long-term objectives, between financial and non-financial measures, between indicators of trends and events". These two theorists defined initially in the BSC as a performance measurement system and later as a strategic management system [4].

The Balanced Scorecard was born in 1990, through a study and has since been perfected as a tool for management of many companies. It is presented within the context of enterprise as a management system of financial and

non-financial resources and not as a simplistic view that used to see the Balanced Scorecard as a set of methods or measures. This innovative system allows the company a clearer vision and objective of the strategies that must be adopted through actions, respecting the performance indicators according to four perspectives: financial (such as profitability and earnings per shares), customers (market size, growth in participation, consumer satisfaction and retention index), processes (efficiency, costs and services) and learning and growth (training knowledge management and future prospects).

For Canevarolo and Martins (2005) the Balanced Scorecard stands for three basic functional moments: as performance measurement system, then as a strategic management system and, finally, as the system for guiding the Organization's strategic focus [7].

The definition of sustainable development within the Balanced Scorecard methodology falls from a systemic vision that includes environmental development along with the economic development and growth. This term was first used in the year of 1987, the Brundtland report (1999) as described below in an excerpt from the report [8]:

"The development that seeks to meet the needs of the present generation without compromising the ability of future generations to meet their own needs, means enabling people, now and in the future, reach a satisfactory level of social and economic development and human and cultural achievement, making at the same time, a reasonable use of the Earth's resources and preserving species and natural habitat".

Western society is characterized for being a consumerist society that seeks at all times to meet their immediate needs, but much of its needs or desires may not be supplied to the extent that a large part of this population requires assistance policies that directly or indirectly terminate complementing the sustainable growth of the economy.

Law n. 12.305, August 2, 2010, establishes the national solid waste Policy, featuring on its principles, objectives and instruments, as well as on the guidelines for the integrated management and solid waste management, including hazardous waste, the responsibilities of the generators and public authorities and to the relevant economic instruments [1]. It was regulated by Decree n. 7.404, December 23, 2010, which, among other things, establishes the Inter-ministerial Committee of the Brazilian Solid Waste Policy.

According to the Ministry of health/2011, this marked the beginning of a strong institutional articulation involving the three federated entities - the Union, the States and municipalities, the productive sector and the civil society in the search for solutions to the serious problems caused by waste, which is compromising the quality of life of Brazilians.

Currently, 13% of municipal waste is recycled, however, the potential for recycling is much larger. Recent study of the "Institute of Applied Economical Search" (IPEA) and the Federal Government, indicates that the country loses R\$ 8 billion annually by burying recyclable materials that may come back to the industrial production. Besides the economic aspects, recycling saves natural resources, like water, in addition to providing the rational use of energy and less emission of greenhouse gases. From these environmental

challenges, allied to social issues, the new legislation points out the responsibility of organizations in manufacturing packaging and more easily recyclable products or that generate less environmental impacts. Measures to reduce waste, start from the design of the products and permeate throughout its whole life cycle, including also transportation and final disposal.

According to the Brazilian Institute of Geography and Statistics (IBGE), held in 2000 (National Survey of Basic Sanitation - PNSB), of the 5.507 Brazilian municipalities, 4.026, there is, 73.1% have the population to 20.000 inhabitants. In these municipalities, 68.5% of the waste generated are leaked in landfills and/or flooded. However, if we take as a reference the amount of garbage they generated by this set of cities in relation to the total of the Brazilian production, the situation is less severe, because they collect only 12.8% of the total (20.658 t/day). This is less than the waste generated by the 13 largest cities with population over one million inhabitants that collect 31.9% (51.635 t/day) of all the urban garbage, and have their final disposal in controlled and sanitary sites: only 1.8% (832 t/day) is destined to dumps, the remainder being deposited in controlled landfills or sanitary.

The problem of the final disposal takes on an alarming scale. Considering only the public and municipal waste, what we see is a widespread action of local governments, over the years, just away from the urban areas the garbage collected, depositing it sometimes in places absolutely inappropriate, such as wooded slopes, mangrove swamps, rivers, bays and valleys. More than 80% of the municipalities in their local waste leak in the open, in watercourses or environmentally protected areas, most with the presence of scavengers – among them children, denouncing the social problems that the mismanagement of garbage.

To manage waste in an integrated manner demands unabridged work with the social aspects of work with the technical and operational planning of urban cleaning system. The statistical data of urban cleaning are deficient because the city halls have difficulty in presenting them, since there are various patterns of measurement of various services. The only national-level information is a result of the National Survey of Basic Sanitation (PNSB), its last edition in 2000. With respect to the costs of various services, the information also are not reliable, because there are no parameters to set values that identify each task performed, in order to compare it with data from other cities.

Despite this picture, the garbage is the most developed segment within the urban cleaning system and which presents the greatest breadth of care by the population, whereas is the system activity that demand a higher percentage of resources on the part of the municipality. This fact is due to the pressure exerted by population and by Commerce to run the collection on a regular basis, thus avoiding the hassle of coexistence with the trash on the streets. However, this pressure usually has a selective effect, namely, the municipal administration, when it has no means to offer service to the entire population, prioritizes trade sectors, health units and the highest-income population. Expansion of coverage of services rarely reaches the really needy areas, not least because the lack of road infrastructure requires the adoption of alternative systems, which have low efficiency, therefore, higher cost.

Another point of great importance was the emergence, in Brazil, in 1981, of the law of the National Environment Policy (Law n. 6.938), a landmark in the development of environmental law, establishing legal definitions on the topics: environment, environmental quality degradation, pollution, polluter and environmental resources. Established an important mechanism of environmental protection – the prior Environmental Impact Study (EIA) and its report (RIMA), Modern Instruments in Environmental Terms.

The Federal Constitution of 1988 dedicated in its title VIII, of the Social order, in chapter VI, article 225, directional standards of environmental problems, setting environment as well of common use by the people [9]. On the other hand, the law n. 9.605, February 12, 1998, which deals with environmental crimes, is considered a milestone in effective protection of the environment.

In turn, the UN Conference on Environment and Development held in Rio de Janeiro, the ECO-92, corroborated in global terms the concern with environmental issues, strengthening the principles and the rules for combating environmental degradation, elaborating the Agenda 21, sustainable development policy instrument.

In the face of the Brazilian legal system, it is understood on being feasible the implementation of a more sustainable consumption policy by the Public Administration.

According to the Ministry of Environment the Environmental the Public Administration's Environmental Agenda (A3P) is a program that aims to implement sustainable social and environmental management of administrative and operational activities of the Government [2]. The A3P has as principles to integration of environmental criteria; ranging from a change in investments, purchases and contracting of services by the Government; until a proper management of waste generated and natural resources used as main objective the improvement of the quality of life in the work environment.

The A3P is a voluntary decision responding to the understanding that the Federal Government has a strategic role in the review of production and consumption patterns and the adoption of new benchmarks in pursuit of social and environmental sustainability. The program has as public managers awareness of guideline for environmental issues, encouraging them to incorporate environmental management principles and criteria in administrative activities, through the adoption of actions to promote the rational use of natural resources and of public goods, the proper management and the decrease in the volume of waste generated, sustainable procurement actions/green purchases and still in the process of continuing education of public servants.

The Agenda is based on the recommendations of Agenda 21, chapter IV, which indicates to the "establishment of programs focused on the examination of unsustainable patterns of production and consumption and the development of national policies and strategies to encourage changes in unsustainable consumption patterns"; in Principle 8 of the Rio/92 declaration which says that "States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies"; and even in Johannesburg Declaration establishing the "adoption of sustainable consumption as basic principle of sustainable development".

The A3P is an invitation to individual and collective

commitment to the changing habits and the dissemination of the action.

### III. METHODOLOGY

In view of the shortage of approaches with regard to sustainability policies to be incorporated in the public administration, the methodology to be used is the case study, since according to Yin (2001, p 77) "... the case study allows an investigation capable of retaining holistic and meaningful characteristics of real-life events, such as individual life cycles managerial and organizational process (...) international relations, and maturation of enterprises " [10].

Was selected as the Organization to analyze the Brazilian Air Force and further your Engineering Department. Will apply, in the realization of the study, the following techniques:

- 1) Direct observation, semi-structured interviews conducted with managers of the Board of Aeronautical Engineering (DIRENG);
- 2) Direct documentation technique by means of bibliographical research and documentation.

The desired end result is to propose, with the use of these techniques, a map of strategic and tactical goals setting sustainability policies and the design of a Balanced sustainable character Scorecard, under the Command of Aeronautics (COMAER).

### IV. RESULTS

Followed the steps of case study with the Board of Aeronautical Engineering (DIRENG) — literature and document analysis; qualitative research, exploratory and content analysis of interviews, semi-structured interviews with the Manager and with the servers of DIRENG, was a map of strategic goals and a map of tactical objectives, defining sustainability policies to be used as part of the Air Force Command. As a conclusion, of this work was drawn the Balanced Scorecard of sustainable character to that organization.

Upon completion of the interviews, we can see that on the chart drawn for the Brazilian Air Force, the sustainability Division that would be created to regulate, supervise and monitor sustainability policies to be implemented, should be made subject, initially, to the Board of Directors of Engineering (DIRENG) who is responsible for the control of all the works of the Organization as well as ancillary tasks such as looking after the heritage, taking care of the fire and structure to ensure the institution's fleet. Respondents unanimously attributed to this board the subordination of the sustainability Division. In this context all maps constructed, as well as the Balanced Scorecard proposed Sustainable, were based on the proposals set out in the interviews and documentary analysis of the Law n. 12.305 and the Agenda (A3P) [1]-[2].

The strategic plan aims to steer the Organization through a path that it can achieve a competitive advantage in front of the market it serves, it is necessary for the analysis of organizational environment so that those strategies are well directed. In this research, the first map orients the company through strategic objectives that will be divided into the

dimensions proposed by the Balanced Scorecard. However since this is a government organization where his primary focus is not on profit, it was decided on the basis of the interviews put as top customer perspective, which in this case it is the society and is the reason to exist.

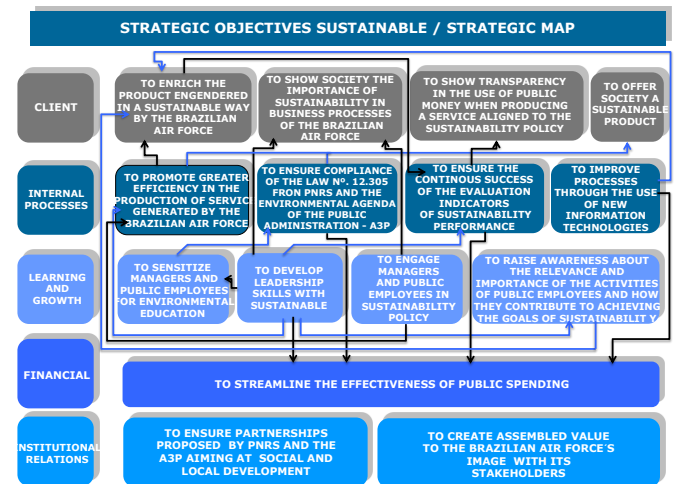


Fig. 1. Strategic objectives sustainable / strategic map..

Conducted strategic studies, was pieced together a team composed of two members of researchers and a SDE/DIRENG boss. After several discussions based on interviews, tactical goals were constructed taking into consideration each strategic objective as defined in Fig. 1.

Fig. 2-Fig. 5 present the tactical objectives so grouped by strategic objective in each perspective. Fig. 6, presents the synthesis of these goals translated into Sustainable Balanced Scorecard design for the Brazilian Air Force.

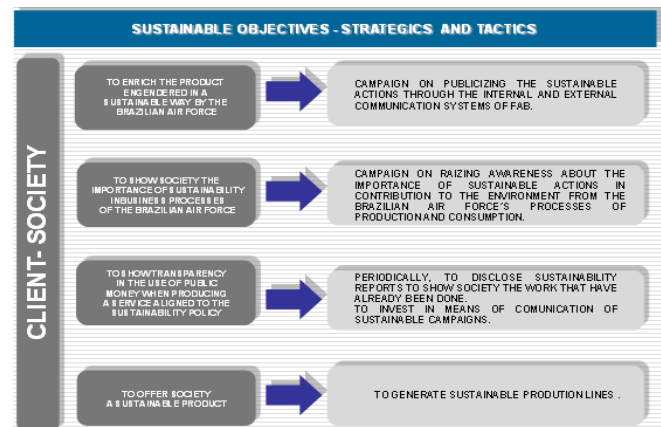


Fig. 2. Sustainable objectives/strategic and tactical perspective – Client

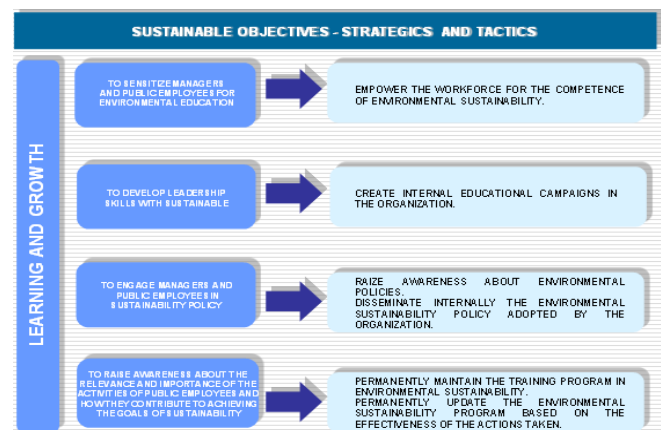


Fig. 3. Sustainable objectives/strategic and tactical learning and growth perspective.

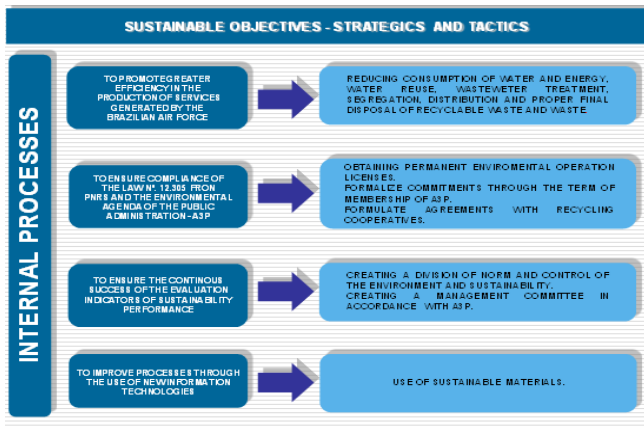


Fig. 4. Sustainable goals – strategic and tactical internal processes perspective.

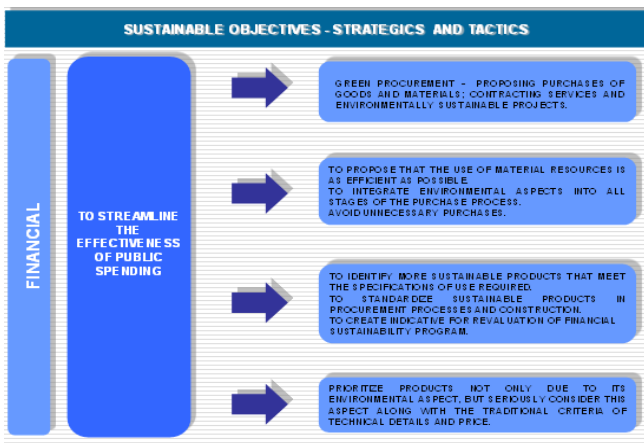


Fig. 5. Sustainable goals – strategic and tactical financial perspective.

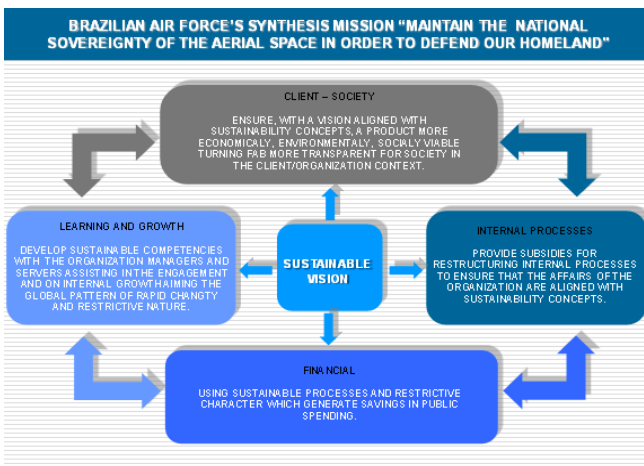


Fig. 6. The balanced scorecard sustainable for the brazilian air force.

## V. CONCLUSION

The growing need for sustainability policies in the governmental sphere, the multiplicity of environmental waste from the Brazilian Air Force (FAB), and the necessary enforcement of legislation for the integration of sustainable development principles sparked the need to conduct a search to identify and monitor the impacts generated, aiming at environmental quality control.

The provision of guidelines and strategies for policy action can add value by increasing the competitive capacity is established within the National Solid Waste Policy (PNRS) culminating in August second, 2010 and in the Public

Administration's Environmental Agenda (A3P) of the Ministry of the Environment [1]-[2].

Thus, the present case study made it possible to carry out, through the interviews and documentary and bibliographical analysis performed, the production of maps of strategic and tactical goals, as well as the application of Balanced Scorecard in order to contribute, within the framework of the Brazilian Air Force (FAB), for the implementation of sustainability policies related to n. 12.305 Law, that focuses on the National Solid Waste Policy (PNRS) and the Public Administration's Environmental Agenda (A3P) [1]-[2].

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# Exploring Memorable Tourism Experiences: Antecedents and Behavioural Outcomes

Lalith Chandralal and Fredy-Roberto Valenzuela

**Abstract**—This paper presents the findings of an exploratory research which examines the antecedents and behavioural outcomes of memorable tourism experiences (MTEs) from Australian travellers' perspectives. 35 in-depth interviews were conducted with a purposive sample of frequent Australian travellers. Inductive content analysis of the transcripts revealed 9 antecedents of MTEs of which eight represent the cognitive domain-perceived meaningfulness of the experience, perceived opportunities to encounter authentic local experiences, perceived significance of the experience, perceived novelty of the experience, perceived opportunities for social interactions, perceived serendipity and surprises encountered during the experience, perceived local hospitality and perceived professionalism of local guides-and the last theme represent the affective domain i.e. various emotions such happiness and excitement associated with MTEs. Analysis also revealed that novelty seeking travellers do not intend to re-visit the same destination despite they have had a memorable experience but they tend to recommend MTEs to others. These findings provide important managerial implications for destination marketing organizations (DMOs).

**Index Terms**—Memorable tourism experiences (MTEs), intention to re-visit, destination marketing organizations.

## I. INTRODUCTION

With the recognition of tourism destinations as amalgams of tourism products offering an integrated experience to consumers [1], the emphasis is now to deliver unique, extraordinary and memorable tourism experiences (MTE) to target tourists in order to maintain a sustainable competitive advantage [2], [3]. However, academic literature and research on MTE remains sparse since it is an emerging research interest with only a few academic studies available, for example, [2]-[7]. More research could lead to a better understanding of what it means for travellers to have a MTE and also to uncover specific elements of such experiences [7]. The purpose of this paper is to report the findings of an exploratory research which examines the antecedents and behavioural outcomes of MTEs from Australian leisure travellers' perspectives.

## II. LITERATURE REVIEW

The significance of the theory of memorable tourism experiences stems from the influencing power of past memory on consumer decision-making. Numerous scholars, for example, [8]-[11], have highlighted the importance of

past memory because it is the single most important source of information when a traveller makes a decision to re-visit a particular destination. Hoch and Deighton demonstrate three reasons behind the significance of past experiences stored in the memory [12]. Firstly, the product involvement and motivation to purchase the product are high when the information is drawn from their past experiences, secondly, consumers tend to perceive past experiences as valuable and credible information sources and, thirdly, there is great influencing power of past experiences on future behavioural intentions. Therefore, Kim, Ritchie, and McCormick recommend tourism businesses give due attention to this by facilitating the realization of memorable tourism experiences for travellers [5]. However, Tung and Ritchie argue that destination marketers cannot directly deliver MTEs because such experiences are highly idiosyncratic [7]. Larsen also affirms this notion stating that tourism experiences are "psychological phenomena, based in and originating from the individual tourist" [13]. Thus memorable experiences are constructed by travellers on their individual assessment of subjective experiences [4]. Therefore, the central role of tourism planners is to "facilitate the development of an environment (i.e., the destination) that enhances the likelihood that tourists can create their own memorable tourism experiences" [7]. However, understanding of what makes a tourism experience more memorable for a traveller is pivotal for such managerial efforts. Hence this investigation aims at uncovering the antecedents of memorable tourism experiences.

## III. STUDY METHODS

In order to answer the research objective, an exploratory qualitative research was conducted in order to uncover the antecedents and behavioural outcomes of memorable tourism experiences. 35 in-depth interviews were conducted with a purposive sample of frequent Australian travellers. The sample consists of the academics and administrative staff of the University of New England and various other professionals such as solicitors, accountants and school teachers. The underlying rationality of choosing the academics and professionals was that they have more potential to undertake overseas travels for leisure and thus can be ideal candidates for investigating memorable tourism experiences. An interview guide was pre-planned to address the major research questions and pre-tested before commencing the interviews. All the interviews were verbatim transcribed by the researchers and imported into MAXQDA 10 qualitative data analysing software. Inductive content analysis was employed to identify the antecedents of

MTEs and their behavioural outcomes. 7 participants agreed to be involved in the process of testing the trustworthiness of the findings and they agreed with the codes assigned by the researchers.

#### IV. FINDINGS

As it can be seen in Table I, 9 themes emerged as the antecedents of memorable tourism experiences of which 8 themes represent the cognitive domain and the last one represents the affective domain. The cognitive domain

comprised: (A) perceived meaningfulness of the experience (B) perceived opportunities to encounter authentic local experiences (C) perceived significance of the experience (D) perceived novelty of the experience (E) perceived opportunities for social interactions (F) perceived serendipity and surprises encountered during the experience (G) perceived local hospitality and (H) perceived professionalism of local guides. In relation to the affective domain, one theme emerged, namely (I) positive emotions.

TABLE I: ANTECEDENTS OF MEMORABLE TOURISM EXPERIENCES

THEMES	In-depth Interviews	
	Number of text segments	Number of interviews
<b>(a) Themes belong to Cognitive Domain</b>		
(A) Perceived Meaningfulness	235	33
(B) Perceived Opportunities for Encounter Authentic Local Experiences	167	30
(C) Perceived Significance	156	28
(D) Perceived novelty	187	24
(E) Perceived Opportunities for Social Interactions	96	26
(F) Local Hospitality	82	26
(G) Serendipity & Surprises	76	23
(H) Perceived Professionalism of Local Guides	25	10
<b>(b) Themes belong to Affective Domain</b>		
(I) Positive Emotions	242	33

##### A. Perceived Meaningfulness

Most of participants (33) referred their memories to certain tourism experiences by which they had gained personally significant outcomes i.e. ‘self-development’ ‘relationship development’, and ‘enhanced family wellbeing’. ‘Relationship development’ was the primarily important aspect of travelling which includes strengthening the existing bonds with the travel companions (e.g. friends) and developing new friendships with people (with other travellers and locals). “There is usually a higher probability of an event becoming memorable because of the people, the social events more so than just the place by itself” (Interview 29). The ‘self-development’ subtheme refers to various personally beneficial outcomes of the trip i.e. been able to enhance their intellectual capacity, to broaden perspectives about life and the world, to change the self-identity, to make self-renewals, and to acquire new skills etc. Family wellbeing” was the third sub dimension of ‘the meaningful experiences’ which may include the positive outcomes of the trip such as ‘enhanced family togetherness’, ‘family happiness’ and improvement of children’s knowledge about the world; “that will always be up the top of our memory list because we had such a lovely close time as a family doing such good fun things really” (Interview 2).

##### B. Perceived Opportunities to Encounter Authentic Local Experiences

This refers to participants’ memories of real local experiences during the trip i.e. experiencing actual local life, cultures and foods of toured destinations. Participants remembered memorable moments such as visits to real local villages, sharing locals’ actual life experiences, and

exploring remote lifestyles, markets, farming and industries etc. “...in terms of what would make it truly memorable, the locals, the way they embrace you and the way that they allow you to enjoy the way they live, and their day to day things” (Interview 23). Participants further referred their memorable trips to experiencing authentic local cultures i.e. participating in local cultural festivals, visiting culturally significant places, and being moved by seeing strange cultural rituals and behaviours. Participants’ memories were also be strongly related with local food and culinary experiences at foreign destinations. Their memories were mostly associated with the deliciousness of local foods they consumed and how strange and different such local foods were. “Local food is probably the main experience that comes to my mind and still I think about it often” (Interview 21).

##### C. Perceived Significance

This was reflected in responses that highlighted the perceived importance of certain experiences in terms of their exclusiveness, extremeness or reputation etc. For example, many participants (28) remembered visitation of world famous iconic tourist attractions such as great touristic cities (e.g. Paris, Moscow), iconic man-made attractions (e.g. Taj Mahal, Great Pyramids), iconic natural wonders (e.g. Iguassu Water Fall, The Mount Everest) and world famous museums and art galleries (e.g. Museum of Modern Arts in New York, British Museum in London) as some of their highly significant moments of past travel experiences. Some participants also referred their past memorable experiences to dream trips (i.e. trips that the participant was waiting for a long time to realize), trips which are perceived as once in a life time experience (i.e.

‘very expensive’ and ‘hard to repeat’ trips), and extraordinary experiences (i.e. trips that typical tourists do not like to undertake). “I think it was memorable because it had been in a dream of my mind for so long that, yes I’ve actually realized that dream, so that’s one thing that made [it] memorable” (Interview 24).

#### *D. Perceived Novelty*

This was the fourth theme of personal autobiographical memories of past travel experiences which was reflected in many of the participants’ responses (24). Novelty may include ‘off-the-beaten track’ travel experiences, ‘first time’ experiences such as ‘first visit to Asia’ or ‘first trip in a cruise ship’, visiting strange and alien places during the trip, staying at accommodation places which are quite different from mainstream touristic hotels, and their exposure to quite different cultures, lifestyles, foods etc. As one participant said, “Things I remember the most are like the big things that we go to see and do, particularly things we have never seen or done before,” (Interview 7). “I think Egypt is an example which I didn’t have very high expectations and I wasn’t really sure how much I would enjoy it and even though it was. I think it’s probably the most significant of the last trips because it was new and it was so different” (Interview 20).

#### *E. Perceived Opportunities for Social Interactions*

This can be another important antecedent for memorable tourism experiences and many participants (26) of this study spontaneously remembered this element when talking about their previous memorable trips and revealed that such social moments can take place with locals, fellow travellers and other randomly met people while travelling. For example, one participant highlighted that social interactions is the major aspect of his travelling: “I do remember just the feeling of being relaxed and having a good time with the people around me more than anything”. (Interview 7). Another participant expressed: “Definitely the social interactions and bonds. I have never kept in touch with other tourists and I tend not to keep in touch with but when I’m there, I enjoy those interactions” (Interview 35). According to their responses, ‘social interactions’ does not refer to creating any long-term friendships or bonds with others; instead it’s mostly related to happy interactions with various people they had met during their trips.

#### *F. Perceived Local Hospitality*

‘Local hospitality’ was highlighted by an overwhelming number of participants (26) and they commented very positively about friendliness, helpfulness and generosity of locals that they have encountered during the trip. “...the Japanese are always bowing and always very friendly to [visitors] and always very helpful so that was something that I remember [they] always come to help you to find your places, find do something, they were always there to help a lot” (Interview 21). Another participant remembered: “actually when we went into Holland I remember a one particular memorable experience with a gentleman one day who invited us to stay in his house...in the morning he went to work and he just left us in his house and told us to close the door when we left so that was how much he trusted us. We have never met him before” (Interview 3).

#### *G. Serendipity and Surprises*

Serendipitous incidents are unplanned but positive and memorable experiences that happened during tours. Participants claimed that generally, independent tourism trips tend to provide more serendipitous experiences than organized tours since independent trips provide more freedom to encounter unexpected experiences. “...it’s associated with that personal kind of serendipity of the associations you make, the people you meet, the places you go, and that kind of freedom about independent travelling where you don’t really know what is going to happen” (Interview 4). Participants also remembered surprising experiences where they had encountered much better experiences than what they expected or imagined. “...when we were slipping our Cocktail in the swimming pool I said to my husband, I never thought we would stay a place like this. That was memorable because it was just well above what I expected” (Interview 23).

#### *H. Perceived Professionalism of Local Guides*

The significant role played by the local guides to make a trip memorable was also emphasised by a number of participants (10). They highlighted certain good qualities of those professional guides who had impressed them during the trip such as guides’ knowledge about the local attractions, ability communicate well, ability to be friendly with tourists and their willingness to do extra things to delight tourists, for example, one participant commented: “...the things how they prepared to do for you, information that they give to you, the friendliness, and their willingness to be a part of your trip...” (Interview 28). “Some guides well, they just go off to their room and you don’t see them when you get to a hotel but other guides who join you and participate” (Interview 18). Another participant claimed “A good guide is certainly extremely beneficial...The company provided a New Zealand national as our guide. And I could talk to him at length [for] hours of time as we were walking, so I could ask him about anything...and his patience, been able to asking questions...sort of every opportunity, he was happy to answer” (Interview 22).

#### *I. Positive Emotions*

Participants referred their past MTEs to a number of emotions such as happiness, enjoyment and excitement etc. As one participant highlighted; “the memorable experiences will be the times that you felt very emotional, like very emotional, very excited or very happy, very surprised, and very curious. I remember things more when I had a very strong emotional experience” (Interview 18). It is rational to argue that the cognitive antecedents discussed above can cause subsequent affective emotions such as pleasure and arousal. Findings further revealed that post trip emotions (e.g. post trip happiness and satisfaction) may also have an effect on the autobiographical memory- “you tend to remember it more and therefore you talk about it more so it stays alive in your memory and it’s quite vivid and you can continue to experience that good feeling” (Interview 23)- which suggests that people may recollect their past good travel experiences over time in order to replicate the same good emotions which help them to rehearse their memory.



### *J. MTEs and Future Behavioural Outcomes*

With reference to the impact of these memorable tourism experiences on future travel decisions, majority of the participants (27) expressed that they neither revisited those destinations nor they will revisit them again in the near future. The major reason they brought into the discussion was that they want to experience something new from every leisure travel. They expressed various opinions such as 'there are many new places to visit before re-visiting places', 'the world is a big place', 'better to see as many as places during the limited lifespan', may decide to revisit places when the list of "must see" comes to an end and 're-visiting places is wasting money' etc. Nevertheless, majority of the participants (30) affirmed that they usually recommend such memorable trips and destinations to others. "My thought on travel is never going back to the same place twice because you would be disappointed, because if it was that good and if you go back and it is not that good it would break your dream from the first time you went. If you leave that memory as it was and just try somewhere else and plus the world is a big place, no need to go back to the same place twice" (Interview 1).

### **V. CONCLUSION AND MANAGERIAL IMPLICATIONS**

The findings of this paper provide valuable insights for tourist destination marketing organizations (DMOs) for better provision of memorable tourism experiences for their visitors. The paper suggests DMOs to re-evaluate their current marketing strategies which are highly focused on destination attributes [14], [15] rather than experiential aspects. While destination attributes can be an important element of memorable experiences (e.g. iconic tourist attractions), many elements of MTEs are experiential aspects e.g. perceived outcomes of the trip, perceived opportunities for social interactions and feelings of pleasure and arousal etc. The paper also suggests that although most of these experiential aspects of MTEs are idiosyncratic phenomena; they can still be influenced by tourism and leisure experience providers in certain ways.

A number of managerial recommendations can be made based on the study findings. First, facilitating to obtain easy and accurate information about the destination and tourism products can enhance the probability of delivering more MTEs for potential visitors because travellers can better plan their trips based on the quality and reliable information which in turn contribute to realise more memorable experiences by themselves. Poor information may prevent such opportunities and even disappoint visitors. Upon arrival of the destination, tourist experience providers (e.g. tourist attractions and tour operators) can deliver more learning experiences for travellers rather than just facilitating 'visiting' and 'seeing' something. Travellers should also be offered more avenues and opportunities to learn about the local history, cultures, languages and local lifestyles which may further add values to their experiences. Similarly, providing more opportunities for travellers to visit authentic local villages, to stay at accommodation places which are more close to real local life, allowing travellers to experience the actual way of local living,

encouraging them to immerse themselves in real local cultural ceremonies and to enjoy more authentic local foods and cuisines can also make a good impression in travellers' minds which will help to create positive memories about the trip.

Traveller's perception about novelty may link to undertaking quite novel tours, visiting strange touristic cities, staying at quite novel accommodations, tasting quite different foods, and immersing themselves into quite different cultures and novel ways of life etc. Hence, tour operator and other tourism experience providers need to critically think how they can distinguish their products from 'typical mainstream tourism products' so that they can deliver a unique experience to travellers. In addition, continuous product developments and modifications are essential for attracting repeat visitors since many travellers tend to be novelty seekers in the context of travelling. Similarly, incorporating more avenues for travellers to engage in social interactions can also positively contribute to MTEs, for example, providing more opportunities for them to interact with locals. Encouraging family travels and group travels can also be more memorable as they tend to enhance the level of enjoyment of the trip due to the 'group mentality' i.e. experience the trip as a group. Especially, traveller's perception of a group tour is directly influenced by the degree to which the group cohesiveness is available and the level of pleasant interactions among the travellers.

Serendipitous and surprising experiences can also trigger travellers' memories about the trip. Thus, planning tourism experiential products which facilitate travellers to experience more serendipity during the travel will be more memorable for them, for example, in the context of group tours, tour operators can incorporate various unexpected and spurring events in to the tours so that travellers may perceive more serendipity during the tour. Further, these tours can offer more flexible options for travellers so that they can plan their own experiences which may also provide more opportunities for serendipity during the trip. In addition, travellers tend to remember trips where they encounter very professional local guides who can be a key determinant of the success of the tour. Both the technical quality i.e. knowledge and expertise in guiding and the functional quality i.e. interactive skills are essential for professional guiding which can impress travellers. Further, travellers tend to have random encounters with the local residents throughout the trip at various locations and their favourable perception about locals' friendliness, helpfulness and willingness to welcome tourists can create a long-lasting memories in their minds. Despite this factor is not under the direct control of tourism services and experience providers, macro level DMOs need to undertake awareness and promotion campaigns to educate local people to be more friendly and hospitable towards foreign travellers.

Finally, certain emotions such as happiness and excitement were found to be other determinants of MTEs. DMOs can gain important insights from the finding that travellers tend to recollect past memorable experiences in order to replicate the same good feelings after months and years following the trip. Hence, DMOs may attract previous visitors by clever promotions which creatively invite them to replicate previous good feelings. MTEs also can have a

positive impact of attracting new visitors to the destination through word of mouth recommendations since many travellers tend to recommend MTEs to others.

In relation to future research, more quantitative type of research is recommended in order to further validate the findings of this investigation.

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# Social Network Sites for Elderly People - A Critical Analysis of Established German-Speaking Online Platforms

Tobias Fritsch, Daniel Brem, Frederick Steinke, Andreas Muhl-Lassen, and Frederik Kerksenfischer

**Abstrac**—Due to the increasing Internet usage of elderly people, Social Network Sites (SNSs) for this audience group gain in importance. The present study analyzed 19 German-speaking online platforms for the elderly with regard to 26 specified success criteria. Therefore, a subjective evaluation on the basis of those criteria was conducted for social community, forum and content management system as most important types within SNSs. In order to approve this evaluation, objective data was gathered from providers of third-party website analyses. On the basis of a group discussion and an additionally matrix analysis, the study showed that website's success does not depend on the quantity of offered main categories but rather on mature and distinct functional offers. Within the matrix analysis, a large variance (41.8 vs. 6.0) between the analyzed SNSs was highlighted. Within this important audience group, achieving a critical mass is a major prerequisite for a successful SNS.

**Index Terms**—Elderly, internet, older people, social network sites, sns.

## I. INTRODUCTION

Social interaction is an innermost human need at any age [1]. However, especially elderly people often have to suffer from isolation since family and relatives do not have enough time to care or the number of close friends decrease. Due to global demographic changes, the situation will increasingly exacerbate [2]. As a result of this trend, the Internet gained in importance for older people and many online offers for the elderly arise. However, these websites are not equally successful. In general, a website's success highly depends on the visiting frequency: the higher it is, the greater is the success of the website [3]. For some websites and especially for SNSs, not only the time of visiting but more the social exchange within a platform is important. In particular, older people have special requirements for SNSs [4]. Thus, a measurement methodology referencing the functionality of a SNS as a critical success factor is needed which can be proven additionally by objective third-party data.

The current research approach is based on [5]. In line with

his findings, the present article contains an empirical approach to use the pre-defined categories of SNSs as well as specific criteria in order to analyze offerings for elderly people. Thus, the research question of this article is defined as follows: *Which characteristics determine the success of German-speaking Social Network Sites for elderly people and how can this success be measured?*

## II. BACKGROUND

This section contains the background information about the aging population and an increasing Internet usage by older people. It is referred that these developments lead to a growing demand for age appropriate SNSs.

### A. Aging Populations

The demographic change, meaning a growing aging society [2], is one of the global mega trends in the 21st century [6]. Germany is one of the most involved countries. The German population will belong to the oldest in the world by 2035. By the middle of this century, more than half of Germany's inhabitants will be older than 50 years [7] and the proportion of people aged 65 years and over will increase from one fifth in 2005 to one third in 2050. Analogically, the over eighty-year old people will even triple to more than 10 million people [8].

Main factors for this trend can be seen in an increasing global life expectancy, a declining fertility rate and an aging of the "baby boom" generations [9]. Adapted from [10], the Federal Republic of Germany is thus subject of the so called "threefold ageing" as the following three criteria are met: Absolute growing figure of older people, relative increasing number of older people compared to the younger and rising number of very old people, defined as 80-year-old and above. Thus, the importance of age appropriate products and services can be seen as a social challenge for a durable integration into the society.

### B. Increasing Internet Usage

The Internet is one way for older people to make existing social contacts more accessible or to establish new ones [11]. Due to its increasing use, almost 60 percent of people aged 60 years and above currently use the Internet for mails, information research, or online banking in Germany [12]. Especially the spread of user generated content was recognized not only within the younger generation [13], [14].

On par with the negative correlation between age and the number of social contacts, the rising number of elderly people using the Internet offers high potential for social exchange platforms, especially in the German context [4].

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According to the study by [15], the membership of the elderly in SNSs has also grown. Whereas in 2009 only seven percent of people aged 40 to 49 and three percent in the age between 50 and 64 are registered in social networks, the numbers rose to 20 percent (age 40 to 49) and 10 percent (age 50 to 64) in 2010 [15].

### C. Demand for Age Appropriate SNSs

The usage of SNSs in general is accompanied by various reasons. The mentioned challenges demonstrate the demand for age appropriate SNSs. Therefore, an evaluation tool to measure the success of SNS for the elderly is needed in order to improve current offerings or to create successful new ones. Thus, a classification of existing SNSs for elderly is implemented based on pre-defined criteria.

## III. METHODS

### A. Classification of SNSs

In order to evaluate SNSs in view of their functional offers, various categories had to be defined. Considering the variety of existing functions on websites, a unique grouping in accordance with the detection of multiple different function designs in various categories (such as forums, social community, or free mail provider) was difficult. Thus, the author conducted various expert interviews in order to detect a general classification and the most important success criteria for each SNS category [5]. Due to the following focus group discussion, the main categories were defined as „social community“, „forum“ as well as „content management system (CMS)“. It is based on the OSI Reference Model by [16], which represents an abstract form of structure commonly used in computer science. The defined criteria are illustrated in Table I.

### B. Matrix Analysis

The website's assessment was conducted with reference to the classification of the SNS. The 26 criteria ensured full applicability of the three categories. Every website obtained subjective scores for its functional offers by means of a four point Likert scale. The scores ranged from 0 („not existent“) to 3 („very pronounced function“). Depending on functional offers of single websites, the analyzed SNS achieved scores for each of the three main categories.

Subsequently, the three single scores were added to the final score by using a matrix, within the so called matrix analysis. In order to do so, special weighting factors were set up to compare the SNSs among each other.

In order to determine the weighting factors, the decisive added value of a website was assessed by the most pronounced function. In case there was not only one main category, the one with the highest score was weighed by 60 per cent and the other one by 40 per cent. If all three appeared, the one with the highest score was weighted by 60 per cent again, the others by 20 per cent. Due to the rating of 0 to 3 points for the 26 criteria per main category, a maximum value of 78 points can be reached for every evaluated SNS. Since four out of 19 websites were magazines and guides for older adults without the possibility of opening a personal account, these pages could not be evaluated using the matrix analysis.

### C. Website Analysis Tool

On the basis of the subjective evaluation of the SNSs by means of the matrix analysis, the Website Analysis Tool (WAT) was used to objectively assess the websites. A correlation analysis was conducted to outline interrelations of the gathered data. Before this background, it became possible to compare these results with those of the matrix analysis.

For further examination, the WATs „seitwert.de“ [17] and „alexa.com“ [18] were used. [17] offers its own evaluation of websites by use of various criteria and their weightings. [18] registers the users' accesses to websites and allows an interpretation of the users' average profile and their attitudes on the basis of this data and its subsequent processing. It analyzes quantitative facts such as the „amount of time spent by a user on a website“, the „site views per user“ or the „percentage of users with a single site view“. The results are reflected in a score system which ranges from zero (0) to 100. In this context, Google PageRank [19], which assesses the link popularity of websites on the basis of an algorithm export and also indicates the success of a website, provided additional data.

## IV. RESULTS

### A. Matrix Analysis

The final scores achieved within the Matrix analysis are illustrated in Table II. It is notable that a social community (SC) and a forum (F) was existent at more than half of the tested websites, all ranked in the upper third. By contrast, a content management system (CMS) is less widespread (only for out of 19 websites). Since there obviously was no general distinction between the analyzed SNSs in terms of the function offers, a good ranking depends more on a well-established and mature functional offer.

TABLE II: FINAL SCORES OF THE MATRIX ANALYSIS (SOURCE: AUTHORS' DESIGN)

Website	SC	F	CMS	Score
platinnetz.de [20]	x		x	41.8
seniorentreff.de [21]	x	x	x	40.0
MC50Plus.de [22]	x	x		32.6
ahano.de [23]	x	x		32.0
50plus-treff.de [24]	x	x		31.0
Romantik-50plus.de [25]	x	x		31.0
feierabend.de [26]	x	x		24.8
herbstzeit.de [27]	x	x		24.6
planetsenior.de [28]	x	x	x	24.2
aktiv 50.net [29]	x	x		23.6
silbernetzwerk.de [30]	x	x	x	23.0
valvere.de [31]	x	x		23.0
senioren-ratgeber.de [32]		x		19.0
sencity.de [33]	x			11.0
reifezeit.net [34]	x			6.0
aktive-rentner.de [35]				-
55plus-magazin.net [36]				-
senioren-kompass.de [37]				-

As seen in Table II, four websites were not integrated into the numerical evaluation due to the missing possibility of social interaction by means of user accounts [35]-[38]. The

analysis of the remaining 15 SNSs for elderly people revealed that [20] got the best overall score (41.8). Those three SNSs with only one interaction category each [32]-[34] got the lowest score (19.0 to 6.0). Only three out of 15 SNSs

provide all three main categories [21], [28], [30] Due to the fact that a maximum value of 78.0 was achievable, the end values of the analyzed SNSs were in the middle or lower range.

TABLE I: EVALUATION OF THE MAIN CATEGORIES SOCIAL COMMUNITY, FORUM AND CONTENT MANAGEMENT SYSTEM (SOURCE: SUTHORS' DESIGN)

Social Network Sites		
Social Community	Forum	CMS
<p><b>General Functions</b></p> <ul style="list-style-type: none"> <li>• Networking with known social communities</li> </ul> <p><b>User</b></p> <ul style="list-style-type: none"> <li>• User Profile</li> <li>• Contact lists and grouping function</li> <li>• Pin board</li> <li>• Ability to establish groups</li> <li>• View online contacts</li> <li>• Chain function (concatenation of friends)</li> <li>• App functions</li> <li>• Adjusted for rights and privacy requests</li> </ul> <p><b>Calendar</b></p> <ul style="list-style-type: none"> <li>• Display of private and public events</li> <li>• Adjustable rights for access and visibility</li> <li>• Function to share appointments</li> <li>• Further release function</li> <li>• Extra points</li> </ul> <p><b>Photo Album and Video Functions</b></p> <ul style="list-style-type: none"> <li>• Simple upload / java mass upload</li> <li>• Receipt of the photo quality</li> <li>• Grouping function</li> <li>• Adjustable for access rights</li> <li>• Embedding videos</li> <li>• Comments / like me</li> </ul> <p><b>Private Messages and Direct Messages</b></p> <ul style="list-style-type: none"> <li>• Single and mass messages</li> <li>• Display (read / unread) messages</li> <li>• Input messages about events (contact inquiry)</li> <li>• "Poke" function</li> <li>• E-mail notification of new messages</li> <li>• Direct message</li> </ul>	<p><b>General functions</b></p> <ul style="list-style-type: none"> <li>• Adjusted for rights and privacy requests</li> <li>• Internal search function</li> <li>• Networking with known social communities</li> </ul> <p><b>User</b></p> <ul style="list-style-type: none"> <li>• User Profile</li> <li>• Avatar</li> <li>• Contact lists</li> <li>• View online contacts</li> <li>• Adjusted for rights and privacy requests</li> </ul> <p><b>Private messages</b></p> <ul style="list-style-type: none"> <li>• Private messages</li> <li>• Display (read / unread) messages</li> <li>• Extra points</li> </ul> <p><b>Topics</b></p> <ul style="list-style-type: none"> <li>• Display topics according to certain criteria</li> <li>• Topics and forums can be subscribed</li> <li>• Ways to manage subscribed threads and forums</li> <li>• Displays the users who access a topic</li> <li>• Ability to send a link to a topic by e-mail</li> </ul> <p><b>Posts</b></p> <ul style="list-style-type: none"> <li>• Preview</li> <li>• Various tools for creating / managing a topic</li> <li>• Integration of video or graphics</li> <li>• Attachments</li> <li>• Poll function</li> <li>• Post count</li> <li>• BB-Code</li> <li>• E-mail notifications of replies</li> <li>• WYSIWYG „What You See Is What You Get“</li> <li>• Post rating</li> </ul>	<p><b>General functions</b></p> <ul style="list-style-type: none"> <li>• Layout and design created with CSS</li> <li>• Plug-ins</li> <li>• Internal search function</li> <li>• Optimized for Smartphone</li> <li>• Comment function</li> <li>• Poll function</li> </ul> <p><b>Cross-Publications</b></p> <ul style="list-style-type: none"> <li>• Post can be transported to an article</li> <li>• Blog entry can be transported to an article</li> </ul> <p><b>Tools / Widget</b></p> <ul style="list-style-type: none"> <li>• Latest Comments</li> <li>• Latest News</li> <li>• HTML widgets from third-party</li> <li>• Spam protection</li> <li>• Extra points</li> </ul> <p><b>Publishing – options</b></p> <ul style="list-style-type: none"> <li>• Users can write articles and publish</li> <li>• Articles can be assigned to multiple categories</li> <li>• Articles can be published on a homepage</li> <li>• Preview function</li> <li>• Adjustable rights for the article consideration</li> <li>• Publication in the future</li> <li>• Content-life-cycle-management function</li> <li>• Status of an article (published / inactive)</li> <li>• BB-Code</li> <li>• Integration of video or graphics</li> <li>• Attachments</li> <li>• WYSIWYG „What You See Is What You Get“</li> <li>• Post rating</li> </ul>

### B. Website Analysis Tool

First, there was a strong significant positive correlation between the final scores of the SNS and the data from seitwert.de. This finding validates the subjective evaluation of the SNS on the one hand, and, on the other hand, corresponds to the assumption that a well-established functional offer is the key success factor for SNS when referencing elderly people. This result is even more impressive since the correlation between the final score of the WAT and the overall assessment of [17] is still stronger. The small but notable difference of the correlation between [19] and [17] overall assessment stems from the fact that PageRank is part of the seitwert.de final verdict. Since a website operator is able to influence the PageRank, it should not be used as a single indicator for the success of a website.

Second, a strong significant correlation between the site views per user and the final score of the matrix analysis proved the assumption that the direct comparison of diverging attitudes of users was more meaningful with regard to different categories.

Third, the very strong significant correlation between time spent on a website per user “ and „site views per website and user“ reflects the fact that the average number of site views increased when the estimated amount of time spent on a website increases and vice versa. The positive significant correlation between the overall assessment of seitwert.de and the site views per user, or the time spend on a website per user respectively, confirm the assumption that a website's success highly depends on the visiting frequency.

Fourth, in terms of the „share of website visits with only one site view“ and the “site views per website and user”, the time spent on the website must be limited since any other action on the website would indicate the exclusion from this category. Accordingly, a negative correlation between these two sets of data could be observed. Furthermore, the user was able to spend a certain amount of time on a website by a site view only (e.g. just reading) before deciding to close the page. In addition, there existed a negative increase of the percentage of users with a single site view compared to the average site views per users. If the average site views per user increased, the percentage of users with a single site

view decreased.

## V. DISCUSSION

The study showed that a website's success does not only depend on a great number of offered main categories, but rather on mature and distinct functional offers.

Websites focusing on content management systems such as magazines and guides showed a significantly higher percentage (up to 70 per cent) of users who only view the page a single time. This fact can be explained by good rankings of these websites' contents in search engines. By entering keywords into the search engines, users are directed to the corresponding website and can access the desired information. As soon as their needs for information are satisfied, there is no reason for remaining on the website and thus, users leave. In doing so, the user has viewed the content of the page only once.

A website's aim is to encourage the user to spend time on it as well as to increase the number of site views per user or to keep it on a high level in order to generate revenues (such as Google AdSense, integrated shop, or the like button). Even though the presented numbers are partially low, there is no indication of an unsuccessful website. Google PageRank rates a website as successful in case it was ranked with a result of five and possesses high link popularity. Despite a rather short amount of time spent on the website and a small amount of site views, a website can nevertheless be successful.

Websites which focuses on social communities and forums offer their users a wide range of possibilities to interact (e.g. creation of a personal profile, messages, instant messaging, or the like button). This fact leads to an increased amount of time spent by a user on those sites as well as to increased site views. The significant correlation between the time spent on the website and the average site views per user leads to a high number of site views. For a content-based account, the percentage of users with only one site view is expected to be very high, while the amount of time spent and the number of site views by a user can be very low. This fact differs from websites offering a social community. Hence, the number of users who only view a page once decrease.

## VI. CONCLUSION

The analysis of social networks for elderly documents the current state of development in the field and highlights the existing functionalities in German networks. Based on the obtained results, an estimation of the distribution, application and potential of websites can be achieved in this research area. Features leading to a particularly high usage were identified within the target group and the contributing effects were shown accordingly. In summary, the current SNSs for elderly people were discussed and a matrix analysis was presented. However, as already stated, network effects in this particular target group have also a significant impact on the actual use of a website. By achieving a critical mass, for example due to easy usability of the website, existing SNSs as Facebook can be pioneer for social exchange platforms with an audience group specific content [39]. The concept of

an age-specific community site therefore seems to be working only partially. The existing SNSs for elderly have a lot of potential for improvement. Future work should analyze the benefits for the elderly that arise through the usage of SNSs. Furthermore, experiments should be executed to answer the question how SNSs support older people in their everyday life.

### A. Limitations

Firstly, the main categories for the criteria for evaluation based on expert interviews and focus group discussions. Moreover, there could exist additional criteria for the evaluation of the SNSs for elderly people.

Secondly, the timespan of analyzing and evaluation of the 19 websites was from September to November 2011. Till today, there can be deviations within content and functionality of the different SNSs.

Thirdly, the rating of the SNSs and the resulting overall scores based on the authors appraisals and experiences.

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# Leadership and Knowledge Sharing: A Case Study

Mônica Figueiredo de Melo, Zenília Maria de Almeida, Ana Carolina Silva, Ana Beatriz de Souza Gomes Brandão, and Michelline Freire Moraes

**Abstract**—This present article is about knowledge sharing in an engineering company. Based on key concepts of knowledge management and theories of knowledge in organizations, the study sought to identify favoring and hindering factors of the leadership indicator for the sharing of knowledge at an engineering firm. Semi-structured interviews with coordinators and staff members were carried out. A qualitative analysis was then performed, which highlighted that the behavior of knowledge sharing, in the point of view of the coordinators, is part of the company's practice, while for the staff members this indicator represented an obstacle for the sharing of knowledge. The following were identified as facilitating factors for the sharing of knowledge: Management towards knowledge and leadership development. The barriers found were: the lack of systemic thinking and the absence of exchange between teams.

**Index Terms**—Knowledge, knowledge sharing, leadership.

## I. INTRODUCTION

Over the centuries, many philosophers have failed in their attempts to define the meaning of knowledge. Also mention that Russel would recommend not defining explicitly such a term for it would be difficult notion to conceptualize [1].

In the 1970s, due to competitiveness and to rapid technological changes, efficiency in the business environment came to depend more on ongoing learning and updating than on the managerial competence [2].

Around the end of the twentieth century, many organizations suffered from "learning disability" and it was only through systemic thinking that reason and intuition were reconciled. It is expected that in the future companies build processes based on their organizational structures, norms and values that are directed towards knowledge sharing and creativity. The structures should be further decentralized, flexible and should permit integration between teams to disseminate knowledge [3].

A sensitive factor as to knowledge sharing is communication, which is essential to teamwork: for the studied company, affective communication is critical to favor the flow of technical information and interpersonal relations. The present study analyzes the favorable aspects and the hindrances found by leaders and their staff in sharing knowledge [4].

## II. THEORETICAL BASIS

The analysis of the favoring factors and hindrances in leadership in the area of knowledge sharing in the company is

the subject of this study.

Knowledge Management is, in brief, the effort to improve human and organizational performance. Knowledge management should have one main objective, which is to make sure everyone in the organization has access to knowledge [5].

Knowledge organizations are companies that present these values and are oriented to the acquisition, processing and dissemination of knowledge that constantly flows in the organization [6].

Power in organizations can come from both the leader and their staff when they have influence on attitudes, behaviors or feelings. In this case, knowledge when viewed of power, is able to influence and dominate others [7].

The term 'knowledge sharing' only makes sense when it is put in action and generates value. In order to more effectively transmit knowledge it is enough to put people together and let them talk to each other. Knowledge sharing in organizations is influenced by many variables that can impact this process in different ways. These include variables of knowledge transfer, with the transmitter and receiver of knowledge, and the context in which knowledge sharing happens [8].

Reference [9] shows the person who expresses some meaning to someone, never produces exactly the intended effect in terms of understanding in the mind of the receptor. What may also happen is that the speaker finds it hard to put in words what he or she would like to share with the others.

Attitude is a predictor of behavior and means the mental state of readiness or predisposition to influencing responses of evaluation directed to objects, people or groups. One base model which is linked to Systems Theory and theories of human communication. The model considers that the process of sharing knowledge is composed by four phases, characterized by specific actions in each phase. These actions were highlighted as compatible aspects with the role of leaders [10].

The required knowledge, knowledge sharing and organizational behavior are aspects associated with leadership and are intertwined with each other, but by means of the theories presented could lay the foundation for structuring and completion of this research. Item III, will detail the development of research presenting its methodology.

## III. RESEARCH METHODOLOGY

This research used a qualitative approach in a case study, with an exploratory and descriptive focus. This case study helped understand more broadly and thoroughly the processes related to knowledge sharing in the company studied. In this case, given the nature of the problem and objectives presented before, it is believed that a qualitative



study enabled a deeper understanding of the reality of the chosen company.

The organization in which the study was conducted is called Maia Melo Engenharia Ltda. It is a consulting engineering company, founded in May 31, 1982, operating in the fields of studies and projects, management / supervision / building inspection and other technical services. The company is a pioneer in the field of Quality and was the first consulting firm to get certified by ISO 9001/1994, in the North and Northeast of Brazil on September 29, 2000 and the first national consulting engineering firm to gain the certification the adequacy of its quality system to the NBR ISO 9001/2000 on 11.29.2001. This organization studied is a private company which operates in the Northern Region (Roraima, Rondônia, Acre, Amapá Amazonas and Pará) in the Midwest Region (Mato Grosso) in the Northeast (Maranhão, Piauí Ceará Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe and Bahia), with projects in Rio de Janeiro and the Federal District.

As the survey sample covered project team coordinators, a total of four, (4) as well as four (4) employees who were subject to the same coordination, intentionally chosen by the time they had been in the company, taking into account periods of change in the board of the company. By inviting these employees the idea was to collect more information.

The following criteria was defined for choosing the sample representativeness (interviewing all 4 project coordinators) availability (interviewing four employees who were available for the interviews during the stage of data collection) and accessibility (interviewing people residing within the city of Recife, Pernambuco, Brazil).

It was established as a criterion for choosing the employees' length of service, so there were 2 employees with more than eight years of work in the company and another 2 under eight years of work in the company. The time was determined due to the changes in management that occurred during this period. People directly involved in the research amount to a total of (8) respondents.

Primary data was obtained on the basis of semi-structured interviews. This technique works so that the interviewee can be positioned freely in their own settings, in which the interviewer raises issues to be addressed.

In the first instance, the researcher contacted one of the project coordinators for a closer understanding of how the teams worked. In respect to the coordinators contacted, we verified the feasibility of researching the four coordinators of projects aiming to collect data about their perception about the existence of knowledge sharing as part of culture and its impact on organizational success.

At another point, respondents were contacted by the researcher in order to advance to schedule a day and time for the interview. The interviews were conducted in the actual working environment of the participants, with an average duration of 1 hour each and were all digitally recorded and later transcribed.

The instrument used for analysis was a qualitative interview guide. This instrument contained open questions so the interviewee could express their views and their opinions about the topic searched. Based on theories of knowledge in the related fields, we developed a categorization of responses

oriented to the application of the content analysis presented below. For the content analysis non-structured questionnaire were used so as to enable a better visualization of different characteristics and meanings. The content of elements was detailed and clustered around categories. The elements constituted the units of analysis, words that refer to indicators (culture, leadership and motivation), were evaluated according to their position within the contents, meaning and values assigned [11].

In the process we also needed to read between the lines and analyze the contradictions reported in several speeches. The answers of the respondents were grouped according to categories; histograms were produced with the distribution of frequencies of all relevant aspects relating to the indicators identified.

One limitation of this study was that more emphasis was given to the perception of the coordinators of the company studied and a small number of employees were interviewed. Another difficulty is to get the actual position of the respondents, probably they felt apprehensive raising real issues that could denote faults or weaknesses on their performance.

The next items will describe the factors that facilitate knowledge sharing and hindrances to the sharing among employees of the company.

This paper focused on leadership indicators as in figure 01.

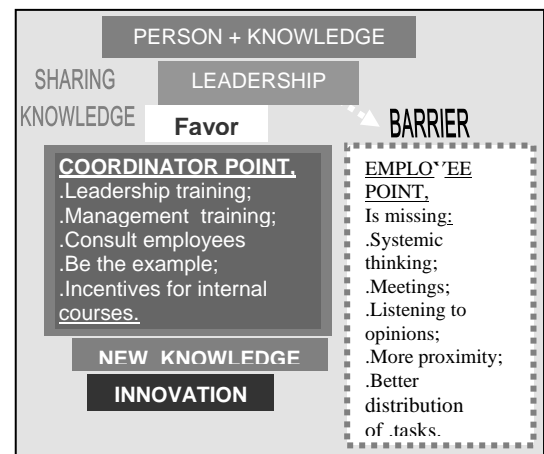


Fig. 1. Conceptual model.

#### IV. RESULTS

The findings will be presented that relate to the indicator of leadership as a facilitator of knowledge sharing. The interviews that support this item are all referring to the testimony of leaders.

The top management has an essential role in supporting programs aimed at knowledge management. Reported that leaders who defended knowledge initiatives were cultured and knowledgeable and drove toward a knowledge culture.

The change of posture to promote knowledge sharing should begin by the leaders, because it is they who should initiate and encourage this behavior to spread knowledge in organizations. Respondent 4, explains his initiative to foster the behavior of sharing knowledge [12].

*"When there is a need to take immediate knowledge, such as the embanking project, our coordinator puts a technical*

expert who dominates the subject near us and he teaches everything to the team." (Interviewee 4).

Stresses the importance of an environment of trust being encouraged as through a trust people tend to share more of their knowledge, and if they perceive ethics and rewards, there will be clear communication between managers and leaders. However, the speech of Engineer 4, below, shows that in his practice as a coordinator there is a mutual interest between him and his followers, but doesn't mention other factors that could stimulate the practice of sharing knowledge.

*"Here we have a culture that whenever some process is not okay, then that employee can propose to change the process or any changes. This has happened with both leaders as with the team as a whole."* (Interviewee 4).

The testimony of engineer leader (interviewee2) below, shows he stimulates sharing and developing professionally his subordinates, and acts like a mentor. His interview determines attitudes to facilitate a process of sharing knowledge in his vision.

*"I have formed some people who work in the area, I try to train these people and then they take their own flights. I'm glad to be able to pass and there are many examples here of people who today are in large companies as engineers."* (Interviewee 2)

The viewpoint of the leaders responsible for the organization teams was that there is access to exchanging information, to get feedback and ideas between coordination and coordinated as seen in Table 01, although in the view of employees that statement was not found, establishing this perspective as representing the views only of the coordinators.

Another relevant factor is the testimony of the Engineer 3, who says that the room for communication with the team is facilitated and the opinions of the staff are taken into consideration in decision making, but the same coordinator also stresses that it is not him who opens this space, but the participative member of the staff.

This item contradicts some theories relating to leadership, which stress the influence of the leader is acquired by means of effective personal relationship between leader and staff and that this relationship enables the leader to take the best its staff has to offer.

*"I ask the team what is the best way to do something and I give them the power to choose. I think being open or not depends on the developer, some people can do it naturally, no embarrassment, in general people are fine with it."* (Interviewee 3)

Finally, the points of greatest relevance collected and analyzed in this indicator, show that the engineers understand their role as leaders as favorable and believe that they are stimulating the practice of sharing knowledge through actions, as indicated by the participation of their teams in development courses, management training and also the formation of new leaders.

Table I below shows the relevant aspects of the findings of leadership facilitators for sharing knowledge.

The next step aims to categorize issues concerning factors that represent barriers of sharing knowledge between the team of the company's projects surveyed.

TABLE I: CATEGORIZATION OF POSITIVE ASPECTS TO SHARING KNOWLEDGE

INDICATOR	F	SIGNIFICANT ASPECTS - FAVORABLE
LEADERSHIP (Coordinators' Point of View)	4	Management training courses for professionals
	4	Training new leaders
	3	Employees are indicated for internal courses.
	3	The coordinator tries to set the example.
	3	The Coordination involves employees in decisions.
	17	TOTAL

Source: Research data.

The indicator Leadership as barrier to knowledge sharing is restricted to employees vision. Table II illustrates the relevant categorization and shows the main barriers for knowledge sharing mentioned in this study.

TABLE II: CATEGORIZATION OF REPRESENTATIVE GATE TO SHARING KNOWLEDGE

INDICATOR	F	SIGNIFICANT ASPECTS – BARRIES
LEADERSHIP (Employee Point)	4	Leaders do not practice systems thinking.
	4	Insufficient planning meetings between teams.
	4	Opinions and suggestions only among engineers and coordination.
	4	Poor listening to the employees' needs.
	4	Inadequate distribution of tasks between teams.
	3	Delegation without monitoring.
	23	TOTAL

Source: Research data.

In the following lines, the employee tells us about the aspects of good listening and the lack of availability of engineers to come closer to the team and be able to understand their real needs as shown in Table II.

*"The meetings between engineers could also see where there could be changes so that there was more help and more interaction between the teams, to help break down barrier"*(Interviewee 6)

Interviewee 7 speaks about the difficulty to exchange knowledge between leaders and staff, due to poor communication (Table 02).

*"The coordinators would be listening more the employees' needs and do more meetings with us, to talk about the priorities in each project. We should get together to have more unity to help everyone. For example, if a project x, has two coordinators, I think it does not belong to neither of them, but should collective."* (Interviewee 7)

Reference [13] shows the most important feature of any coach is to be a good listener; the act of human communication is a miracle. The coach should encourage people to perceive other parts of reality and try to find alternatives, interpret the facts and discover new ideas that lead to the growth of knowledge. This is another example related to dialogue as a facilitator of sharing knowledge among engineers cited as deficient by respondent 8.

*"We need to have more dialogue with the coordination. They are busy and have a thousand things to do, but they must support us. If I were the coordinator I'd be near to see how hard and to know: "what are you feeling?", "What is*

*missing here?", "What is necessary?" Because often, we delegate and then we think: "Okay, now I'll concentrate on something else." But there got to be contact at all times. Communication between us must improve!" (Interviewee 8)*

A person can only transmit knowledge on solving a particular problem. Below, the employee suggests actions their leaders could take to improve.

*"There are follow-up meetings of the board with the coordinators and assistants of the coordinators, but there should be meetings for each section, CAD drawing, Excel industry, computer industry, technical areas, there could be monthly meetings for each section and they'd meet and listen to the people involved." (interviewee 5).*

Leaders should change the way in which they act before facing changes, rethink attitudes that have been developed. The leader must learn to listen, orchestrate initiatives and should be aware of his or her position, to be the example of his speech, be true, have passion for the values and encourage more systemic patterns of thinking. He needs to actually accept the challenge of change so as to create an environment in which people also want to change and thus stimulate attitudes towards building knowledge in the team.

The contributors expose below their feelings about the consequence of the lack of listening to their ideas by their leaders and what it can generate in terms of loss for the company. Not listening leads to dissatisfaction and consequently a barrier that is generated by the leader.

*"If the employee gives an idea or wants to innovate and if he is not heard, what will happen? He will never look for anyone, and a door will be closed for his ideas and knowledge. The other question is, if he is heard and gets no response. Gosh! That's the worst thing because the employee spent his time studying a certain subject, to go to his direct boss to says, look, I have an idea! And the guy hears it and never puts it in practice. He will be discouraged. So the main thing for the leader is to be a good listener, go ahead and give feedback on that idea to the author of the idea. I think this should happen here." (Interviewee 5).*

*"There is a dispute because everyone just wants to finish each work. Sometimes we do not talk nor give suggestions because we do not feel there is any room for that." (Interviewee 7).*

Below another employee exposes the difficulty experienced by not being encouraged by their leader to share information with a colleague (Table 02).

*"I have already taken up some scolding! They've said to me, "look at your work," but I want to help my colleague and I know how it's done! I help anyway, even if I lose a little bit of my time so then I'll do mine. And I've heard: you can't, you can't!" (Interviewee 8).*

There are plans for sharing knowledge among leaders. He said that there is an interest in having meetings for dissemination. This idea could be the beginning of a knowledge management strategy as shown in the speech of a coordinator below.

*"[...] I had the idea of making meetings with coordinators to pass on knowledge. I saw this in the medical field, every week a doctor would present a case to colleagues, cases of success or failure to transmit. I wanted to do it here. For each project a coordinator would transmit experiences to others,*

*but I could not, because there is so much to do here, and the ones presenting would have to spend extra time preparing their presentations. But it is a path that we can still try!" (Interviewee 4).*

This topic is relevant for the employees' vision on the role of leaders in the sharing of knowledge, highlighting the lack of stimulus for knowledge exchange between individuals and between teams and leaders. For employees this attitude could be stimulated by developing better listening.

Finally, some hindrances to sharing knowledge are worth examining as key issues regarding leadership.

In the indicator of leadership as a barrier to knowledge sharing a new vision could be sought in order to bolster the relationship between leaders and their teams, through the exercise of systemic thinking by managers that would result in a broader view of the company's road, conducting a strategic plan that would aim at actions in this field across the company as a whole.

As shown in Table 02 above actions to remove these barriers need to be planned and implemented. The key issues relating to leadership focused on knowledge sharing are not being seen by the team member probably because these facilities do not have enough strength to work on attitudes directed at passing on knowledge, whereas the aspects that represent barriers have strength of the staff but leaders are not relying on it and therefore it turns out to be barriers which divide the company and prevent the circulation of knowledge. Given these arguments, one can understand that knowledge has no strength to move, or incentive to flow in the organization, and these issues could be addressed so as to improve the process of creation and innovation, which are facts that impacted the success of this company.

It is then fitting to ponder over the notion that there is a need to review the aspects related to a contemporary management, which is related to being able to develop intuition, to broaden perceptions, emotions and imagination, thus transforming managers into leaders and enhancing organizations.

## V. FINAL REMARKS

This paper focused on a comparison between the central vision of the leaders and their teams. The research found that while implementing knowledge sharing policies, one must overcome barriers to the improvement of interpersonal communication processes, intergroup and organizational and adopt management styles that facilitate cooperative work and commitment of employees.

The managers interviewed in this study have a vision and experiences that favor providing training to their teams. This point was a significant one and was supported by employees who feel privileged by the ease with which they acquire more knowledge and evolve professionally at the company.

The issue of knowledge sharing has been identified as of interest by the respondents and no association was found with respect to knowledge, power and hierarchic position.

The company has been seen over its history a record of knowledge sharing through the influence of the founder that was intended to generate actions for growth and for the valuing of engineering.

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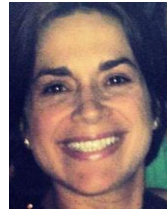
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# Quality Competitiveness of Latvia's Food Industry in the Fish Products Group

J. Priede

**Abstract**—The aim of this paper is to develop framework for evaluation of quality competitiveness of countries exports and to use this framework to examine quality competitiveness of Latvia's food industry in the fish products group.

To achieve this aim author studied topic related scientific literature and used appropriate methods to examine quality competitiveness according to the other researchers and author's own developed approach.

To successfully achieve the aim of the paper and fulfill the tasks set the following research methods were used: 1) monographs method; 2) logical - constructive; 3) statistical analysis techniques: structural analysis and regression analysis; 4) graphical method.

At the end of the paper author make conclusions about developed methodology of evaluation of quality competitiveness and main conclusions about examined quality competitiveness of Latvia's food industry in the fish products group.

**Index Terms**—Competitiveness, fish, export, quality.

## I. INTRODUCTION

Quality is a complex phenomenon and there exist no general accepted definition, which fits every purpose and all the complexities in teal economics.

While competitiveness of enterprises has been studied by many scholars around the world, competitiveness of nations is a relatively new discipline.

Studies of export competitiveness in the world markets are not new. Several attempts to evaluate export competitiveness have been made in the past, primarily in Eastern Europe. In Czechoslovakia, for example, a detailed and comprehensive analysis of the study was undertaken already in the 1960's. Similar approach was used by World Bank studies of the price and quality competitiveness of exports by other authors.

Quality competitiveness topic is still important and research in this field continuous. Researchers are using different methods to look at the quality of exports and its competitiveness. Researchers are developing different methods and indicators to measure quality competitiveness of exports, product differentiation and quality link to changes in exports, product-quality view, exporters behavior under quality constrains.

Main problem author is facing in this article is measuring quality competitiveness of countries and industries. Until now there are several approaches in the literature how to

measure quality competitiveness of countries or industries or product groups and each one of them has their advantages and disadvantages. Approach is still discussable due to the nature of measuring quality itself and measuring quality competitiveness of country is still quite new and undeveloped field.

## II. THEORETICAL FRAMEWORK OF QUALITY COMPETITIVENESS OF COUNTRY AND INDUSTRY

Theoretical and empirical research increasingly point to the importance of product quality in international trade and economic development [1].

Studies of export competitiveness in the world markets are not new. Several attempts to evaluate export competitiveness have been made in the past, primarily in Eastern Europe. In Czechoslovakia, for example, a detailed and comprehensive analysis of the study was undertaken already in the 1960's (see, for example, [2]). Unfortunately, their study covered only the price competitiveness of Czechoslovak exports in the EEC market and the period 1955-64 and selected manufacturing exports. They estimated export prices realized by Czechoslovak exporters in the EEC market and compared them with export prices of countries for the same products of countries of the European Free Trade Association (EFTA).

Similar approach was used by World Bank studies of the price and quality competitiveness of exports by other authors [3].

Quality competitiveness topic is still important and research in this field continuous. Researchers are using different methods to look at the quality of exports and its competitiveness. Researchers are developing different methods and indicators to measure quality competitiveness of export [4], [5], importance of the quality in competitiveness [6], [7], price and non-price competitiveness [8], quality's impact on prices of trade [9], product differentiation and quality link to changes in exports [10], [12], product-quality view [13], exporters behavior under quality constrains [14] and other issues.

Since product quality is not directly observable from trade data, there is a lack of consensus on an appropriate measure of quality. Researchers have traditionally used various price indices to proxy for quality, but this approach ignores the horizontal aspects of product differentiation. On the other hand, efforts to incorporate horizontal differentiation have been relatively scarce and are somewhat difficult to implement at a more aggregate level.

In this paper author decided to pay more attention to Aiginger's ideas in order to better understand the theoretical framework of quality competitiveness.

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Higher quality is a necessary precondition for high cost producers to stay competitive. Producing the same quality at a higher price or at lower margins is not feasible in the long run. Many European countries have higher wages than the USA and Japan; this cost advantage is even larger if compared to accession countries and to many new competitors in the globalizing world. It is possible to cope with higher wages by increasing productivity, but since technology and managerial skills are also spreading by the investment of multinational firms, this strategy is not always feasible. Producing a higher quality is an alternative as well as a complement to higher productivity. This strategy is however easier in those industries in which buyers differentiate between quality types, while there are other markets in which price competition is the most important competitive mode. "Quality competition" is competitive environment, in which upgrading quality, and increasing the willingness to pay is important relative to competing at low prices [15].

Activities that upgrade quality are more or better skilled labor, machines, more sophisticated material inputs, but also superior organization on the plant or firm level. Research and development, as well as imitation of the best techniques and processes, may be sources of quality upgrading. Marketing may increase the willingness to pay by providing information about the capabilities of the product or by changing the tastes of consumers. In most, but not all cases, the quality of output is related to the quality of input. Submitting to certifications, setting standards, and benchmarking are other techniques of upgrading the quality of processes, as well as the quality of products, and also market functions. The inputs that help to upgrade quality, economic and political accelerators, are summarized in Fig. 1.

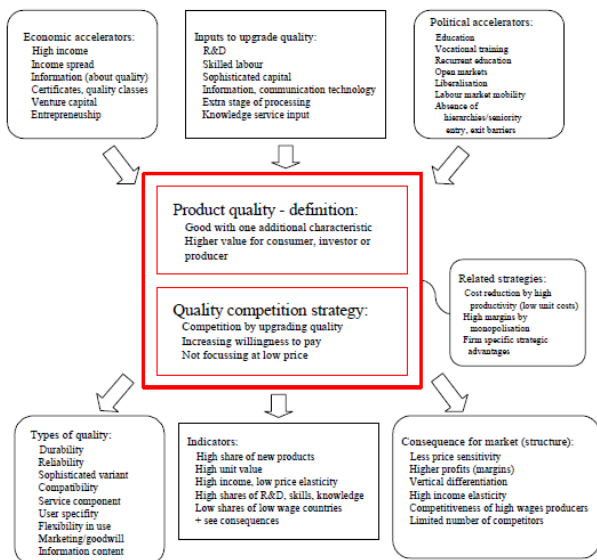


Fig. 1. Quality competition: preconditions, types and consequences.

It also reports on the indicators that signal quality and consequences for market structure.

Quality differs from productivity, as the latter is defined usually in technical (quantitative) terms, like tons per one unit of labor input. If, however, value added is used as a numerator, then the prices and quality of output are taken into

account. And if we distinguish between several qualifications for labor, the quality of inputs can be incorporated into the denominator of productivity. Nevertheless, productivity studies focus on the quantity of output with respect to the quantity of inputs, trying to do so for indicators which are as homogenous as possible, while quality explicitly addresses the heterogeneity of outputs produced usually with respect to heterogeneous inputs.

Innovations refer to changes in processes and products. New products are usually products of higher quality.

However, they can be relatively cheaper when better materials or superior production processes are used. Tension between higher quality and lower costs may arise.

Adding a further stage of processing usually increases the quality of the product. The additional stage can make the product more durable, more convenient, more specifically suitable and useful for the consumer, investor or producer. A further stage of processing can be to combine hardware with a software; a tangible product with a service or information. There are some cases, where a further stage of processing decreases the user value by decreasing flexibility or compatibility for some purposes.

Quality and profitability are closely related, insofar as the quality of products will usually raise profitability, both by decreasing the competitive pressure as well as by increasing the willingness to pay. However, quality is mainly a characteristic of the product and profitability a result of the production process and the strategy and organization of firms. There can be a conflict between the quality of the product as measured in objective terms and profitability, if quality raises costs more than it raises the willingness to pay. The economic solution is to find the quality that maximizes profits. The resulting "optimal" quality provided may be below that assessed as desirable or feasible by technicians or consumer organizations.

The quality of products should be reflected in the profits and specifically in the persistence of supernormal profits. If the market is not regulated or characterized by entry barriers, each advantage of a specific firm will be contested rapidly by other firms. Only firms which can consistently upgrade quality or which – to use a term taken from strategic management literature – possess a specific nonimitable advantage can accrue higher profits in the long run.

Aiginger also developed three main indicators to assess quality: the unit value of exports (UV), the share of exports in quality sensitive industries, and the share of exports in the high price (quality) segments.

Author in this paper is using the unit value (UV) of exports: this indicator is defined as nominal exports divided into tons. Higher unit values reflect higher willingness to pay for a given product, one reason for this is the higher quality in a market with vertically differentiated products. The unit value for an aggregate is higher if a country focus on more sophisticated or higher processed goods. We can call this indicator "indicator on overall quality" since it comprises many different aspects of product quality.

Author is using unit value of imports and relative unit value as well in this paper to reveal nature of quality

competitiveness.

### III. MEASURING QUALITY COMPETITIVENESS

The most comprehensive measure of quality available for empirical research is the "unit value". According to Aiginger its usefulness in evaluating quality comes from the fact that all of the following activities tend to increase sales relative to physical weight:

- Increasing durability, reliability, compatibility, flexibility
- Using superior material inputs or higher skills
- Making a product more specific to demand
- Refining or further processing a product
- Adding new functions, service or maintenance contracts
- Better design, advertising.

Unit values as indicators of quality have been used in industry studies for assessing qualitative competitiveness and for discriminating between different components of intra-industry trade.

The unit value is defined as nominal value divided into physical volume. In Aiginger's reports it is the gross value of exports or imports in ECU (euro) divided by kilogram. The unit value in general depends on demand and prices, but specifically it reflects changes in quality, shifts to higher product segments and to other value enhancing features (service component, design and advertising). Therefore, unit value is often applied as an indicator in attempts to measure quality and vertical product differentiation. Like any comprehensive indicator, it has advantages and disadvantages. Among the advantages is its availability at nearly every level of disaggregation (6 digit industries or even 9 digit industries), for any country, and even for bilateral country to country trade flows. It is not available for production. For some industries, some information is missing (differing from country to country), implying careful programming techniques for the correct treatment of nominators and denominators.

As far as the interpretation of the unit value is concerned, it is fascinating that most of the components which add value are included. Industries intensively using physical capital exhibit rather low unit values, since capital is used for example in basic steel industries or in basic chemicals for large-scale production. So capital intensive industries rank lower and skill intensive higher in unit values as compared to productivity or value added per employee. This can also be seen as an advantage when we understand that developed countries rely mostly on skills in their efforts to achieve the competitive edge. On the other hand, some industries have intrinsically higher unit values, while they are neither high tech, nor do they use skilled labour, nor is physical capital involved. For example, this holds for textile and apparel industries, in which the unit values are high, since the weight in tons is low. Here, reprocessing also poses a problem. Goods are shipped into low wage countries and return at a somewhat higher unit value, indicating that the high wage country exports the lower quality product (as compared to the re-imported good). Reservations about the use of unit value also hold for precious metals, where supply is scarce relative to demand. Therefore, jewellery, leather, furs, footwear and apparel are among the top industries, as far as absolute unit

value is concerned, without for example any indication of the use of skilled labour or research. However in general, high tech or high skill industries - like aircraft and spacecraft, watches and clocks, TV and radio transmitters and instruments - are also among the industries with the highest export unit values.

A problem in using unit values was that high values could indicate high quality or high costs. A technique proposed by Aiginger [16] enables us to disentangle costs and quality at least partially. If unit values reflect costs, the quantity exported must be low for the high cost country. If it reflects quality, then exports are predicted to be high for the country with the higher unit value. Another objection to the use of unit value is that unit values may include the higher margins created by market power. The greatest market power is primarily expected on domestic markets. If unit values on the international market contain market power, this will be based on a major innovation. And if some firms succeed in becoming world monopolists and are not challenged over a long period of time, they will produce in various countries. Unit values of exports and imports are not fully comparable, since both are measured at the border. Imports include trade costs from the point of origin to the border, exports from the mill to the border. The reporting mode has shifted in the last years from customs agencies to firms. A lot of noise and inconsistency on the product level have arisen from these features, but the rich data set enables us to cope with many outliers and errors. But in the most cases, a careful second look at the data, or the exploitation of the very rich data can eliminate distortions or enable an evaluation of their quantitative impact. In general we use total exports if we focus on the comparison of European countries.

### IV. QUALITY COMPETITIVENESS OF LATVIA'S FOOD INDUSTRY IN THE FISH PRODUCTS GROUP

Author in this section of article will analyze quality competitiveness of Latvia's food industry in the fish products group by applying approaches described in previous sections.

Food industry is one of the main industries in the total exports of Latvia [17]. Agriculture and food products combined 12,7% from all exports in year 2011 (Table I).

TABLE I: STRUCTURE OF EXPORTS OF LATVIA BY THE MAIN COMMODITY GROUPS IN YEAR 2011

<b>Total, including:</b>	<b>100</b>
wood and wood products	16,8
metal and metal articles	16,4
light industry products	14,5
agriculture and food products	12,7
products of chemical industry and related industries, plastics	10,5
machinery products	9,1
minerals	6,7
vehicles	4,6
other goods	8,7

In the imports in year 2011 agriculture and food products combined even more - 15,1% from all imports.

The food industry is the largest manufacturing industry by



both turnover and the number of employed. The sector is mainly oriented towards the domestic market where slightly more than 70% of all production is sold. Therefore along with the decreasing domestic demand during the crisis, production volumes of the sector decreased rapidly, and the sector recovery is slow. During the crisis production volumes of food and beverages decreased by a fifth and that was slower than average in the manufacturing.

However, the recovery of the food industry is rather slow due to moderate increase of demand in domestic market. In 2010 and 2011, production volumes remained at the level of 2009. The situation is not significantly improving in 2012 – in four months output of the food industry exceeded the level of January-April 2011 just by 1 percent.

Despite the low production volumes, the turnover of food industry has increased considerably. In 2011, it increased by 9.3%, the rise in production sold in export markets (by 21%) contributed the most to the increase in turnover, while revenues from sales in the domestic market increased by 5 percent.

The increase in industry turnover in 2010-2011 was mainly determined by the rise in producer prices due to the rise in food prices worldwide. In 2011, the producer prices in food industry were by 5.9% higher than a year ago.

In 2012, food prices in the world are decreasing and producer prices in the industry are not increasing significantly and in April 2012 they were only by 1.8% higher than in April 2011. Therefore, also the total turnover of the industry has become moderate. In the four months of 2012, turnover exceeded the level of January-April 2011 only by 3.2 percent.

The biggest trade partners of Latvia from January until April 2012 were Lithuania – 17% of the total foreign trade turnover, Russia – 12%, Germany and Estonia – each 10%, Poland – 8%, Sweden and Finland – each 4 percent.

But if we analyze food production export, then during the same period of time biggest trade partners of Latvia were Lithuania – 23% and Estonia – 18% (Fig. 2).

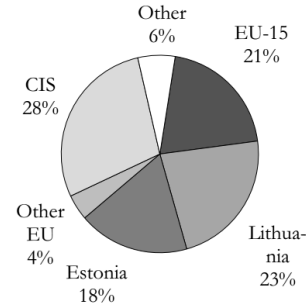


Fig. 2. Food production exports by groups of countries, January-April 2012 (Ministry of economics of the republic of Latvia).

To reveal nature of quality competitiveness of Latvia's food industry in fish products group author calculated relative unit value of trade between Latvia and main trade partners: Belarus, Germany, Denmark, Estonia, France, Lithuania, Poland and Russia. Similar approach was used in [18], [19].

Author used Eurostat databases and calculated Latvia's unit value of fish products export with main trade partner countries and summarized results in Table II.

TABLE II: LATVIA'S UNIT VALUE OF FISH PRODUCTS EXPORT WITH MAIN TRADE PARTNER COUNTRIES, YEARS 1999 – 2011, EURO/100 KG

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Belarus	24,98	29,02	26,57	26,11	22,83	22,54	25,31	25,54	29,01	32,10	34,95	30,42	34,17
Germany	126,66	172,43	239,46	335,47	295,38	274,30	337,85	295,41	332,50	221,54	366,01	754,31	762,34
Denmark	79,06	280,83	161,48	343,52	338,45	314,50	148,13	405,24	114,49	222,61	93,31	80,40	105,55
Estonia	27,62	45,24	46,24	32,69	30,27	80,24	246,66	271,85	289,41	297,79	281,23	220,31	288,26
France	121,51	121,47	N/A	437,96	279,53	312,35	N/A	340,88	313,08	300,71	280,30	429,26	418,70
Lithuania	33,98	113,06	128,62	115,78	115,95	109,70	202,08	205,70	233,65	216,97	267,20	183,18	178,09
Poland	N/A	N/A	14,69	N/A	N/A	N/A	228,91	N/A	137,65	202,37	139,10	112,33	120,27
Russia	15,76	11,56	11,66	20,29	23,75	22,34	23,28	22,32	23,09	25,96	32,17	38,15	42,62

Although the highest value of export in year 2011 was to the Estonia (31,4 million euro) and Lithuania (18,4 million euro), the highest unit value in fish products export is achieved to Germany 762,34 Euro/100kg with a 2 million

euro total export in year 2011.

Author calculated also Latvia's unit value of fish products import with the same trade partner countries and summarized results in Table III.

TABLE III: LATVIA'S UNIT VALUE OF FISH PRODUCTS IMPORT WITH MAIN TRADE PARTNER COUNTRIES, YEARS 1999 – 2011, EURO/100 KG

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Belarus	354,40	388,48	227,48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	132,55	122,21	29,59
Germany	154,64	271,92	196,04	114,96	121,56	186,77	277,55	122,88	407,83	773,41	1053,96	530,23	896,63
Denmark	532,09	324,22	109,43	188,22	201,52	79,61	178,67	253,26	394,76	299,51	332,78	385,98	449,99
Estonia	123,99	57,24	69,99	40,19	81,75	96,73	115,77	111,06	110,76	76,91	66,88	276,46	118,09
France	948,12	944,47	1009,36	245,38	325,31	759,32	477,82	1045,38	963,41	962,32	605,44	548,23	613,21
Lithuania	55,71	67,13	38,32	36,73	34,55	54,48	85,52	93,52	113,81	138,57	226,30	111,62	115,79
Poland	29,62	469,14	332,20	542,30	281,40	106,84	118,34	79,84	89,87	117,56	147,40	176,10	278,99
Russia	65,63	64,28	63,22	87,81	59,79	55,87	55,92	214,04	154,44	N/A	35,30	44,33	445,21

The highest unit value of fish products import in year 2011 was from Germany (896,63 euro/100kg and total import of 1 million euro), France (613,12 euro/100kg and total import of 0,7 million euro) and Denmark (449,99 euro/100kg and total import of 5,9 million euro). Latvia's main trade partners

Estonia and Lithuania imported lest fish products in total value than Latvia exported to these countries and also unit value of import was lower than unit value of export which shows quality competitiveness of fish products.

To reveal quality competitiveness of fish products export

to main export countries author use relative unit value as well that shows relationship between unit value of export and unit

value of import. Author calculated relative unit value using data in Tables II and III and summarized results in Table IV.

TABLE IV: RELATIVE UNIT VALUE OF LATVIA'S TRADE WITH FOOD (FISH PRODUCTS) WITH MAIN TRADE PARTNER COUNTRIES, YEARS 1999 – 2011

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Belarus	0,070	0,075	0,117	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0,264	0,249	1,155
Germany	0,819	0,634	1,221	2,918	2,430	1,469	1,217	2,404	0,815	0,286	0,347	1,423	0,850
Denmark	0,149	0,866	1,476	1,825	1,680	3,951	0,829	1,600	0,290	0,743	0,280	0,208	0,235
Estonia	0,223	0,790	0,661	0,813	0,370	0,829	2,131	2,448	2,613	3,872	4,205	0,797	2,441
France	0,128	0,129	N/A	1,785	0,859	0,411	N/A	0,326	0,325	0,312	0,463	0,783	0,683
Lithuania	0,610	1,684	3,357	3,152	3,356	2,014	2,363	2,200	2,053	1,566	1,181	1,641	1,538
Poland	N/A	N/A	0,044	N/A	N/A	N/A	1,934	N/A	1,532	1,721	0,944	0,638	0,431
Russia	0,240	0,180	0,184	0,231	0,397	0,400	0,416	0,104	0,150	N/A	0,911	0,860	0,096

Table IV reveals relative unit value of trade with fish products. According to theoretical framework all indicators above 1.00 (RUV>1.00) tend to indicate competitive trade – export quality and added value is higher than imported.

Relative unit value reveals that great fluctuations in all export markets except main export markets – Estonia and Lithuania where it is possible to make conclusions. If we look just at these two countries than we can see that RUV of trade with Lithuania is more than 1 since year 2000. Although since year 2001 it has decreased from highest 3,357 to 1,538 in year 2011, RUV still strongly shows fish products export quality competitiveness to Lithuania.

Latvia shows high export quality competitiveness also to Estonia (Table IV), RUV is more than 1 since year 2005 and in year 2011 it was 2,441 (except year 2010 when it was 0,797).

Of course we do have to take into account that deeper analysis of fish products group will reveal the nature of the trade and “nature of added value”.

## V. CONCLUSION

Measuring quality competitiveness is very complex. Developed approaches by any author have certain drawbacks and researchers have to take them into account. Unit value of export, unit value of import and relative unit value are good indicators to reveal a nature of quality competitiveness.

Agriculture and food products industry is one of the most important industries in Latvia with 12.7% in total export.

Quality competitiveness of fish products was observed with main trade partners – Lithuania and Estonia.

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# Humanizing Twitter in Retail: How Lawson, a Convenience Store Chain in Japan Fused Cute Culture and Social Media

C. S. L. Tan

**Abstract**—Businesses have embraced social media in efforts to gain market share and brand loyalty. Companies take to Twitter to advertise as well as provide real time information and promotions to their ‘followers’. While some companies utilize Twitter as a means of information dissemination tool, maintaining a one-way communication flow; others such as JetBlue engage in two-way communication. In Japan, Lawson a local convenience store chain adopted an approach that fused cute culture with Twitter leading to humanizing their Twitter account. This paper aims to address the elements of cute culture and the integration of cuteness in social media in a Japanese convenience store chain. The features and characteristics of Lawson’s twitter account are analyzed and the findings reflect that Lawson approaches their Twitter account differently, humanizing their social media and further solidifying the importance and appeal of cute culture in gaining brand recognition in Japan.

**Index Terms**—Convenience store, cute culture, Japan, social media, twitter.

## I. INTRODUCTION

Businesses today are faced with the challenges of a volatile marketplace and extremely stiff competition. To remain competitive, organizations have to develop new strategies while incorporating new technology and shifts in consumer behavior. As consumers form relationships with brands, not products, not corporations, it is pertinent that brands establish relationships with consumers in order to gain loyalty and brand equity [1]-[3]. Emotional branding brings a new layer of credibility and personality to a brand by connecting powerfully with people on a personal and holistic level [2]. Feelings and the emotions evoked are the basis in creating successful, smashing brands. Conceptualizing a brand through personalization has become a very powerful way to build brand identity [2], [4].

In retail from established department stores such as Macy’s to home products such as Ikea, most companies have embraced social media as part of a necessary marketing tool. Convenience stores for instance 7-eleven are not left behind and have also jumped on the social media bandwagon. While convenience stores essentially promise convenience, in Japan convenience stores have redefined the meaning to convenience offering a plethora of products and services ranging from fresh sushi, concert tickets to paying income taxes [5]. Lawson, the second largest convenience store chain

in Japan with more than 10,000 shops in Japan and more than 400 in China and Indonesia as well as the US has taken a different approach in managing its Twitter account [6]-[9]. Unlike their competitors, namely 7-Eleven, FamilyMart and MiniStop, Lawson has integrated cute culture in differentiating it’s Twitter account and creating a character that has since inception seen an increase in terms of number of characters introduced thus cultivating social groups. The next section will examine cute culture and its place in Japanese culture followed by Lawson’s Twitter account.

## II. POPULAR CULTURE

Popular culture, or better known as pop culture, refers to the culture of the masses [10]. This is contrary to the image one conjures up when the word culture is mentioned – arts, superior knowledge and intellect. Popular culture is derived from the daily lives of the majority in society. As such, daily aspects such as entertainment, media, music, sports and clothing are key components of popular culture.

Japan is renowned for being a trendsetter and one of the main contributors to the world of popular culture [11], [12]. The massive success and popularity of ‘cute culture’ took the world by storm. Characters such as Hello Kitty, Doraemon, Crayon Shin-chan and Sailor Moon became icons of cuteness. Japanese アニメ (Anime) and (漫画) manga have a legion of fans spanning every corner of the globe. Cute culture vocabulary has even ‘invaded’ the world of western music; for instance super ‘*kawaii*’ in Gwen Stefani’s Harajuku Girls (from the 2006 Grammy nominated album, Love. Music. Angel. Baby.).

A myriad of themes and influences generally form the foundation of pop culture. The views, values, practices, concerns and opinion of society – regardless of time; both past and present are reflected through Japan’s pop culture. Through pop culture, we witness the new sub cultures form such as cute ‘*kawaii*’ (可愛い) culture.

### A. Cute Culture

Japan is known as the Country of Cute where cute is ubiquitously found in decorations and illustrations [13]-[14]. According to a survey done by CREA in 1992, ‘*kawaii*’ or cute is the most habitually and widely used in modern day Japan [15]. Popular cute culture icon, Hello Kitty is the epitome of cuteness and has fans both locally as well as overseas.

Cute culture began in the 1970s when Japanese teenage girls started writing in rounded childish letters and characters

[16]. It rose in Japan in the 1970s and 1980s from a fusion of post-modern desire and infantile affectation [17]. However, the psychological need to be cute has long been around in the Japanese culture, in the form of *amae* (甘え) or interdependence indulgence, a concept that is used to describe often a childish behavior that stems from the desire to be loved and to be indulged and taken care of. There is the element of dependence and this persists even into adulthood. The desire to look cute is a typical expression of *amae*; be in the clothing and appearance or even the usage of childlike words that demonstrate the distinction between children and adults has become blurred [18]. The stress of everyday living and space constraints in the city have also been cited as reasons that the Japanese are fixated on cute things and fantasy as a means of escapism [19].

Cute or *Kawaii* has been subjected to various definitions. It has been defined as interrelated dimensions of physical, relational/ emotional, and sexual [20]. McVeigh [21] on the other hand defines it according to different categories: baby, very young, young, maternal, teen, adult, sexy, pornography, child pornography, authority and corporate. Masabuchi [22] lists seven elements that define cute: smallness, naivete and innocence, youth (especially the very young), *amae*, roundness, pastel colors and animal-like qualities.

Core elements of cute are found in more 'negative' traits than positive such as grotesque, neediness, defenselessness, and the inability to stand alone as these evoke a sense of pity, that leads to sympathy, even a maternal feeling and the need of wanting to protect [23]-[26], [19], [20]. Childlikeness where sweet, adorable, innocent, pure, simple, genuine, gentle, vulnerable, weak and inexperienced social behavior and physical appearances form the definition of *kawaii* is also stressed as a key element [15].

### III. LAWSON AND TWITTER

As companies turn to Twitter to expand their market, various strategies are formulated in order to attain differentiation and attract as well as retain followers. As individuals use twitter to stay in touch and communicate with friends or 'followers' and get real time information and news, most are less inclined to follow companies and businesses or even brands, based on the top 200 Twitterholics based on followers. Celebrities; entertainers and sports stars clearly dominate the rankings. While Comcast and BestBuy used a real person rather than a logo to front their Twitter pages, BestBuy did not manage their tweets well as they were too formal unlike Comcast at @comcastcares [27]. The standard advice given to corporations wanting to successfully manage their Twitter accounts is to be human and this goes beyond having a human face to front the page, corporations need to tweet in a less formal and more 'human' tone in order to establish a relationship with their followers [27]-[30].

Lawson Japan is no stranger to the social media realm as it has various social media accounts ranging from Mixi to Line. Even though they are the second largest convenience store in Japan, the number of their Twitter account followers surpasses that of their main rivals by nearly five fold (as of July 2012) as illustrated in Table I.

TABLE I: TOP THREE CONVENIENCE STORES' TWITTER INFORMATION

Ranking	Store	Joined Twitter	No.of Followers (as of Sept 30, 2012)
1	7-Eleven	11 April 2012	34,009
2	Lawson	1 April 2010	185,727
3	FamilyMart	1 Dec 2009	39,795

Lawson approaches its Twitter account from a different perspective as opposed to its rivals. The following aspects are adopted by Lawson, which sets it apart from its rivals as it manages to humanize its Twitter account.

#### A. Characters

As characters are dominant in Japanese cute culture, Lawson created the main character named Akiko, fondly referred to as Akiko-chan who works at the convenience store. She is introduced as a college sophomore working part-time at the convenience store, as she adores the uniform. Akiko-chan also provides daily horoscope to those who tweet her as well as advice and information on a range of topics from cooking to music and even hairstyles. Akiko-chan is also the face of the other Lawson social media websites. When Lawson first launched its Twitter account, Akiko-chan was the only person introduced. As followers grew, Lawson introduced Akiko-chan's family including extended family like her cousin, friends and coworkers. Each character's information is also provided for instance, where did Akiko-chan meet her friends and their hobbies. Fig. 1 illustrates the network that Akiko-chan currently has.



Fig. 1. Akiko's network

The characters and their backgrounds make them human-like. Followers are introduced to their blogs (Akiko-chan's brother started a blog recently) and this adds more depth to the characters where followers can empathize with the characters.

Recently a vocaloid version of Akiko-chan has been unveiled. Followers are now introduced to this vocaloid named Akikoroid-chan. The surge in vocaloid popularity in Japan is undeniable as Hatsune Miku has staged sold out concerts and has also performed overseas recently. Akikoroid-chan introduces the followers to music and video as well as Lawson channel.

#### B. Human-Like Traits

Akiko-chan and her extended social circles have been



given human-like traits. Their backgrounds, hobbies and in the case of Akikoroid-chan the story of how she was made gives the followers not only a deeper understanding of each character but helps forge bonds with them too. While the focus of the other convenience stores are providing information of the products, Akiko-chan and her team share other kinds of information such as entertainment and beauty that is indirectly linked to the store's products or services. Auditions were also carried out to find the voice for Akiko-chan where followers were given the chance to give their feedback on the voice and the search process was shared with the followers. The selected voice was generally reviewed as cute by the followers as shown in Fig. 2 further substantiating the role of cute culture in humanizing the Twitter character.



Fig. 2. Feedback on Akiko-chan's selected voice.

### C. Tweeting and Blogging Style

Akiko-chan's tweets are in a very informal tone as with the writing style on the characters' blogs. Followers are made to feel as if they are reading tweets and the blogs of college students, having further shape the humanization of the characters. The language used in the tweets and blogs is very casual making it sound as if the characters are 'talking' to their friends and peers. Japanese language has different sets of words and expressions that must be used in formal situations and are completely different from those used when communicating with friends and family. Lawson has opted to use the latter instead of the former and that has appealed more to the customers and followers.

### D. Lifestyle

While Akiko-chan and her friends, family and coworkers have shared their background and stories Lawson goes further in humanizing their social media by incorporating other areas of interests such as music and movies as well as videos. The characters recommend music and videos as well as movies. As entertainment is an important aspect of our daily lives, leveraging on the followers' interests creates more value for Lawson's Twitter as well as other social media accounts. The characters not only talk about upcoming movies and albums but Akikoroid-chan also releases singles and music videos as well as collaborates with singers such as Chatmonchy, a Japanese female rock band. Akiko-chan has also crossed over to the gaming world as she befriended

Light to promote Final Fantasy VII and recently Slime from Dragon Quest X. The merging of various characters further adds a surreal dimension to the characters.

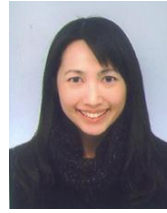
## IV. CONCLUSION

The strategy that Lawson took with managing its social media was not only to fuse cute culture but to develop the characters and create them into your average middle class people who have jobs, school and interests. The blurring of lines between the characters and actual rock singers and gaming characters with the collaboration and crossovers further fuels the humanizing of Akiko-chan and her family, friends and coworkers.

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# Third Sector Accounting Practices: A Case Study in the Metropolitan Area of Recife

Ana Carolina Silva, Ana Beatriz de Souza Gomes Brandão, Michelline Freire Moraes, Zenóbia Maria de Almeida, and Mônica Melo

**Abstract**—It The article discusses results of a study of Recife metropolitan region with the objective of identifying aspects relating management accounting practices used by Third Sector organizations. In a universe of 66 institutions 21 nonprofit organizations (charitable services, schools, professional associations, hostels and scholarships funds) were surveyed. The sample choice was intentional and determined by the spatial location and access to institutional agents. The methodological procedures used were exploratory studies (literature review and use of questionnaires) and documentary research. The database provided by the Ministry of Justice and the Getúlio Vargas Foundation (Map of the Third Sector) was invaluable. It was found that there is no relationship between the level of education of managers and management accounting practices adopted by the surveyed organizations and that there is a relationship between managers' performance time and the use of the set of quality measures in the Organization.

**Index Terms**—Organization of the third sector, accountability, benchmarking.

## I. INTRODUCTION

People always question the difference between companies and nonprofit organizations. States that performance may be the biggest difference as in [1]. Typically, companies define performance narrowly, in other words, as profit. In a Third Sector Organization, profit does not exist, therefore, the quantification of its results becomes a difficult task, but once established, the organization can evaluate their actions not only qualitatively, but quantitatively.

Management proposals for Third Sector Organizations were influenced by managerial concepts from multiple sources - Third Sector: volunteering, advocacy, governance and participatory evaluation; Public Sector: accountability, transparency and capacity building; Private Sector: strategic planning, management by objectives etc.

A Third Sector Organization must be results-oriented, while not having the focus on profit. Its final result should be "measured according to life changes: behavior, circumstances, health, hope, competence or people capacity" like in [2].

From this point of view, the Organization's strategy turns mission and performance into goals. The non-profit organizations typically have difficulty to clearly define their strategy as in [3]. Most of their plans consist of a list of programs and initiatives and not the results that the

organization aims to achieve. Reference [4] shows a research carried out in the state of Rio de Janeiro among leaders of Third Sector Organizations found that the inherent characteristics of these entities and the evolution of their role have profound implications on the type of management practiced by them as in [4]. The survey results showed that such entities do not always have a clear and defined view of their mission, making the establishment of actions, setting goals and objectives and evaluation of results a hard task. Defining the mission is indeed a hard task, however, of great importance regarding the management of Third Sector Organizations. The Non-Governmental Organizations should emphasize the practice of planning since strategic competence becomes crucial at a time when those organizations begin to act in coordination with other social actors in the development process such like in [5].

Another point of fundamental importance with regard to the strategy of Nonprofit Organizations is the definition of who their customers are. Customers are those who "must be satisfied so that the organization reaches results." There are clients as such: a) primary – the one whose life was transformed by the actions of the Organization, b) secondaries - those who work for the organization (volunteers and staff); c) donors and sources of reference. Still to this author, the Organization must inevitably create value for its customers who will satisfy their needs and desires.

The administration of an NGO is divided into four basic functions: Planning: drawing an action program that provides a glimpse of a future environment; Organization: performing the actions planned in a structured way, in order to get maximum results with minimal use of resources; Direction: performing the actions planned, using the individuals that make up the Organization and Control: ensuring implementation of all actions the way they were planned. Other functions: budgeting - procedures adopted by companies (private) to achieve desired goals of profit. The preparation of various budgets allows the manager to better visualize the allocation of resources and coordination of their activities. b) Performance Evaluation: quantifying the efficiency and effectiveness of the actions taken by the company such as in [6]. One of the main problems of performance measurement is the precise definition of what should be measured. Preparing budgets and evaluating performance are key aspects in the management of any and all institutions. Performance evaluation in the Third Sector entities is closely related to the concept of Accountability that, connotes an obligation to be accountable for the results achieved in relation to responsibilities under a delegation of

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powers.

Given the above, this study aimed to identify aspects of management accounting practices used by Third Sector organizations located in the metropolitan area of Recife.

## II. METHODOLOGY

The methodology includes interviews applied to selected managers of organizations, as well as technical documentation indirectly through desk research and literature. The research was conducted in the metropolitan area of Recife with 21 of the 66 registered organizations.

In a universe of 66 institutions, 21 nonprofit organizations (charitable services, schools, professional associations, hostels and funds scholarships), were surveyed. The sample choice was intentional and determined by the spatial location and access to institutional agents. The methodological procedures used were exploratory studies (literature review and use of questionnaires) and documentary research. The database provided by the Ministry of Justice and the Getúlio Vargas Foundation (Map of the Third Sector) was invaluable. The statistical treatment was based on descriptive data analysis, by measuring the position (mean, mode and median), dispersion (standard deviation) and frequency comparison (proportion and percentage). Then, two tests for nonparametric hypotheses were applied: the Fisher Exact Test for issues that fall in a 2x2 contingency table and the Chi-Square test for other issues. In some cases, the significance level of 5% was relaxed since results may reveal clues that deserve to be investigated in future studies. The Statistical Package for Social Sciences - SPSS, version 19.0 for descriptive analysis and hypothesis testing.

## III. RESULTS

For the accomplishment of this study the following investigative questions were considered: a) which management accounting practices are used by the surveyed Third Sector Organizations? b) Is there any relationship between the characteristics of managers and management accounting practices adopted by the surveyed organizations?

Regarding the used management accounting practices, descriptive data analysis revealed the following results:

- 90.5% prepare the balance sheet; 95.2% prepare the income statement for the year; 85.7% prepare the demonstration of source and application of funds, 81% prepare the statement of changes in net equity and 95.2% prepare explanatory notes of their accounting statements;
- 90.5% of organizations use accounting information to be accountable to their funders and for Organization control and 61.9% use it for tax purposes;
- 45% prepare their financial statements monthly, 25% quarterly, 5% semiannually and 25% annually;
- 81% of organizations calculate costs of their services or products using absorption costing and the other one uses absorption and variable costing. Only 9.6% said that they know the costing method. Fifteen institutions were unable to determine which method is used, either for unfamiliarity with the existing methods or for never having thought about the matter;

- Among the 21 organizations surveyed, only one does not evaluate the performance of its results;
- 90% of respondents said that the implementation of a measurement system was due to the need for Organization transparency, 20% stated that it was due to council imposition 15% due to legal requirements and only 10% due to request by the community.

In order to test the 2nd research question aimed at verifying the existence of a relationship between the characteristics of managers and management accounting practices, used by the surveyed Organizations, the following assumptions were raised:

### A. 1st Hypothesis

H0 - There is no relationship between "education level of managers" and management accounting practices adopted by the Organizations surveyed.

H1 - There is a relationship between "education level of managers" and management accounting practices adopted by Organizations surveyed.

It is expected that managers with higher level of education adopt superior management accounting practices. In order to examine this hypothesis, the relationship between the educations levels of managers with all management accounting practices defined previously was tested. To operationalize the test of such hypothesis, a variable to represent the "Education level of managers" was built. Respondents were asked about their education level and responses were divided into two groups:

- 1) Higher education.
- 2) Specialist.

Building on the grouping of this response, each one of the variables described above were tested with the management accounting practices previously defined. Crossing these variables it was possible to reject the null hypothesis (H0), the lack of relationship between the "education level of managers" and the practice of benchmarking and accept the alternative hypothesis that there is a correlation between those two variables.

TABLE I: RELATIONSHIP BETWEEN THE LEVEL OF EDUCATION OF MANAGERS AND PRACTICE BENCHMARKING.

Education Level	Benchmarking			
		No	Yes	Total
	Higher	02	09	11
	Specialist	05	01	06
	Total	07	10	17
Fisher's Exact Test: Level of Significance: $P < 0$ .				

The second hypothesis sought to test the existence of a relationship between the variable "Time of action of Respondents in Organizations" and the use of management accounting practices. It is expected those managers (represented by respondents) with more experience (acting time) adopt better management practices:

### B. 2nd Hypothesis

H0 - There is no relationship between "Time of action of the respondents in Organizations" and the practices of management accounting, adopted by the surveyed Organizations.

H1 - There is a relationship between "time of action of the respondents in Organizations" and the practice of

management accounting, adopted by the surveyed organizations.

To examine this hypothesis, it was tested the relationship between the action time of the respondents in Organizations with all management accounting practices defined previously. For testing such hypothesis, a variable that determined the "time of action of the respondents in Organizations" was built. Respondents were asked how long they have been working in the Organization and the responses were segmented into two groups:

- 1) A period of up to two years of operation;
- 2) A period of five years or more.

To represent "quality", it was built a variable obtained through the responses to question 34, "e" of the survey questionnaire, which asks participants which groups of performance measures were used in the Organization. The variable targeted companies into two groups:

- 1) The ones who answered yes, ie using the group of quality measures;
- 2) The ones who answered no, ie, the ones who do not use the group of quality measures;

The null hypothesis (H0) was rejected at a significance level of 5.3%, in the Chi-Square test and 8.4% in the Fisher Exact Test, which allows to accept the alternative hypothesis (H1) of the existence of a relationship between action time of the managers and the use of group of quality measures in the Organization.

TABLE II: RELATIONSHIP BETWEEN ACTION TIME AND USE THE QUALITY MEASURES GROUP

Action Time	Group of Quality Measures			
		No	Yes	Total
	Period of to 2 years	05	00	05
	Period of 5 years or more	05	05	10
	Total	10	05	15
Fisher's Exact Test: Level of Significance: $P < 0,035$				
Chi-Square Test Level of Significance: $P < 0,053$				

#### IV. CONCLUSION

This work aimed at the research of management accounting practices adopted by the Third Sector Organizations in the Metropolitan Region of Recife. In order to achieve such goal, a literature review on the subject in question we carried out as well as an empirical study using the database provided by the Ministry of Justice and the Third Sector Map of Fundação Getúlio Vargas. It was found that:

- There is no relationship between the level of education of managers and management accounting practices, adopted by the organizations surveyed;
- There is a relationship between managers' action time and use of group of quality measures in the Organization.

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# Investigating the Determinants of e-Banking Loyalty for Large Business Customers: Two Empirical Models

A. Fragata and E. Moustakas

**Abstract**—The current research paper proposes two models for the determinants of E-banking Loyalty for large business customers. The results demonstrated that five main quality dimensions were identified for the e-banking portals: assurance, reliability, convenience and quality monitoring by the financial director of the company. The results also confirm that e-banking quality has a strong impact on e-banking loyalty via the mediating effect of e-trust and switching costs have strong impact on e-banking loyalty. Further our findings also suggest that interpersonal relationships generated between the bank manager and the decision maker of the company have a strong impact on the perceptions of service quality in online banking, and will also affect positively E-Banking Loyalty.

**Index Terms**—Banking, e-loyalty, e-banking quality.

## I. INTRODUCTION

A large number of research studies have focused on analysing the determinants of bank loyalty in retail banking. However, there is limited research related to investigation of loyalty determinants in business banking in online environments, especially for medium/large banking customers. The current research investigates the main determinants of e-banking loyalty for this important and profitable bank segment in Portugal. Despite the low percentage of large companies in Portugal these organisations are generating a large percentage of the national turnover in the country. Also an important issue is that substantial differences exist between how the banks interact with SMEs and large organisations. The high competence and the specified advanced needs of the larger companies characterize the exchange with banks. The movement of customers from traditional branch banking to stand-alone forms of banking via the internet, telephone and mobile devices means a shift from personal relationships and face-to-face contacts to faceless digital relationships. The high cost of acquiring new e-customers can lead to unprofitable customer relationships for the first three years. As a consequence, it is critical for online companies to create a customer loyal base, as well as to monitor the profitability of each segment. Despite the growth of internet banking, many investigations also demonstrated that corporate banking customers still prefer personal relationships as the

principal means of communication and exchange between bank and client firm.

## II. LITERATURE REVIEW

The most important step in providing a sophisticated level of service through e-banking portals is to identify and measure the dimensions of portal quality. A major determinant of e-banking loyalty is the perception of service provided by the website of the bank. E-banking Service Quality is defined as the overall customer evaluations and judgments regarding the excellence and quality that influences consumption decisions in the context of electronic banking [1]. For this study we considered seven e-banking quality dimensions for the business customers. These dimensions will be briefly discussed:

- 1) *Product variety*. Online customers are more inclined to patronize firms which offer a substantial variety of services. The primary reason for this choice is that it is more likely that their diverse needs can be fulfilled [2].
- 2) *Assurance*. It is defined as the customer's perceived security and privacy when using the e-tailers services. Security concerns the risk of third parties obtaining critical information about the customer, whereas privacy relates to the concern about the potential misuse of personal information by marketers [3].
- 3) *Responsiveness*. Is defined as the speed, timeliness, and convenience of service delivery [1]; Customers expect online banks to respond to their inquiries promptly [4].
- 4) *Accuracy*. Means operational precision [4], making the content and the interface of the bank's web site, and online transactions free of error [1].
- 5) *Reliability*. It is the ability of the Internet bank to perform the promised service dependably and accurately [1], and the ability of the web site to fulfil orders correctly, deliver promptly and keep personal information secure [5].
- 6) *Convenience*. Since individuals can use e-banking over the Internet at any time in any properly equipped location, the quality attribute of time and location convenience is likely to be significant in differentiating it from traditional retail banking [4].
- 7) *Overall E-banking Quality*. Evaluation for the overall quality of the main online bank used by the decision maker of the company.

Trust has been identified as key to e-commerce, because it is crucial wherever risk, uncertainty and interdependence exist. Customers are reluctant to adopt e-banking because of security and privacy concerns and trust related issues. Thus, the lack of customers trust both in the attributes of the bank

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and in the overall on-line environment has been and remains an obstacle in the widespread adoption of e-banking [6]. Lowering perceived risks associated with online transactions as well as maintaining transaction trust is vital keys to attracting and retaining customers [7]. The quality elements of the e-service are expected to affect e-trust directly [8], because they represent trust cues that convey the trustworthiness of the site and the system to customers [9]. The authors in [10] found that trust, habit and reputation have a significant influence on customer loyalty towards individual Internet banking websites, and in an investigation by [11] service quality, e-satisfaction, and e-trust have a strong direct effect on e-loyalty. The authors in [12] also investigated trust and switching costs as a way to build e-loyalty in Internet markets. The authors in [2] investigated the moderating effects of switching costs on customer loyalty through both satisfaction and perceived-value measures. The results, evoked from a Web-based survey of online service users, indicate that companies that strive for customer loyalty should focus primarily on satisfaction and perceived value. The moderating effects of switching costs on the association of customer loyalty and customer satisfaction and perceived value are significant only when the level of customer satisfaction or perceived value is above average.

Despite the growth of internet banking, the bank branch has been enjoying resurgence in popularity, in a study developed by [13]. For three key products, online high interest savings accounts, personal loans and credit cards, branches surged ahead of the internet as a favored channel for acquisition. Branches also saw an increase in frequency of visits by consumers. In a study conducted by [11], the key finding were that customers both small and bigger companies, place greater importance on personalized interaction than any form of technological interaction. They also found that business banking customers place greater importance on personal and face-to-face interaction as they become more satisfied with e-mail communication. There still remains a strong inclination in business banking towards the use of the personal relationship between the banker and company client as the principal vehicle of exchange. In a research conducted by [13] they concluded that corporate customers feel internet banking is a good channel to interact with the bank faster, however, the web-based services contribute only a small part of overall relationship strength. Corporate customers do not seem to see the web as a channel to replace traditional relationships, but rather as a way to supplement and enhance the relationships. They also concluded that for these customers, it is important that bank managers modify their standard business plans away from stand-alone interpersonal or online channels, if they seek loyalty and stronger usage of the Internet. In an investigation in electronic banking conducted by [6] it was suggested that the presence of a physical branch and the brand name are important for the trustworthiness in the online banking. Previous investigations emphasize the idea that the personal contact is the preferable mean of contact for business customers, thus the relation between the bank staff and the decision maker of the company can affect the perceptions of the quality of the bank web site and e-loyalty.

According to what was discussed above, we propose two

complementary models (Model A and B) for the determination of E-banking Loyalty, as a way to supplement and enhance the relationships in online banking, with the following hypothesis:

HA<sub>1</sub>: E-Banking Service Quality perceptions have an indirect and positive effect on E-Banking Loyalty via the mediating effect of E-Banking Trust.

HA<sub>2</sub>: Perceived switching costs have a direct and positive effect on E-Banking Loyalty.

HB: Interpersonal relationships in traditional banking have an indirect and positive effect on E-Banking Loyalty via the mediating effect of E-Banking Service Quality.

### III. METHODOLOGY

The research included qualitative interviews with decision makers of five large companies in Portugal. The proposed model was tested with the use of a questionnaire which was given to medium-large corporate customers of the main Portuguese banks. We randomly selected organisations between the 220 major companies in Portugal, mailed the questionnaire and received 72 valid responses. The sample was randomly selected from the database of Dun & Bradstreet and it is representative of the medium/large companies in Portugal. In our sample work, 60% of the companies have more than 250 employees while 80% have over 50 million euro annual turnover. The 7-point Lickert scale was used to measure all items. Empirically validated scales were adapted to the context of the study and used to measure the respective constructs. The empirical validation of the measurement models were performed by exploratory and confirmatory factor analysis as well as reliability analysis. In addition to Cronbach's Alpha, the local fit indices – indicator reliability, variance extracted, factor reliability and total variance explained – were employed to test the validity of the obtained factor. We also tested the composite reliability, the variance extracted and discriminant validity for each construct. After this analysis, we estimated the final structural models with Amos 19.0.

### IV. FINDINGS

The current research proved that companies have split bank arrangements, with 42, 9% working with more than 4 online banks. We found that the larger the size of the corporate segment, the greater the number of banks used, with the larger companies using the services of four or more banks on average as we can see in fig. 1. Same results were obtained in a research study which was conducted by [14] with data from Portugal, where the average number of banks was 1.4 for very small firms (with less than 10 employees) and 5 for those with over 200 employees. Most of the latter borrowed from 4 banks. Although most of the responding companies use the services of four or more banks, strong loyalty existed between organisations and their lead commercial bank, as discussed in the previous study conducted by [15]. The data also showed that 50% have been working with the main online bank between from 4 to 6 years, strong loyalty exists between companies and their lead

commercial online bank.

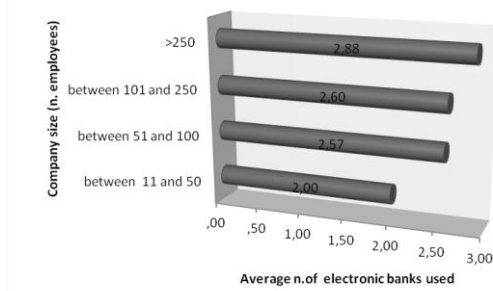


Fig. 1. Average number of online banks according to firm size.

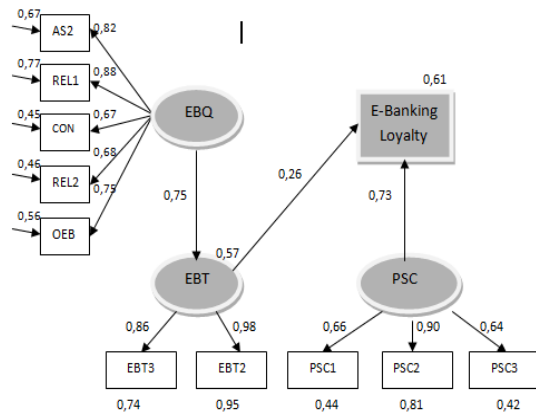


Fig. 2. Structural equation model A.

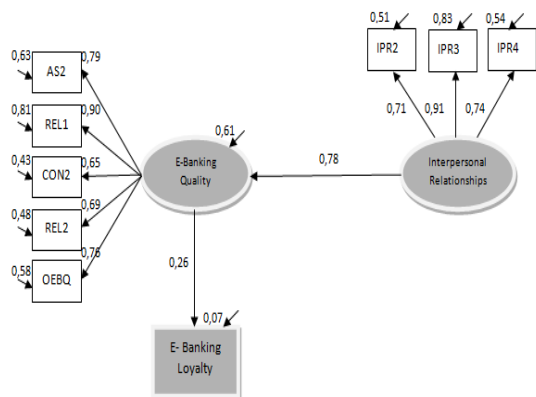


Fig. 3. Structural equation model B.

In Fig. 2 and Fig. 3 we present the final structural models with the accepted hypothesis, in tables I and II the results of the exploratory and confirmatory analysis and in tables III and IV the tests results on convergent and discriminant validity for the two models. In Model A, five items were reduced from the original 15 items to measure E-Banking Quality for the business banking clients. They include Assurance (AS1), Reliability (REL1 and REL 2), Convenience (CON 2) and Overall E-Banking Quality. The results confirm that E-Banking Service Quality (EBQ) has a strong impact on E-Banking Loyalty through the mediating effect of E-Trust, thus confirming the proposed hypothesis HA1. The quality of the bank's website has a strong factor in the perceptions of trustworthiness, the performance of the online bank in terms of dependability, accuracy, fulfill orders correctly, and the security and privacy concerns have strong impact in assuring E- Banking Trust. We also found a strong

impact of 0, 73 in the relation between Perceived Switching Costs and E-Loyalty.

For Model B the results indicate that Interpersonal Relationships have a positive and direct effect on the perception of E-Banking Service Quality, and that Interpersonal Relationships also have an indirect and positive effect on E-banking Loyalty through E-Banking Service Quality, with a total effect of 0,203. The correlation between the two constructs Interpersonal Relationships and E-Banking Service Quality is high (0,779) consistent with the proposed hypothesis.

TABLE I: EXPLORATORY ANALYSIS

Models	Constructs	Item	Indicator Reliability	Total Explained Variance	Cronbach Alpha
Model A	Perceived Switching Costs	PSC1	0,808	68,90%	0,77
		PSC2	0,882		
		PSC3	0,798		
	E-Banking Service Quality	AS2	0,76	66,32%	0,86
		REL1	0,9		
		CON2	0,67		
		REL2	0,71		
		OEBQ	0,77		
	E-banking Trust	Etrust2	0,959	92%	
		Etrust3	0,959		
Model B	Interpersonal relationships	IPR2	0,826	73,70%	0,82
		IPR3	0,916		
		IPR4	0,831		
	E-Banking Service Quality	AS2	0,76	66,32%	0,869
		REL1	0,9		
		CON2	0,67		
		REL2	0,71		
		OEBQ	0,77		

It has been shown in previous studies that customers are more likely to become loyal if they develop a personal relationship with a contact employee, in a context of the traditional banking. Our findings suggest that the relationships generated between the decision maker of the company and the manager of the bank is an important antecedent of the perception of the E-Banking Service Quality and an important driver of E- banking loyalty.

Corporate customers embrace a wide range of communication interfaces (both personal and online), and it is important to develop a strategy which plans an appropriate balance between personal and remote interaction to this segment.

Customer-bank relationships cannot be ignored when implementing Internet Banking. Banks have to work on other relationship elements simultaneously to develop ways to explicitly get customers to perceive high switching costs. This investigation also revealed that besides the fact that business customers proactively adopt technological channels, such technologies provide a useful complement rather than a replacement for traditional personalized interactions.



TABLE II: CONFIRMATORY ANALYSIS

Models	Constructs	Composite Reliability	Variance Extracted	Global Fit
Model A	Perceived Switching Costs	0,89	0,7	$\chi^2 = 58$ $df = 42$ $CFI = 0,959$ $RMSEA = 0,072$ $TLI = 0,946$ $GFI = 0,876$ $AGFI = 0,806$
	E-Banking Service Quality	0,88	0,59	
	E-banking Trust	0,96	0,92	
Model B	Interpersonal relationships	0,83	0,63	$\chi^2 = 36,8$ $df = 26$ $CFI = 0,964$ $RMSEA = 0,077$ $TLI = 0,95$ $GFI = 0,906$ $AGFI = 0,838$
	E-Banking Service Quality	0,88	0,59	

TABLE III: TESTS RESULTS ON CONVERGENT AND DISCRIMINANT VALIDITY FOR MODEL A

Constructs	E-Banking Trust	E-Banking Service Quality	PSC
E-Banking Trust	0,92 <sup>a</sup>		
E-Banking Service Quality	0,57 <sup>b</sup>	0,59 <sup>a</sup>	
PSC	0,01 <sup>b</sup>	-	0,70 <sup>a</sup>

a. The diagonal entries represent the average variance extracted by the construct.

b. The off diagonal entries represent the squared correlations between the constructs.

TABLE IV: TESTS RESULTS ON CONVERGENT AND DISCRIMINANT VALIDITY FOR MODEL B

Constructs	Interpersonal Relationships	E-Banking Service Quality
Interpersonal Relationships	0,63 <sup>a</sup>	
E-Banking Service Quality	0,59 <sup>b</sup>	0,59 <sup>a</sup>

## V. CONCLUSIONS

The business customers in our sample also chose to maintain multiple relations with several banks. This means that competition in this segment is fierce and banks have built aggressive strategies to retain their big volume customers. The results in our data suggest that the quality perceptions of the online bank seem extremely important in e-trust building. The preeminent importance of e-trust can be explained by both the core products of the financial industry, which can be seen as the transmission and processing of highly confidential information, and trust in the medium as such, which again stands for the banks capability to securely transfer and store confidential personal information. Thus the banks must build high quality websites in order to signal

competence and trustworthiness to its business customers. The privacy and policy must be presented as manner that is obvious, accessible. Our findings suggest that switching costs have a strong impact in creating retention in the banking online environment and manage to obtain substantial benefits by holding most of their banking business with one bank. Switching barriers make it costly for the customer to switch to another supplier, the implication for this preposition is a positive relationship between switching costs and customer loyalty, therefore an increase in switching costs will lead to an increase in loyalty.

The relationship between the bank and their corporate customer is based on the exchange of financial service and resources in the traditional bank branch and in the online environment. Banking is characterized by interaction between the parties and proceeds by a series of commercial transactions contained in the dimensions above exchange of information, social exchange and by technical or organizational adjustments of responsibilities and routines. A transaction between two organizations will influence the next transaction between them and create obligations, expectations and interpersonal involvement. The parties may have a long-term relationship which constitutes a framework in which further transactions and activities are carried out. This long-term relationship can be seen as being constituted by a number of ties or bonds between the bank and the customer. It has been shown in previous studies that customers are more likely to become loyal if they develop a personal relationship with a contact employee, in a context of the traditional banking. In previous studies in corporate banking it also was found that this segment also still prefer personal relationships as the principal means of communication and exchange between the bank and client firm [16]. Although most of the studies analysed small companies that are more dependant and desire closer, more socially based relationships with their banks.

In fact, despite a drive towards automation of service delivery, branch reorganization and sophisticated technological linkages between banks and companies, a majority of both bank managers and their corporate customers continues to believe the "old-fashioned" human relationship between bank manager and corporate financial officer should be the natural fulcrum of interaction [16].

The same conclusion was obtained in the study conducted by [17], they demonstrated that personal interaction/face-to-face interaction is more important to small/medium and large companies than technological means.

The authors in [18] also argued that customer-bank relationships cannot be ignored when implementing Internet Banking. Banks have to work on other relationship elements simultaneously to develop ways to explicitly get customers to perceive high switching costs. Our findings suggest that the relationships generated between the decision maker of the company and the manager of the bank is an important antecedent of the perception of the E-Banking Service Quality and an important driver of E-Loyalty. This means that the more the relations between the bank managers and the decision makers of the company are satisfactory one's, the more they will have a positive evaluation of the quality of the bank website, and then be more loyal to this channel.

Regarding the study of [17], they refuted the initial theory

that there is a negative correlation between personal interaction and the technological interaction channels. They found that the importance of personal interaction and the importance of face-to-face interaction both increase as the level of satisfaction with e-mail communications increases

Further, our findings suggest that other elements of the relation have to be worked simultaneously, in order to develop E-Banking Loyalty.

In fact we found that quality perceptions of the bank in traditional face-to-face transactions have a major impact on the perceptions of quality in an online environment and thus create retention.

The notion that technological channels might go some way replace the need for personal channels in business banking is wrong, by the evidence in this study.

Technology should provide a useful complement, rather than a replacement for the traditional personalized interaction.

It is important that bank marketers plan to integrate both the traditional and the web channel, providing a good service with a range of supporting services through many channels, for instance, a good back up call service online and after transaction.

Bank managers should identify the perfect allocation between face-to-face contact in traditional banking and online banking when dealing with business clients and provide a simultaneously strategy for both channels since they have a greater influence in each other.

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# Typical Regional Food and Beverage Products and Region of Origin Perception Differences between Domestic and Foreign Tourists

Marko Paliaga and Ernes Oliva

**Abstract**—This research is aimed at determining the differences in the perception of the typical regional products and region of origin between domestic and foreign tourists. Seeing that tourism experts need to know how consumers or potential consumers perceive typical regional products, this research sheds light on whether the perception about typical regional products and region of origin differs between domestic and foreign tourists in relation to familiarity about typical products. The authors of the paper have used the Region of Istria as an illustrative example due to its rich culinary heritage and tradition that can be successfully used as a competitive advantage in the tourist market.

**Index Terms**—Regional products, regional marketing, regional image, perception of regional products.

## I. INTRODUCTION

Numerous authors studied themes concerning the influence of the image of the country of origin and the region of origin on the image of products and the consumer's product evaluation. Many authors have concluded that the influence of the image of the country of origin and the region of origin on the image of products and the consumer's product evaluation exists. If the country or region image is perceived positive, the perceived image of products and consumer's product evaluation will be positive as well. On the other hand, consumers with a positive attitude towards products from developed countries at the same time have a positive image towards the country of origin of products. For this reason, there is the need to research and understand needs and desires of potential tourists and their knowledge and perception of products of the region and region of origin.

It is presumed that familiarity with products affects the consumer's perception of the region of origin of products. The term region in this paper refers to geographical area within a country, in this case, the region of Istria in the Republic of Croatia (Istria County in Croatia, Region of Istria, Istrian region). Examples of products marked as regional specialties, traditional regional products, regional autochthonous products or typical regional food may be found worldwide in both food and non-food sector. Different sorts of wine, cheese, olive oil, fruit, vegetables, spices, meat and dry-cured meat products and alcoholic drinks are examples of products marked as regional typical, traditional or autochthonous products. The image of the region of origin of products is actively used in marketing these products.

Marketers attempt to communicate specific qualities of products to target segments, qualities that are, among other things, rooted in human expertise and the natural environment of the region of origin. It is therefore implied that familiarity with regional products and their characteristics affects the perception or image of regional products, which eventually affects the perception or image of the region of origin.

Development of regional product brands is a manner of promoting the region of origin as a tourist destination. The authors of the paper have used the Region of Istria and Istrian regional autochthonous products as an illustrative example due to its rich culinary heritage and tradition that can be successfully used as a competitive advantage in the tourist market.

## II. THEORETICAL FRAMEWORK

In the scientific literature a significant number of papers can be found about the influence of the image of country of origin and region of origin on the products image and consumer's evaluation of products [1]-[7]. Associations that consumers have with a particular country are related to knowledge of the country of origin and knowledge of the region of origin [8], [9]. But, consumer perception of typical food products seems to be based on regional image rather than on deep knowledge of products [10].

On the other hand, image of a country may also be considered as the consumer's general perception of quality of products from the country of origin and the nature of people from that particular country [11]. It has been accepted by academics that consumers, having positive attitudes toward products from developed countries have at the same time positive image of the country of product and that image is a group of beliefs about dimensions representing important product features [12]. Presuming that regional autochthonous food products may be used as foundations for the development of regional brand, these products can also assume the role and function of development or strengthening of the brand of the region of origin [13]. Therefore, these products have to meet the consumer desires or needs [14]. Food and beverage products of a particular country, such as pizza (Italy), champagne (Champagne), bordeaux (Bordeaux), oranges (Sicily) or prosciutto (Istria) may be one of its most important culturological expressions (adapted according to [15]-[17]). Besides products, the image of a region or country may also be influenced by the manner in which particular products are perceived as ingredients of particular dishes, how they are combined and prepared,

which can be an important element of national cultural identity and image as well [18], [19]. In this regard, some authors maintain that local and regional food are important elements that add to the value of a destination and that they can contribute to sustainable competitiveness of a destination [20], [21]. Seeing that the image of a country is created based on the following variables, namely representative products, national characteristics, economic and political characteristics, history and tradition, with the objective of acquiring competitive market advantages, there is a need to research and understand the needs and desires of potential tourists and their knowledge, perception of regional products and region of origin [22]. The following comparison shows a number of arrivals and overnight stays of domestic and foreign tourists in Istria (see Table I).

TABLE I: DOMESTIC AND FOREIGN TOURISTS ARRIVALS AND OVERNIGHT STAYS ON ISTRIA IN YEAR 2011.

Guests	Arrivals	Nights
Domestic	185.086	1.001.581
Foreign	2.827.118	19.645.147
<b>Total</b>	<b>3.012.204</b>	<b>20.646.728</b>

Source: Istria County Tourist Offices [12]

From the data it is evident that the Istria region is tourism oriented region. Foreign tourists make 93, 85 % of total arrivals and achieve 95, 14 % of total overnight stays (see Table I).

Tourism experts have to focus not only on the identification of tourists as consumers, but they also have to understand tourist perceptions of various products and services. For this reason, it is very important that marketers in tourism are aware of how tourists perceive their products in the manner and the extent to which particular products are recognisable (brand) and how they affect the image of a region or country since consumers evaluate products influenced by knowledge they have of the origin of these products and their perception of the country [23], [24].

### III. RESEARCH

#### A. Purpose and the Aim of the Research

Research of available literature suggests a firm belief the image or perception of regional products affects the image or perception of a region or country of origin and vice versa. These perceptions may be influenced by familiarity with regional products. The paper includes the research of perception of domestic and foreign tourists of representative autochthonous products (olive oil, prosciutto, wine and truffles) and their region of origin using a concrete example of the region of Istria (Republic of Croatia). From the consumer standpoint, traditional food products, specialties, food products manufactured on a farm, local food and sometimes organic food are typical or autochthonous food products that can and may be associated with a region of country of origin [25]. Consumers show great interest in typical food products because of their distinctive historical,

cultural and physical attributes deep ingrained in the area of production [26]. The aim of the research is to find out whether there are differences in perception of regional autochthonous products, region of origin, use of name of the region of origin in the brand name of typical products, and familiarity with regional autochthonous products. The authors also want to confirm that the group with grater familiarity has a more positive perception of typical regional food and beverages products and more positive perception of the region of origin, in this case Istria, as well as more positive associations with the name of the region (Istria, product of Istria, made in Istria, Istrian, etc.) used in the brand name of typical regional products.

#### B. Hypothesis

When the country is well-known or when its reputation on food is well established there is a halo effect that lead to a favourable consideration of the given typical food product [27]. Reference [28] shows a moderate satisfaction with the price and relatively high level of foreign tourist satisfaction with the quality, promotional activities and availability of typical Istrian regional products. Considering that research, there is a need to explore differences in familiarity with typical Istrian products and perceptions about products, region of origin and brand name between domestic and foreign tourists. Considering the previously defined research problem and subject matter of research, we have deduced the following hypothesis:

H1: Perception of regional autochthonous products is not homogeneous in relation to familiarity of observed groups with Istrian regional autochthonous products,

H2: More familiar group has a more positive perception of regional autochthonous products, region of origin and associations with the name of the region of origin from less familiar group.

#### C. Methodology

Method used in the survey was questionnaire method. The questionnaires were distributed in Croatian, English, Italian and German language. Survey was conducted on convenient sample of domestic and foreign tourists during the summer season in Istria. The questionnaire was divided into several parts. First part included question about tourists general familiarity with regional autochthonous products. Second part included claims about regional autochthonous products and third part included claims about region of Istria to identify and evaluate general tourist perception about products and region. Fourth part included questions to identify tourist associations with the name of the region of origin, respectively brand name „Istrian..“. In the questionnaire a five point Likert scale was used ranging from 1 to 5, for example 1 = totally disagree, to 5 = totally agree. A total of 324 properly filled out questionnaires were collected. Therefore, the research compares perception differences of Istrian regional autochthonous products, region of origin and the associations with brand name between the two groups, domestic and foreign tourists. The questionnaire results were analyzed using descriptive statistic, independent samples T-test and correlation analysis in order to achieve a general view and confirmation of the hypothesis.

TABLE II: FREQUENCIES OF DOMESTIC AND FOREIGN TOURISTS FAMILIARITY EXPRESSED IN PERCENTAGES

Tourists	Yes	No
Domestic	100%	0%
Foreign	72,80%	27,20%

Source: author's research, 2012.

#### D. Results

Research sample includes a total of  $N = 324$  respondents, of which 144 domestic and 180 foreign tourists.

Foreign tourists are less familiar with Istrian typical autochthonous products than domestic tourists. High value of Pearson Chi-Square test (Chi-Square: 46,185,  $p = 0,000$ ) at significance level of  $p < 0.01$  shows that familiarity with Istrian regional autochthonous products depends on tourist segment. Cramer's V test (Cramer's V: 0.378,  $p = 0,000$ ) indicates that dependence is weak, but nevertheless statistically significant  $p < 0.01$  (see Table II).

Comparison of product perception differences shows high T-test values and statistically significant difference ( $p < 0.05$ ) of mean values for eleven of thirteen measured dimensions between two independent samples. For two dimensions data shows no significant difference between mean values: "healty" (T: -1.314,  $p > 0.05$ ) and "available for purchase" (T: 1,127,  $p > 0.05$ ) (see Table III).

TABLE III: REGIONAL AUTOCHTHONOUS PRODUCT PERCEPTION DIFFERENCES BETWEEN DOMESTIC AND FOREIGN TOURISTS

Istrian regional products are:	Domestic	Foreign	T-test	p
High quality	4,6597	4,0167	7,348	0,000
Healthy	3,8194	3,9778	-1,314	0,190
Recognisable	4,5417	4,0000	5,733	0,000
Expensive	3,8056	3,0000	6,501	0,000
Available for purchase	3,6944	3,5667	1,127	0,261
Ideal	4,3542	3,8167	5,102	0,000
I get value for money	4,6528	3,7556	9,805	0,000
Element of regional recognition	4,8542	4,0667	10,318	0,000
Better than other	4,2639	3,5944	5,938	0,000
Motive of arrival	4,0417	3,4833	4,249	0,000
Part of cultural heritage	4,7986	4,1056	8,291	0,000
Closely related to the region	4,7778	4,0889	7,552	0,000
Best way to promote the region	4,7708	4,0222	8,508	0,000

Source: author's research, 2012.

Analysis of region of origin perception differences reveals high T-test values and statistically significant difference ( $p < 0.01$ ) of mean values for seven of eight measured dimensions between domestic and foreign tourists. High positive T-test values lead to the conclusion that domestic tourists have a more positive perception of the region of origin than foreign tourists in all dimensions, except for one dimension "region of preserved nature" in which there is no difference in mean values (T: -0.121  $p > 0.05$ ) (see Table IV).

Analysis of association differences shows high T-test values and statistically significant difference ( $p < 0.01$ ) in mean values for each dimension between domestic and

foreign tourists. Domestic tourists have mainly more positive associations with brand name "Istrian..", but brand name associates domestic tourists more on expensiveness (T: 3,605,  $p < 0,001$ ) and foreign tourists more on happiness (T: -5,843,  $p < 0,001$ ) (see Table V).

TABLE IV: REGION OF ORIGIN PERCEPTION DIFFERENCES BETWEEN DOMESTIC AND FOREIGN TOURISTS

Region of Istria is:	Domestic	Foreign	T-test	p
Closely related to tradition	4,5417	4,1056	4,892	0,000
Region with preserved nature	4,1736	4,1833	-0,121	0,903
Known for traditional products	4,7847	3,7556	12,034	0,000
Wine region	4,6667	3,8167	9,586	0,000
Region with rich cultural heritage	4,6042	4,1722	5,058	0,000
Region of specific enogastronomy	4,6528	3,9500	7,732	0,000
Known for olive oil	4,8681	4,0278	9,196	0,000
Known for truffles	4,6667	3,7444	9,989	0,000
Known for prosciutto	4,5208	3,7778	7,023	0,000

Source: author's research, 2012.

TABLE V: BRAND NAME ASSOCIATION DIFFERENCES

Brand name "Istrian.." reminds me of:	Domestic	Foreign	T-test	p
Quality	4,5764	4,1000	5,470	0,000
Prestige	4,4306	3,5500	9,242	0,000
Uniqueness	4,8194	4,1056	8,721	0,000
Expensiveness	3,5139	3,0333	3,605	0,000
Tradition	4,5764	4,3056	3,503	0,001
Reliability	4,4097	3,8556	6,277	0,000
Happiness	3,4306	4,0556	-5,843	0,000
Safety	4,3681	3,7667	6,883	0,000

Source: author's research, 2012.

#### E. Limitations and Further Research

Although the research provides an important insight into perception differences for regional autochthonous products, region of origin and the use of the name of the region of origin in the name of the product, there are several research limitations that we need to point out in relation to familiarity of domestic and foreign tourists with regional autochthonous products. The main research limitation comes from relatively small research sample that is divided in two groups - domestic and foreign tourists. Research would ideally be made with a larger number of respondents, which would make results generalisation possible. Respondents should be divided based on the tourist country of origin and the level of familiarity, which would produce more precise and more concrete data. By the same token, it would be desirable to make product classification to conduct the research for each individual product. This would make the research considerably more profound and provide an insight into the extent to which each product overlaps with the region of origin and into the influence of each individual product and familiarity about the product on the perception or the image

of the region.

### F. Conclusion

The main objective of this research was to gain an insight into perception differences of regional autochthonous products, region of origin, and region name used in regional autochthonous brand name between domestic and foreign tourists in relation to their familiarity with regional autochthonous products. Tables II and III confirms hypothesis H1 that perception of regional autochthonous products is not homogeneous in relation to familiarity of observed groups with listed products. Hypothesis H2 that the group with higher level of familiarity has a more positive perception of typical regional products, region of origin and associations with the name of the region of origin used in typical product brand name can be confirmed by the result of analysis shown in Tables II, III, IV and V. Analyses reveal that domestic tourists who are more familiar with typical Istrian products have a more positive perception in all measured categories than foreign tourists, who are less familiar with Istrian regional autochthonous products.

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# Third Sector: Accounting Tools

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**Abstract**—It is essential, in a Third Sector Organization, to be results-oriented, despite not having the focus on profit. The institution must have the perception that their efforts lead to a good result. Organizational practices should exhibit knowledge, accountability, vision and the organization's mission, expressed in strategic planning. The result is a process that promotes the growth of critical leadership and develops direct evidence of organizational impact. The article examines managerial accounting tools used by Organizations of the Third Sector, proposing to confirm hypotheses regarding the relation between accounting practices adopted with the managers educational level, with the operating time of the respondents in Organizations, with the size of Organizations, with the qualification as CSOPI (Civil Society Organization of the Public Interest) and the characteristics of the model for evaluating the performance of a CSOPI. The methodology includes application of interviews with managers of the selected organizations, as well as technical documentation indirectly by desk research and literature. The research was conducted in the metropolitan area of Recife with 21 of the 66 registered Organizations. The statistical analysis was based on descriptive analysis of data, by measuring the position (mean, median and mode), dispersion (standard deviation) and compared the frequency (proportion and percentage). After that, two tests for nonparametric hypotheses were applied. As a result, the study shows a positive correlation between the following variables: a) Level of education of managers and benchmarking practices; b) Time of activity of respondents and the use of quality measures group; c) Organizational Size with: the use of the social balance sheet in accountability to the cooperation agencies; the use of the acknowledgment of changes in equity on accountability to the cooperation agencies; using the project progress report in accountability to the cooperation agencies; the way to evaluate its results; d) Qualification as CSOPI with: accountability to the community, using the balance sheet accountability to donors; the use of the statement of financial accountability to donors; the use of the social accountability donors; the use of explanatory notes in accountability to donors; the use of the acknowledgment of variation of net worth in accountability to donors; The lack of information for generating indicators.

**Index Terms**—Third Sector, CSOPI, organizational practices.

## I. INTRODUCTION

Records of philanthropic activities were identified in Ancient China, in ancient Egypt, in ancient Greece and India. The 'primitive' Christian Church also established funds to assist the orphans and widows, whose contribution used to come from wealthy people [1]. In XIX century, Catholic and Protestant churches that developed philanthropic activities for at least a hundred years, had a close connection with

social organizations, constituted mostly of orphanages, nursing homes, hospitals, schools, and other associations for the benefit of needy community [2].

In Brazil, records of the Third Sector date back to the Imperial period. This concept was developed during the First Republic, through social actions of religious feature, which suffered a strong influence of Portuguese colonization and the domination of Catholic Church. The period between the 30s and the 60s was marked by the first law that regulated the procedures for declaration of Federal Public Utility, and the National Council of Social Service, signed by Brazilian President Getúlio Vargas in 1935. In the early 70s, new social philanthropic actions performed by privileged families of society were consolidated. Following the 90s, with the strengthening of civil society, the Third Sector Organizations grew steadily, redefining a new model of relationship between society and the state [3].

The Civil Society Organizations of Public Interest (CSOPI), a public title, conferred by the federal government, which can be obtained by civil associations and foundations under private law by completing the requirements and procedures established by the Law No. 9.790/99 is noteworthy in this study, because since the creation of the Law N. 9.790/99, was instituted a legal mark of the Third Sector [4].

According to the Handbook of Legal Administration, Accounting and Finance for Non-Governmental Organizations[5]:

"Law sought to recognize the public nature of a number of civil society organizations previously unrecognized by the state, creating a new classification system, which also sought to differentiate Nonprofit public interest from those of mutual benefit (to a limited number of associates) and commercial character."

Although Law No. 9.790/99 enter a new classification system, the Handbook of Legal Administration, Accounting and Finance for Non-Governmental Organizations points out that the qualification of the Organization as CSOPI does not invalidate its registration as civil association or foundation; being thus, its laws prevail simultaneously [4], [5].

The age of information has brought urgency for change in business organizations. The competitive advantage no longer holds with the allocation of new technology and physical assets, and the excellence of effective management of financial assets and liabilities. This new organizational scenario requires not only modernized and efficient methodologies of management, as also suggests new techniques that enable a better organizational orientation.

In the decades prior to the eighties, the macro-environment of non-governmental organizations that make up the Third Sector was characterized by the excessive amount of

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financing sources and undemanding as regards to the effectiveness and impact on the results. This context led to a lack of concern about strategic management from these organizations.

It is essential, in a Third Sector Organization, be results-oriented, despite not having the focus on profit. The institution must have the perception that their efforts lead to a good result. Organizational practices should exhibit knowledge, accountability, vision and mission of the organization, explicit strategic planning. The result is a process that promotes the growth of critical leadership and develops direct evidence of organizational impact.

Another item to be observed, concerns to budgets. References [6] shows, preparation of various budgets allows the manager to better visualize the allocation of resources and coordination of their activities. The budgets imply procedures adopted by firms to achieve the desired levels of profit, enabling managers to make wider predictions of situations that may occur in a given period. At the end, there will be an assessment of the resources defined in the budget to establish the administrative performance.

The article aims to analyze the management accounting tools used by organizations of the Third Sector, proposing to confirm hypotheses related to the relationship between the accounting practices adopted and educational level of managers, the time of action of the respondents, the size of organizations, qualification as CSOPI, features of a model for evaluating the performance of a CSOPI.

## II. METHODOLOGY

The methodology includes interviews applied to selected managers of organizations, as well as technical documentation indirectly through desk research and literature. The research was conducted in the metropolitan area of Recife with 21 of the 66 registered organizations.

The methodological procedures used were exploratory studies (literature review and use of questionnaire) and documental research. The database provided by the Ministry of Justice and the Getúlio Vargas Foundation (Map of the Third Sector) was of great value.

The statistical treatment was based on descriptive analysis of data, by measuring the position (mean, median and mode), dispersion (standard deviation) and comparison of frequency (proportion and percentage). Then were applied two tests for nonparametric hypotheses: the Fisher Exact Test for issues that fall in a 2x2 contingency table and the Chi-Square test for the remaining issues.

Reference [7] shows that the Fisher Exact Test constitutes a non-parametric technique useful for analyzing discrete data (nominal or ordinal), when the sample size is small. Moreover, the Chi-Square test can be applied to determine the significance of differences between independent groups; the measurement may be even scaled nominal or classifier, which is the case of most of the research variables [7].

Reference [8] shows also highlights that, in selecting the non-parametric test, when employing the 2x2 table, it should be noted:

- When  $N > 40$  ( $N$  is the number of observations), using the Chi-Square test with continuity correction (Yates' correction);
- When  $20 \leq N \leq 40$ , the Chi-Square Test may be used, as long as none of the expected frequencies be less than 5. If the smallest expected frequency is less than 5, it is recommended the Fisher Exact Test;
- When  $N < 20$ , use the Fisher Exact Test in any case.

Reference [7] shows that states that to reject the null hypothesis, it is usual to adopt a significance level of 0.05 or 0.01, although other values may be used. The level of significance is the probability of committing type I error, in other words, the probability that the true null hypothesis is being rejected.

In some cases, the significance level of 5% was relaxed having in mind that the results may reveal clues that deserve to be investigated in future studies. We employed the Statistical Package for Social Sciences - SPSS, version 19.0 for descriptive analysis and hypothesis testing.

## III. RESULTS

The sample of the universe searched, Third Sector organizations, revealed the following characteristics:

- Institutional format - all the searched organizations (21) are civil associations; twelve of them possess a CSOPI (Civil Society Organization for the Public Interest) qualification;
- Existence time - most of them (52.4%) were instituted between two and five years ago, although the oldest one has been running for 55 years already;
- Size of the searched organizations - medium (57%); large (23.8%); small (19%);
- Position - 42.9% of the interviewed people act as an administrator; 19% are accountants and 4.8% are part of the council. Other (33%) are coordinators, treasurers and administrative consultants;
- Age - ranges from 24 to 61 years old. Median: 34 years old (used due to the sample doesn't adjust itself to the normal curve. Force center. Shapiro-Wilk test);
- Working time in the organization - 81% have worked for 5 years at the most and 14% around 10 and 15 years old;
- Number of employees and volunteers - 10 to 20 people (19.1%); 20 to 30 (23.8%); 30 to 40 (9.5%); more than 40 people (28.5%). It was found that the staff and volunteer board of the entities depends more of the projects they develop than of its size properly, confirming that, on the Third Sector, the number of people which integrate the organizations isn't a decisive factor of the entity size.

As regards the hypothesis test, it was noticed that:

Confirmed Hypotheses	Fischer's Exact Test/Significance Level	CHI-Square Test/Significance Level
There is no relation between "the level of education of the managers" and the managerial accounting practices adopted by the searched organizations. 1. Level of education of the managers and the benchmarking practices.	$p < 0.035$	The test has not been done.
There is a relation between "the working time of the respondents in the organizations" and the managerial accounting practices adopted by the	$p < 0.084$	$p < 0.053$



searched organizations. 1. Working time of the respondents and the use of the quality measure group.		
There is a relation between “the size of the organization” and the managerial accounting practices. 1. Size of the organization and the use of the social balance sheet on the accountability to cooperation agencies; 2. Size of the organization and the use of the statement of changes in net equity on the accountability to cooperation agencies; 3. Size of the organization and the use of the projects evolution report on accountability to cooperation agencies; 4. Size of the organization and the form of evaluation of its results.	$\rho < 0.119$ $\rho < 0.04$ $\rho < 0.119$ The test has not been done.	$\rho < 0.058$ $\rho < 0.016$ $\rho < 0.058$ $\rho < 0.051$
There is a relation between “the qualification as an CSOPI and “the managerial accounting practices” adopted by the searched organizations. 1. Qualification as a CSOPI and accountability to community; 2. Qualification as a OSCIP and the use of the balance sheet on the accountability to the donors; 3. Qualification as a CSOPI and the use of income statements for the fiscal year on the accountability to the donors; 4. Qualification as a CSOPI and the use of the social balance sheet on the accountability to the donors; 5. Qualification as a CSOPI and the use of explanatory notes on the accountability to the donors; 6. Qualification as a CSOPI and the use of the statement of changes in net equity on the accountability to donors.	$\rho < 0.056$ $\rho < 0.029$ $\rho < 0.071$ $\rho < 0.039$ $\rho < 0.024$ $\rho < 0.027$ $\rho < 0.006$	$\rho < 0.04$ $\rho < 0.020$ $\rho < 0.056$ $\rho < 0.027$ $\rho < 0.017$ $\rho < 0.004$ $\rho < 0.01$
There is a relation between “the qualification as a CSOPI” and “the characteristics of the performance evaluating model” adopted by the searched organizations. 1. Qualification as a CSOPI and the insufficiency of information for generating indicators.	$\rho < 0.040$	$\rho < 0.027$

#### IV. CONCLUSION

The article analyzes the managerial accounting tools used by Third Sector organizations, proposing to confirm hypotheses relating to the link between the accounting practices adopted with the level of education of the managers; the working time of respondents in the organizations; the size of the organizations; the qualification as a CSOPI; and with the characteristics of the performance evaluating model of a CSOPI.

The methodology used includes the conduction of interviews with the managers of the selected organizations, as well as the technique of indirect documentation through documental and bibliographic research. The research was done in the metropolitan area of Recife with 21 of the 66 registered organizations. The statistical processing was based on the descriptive data analysis, through the measures of the central tendency (mean, mode and median), dispersion (standard deviation), and comparison of frequency (proportion and percentage). Subsequently, two

nonparametric hypothesis tests have been applied.

As results, the study presents a positive correlation between the following variables:

- 1) Level of education of the managers and the benchmarking practices.
- 2) Working time of the respondents and the use of the quality measure group.
- 3) Size of the organizations with: the use of the social balance sheet on the accountability to cooperation agencies; the statement of changes in net equity on the accountability to cooperation agencies; the projects evolution report on accountability to cooperation agencies; and the form of evaluation of its results.
- 4) Qualification as a CSOPI with: accountability to community; the use of the balance sheet on the accountability to the donors; the income statements for the fiscal year on the accountability to the donors; the social balance sheet on the accountability to the donors; the explanatory notes on the accountability to the donors; the statement of changes in net equity on the accountability to donors; and the insufficiency of information for generating indicators.

The main limitations of the study refer to: the comparative data analysis; the sample selection (practical criteria); the analysis of some research questions couldn't be done in a conclusive form due to the sample size (force reduction of the Chi-square test).

Suggestions for future studies: reapply the study with more representative samples of Brazilian institutions, what will allow knowing better the managerial accounting practices adopted by the Third Sector organizations.

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# Identifying Themes of Entrepreneurial Strategy of New Ventures in International Markets Entry

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**Abstract**—The study aim is to identify themes of entrepreneurial strategy of new venture in international markets entry. In the study, using qualitative research methods, a sample consist of five new ventures in central state of Iran studied. Interview technique was used for data collection. The data analysis results showed that the identification of new ventures entrepreneurial strategy in international markets entry by industrial managers consists of identifying opportunities, managing uncertainty, capabilities discovery, and customer discovery and channel discovery which have been approved by various studies.

**Index Terms**—Entrepreneurial strategy, international strategy, new ventures.

## I. INTRODUCTION

These days, international trade development is known as an important strategy for growth of many new ventures and SME industries. Since without succeed in international markets, they can't survive in small and saturated markets [1], [2].

In today's economy network, the business environment is complex, dynamic and more competitive than before [3]. Entrepreneurs facing a series of strategic decisions in business process as an example, decision to start a new venture, decision to organize new management team, decision to focus on particular part of market and decision to supply financial resources. The decisions are a set of entrepreneurial strategies that will greatly affect the success of the firm [4]. Considering that effective entrepreneurship in emerging market is a strategic process, so for strategic management it would be hard to achieve in emerging markets without entrepreneurial orientation; hence with combining strategic and entrepreneurial perspectives, we propose entrepreneurial strategy elements for sustainable development of entrepreneurial channels for implementing internal (ability) and external (customers) creative discoveries [5].

Another issue highlighted the importance of entrepreneurial strategy is to make the new company's internationalization, and it is nothing but problems related to the each of the firm's internationalization approaches. Adopting an economic approach to internationalization of firm is beneficial but process aspects of internationalization

are ignored. Process approach considers the aspect, but as the economic approach condors the individual's strategic choices, so it wouldn't be useful in understanding strategic changes, particularly where the entrepreneurs plays the main roles [6]. Since the entrepreneurs are the main variables in the internationalization of new economic activities, hence for creating the most values, the entrepreneurial company's should have a strategic function which requires combining of strategic and entrepreneurial thoughts [7]. Entrepreneurial strategy is a milestone in internationalization of new ventures, and identifying its themes is the ultimate goal of this research.

Among the best and fastest strategies in this path is defining strategies used by companies that have taken steps in this field.

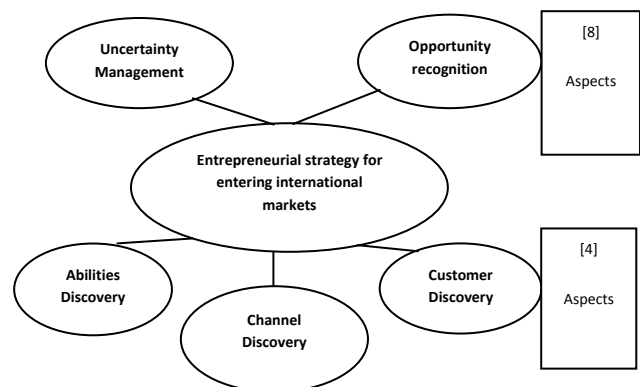


Fig. 1. The conceptual model [4], [8].

## II. CONCEPTUAL FRAMEWORK

Although the primary conceptual model with strategic entrepreneurship issue have emerged before [9], [10], but modern models should be developed and adopted fields in proposed model should be analyzed in identical [11]. Reference [9] set six dimensions at the center of strategic entrepreneurship including: innovation (creativity and executive ideas), networks (providing access to resources), internationalization (rapid adaptation and development), organizational learning (knowledge transfer and resource development), growth (success stimulation and changes) and top management team (effective selection and strategy implementation insurance). Activity in these fields can be connected to the strategic and entrepreneurial category. The dimensions have been modified by [12]. And include: network and external coalition, resources and organizational learning, innovation and internationalization. While the two models have some similarities which means both focus on

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networks and growth, [12] model has more emphasis on resources, qualifications and capabilities and also seek to manage strengthening the strategic aspects of the model. However, these models have made a little change in aspects of entrepreneurial or exploratory model and raise questions about suitability of the frames [11]. Meanwhile, with regard to the new field of new company's internationalization, the studies haven't noticed any approach which includes factors affecting the formation of entrepreneurial strategies in internationalization of new companies. Therefore, the reviews the existing literature, it also identify the affecting factors of entrepreneurial strategy in internationalization of start-ups economic activities. Thus, the aim of the study was to identify themes of entrepreneurial strategy in internationalization of new ventures. Due to lack of theoretical components, the theoretical frameworks of constituent components are as follows.

### III. SAMPLING TYPE AND METHOD AND SAMPLE SIZE

The research is a functional survey and its research method is qualitative. The method of sampling is purposeful, and due to the fact that the aim of the study is to benefit from the enriched and informed sample, purposeful criterion sampling strategy was considered. The companies in this study were selected on the basis that: a) are involved in one of the international activities. B) In first 42 months of its life cycle (42 months after establishment and payments); have expanded its activities and operations into foreign (or international) markets. In the study, sampling continued until theoretical saturation. And for this purpose face to face interviews with five companies' managers and board of directors have been conducted.

### IV. DATA ANALYSIS METHOD AND STAGES

In the research, a qualitative content analysis was used to analyze data. Reference [13] defined qualitative content analysis as a procedure used in order to interpret the content of texts which taken from the interviews, using a systematic processes of coding and identifying patterns and themes with original issues.

#### A. Phase 1

At this stage, based on the principles and theoretical literature of the research, the most important factors and indicators in entering the international markets were identified and extracted. Then a questionnaire with 8 open questions designed and purposeful randomly provided for samples. The purpose of the open questions in the survey questionnaire, identifying factors and affective indicators in relation to each question on the view of interviewees.

#### B. Phase 2: Reliability

Questions which form the basis of the interviews has been confirmed by experts of the field include university professors and administrators who are active in exports. To increase reliability, eliminating potential ambiguities in the questions and assurance of the accuracy of the respondents answers, three approaches were used to enhance the participation of the interviewees including: a) key detail b)

citation c) transparency.

#### C. Phase 3: Data Analysis

For data analysis two open and close coding method were used. In open coding, the goal is describing reports and information taken from interview in concepts. And in key coding, classifications and themes of variables which obtained as a result of open coding are reviewed and distinctive.

TABLE I: THEMES OF ENTREPRENEURIAL STRATEGY OF NEW VENTURES IN INTERNATIONAL MARKET ENTRY

Theme	Aspect	Execution
Opportunity discovery process	-Innovation	New marketing, competitive advantage, new products, competitive product development, data collection systems, human resources, internal and external information resources, competitive advantage (focus), competitive advantage (differentiation), social networks (family), the social network (colleagues, clients or suppliers), providing the raw material, social networks (family, friends), the volume of exports
	-Resource control	
Uncertainty management process	-Growth of small scales -Focus strategy -Flexibility -Legitimacy	Capital growth, prospective, risk-taking, market segmentation, taking action, the competitive volume
Ability discovery process	-Openness  -Effectiveness	Information about competitors, competitors' information access, export targets, International Development, international activities, satisfaction with export development, international negotiations, international contracts, orders, randomness, awareness of international opportunities through the channel, reaction to the market information and, opportunities, reflecting the results of ongoing activities in abroad, competition policy, regulatory involvement in export activities, attend international exhibitions, teamwork, Company goals effects on the Executives decisions,
Customer discovery process	-Trust  -Credit	Search for information, marketing research, new customer relationships development, identify potential customers / distributors, customer satisfaction, trust to received information, customer maintaining, feedback
Channel discovery process	-Autonomy  -Experience	Member contributions, participation in the international development of managers and employees, the employees' problem solving venture, employee awareness, awareness, awareness of opportunities, Experience in the field of internationalization of the company or its owners experience seeking foreign partners to understand internal rivals (knowledge), knowledge of global competitors.

#### D. Phase 4: Findings

After content analysis of collected interviews data, the sub and main criteria were identified and extracted (or exploited). After extracting the indicators obtained from interviews and integrating them with indicators taken from

research literature and integrating matches and eliminating duplicates, finally 12 criteria and 58 sub-criteria were obtained.

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# The Role of Event Marketing to Increase Brand Awareness of East Java Tourism and the Impact on Development of Entrepreneur Motivation (Case Study on Jember Fashion Carnaval)

Alvan Sidiq Asbullah

**Abstract**—In 2010, East Java got a first rank in Indonesia for foreign and domestic tourist visits reached until 48 million 48.261.888 tourists. While for foreign tourist visits from 2009 to 2011 are also always on the increase. With such achievements of East Java, it need an effort to maintain the stability or even increase that achievements in order to create and develop entrepreneurship motivation to increase economic activity. This paper is designed to know the concept of the role of event marketing to increase brand awareness of east java tourism and the impact on development of entrepreneur motivation. The study scientific work is designed by using a descriptive analytical approach. JFC As Event Marketing to Increase Brand Awareness of East Java Tourism and this impact on entrepreneurship motivation is drawn as an concept that involves the role of management JFC, Provincial Government of East Java, Travel Agents, Culinary, Hotel, and Tourism objects in East Java. The role of each stakeholder. In order to increase brand awareness of East Java tourism can be divided into three phases, namely pre-event, event, post-event. With this concept, the conclusion, are:

- 1) Created JFC As an Event Marketing in Promoting East Java Tourism. Finally, it will increase Brand Awareness of East Java Tourism and increase entrepreneurship motivation of East Java people
- 2) Through this concept, by the potential that every regions have, it will able to do the event marketing as corporate social responsibility of each district in promoting their potential tourism object by the concept of event marketing.
- 3) Through event marketing, it will be able to increase brand awareness of tourism potential and will give impact in increasing economic activity of each district.

**Index Terms**—Event marketing, brand awareness, entrepreneurship motivation, jember fashion carnaval.

## I. INTRODUCTION

Entrepreneurship development is considered very important because the base business and entrepreneurial ability of an economy are all factors of production first. The number and quality of people with entrepreneurial skills is the key to maximizing the efficient use of the factors of economic development competitiveness [1]. In order to achieve successful implementation of entrepreneurship as a solution to the problem of unemployment in Indonesia, it is necessary to build an entrepreneurial motivation in

Indonesian society.

During this Jember known as a producer of tobacco because tobacco has a superior form of commodities, but since 2003, the impact on the state economy in Jember more lively fashion with the convening of an annual performance packaged in a carnival, with the name of Jember Fashion Carnaval (JFC). Event marketing event that aims to build Jember through the tourism sector, providing great potential for the development of entrepreneurship in Jember [2].

Department of Culture and Tourism of East Java held a buzz in the tourism sector. East Java Tourism Office headed by Ir. H. Jarianto mapping conducted a seminar in East Java tourism market positioning. The event was held as seen growth rates are encouraging travelers in East Java, so it is necessary to maintain the stability of the accomplishments that have been achieved so far. In 2010, East Java, the highest position in the archipelago in the tourist excursions reached 48,261,888, according to data from the Central Statistics Agency. The seminar East Java tourism market positioning is done at Hotel Bisanta Bidakara formulate attainment targets tourism in East Java in 2012 which is expected to grow eight million of the total value of the above [3].

In the meantime, one powerful way to convey the message of a brand is to invite customers and potential customers to engage in an event held company. Event marketing has tremendous power to create brand awareness to consumers so that in him growing bigotry against certain products [4]. If the event held earnest, event marketing (event marketing) has a powerful appeal for marketers in an attempt to strengthen brand awareness of a product in the eyes of consumers [5].

Seeing the target market positioning mapping form East Java tourism refers to tourist growth rate in East Java are encouraging, it is necessary to maintain the stability of the accomplishments that have been achieved so far. JFC no doubt bring back in terms of visitors. Ahead of August 3, which was held yesterday JFC in 2011, hotels and inns in Jember and surrounding areas are full by about 300 local and international media who wish to cover [6]-[7]. Thus the JFC can be used as event marketing for tourism in East Java in promotional activities to increase brand awareness and tourism in East Java in improving the entrepreneurial motivation.

## II. STUDY LITERATURE

### A. Event Marketing

Marketing is a promotional event designed to attract and



occasion involve a brand's target audience." Event held marketing should have an influence (impact) and provide a lasting impression to everyone in attendance that the customer or potential customer can be quite long considering such a pleasant experience. An event marketing has several advantages and disadvantages that must be considered by every marketer. Through direct interaction is that marketers are able to do a wide range of approaches to provide a deep impression on the product image in the eyes of consumers, of course, a good image that can influence consumers in making purchasing decisions on products [8].

### B. Brand Awareness

Brand awareness or brand awareness is the first step to build a product brand. The most important aspect of brand awareness is a form of information in memory in the first place. A point memory brand awareness is essential before brand association can be established. When consumers have little time to do the intake, proximity to the brand name would be enough to determine the purchase [9], [10].

### C. Entrepreneurship Motivation

Entrepreneurship has been very important in helping the government in terms of job opening, both for entrepreneurs themselves and to other communities. This is due to the limited ability of the government to provide jobs for the 200 million people in Indonesia. Therefore, entrepreneurship is a potential development, both in quantity and quality of entrepreneurship itself [11]. Based on all its potential, then entrepreneurship is very important to be cultivated. Therefore, it is necessary to build a business entrepreneurship motivation in Indonesian society [12].

## III. METHODOLOGY

This scientific paper examines the institutional event marketing, which is the synergy between government, event marketing, and other stakeholders in finding the concept of the role of event marketing to increase brand awareness of east java tourism and the impact on development of entrepreneur motivation. The research method used is literature which the authors explore the phenomenon [13]. Interviews were conducted with management JFC, Mr. Hendik Rendrawan and East Java Tourism Ambassador 2012, Shofie Sabatini Verayunia. Library Studies conducted to obtain secondary data to examine various written references (books, documents, papers, articles from the internet, and so on) that have relevance to the issues discussed [14].

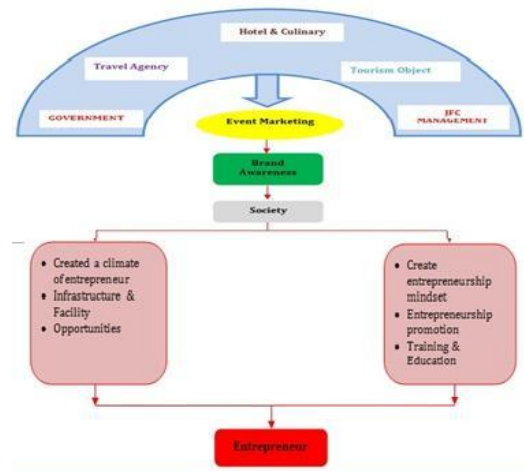
## IV. DISCUSSION

Scheme explains the above concept of each stakeholder's role in event marketing creates an impact on increasing the brand awareness of the potential of local tourism. The role of each stakeholder including:

### A. Management of JFC

JFC as carriers of cultural values and tourism in East Java in any event his performances. We know that the JFC is unique performances costumes from various regions within

the country and abroad. To be able to display the cultural values of East Java, the need for better cooperation among relevant stakeholder. As for what to do by management JFC is entering the cultural values of East Java in all its events, that is, in any fashion design to the theme of culture in East Java.



Source: Data processed

Fig. 1. The role of event marketing to increase brand awareness of east java tourism and the impact on development of entrepreneur motivation.

### B. East Java Provincial Government

As for what to do by the Province of East Java is:

- 1) JFC took as one of the media marketing of tourism in East Java
- 2) Provide easiness (Mass: permit activity, place, time, event concept and funding) for the JFC to execute event.
- 3) Utilizing moment performances of Java JFC to promote tourism East through East Java tourism ambassador role, namely:
  - Actively promote cultural and tourism potential in East Java JFC performances by stand or outlets along the catwalk JFC. In addition, the substrate and finish at JFC, allocated time for the media campaign as well.
  - Promote the event JFC through mass media, print, and electronic. Promotions conducted before and after the event.

### C. Travel Agents, Business Culinary and Hotel

#### 1) Travel agents

Transport fleet ready to serve the transportation needs of the domestic and foreign tourists to witness the JFC and excursions to the sights of East Java. Promote and travel packages at affordable prices and the best facilities in order to service visiting most attraction in East Java.

#### 2) Culinary

Creative Culinary ready to serve, so travelers who present no difficulty to find consumption. If this is available with both, it will be able to give the impression that East Java not only has a variety of tourist and cultural potential alone, but other supporting facilities were available.

#### 3) Hotel

- Facilities and services are ready to serve the local arrival of local and foreign travelers who visited.
- The packages are affordable and comfortable accommodation with a range of facilities that support.

#### *D. Objects Holidays in East Java*

Promoting the attractiveness and beauty of attraction through various media. In addition to note is cleanliness, security, infrastructure attractions are well prepared to create visitor satisfaction. So it is expected to create a great impression for any visitor who came and were able to increase the interest to come back to the most attraction in East Java.

The reason why the purpose of this concept is event marketing, and is due in line with the results of the study by a research institute management seminars delivered in 2008, that [15]:

- 1) 78% say event marketing is effective, as 17.1% can increase awareness of a product, in that it will boost awareness of the potentials of tourism and culture in East Java.
- 2) The role of event marketing, 59% of companies say is very important in marketing activities. This means that event marketing is superior to other promotional media. Any potential for tourism and culture in East Java can be conveyed in building its brand in the public eye and build emotional target audience so as to give a deep impression on everyone in attendance. That is expected to encourage the spread of word of mouth activity to people in the surrounding area about the experience of what they have felt.

To overcome barriers to entrepreneurship in the community to build motivation in Jember through the JFC, the necessary role of the Government of Regency (Regency) Jember as a motivator and mover. Role of Government Jember can be realized in the form of full support to the activities of JFC and the preparation of programs that can create a climate conducive to the development of entrepreneurship in Jember. The main thing that needs to be done by the Government Jember as a form of support for the JFC is to develop a vision and mission that is consistent with the JFC objectives are the development of the tourism sector in Jember. The vision and mission is needed as a guide in formulating government policies Jember, in order to build Jember ideals can be realized through the tourism sector. Other support that can be given Jember Government is providing various facilities and facilities for the holding of JFC each year.

The next stage is to conduct outreach to the community about the vision and mission of building the tourism sector in Jember. Governments also need to socialize Jember JFC's role in achieving the vision and mission and urge the entire community to participate Jember effort in developing the tourism sector in Jember through JFC. These efforts can be realized in the form of direct involvement in the events JFC or community in the form of full support

In an effort to build the tourism sector and improve the economy of the community, the local government can afford Jember through entrepreneurship. Therefore, programs need to be developed that can develop entrepreneurial motivation in Jember. Such programs may include the creation of a conducive business climate and entrepreneurship program in community mental formation Jember.

In the effort to create a conducive business climate, Jember regency can begin by improving existing facilities and

infrastructure, especially transport. So far, the factors leading to the reluctance of investors to invest their funds in Jember is due to transportation issues, the local government can Jember soon complete the construction of the airfield Notohadi Negoro, thus facilitating the mobility of people in and out of Jember.

In addition, the Government Jember need to provide facilities for the ease in starting a business. Convenience facilities include procedures related to the ease of administration (business license) as well as the provision of venture capital through small business loans (KUK) with mild conditions and interest rates. These facilities aim to create economic opportunities that can attract people to entrepreneurship.

To develop entrepreneurship motivation, Jember Government also needs to seek mental formation of entrepreneurship in society. The first step to do is to conduct dissemination and promotion of entrepreneurship. Dissemination and promotion can be done through entrepreneurship seminars.

The government can also seek Jember mental formation of entrepreneurship in the form of training, which contains about entrepreneurship education and training. In the training, also need to be given managerial knowledge and entrepreneurial motivation to form a strong entrepreneurial mental.

It is expected that the programs of the Government of Jember, the public can take advantage of the growing opportunities in the tourism sector through events Jember Jember Fashion Carnaval, by way of entrepreneurship. In order for the program to run optimally, we need to hold periodic evaluations. In the evaluation Jember Government doing improvements and innovations development tailored to the circumstances that occurred.

#### *E. Roles and Opportunities JFC Another Area in East Java*

Jember Fashion Carnaval (JFC) as a pioneer in Indonesia's cultural parade bring benefits to the continuity of national culture that few people began to forget Indonesia. This is evidenced that JFC invited and become a consultants by several other areas in East Java As. JFC has become an inspiration for Fashion Carnaval in East Java, including Malang and Batu Flowers Carnaval, Pandaan Banyuwangi Ethnic Festival and Carnaval. JFC also been contracted by the government kabupaten Banyuwangi for 3 years from 2009 to 2011 as a consultant [16].

This is certainly an opportunity to make other areas to implement the same event to introduce the potential of the region to the wider community through an event tourism or event tourism marketing in order to grow brand awareness and increase the tourism potential of the area. For example, in the city of Malang and Batu, Malang and Batu via Carnaval Flowers can introduce potential natural attractions, while in Banyuwangi and Pasuruan through Pandaan Banyuwangi Ethnic Festival and Carnaval to introduce or promote cultural tourism. If brand awareness increased tourism in the area, it will improve achievement tourist activities and impact on improving people's economic activities in daearahnya through various fields of economic activity.

## V. CONCLUSION

With this concept, the conclusion, are:

- 1) Created JFC As an Event Marketing in Promoting East Java Tourism. Finally, it will increase Brand Awareness of East Java Tourism and increase entrepreneurship motivation of East Java people .
- 2) Through this concept, by the potential that every regions have, it will able to do the event marketing as corporate social responsibility of each district in promoting their potential tourism object by the concept of event marketing.
- 3) Through event marketing, it will be able to increase brand awareness of tourism potential and will give impact in increasing economic activity of each district.

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