## Volume I Number 1 2014

## Journal of Academy for Advancement of Business Research

## Editor-in-Chief

Dr. Tom F. Badgett, D.B.A.

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Journal of Academy for Advancement of Business Research<sup>TM</sup>

Print: ISSN 2332-0311 Online: ISSN 2332-032X

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**Print: ISSN** 2332**-**0311

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## CULTURAL VALUES AND SOCIAL RESPONSIBLE CONSUMER BEHAVIOUR

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## **ABSTRACT**

The main objective of this study is to identify the relationship between cultural values and the perception of social responsibility by Portuguese consumers. Data were collected for Portuguese consumers. The research examines the influence of cultural values on consumer perceptions about the practices of corporate social responsibility. The main findings suggest that Portuguese consumers are guided by cultural values as Consumer Innovatiness, Tradition and Consumer Ethnocentrism and this influences consumer perceptions about the social responsibility practices. The implication of this study is relevant for companies with social responsibility practices in their processes of internationalization.

**Keywords:** cultural values, consumers perceptions, corporate social responsibility, structural equation modelling

### 1. INTRODUCTION

The interest of the influence of culture on consumer behavior has increased considerably as a result of the globalization of markets and the diversification of consumer segments. In marketing research, culture has been considered as a determinant of consumer behavior (Patterson et al., 2006; Prasongsukarn, 2009). The cultural values of consumers have an important role in the formulation of international marketing strategy (Fisher et al., 2010). The cultural values of consumers may influence their perception about the practices of corporate social responsibility.

The link between consumption and cultural values has been widely advocated (Allen, 2001; Arnould et al. 2,003; Allen et al. 2,002) since the culture has influence on human behavior and thus in consumption. Cultural values, in turn, are also explanations of consumer behavior. Thus, it becomes necessary to understand the influence of culture on global marketing strategies (De Mooji, 2003, 2010). On the other hand, consumer behavior and perceptions differ as a result of the differences to cultural values (Hofstede, 1991).

The social responsibility practices reflect to stakeholders' information about the organization's values and are useful in increasing the confidence that individuals have on companies (Pérez, Salmone and del Bosque, 2013). The perception of consumers about the practices of corporate social responsibility influence the affective responses of consumers who identify with the company (Bhattacharya and Sen, 2004; Sen and Bhattacharya, 2001; Page and Fearn 2005; Marin and Ruiz, 2007; Pérez, Salmone and del Bosque, 2013).

With this paper we intend to analyze what are the cultural values prevailing in Portuguese consumers and know how these values explain the perception of consumers about the practices of corporate social responsibility.

The work begins with a literature review of the main concepts of the paper: the cultural values of individual consumers and consumer perceptions about the practices of corporate social responsibility. Also, a review of the literature that supports the research questions. Next is explained the methodology for research with respect to the sample and measuring the constructs. The results of the study are presented below, and a final session covers the findings, the management implications, limitations of the study and further work in the future.

## 2. THEORETICAL BACKGROUND AND HYPOTHESES

To develop research hypotheses and arguments to defend the importance of knowing the individual cultural values underlying the perception of consumers about the practices of corporate social responsibility, this study considers the self-congruity theory and cultural values individual consumers.

The sefl-congruity theory suggests that consumers choose products and brands with symbolic meanings that are congruent with their own self-concept (Sirgy, 1982, 1985; Litvin and Kar, 2004). This theory is included in a number of theories of cognitive consistency (cognitive-consistency theories) that suggest that individuals act consistently with their beliefs and behaviors since the inconsistency produces feelings of discomfort and tension (Allen et al., 2008).

Aaker et al. (2001) suggest that the symbols and meanings embedded in brands serve to represent and institutionalize the values and cultural beliefs. Consumers are more likely to respond favorably to the symbolic meanings of products that reflect a value that they as individuals defend, increasing your chances of buying.

The symbolic objects contain shared culture, abstract beliefs that refer to entities in the cultural world constituted. The symbolic meanings of an object, synthesized in a brand, consisting of abstract and subjective beliefs about a cultural entity. However, the symbols are linked to a specific configuration of tangible attributes instantly result an evaluation of the product as a whole (Allen et al. 2008).

Despite a great deal of discussion around the concept of culture, there is still no broad consensus on its definition. By culture it is understood the set of shared knowledge and implicit theories about the world, including beliefs, values, attitudes and other constructs necessary to interpret and understand the various environments (Hong et al., 2000, Sharma, 2010).

Culture can be seen as a system of meanings shared by members of a specific society. Different cultures may give prominence to different values and these values can affect both the roles that companies play in society, whether that society expects of firms (Burton, Farh and Hegarty, 2000). Culture represents an evolving and ongoing set of norms and values, where acculturation is characterised by conflict, creativity, democratisation, disagreement, innovation, internal or external industrialisation and modernisation (Oyserman 1993; Rohner 1984). Culture can be seen as three ideational themes: cognitive, structuralism and symbolic (Keesing 1974).

Culture includes values, norms and beliefs going beyond mere personal values. For de Mooji (2003, 2010), cultural values explain the behavior of consumers and if businesses want to succeed in international markets, understanding the influence of culture is fundamental. The different components contained in the culture, make individuals predisposed to act in accordance with the most appropriate ways for their reality. On the other hand, for Prasongsukarn (2009), integrates the culture of human society and its identity.

Research on cultural values (Hofstede, 1980) suggests that the value systems differ from country to country. Fischer et al. (2010) argue that in the context of marketing, this can be relevant since the meaning of brands may vary between individuals from different countries.

For Hofstede (1991), the culture is more apprehended than the inherent, which allows a change in learning new culture traits. Brands can be seen as the product of a culture that has the potential, while circulating in society to affect other cultures and cultural habits (Hakala et al., 2012). For de Mooij (2010), although the needs are universal, the set of values, attitudes and motivations vary the behavior of consumers, according to their cultural differences.

The instrument of cultural analysis of Hofstede (1991) serves as a useful theoretical basis for exploring the cross-cultural differences in consumer behavior. Furthermore, the measuring instrument Hofstede is quite comprehensive and useful relationships with shows demographic, geographic, economic and political society. However, the constructs at the nation-level may not fully represent the diversity of cultural orientations of a country.

The cultural orientation will be better linked to individual attitudes and behaviors. Although the culture is characterized by shared values, variables measuring individual should be carefully used when one

intends to get results at the aggregate level, as the society of a country is rarely culturally homogeneous. Therefore, some caution is necessary when using national generalizations to explain individual behavior.

The cultural orientation of individual consumers is operationalized in five basic cultural dimensions: individualism, power distance, uncertainty avoidance, masculinity and long-term orientation (Hofstede, 1991; Sharma, 2010). However there are differences between the cultural dimensions at the country level and individual values, which led to development of various measures and scales (Sharma, 2010).

There are few studies that explain the perception of social responsibility practices in different cultures (Kim and Kim, 2010; Singh, Sanchez and del Bosque, 2008). However it can be assumed that the values are different across cultures and differences in these values are reflected in the attitudes of individuals against the practices of corporate social responsibility (Burton, Farh and Hegarty, 2000).

The research on responsible consumption has been developed combining aspects of the theory of reasoned action with the personal values of consumers (Ajzen and Fishbein, 1980). Webster (1975) defines the social conscience of the consumer as the consumer who has public attention to the consequences of their private consumption or consumer who intends to use its purchasing power in order to bring about social change. Thus, the consumer incorporates social issues in their purchasing decisions, evaluating the consequences of their consumption in society.

According to the main findings of the literature on corporate social responsibility (CSR), consumers are interested in the social behavior of companies and are influenced in their purchases by these behaviors (Maignan, 2001). Frequently, consumers argue that a company's profile on social responsibility is important in the selection and purchase of certain brands (Castaldo et al, 2009; Singh, and Sanchez del Bosque, 2008).

On the Corporate Social Responsibility (CSR) it is understood the actions and policies of a specific organizational context that takes into account the expectations of stakeholders three performance levels: economic, social and environmental (Aguinis, 2011; Rupp, 2011; Rupp, Williams and Aguilera, 2010; Aguinis and Glavas, 2012). Refers to the efficiency of a business to produce and put in the market products taking into account the management of social obligations (Pérez, Salmone and del Bosque, 2013).

Recent studies have found that consumer response to CSR practices are quite complex and consumers are strongly influenced by reasons related to values (Barone, Miyazaki and Norman, 2007; Pivato, Misani and Tencati, 2008; Alcañiz, Cáceres and Pérez, 2010; Boulstridge and Carrigan 2000). The exposure of consumers to information on social responsibility practices determines the consumer's beliefs about them and their general attitude towards the company practices (Wagner, Lutz and Weitz, 2009; Sen, Bhattacharya and Korchum, 2006).

As already said, there is still no broad consensus on the conceptual and operational definition of cultural orientations at the individual level. The cultural orientation at the individual level is the shared culture of values and norms, as well as personal benefits that is based on individual experiences only. In this case, this cultural orientation has a multidimensional structure. This work uses Shrama (2010) scale for the measurement of individual cultural orientation considering that this orientation is formed through constructs such as independence (IND), interdependence (INT), power (POW), social inequality (IEQ), risk aversion (RSK), intolerance of ambiguity (AMB), masculinity (MAS), gender equality (GEQ), tradition (TRD), prudence (PRD), consumer ethnocentrism (CET) and consumer innovativeness (CIN).

The culture of the Mediterranean and southern Europe, which includes the study sample, present some peculiarities that may explain the perception of individuals about social responsibility practices.

So, are raised a set of research questions to which they want to address in this initial phase of work, namely, what are the constructs of individual cultural orientation that are present in the Portuguese population and these individual cultural values influence consumer perceptions on the practices of corporate social responsibility.

 $QP_1$ : What are the constructs of individual cultural orientation that predominate in Portuguese consumers?

QP<sub>2</sub>: The constructs of cultural orientation of individual consumers Portuguese influence their perception about the practices of corporate social responsibility?

### 3. METHOD

## 3.1. Sample and Procedure

The collection of information for the estimation of the model was done through survey together consumers, using scales of measurement referenced in the literature.

### 3.2. Measures

The questionnaire for data collection was divided into two parts. The first part of the questionnaire contains a set of demographic questions that allow characterizing the respondent. The second part of the questionnaire contains items of the scales to measure the constructs under study, in which respondents gave their level of agreement using a Likert scale of 5 points.

To measure the personal culture orientation of consumers used the Sharma (2010) scale and to measure the orientation of socially responsible consumers behavior used the Roberts (1996) scale.

**TABLE 1. SCALES USE** 

Scale	Itens
	L L (ND)
Personal Cultural	Independence (IND):
Orientation (Shrama,	IND1. I would rather depend on myself than others
2010) (adapted)	IND2. My personal identity, independent of others, is important to me
	IND3. I rely on myself most of the time, rarely on others
	Interdependence (INT):
	INT1. The well-being of my group members is important for me
	INT2. I feel good when I cooperate with my group members
	INT3. I tis my duty to take care of my family members, whatever it takes
	Power (POW):
	POW1. I easily conform to the wishes of someone in a higher position than
	mine
	POW2. It is difficult for me to refuse a request if someone senior asks me
	POW3. I tend to follow orders without asking any questions
	Social Inequality (IEQ):
	IEQ1.A person's social status reflects his or her place in the society
	IEQ2. I tis important for everyone to know their rightful place in the society
	IEQ3. I tis difficult to interact with people from different social status than
	mine
	Risk Aversion (RSK):
	RSK1. I tend to avoid talking to strangers
	RSK2. I prefer a routine way of life to an unpredictable one full of change
	RSK3. I would not describe myself as a risk-taker
	Ambiguity Intolerance (AMB):
	AMB1. I find difficult to function without clear directions and instructions
	AMB2. I prefer specific instructions to broad guidelines
	AMB3. I tend to get anxious easily when I don't know an outcome
	Masculinity (MAS):
	MAS1. Women are generally more caring than men
	MAS2. Men are generally physically stronger than women
	MAS3. Men are generally more ambitious than women

	<del>,</del>					
	Gender Equality (GEQ):					
	GEQ1. I tis ok for men to be emotional sometimes					
	GEQ2. Men do not have to be the sole bread winner in a family					
	GEQ3. Men can be as caring as women					
	Tradition (TRD):					
	TRD1. I am proud of my culture					
	TRD2. Respect for tradition is important for me					
	TRD3. I value a strong link to my past					
	Prudence (PRU):					
	PRU1. I believe in planning for the long term					
	PRU2. I work hard for success in the future					
	PRU3. I am willing to give up today's fun for success in the future					
	Consumer Ethnocentrism (CET):					
	CET1. We should not buy foreign products, because it hurts our economy					
	CET2. Only products that are unviable in our country should be import					
	CET3. Purchasing foreign products allows other countries to get rich off of us					
	Consumer Innovatiness (CIN):					
	CIN1. I am more interested in buying new than known products					
	CIN2. I like to buy new and different products					
	CIN3. I am usually among the first to try new products					
Socially Responsible	SRCB1. I have purchased products because they cause less pollution					
Consumer Behavior	SRCB2. When I have a choice between two equal products, I always					
(Roberts, 1996)	purchase the one that is less harmful to other people and to the environment					
(adapted)	SRCB3. Whenever possible, I buy products packaged in reusable containers					
	SRCB4. I only try to buy products that can be recycled					
	SRCB5. If possible, I will not use a product that can be harmful to other people					
	SRCB6. I will not buy a product if the company that sells i tis socially					
	irresponsible.					
	openiciae.					

## 3.3. Analysis and Results

Descriptive analysis was conducted to find out demographic characteristics for the sample. Among the total of 163 respondents, 74% are female and 89% male. The monthly net income of the household is mostly less than 1000 euros (70.6%). The size of the household is divided between fewer than two persons (46.0%), and two to five individuals (54.0%). The vast majority of respondents have higher education (76.7%). And 52% are aged between twenty and 40.

The survey questions were tested through exploratory factor analysis and structural equation. Thus, since there is no study on the cultural orientations of the Portuguese was necessary to conduct exploratory factor analysis to answer the first research question.

Assuming that the data come from a multivariate normal population, it is convenient to test, through the Bartlett Sphericity Test, if the correlation matrix used is the identity matrix and if its determinant is equal to 1. If this hypothesis is rejected, there is statistical evidence that there is a correlation between the variables and you can proceed with the analysis. The results found for the scales of personal cultural orientation and perception of socially responsible consumer behavior, rejects the hypothesis at a significance level of 1%.

In addition to this test, the statistical Kaiser-Meyer-Olin (KMO) allows to evaluate the relationship between the simple correlations and partial correlations between variables. It is a statistic that varies between 0 and 1. The factor analysis is considered as the best if KMO statistical approaches to one. The values found for the factor analysis of the scale of cultural values

Exploratory factor analysis was employed in data set to uncover underlying personal cultural orientation and socially responsible consumer behaviour dimensions. In order to simplify the findings, a varimax orthogonal rotation was performed on an initial factor solution. The criteria for acceptance of the results were the value of each eigen value is greater than 1.0; the factor loading after varimax rotation are greater than 0.3; the variance explained by all factor sis great than 40 percent and no variable has significant loading on more than one factor.

TABLE 2. KMO MEASURE AND BARTLETT'S TEST

Tests	Personal Cultural Orientation	Socially Responsible Consumer Behavior
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0,691	0,689
Bartlett's Test of Sphericity	565,424 (df = 45 and Sig. = 0,000)	304,883 (df = 3 and Sig. = 0,000)

TABLE 3. TOTAL VARIANCE EXPLAINED FOR PERSONAL CULTURAL ORIENTATION

Component	Initial Eigenvalues		Rotation Sums of	f Squared Loadings
	Total Cumulative % of		Total	Cumulative % of
		Variance		Variance
Factor 1 (CIN1, CIN2, CIN3)	3,203	32,031	2,224	22,239
Factor 2 (TRD2, TDR3)	1,875	50,781	2,092	43,160
Factor 3 (CET1, CET2, CET3)	1,400	64,780	2,030	63,465
Factor 4 (INT2, IND2)	1,036	75,138	1,167	75,138

Extraction Method: Principal Component Analysis.

From the results we can conclude that personal cultural orientations of Portuguese consumers are those which are connected to Consumer Innovatiness, to Tradition and to Consumer Ethnocentrism. The factor 4 is difficult to interpret because collects one item of independence and one item of interdependence, which is contradictory.

Although scales validity was borrowed from previous studies, the reliability test was conducted again for the personal cultural orientations and socially responsible consumer behaviour scales. Cronbach's alphas for those were as follows: consumer innovatiness 0,815; tradition 0,853; consumer ethnocentrism 0,751 and social responsible consumer behaviour 0,874.

The structural equations model proposed establishes the relationship between Personal Cultural Values with Social Responsibility practices Therefore, the author raise three research hypotheses:

 $H_1$ : The consumer innovatiness have a positive direct impact on the social responsibility policies consumers perceptions ( $\gamma_{11} > 0$ ).

 $H_2$ : The tradition have a positive direct impact on the social responsibility policies consumers perceptions ( $\gamma_{12} > 0$ ).

 $H_3$ : The consumer ethnocentrism have a positive direct impact on the social responsibility policies consumers perceptions ( $\gamma_{13} > 0$ ).

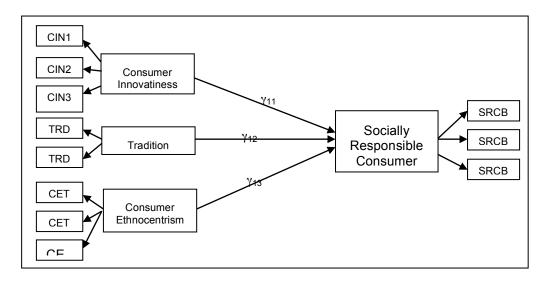


FIGURE 1. CONCEPTUAL MODEL

The model was estimated using the covariance matrix. The statistical software program used was the STATISTICA 6.1. which allowed to calculate the variance and covariance (data) matrices and the estimation of the structural model. The estimation is undertaken by the method of maximum likelihood, since the objective is to develop and test the theory of personal cultural values affect the consumer perceptions on social corporate responsibility.

The chosen indicators to analyse the goodness of the adjustment are the ones suggested by Hair et. al. (2006) as the absolute indicators, Chi-square standardized, RMSEA (Root Mean Square Error of Approximation) e GFI (Goodness-of-Fit). The Chi-square standardized presents acceptable values when these are comprised between 1 and 3 (Hair, et. al., 2006). We use RMSEA (Root Mean Square Error of Approximation) instead of RMSSR (Root Mean Square Residual) because the estimated models are based on the covariance data matrix. This indicator must be comprised between values from 0,05 (good fitness) and 0,08 (acceptable fitness). The GFI (Goodness-of-Fit) is an index of goodness of the adjustment that represents the total fitness levels, without correction in relation to degrees of freedom. High values of this indicator show good fitness, although there are not established minimum acceptable levels.

Hypotheses	Parameter	Estimation	p-Value	Conclusion	
Consumer Innovatiness → Social responsibility (+)	<b>Y</b> 11	0,681	0,000	Validated	
Tradition → Social responsibility (+)	<b>Y</b> 12	0,313	0,000	Validated	
Consumer Ethnocentrism → Social responsibility (+)	<b>Y</b> 13	0,537	0,000	Validated	
Goodness of the Adjustment					
χ <sup>2</sup> Standardized		2,2	21		
RMSEA 0,084					
GFI 0,871					
AGFI		0,7	78		

TABLE 4. HYPOTHESES

We found that the constructs of personal culture orientation consider of the structural model is positively and significantly related to perception of social responsibility practices.

## 4. DISCUSSION AND CONCLUSION

The theoretical discussion about the social responsibility practices shows that these must exist to help enterprises build a better relationship with the various stakeholders, in particular consumers.

We focus our research in Portuguese consumers and the link between personal culture orientation and the perception that a company is socially oriented. The study provides empirical support for the assertion that consumer innovatiness, tradition and consumer ethnocentrism are the individual cultural values of Portuguese consumer and they are related with consumer perception of socially oriented companies.

A managerial implication is that managers who want promote their brand to social responsibility needs to understanding the personal cultural values of the consumers.

A limitation of this study is that was not considered any specific company with social responsibility practices and respondents may be responding more by constraint than by actual practice. Further empirical research with cross-national consumers seems necessary. Future studies would attempt to find if there are any consistent personal cultural orientations of different cultures have impact in perception of socially responsible consumer behaviour.

### **REFERENCES**

- Aaker, J. L., Benet-Martinez, V. and Garolera, J. 2001. "Consumption Symbols as Carriers of Culture: A Study of Japanese and Spanish Brand Personality Constructs", *Journal of Personality and Social Psychology*, vol. 81, no 3, pp. 492-508.
- Alcañiz, E. B., Cáceres, R. C. and Pérez, R. C. 2010. "Alliances Between Brands and Social Causes: The influence of company credibility on social responsibility image", *Journal of Business Ethics*, vol. 96, pp. 169-186.
- Aguinis, H. 2011. "Organizational responsibility: Doing good and doing well" in S. Zedeck (Ed.), *APA Handbook of Industrial and Organizational Psychology*, vol. 3, pp. 855-879, Washinton, DC: American Psychological Association.
- Aguinis, H. and Glavas, A. 2012. "What we know and don't know about Corporate Social Responsibility: A review and research agenda", Journal of Management, vol. 38, no 4, pp. 932-968.
- Ajzen, I. and Fishbein, M. 1980. *Understanding Attitudes and Predicting Social Behaviou*r, Prentice-Hall, Englewood Cliffs, NJ.
- Allen, M. W., Gupta, R. and Monnier, A. 2008. "The Interactive Effect of Cultural Symbols and Human Values on Taste Evaluation", *Journal of Consumer Research*, vol. 35, pp. 294-308.
- Allen, M. W. 2001. "A practical method for uncovering the direct and indirect relationships between human values and consumer purchases", *Journal of Consumer Marketing*, vol. 18, n° 2, pp. 102-120.
- Allen, M. W., NG, S. H. and Wilson, M. 2002. "The functional approach to instrumental and terminal values and the value-attitude-behaviour system", *European Journal of Marketing*, Vol. 36, N° 1-2, pp. 111-135.
- Arnould, E. J., Prince, L. and Zinkhan, G. 2003. Consumers, New York: McGraw-Hill.
- Barone, M. J.; Norman, A. T. and Miyazaki, A. D. 2007. "Consumer response to retailer use of cause-relates marketing: is more fit better?", *Journal of Retailing*, vol. 83, n° 4; pp. 437-445.
- Bhattacharya, C.B. and Sen, S., 2004. "Doing better at doing good: When, why, and how consumers respond to corporate social initiatives", *California Management Review*, vol. 47,pp. 9-24.
- Boulstridge, E. and M. Carrigan 2000. "Do Consumers Really Care About Corporate Responsibility? Highlighting the Attitude-Behaviour Gap", *Journal of Communication Management*, vol. 4, n° 4, pp. 355-368.
- Burton, B. K., Farh, J. L. and Hegarty, W. H. 2000. "A cross-cultural comparation of corporate social responsibility orientation: Hong Kong vs United States Students", *Teaching Business Ethics*, vol. 4, pp. 151-167.
- Castaldo, S., Perrini, F., Misani, N. and Tencati, A. 2009. "The Missing Link Between Corporate Social Responsibility and Consumer Trust: The Case of Fair Trade Products", *Journal of Business Ethics*, vol. 84, pp. 1-15.
- De Mooji, M. 2003. Consumer behaviour and culture: consequences for global marketing and advertising, Thousand Oaks: Sage.

De Mooji, M. 2010. Global Marketing and Advertising – Understanding Cultural Paradoxes, Sage Publications. Los Angeles. CA.

- Fischer, M., Völckner, F. and Sattler, H. 2010. "How important are brands? A cross-category, cross-contry study", *Journal of Marketing Research*, vol. 47, no 5, pp. 823-839.
- Hakala, U., Svensson, J. and Vincze, Z. 2012. "Consumer-based brand equity and top-of-mind awareness: a cross-country analysis", *Journal of Product and Brand Management*, vol. 21, nº 6, pp. 439-451.
- Hofstede, G. 1991. Cultures and Organizations: Software of the mind, McGraw-Hill.
- Hofstede, G. 1980. Culture's Consequences: International Differences in work-related values, Sage Publications, Beverly Hill, CA.
- Hong, Y.; Morris, M. W.; Chiu, C. and Benet-Martinez, V. 2000. "Multicultural minds: a dynamic constructivist approach to culture and cognition", *American Psychologist*, vol. 55, pp. 709-720.
- Litvin, S. W. and Kar, G. H. 2004. "Individualism/Collectivism as a Moderating Factor to the Self-Image Congruity Concept", *Journal of Vacation Marketing*, vol. 10, pp. 23-32.
- Keesing, R. M. 1974. "Theories of Culture", Annual Review of Anthropology, vol. 3, no 1, pp. 73-97.
- Kim, Y and Kim, S-Y 2010. "The influence of cultural values on perceptions of corporate social responsibility: application of Hofstede's dimensions to Korean Public Relations Practitioners", *Journal of Business Ethics*, vol.91, pp.485-500.
- Maignan, I. 2001. "Consumers' Perceptions of Corporate Social Responsibilities: A cross-cultural comparison", *Journal of Business Ethics*, vol. 30, pp. 57-72.
- Marin, L. and Ruiz, S. 2007. "I Need You Too!" Corporate Identity Attractiveness for Consumers and The Role of Social Responsibility, *Journal of Business Ethics*, vol. 71, pp. 245-260.
- Oyserman, D. 1993. "The lens of personhood: Viewing the self and others in a multicultural society", *Journal of Personality & Social Psychology, vol.* 65, pp. 993–1009.
- Page, G. and H. Fearn 2005. "Corporate Reputation: What do Consumers Really Care About?", *Journal of Advertising Research*, vol. 45, no 3, pp. 305-313.
- Patterson, P. G., Cowley, E. and Prasongsukarn, K. 2006. "Service Failure Recovery: The moderanting impact of Individual-Level Cultural Value Orientation and Perceptions of Justice", *International Journal of Research in Marketing*, vol. 12, n° 2, pp. 90-113.
- Pérez, A., Salmones, M. M. G. and del Bosque, I. R. 2013. "The effect of corporate associations on consumer behaviour", *European Journal of Marketing*, vol. 47, nº 1/2, pp. 218-238.
- Pivato, S., Misani, N. and Tencati, A. 2008. "The impact of corporate social responsibility on consumer trust: the case of organic food", *Business Ethics: A European Review*, vol. 17, no 1, pp. 3-12.
- Prasongsukarn, Kriengsin 2009. "Validating the Cultural Value Scale (CVSCALE): A case study of Thailand", *ABAC Journal*, vol. 29, n° 2, pp. 1-13.
- Roberts, J. A. 1996. "Will the Real Socially Responsible Consumer Please Step Forward?", *Business Horizon*, vol. 39, pp. 79-83.
- Rohner, R. P. 1984. "Toward a conception of culture for cross-cultural psychology", *Journal of Cross-Cultural Psychology*, vol. 15, pp. 111–138.
- Rupp, D. E., Williams, C. A. And Aguilera, R. V. 2010. "Increasing corporate social responsibility through stakeholder value internalizations (and the catalysing effect of new governance): Na application of organizational justice, self-determination and social influence theories", in M. Schininke (Ed.), *Managerial Ethics: Managing the Psychology of Morality*, pp. 69-88, New York: Routledge.
- Rupp, D. E. 2011. "An employee-centered model of organizational justice and social responsibility", *Organizational Psychology Review*, n°1, pp. 72-94.
- Sen, S.; Bhattacharya, C. B. and Korschum, D. 2006. "The role of corporate social responsibility in strengthening multiple stakeholder relationships: a field experiment", *Journal of the Academy of Marketing Science*, vol. 34, n° 2, pp. 158-166.
- Sen, S. and Bhattacharya C. B. 2001. "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility", *Journal of Marketing Research*, vol. 38, pp.225-243.
- Sharma, Piyush 2010. "Measuring personal cultural orientations: scale development and validation", *Journal of Academy Marketing Science*, vol. 38, pp. 787-806.
- Singh, J., Sanchez, M.M.G-S. and del Bosque, I. R. 2008. "Understanding Corporate Social Responsibility and Product Perceptions in Consumer Markets: A Cross-cultural Evaluation", *Journal of Business Ethics*, vol. 80, pp. 597-611.

Sirgy, M. Joseph 1982. "Self-Concept in Consumer Behaviour: A Critical Review", *Journal of Consumer Research*, vol. 9, pp. 287-300.

- Sirgy, M. Joseph 1985. "Using Self-Congruity and Ideal Congruity to Predict Purchase Motivation", *Journal of Business Research*, vol. 13, pp. 195-206.
- Wagner, T; Lutz, Richard and Weitz, B. 2009. "Corporate Hypocrisy: Overcoming the Threat of Inconsistent Corporate Social Responsibility Perceptions", *Journal of Marketing*, vol. 73, November, pp. 77-91.
- Webster, F. 1975. "Determining the characteristics of the social conscious consumer", *Journal of Consumer Research*, vol. 2, December, pp. 188-196.

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# SOCIOECONOMIC ASPECTS OF SUGARCANE PRODUCING MUNICIPALITIES IN BRAZIL

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#### **ABSTRACT**

The production of ethanol from sugarcane is very traditional in Brazil, and it has been used since mid 1970s. Since the rise of sustainability concerns, the impacts on social development of sugarcane products have been discussed widely. The impacts are hard to measure, but this article studies the correlation between sugarcane production and economic diversification and social wellbeing. The cause and effect relationship is not always confirmed, but there it can be taken as a proxy of the effects of sugarcane introduction in the municipalities. Normally, its correlation with social indicators is inverse, meaning that municipalities with high sugarcane dependence have lower social wellbeing.

Keywords: Socioeconomic impacts, Sugarcane ethanol, Sustainability, correlation coeficiente

## 1. INTRODUCTION

After its introduction in the country and for over two centuries, sugarcane was Brazil's main product and one of the pillars of the economy. In the 1970s the sugarcane sector initiated a longing transformation: a large-scale ethanol production program ("Proalcool") was created by the government aiming at the production of anhydrous ethanol for blending with gasoline. With the second oil crisis, started in 1979, hydrous ethanol was introduced in the market and, since then, the sales of light vehicles able to run just with ethanol increased very fast.

With the fall of the oil prices in the mid 1980s ethanol started to lose its competitiveness. The incentives given by the government were reduced and in a second moment ethanol lost room in some regions due to the introduction of Vehicular Natural Gas (VNG) in the late 1990s. However, almost at the same time, with the deregulation of the sugarcane industry and the rising prices of oil, ethanol became a feasible option again. Nonetheless, the most important driver for the revival of the hydrous ethanol was the introduction of flex-fuel vehicles (FFV) in 2003. In Brazil the technology allows the use of any fuel blend, varying from gasohol (a blend of anhydrous ethanol – 18 to 25%, volume basis – with conventional gasoline) to pure hydrated ethanol. The acceptance of this technology and the relative low prices of ethanol allowed a large increase of the sales of FFVs; currently, almost 90% of the new light vehicles sold are FFVs.

Being an important economic activity for the country (e.g., it contributes with 2% of total GDP), the sugarcane sector is interlaced between industry and agriculture, and its impacts are obviously related to both sides of the supply chain. Due to the number of economic operators and the heterogeneity within the supply chain, ensuring sustainability of ethanol production is, therefore, a highly complex task, which requires a wide view of the system and its peculiarities.

This article intends to analyze the relationship between sugarcane production and local socioeconomic development, represented by eight selected indicators, and also to evaluate the importance of economic diversity in the local development. This analysis is done for two main producers, with different social realities: São Paulo state, the biggest sugarcane producer and highest GDP in the country, and Alagoas, one of the poorest states in Brazil, and most important sugarcane producer in the Northeast region. The objective is also to study the years of 2000 and 2010, in order to identify any changes over time.

## 2. METHODOLOGY

Both states in question are very important for the history of sugarcane: Even though it represents only 3% of the Brazilian annual production of sugarcane, Alagoas is the largest sugarcane producer in Northeast

region of Brazil (CONAB, 2013). This region is of particular interest in socioeconomic studies due to its low development and struggle with poverty. On the other hand, São Paulo state is the largest producer of sugarcane, with 55% of the countries sugarcane production. São Paulo is also the richest state in the country, with 33% of the country's GDP (IBGE, 2013).

To analyze the sugarcane producers only, the municipalities were divided by their contribution to the total amount of sugarcane produced in the state. The sugarcane municipalities that added to 90% of the total production were considered to be producers; the others were removed from the analysis. São Paulo state had 186 municipalities considered as sugarcane producers in 2000, and 265 in 2010. Alagoas had 29 in 2000 and 33 in 2010.

This study uses eight socioeconomic indicators to represent the socioeconomic situation of all municipalities concerned. These indicators can be divided into different categories of public interest, as shown in Table 1.

Class of interest	Indicator
Education	Illiteracy rate
Health	Life expectancy
	Child mortality
Income	Theil index
	Percentage of poor people
Infrastructure	Connection to the electricity grid
	Sewer system connection
General development	HDI

TABLE 1 – INDICATORS AND CATEGORIES ANALYZED

In order to verify the connectivity between sugarcane production and development, the correlation coefficient between the social indicators and five indicators of economic dependence. These dependence indicators are represented by:

- Participation of sugarcane in the economy: Participation of sugarcane in the total Municipal GDP;
- Participation of sugarcane in the agriculture sector: Participation of sugarcane in the total GDP of the agriculture sector;
- Participation of the three sectors in the economy: Participation of industry, service and agriculture in the total Municipal GDP;

The first step was to separate the municipalities into producers and non-producers. After that, the calculation of the economic participations, using economic information of municipal GDP was done. And finally, the calculation of the correlations between the social and the economic indicators.

The correlation coefficient gives an instant portrait of how close two parameters vary in relation to one another. This coefficient can be expressed in terms of its original observations, according to equation 1 (Wonnacott and Wonnacott, 1978).

$$r = \frac{\sum (X_i - \overline{X}) \cdot (Y_i - \overline{Y})}{\sqrt{\sum (X_i - \overline{X})^2} \cdot \sum (Y_i - \overline{Y})^2}$$
 Equation 1.

However, it is important to realize that the correlation doesn't necessarily indicate a cause and effect relationship. The fact that two variables evolve at a same pace could be either a coincidence or even influence from a third variable (Wonnacott and Wonnacott, 1981). Furthermore, the correlation coefficient only captures the linear relationship between the two variables, ignoring any non linear interaction that might exist (Tabachnick and Fidell, 2007).

## 3. RESULTS

In all four tables shown below (tables 2,3,4, and 5), the numbers with an asterisk represent a statistically significant coefficient. That is, one can say the coefficients are different from zero.

In Alagoas, the results show an increase in the proportionality between the social indicators, and the participation of sugarcane in the local economy. However, the presence of sugarcane in the economy indicates a worst quality of life, according to the social indicators. The negative coefficients show that the higher the participation of sugarcane in the economy, the higher the illiteracy rate and the higher the percentage of poor people, as well as lower HDI for 2000. For 2010, other indicators have statistically significant coefficients, and they, are as in 2000, negative. With the exception of the infrastructure indicators, all others are negatively proportional to the participation of sugarcane in the economy.

Indicators	Service participation	Agriculture participation	Industry participation	Sugarcane participation in agriculture	Sugarcane participation in the economy
Illiteracy rate	-0.163	0.572*	-0.381*	-0.191	0.467*
Life expectancy	-0.115	-0.407*	0.418*	0.156	-0.275
Child mortality	0.093	0.415*	-0.411*	-0.156	0.275
Theil index	0.337	-0.058	-0.165	-0.166	-0.112
Percentage of poor					
people	-0.097	0.491*	-0.354	-0.215	0.370*
Connection to the					
electricity grid	0.420*	-0.265	-0.043	0.383*	-0.095
Sewer system		_			
connection	-0.079	-0.214	0.231	0.102	-0.150
HDI	0.119	-0.504*	0.352	0.176	-0.385*

TABLE 2 - CORRELATION COEFFICIENTS FOR ALAGOAS IN 2000

The participation of agriculture in the local economy also reflects a negative proportionality with the social indicators. On the other hand, municipalities with higher industry participation have better social indicators, representing a better quality of life. The service sector in the state of Alagoas, as not expected, doesn't express any relationship with the social indicators, except for connection to the electricity grid in 2000, which, alone, doesn't represent a better quality of life.

The participation of sugarcane in the agricultural sector has also little correlation with the indicators studied, which represents that sugarcane presence in agriculture doesn't affect neither negatively nor positively the quality of life, if any cause and effect relationship could be proven.

Indicators	Service participation	Agriculture participation	Industry participation	Sugarcane participation in agriculture	Sugarcane participation in the economy
Illiteracy rate	0.214	0.611*	-0.488*	-0.077	0.473*
Life expectancy	-0.267	-0.534*	0.502*	-0.058	-0.465*
Child mortality	0.257	0.529*	-0.494*	0.061	0.462*
Theil index	-0.077	-0.363*	0.254	-0.390*	-0.467*
Percentage of poor					
people	-0.152	0.509*	-0.080	0.017	0.406*
Connection to the electricity grid	0.070	-0.112	-0.018	0.017	-0.088
Sewer system					
connection	0.069	-0.146	0.003	0.043	-0.116
HDI	-0.116	-0.684*	0.431*	-0.053	-0.578*

**TABLE 3 - CORRELATION COEFFICIENTS FOR ALAGOAS IN 2010** 

For São Paulo, the correlations between social and economic indicators are stronger than Alagoas. When sugarcane has a strong participation on the economy, the social indicators show weaker results, as

illiteracy rate, for example. A coefficient of 0.598 indicates a strong positive relationship between the variables, meaning that the higher the dependence on sugarcane production, the higher the illiteracy rate. The opposite goes for HDI, a coefficient of -0.562 represents that the higher the participation of sugarcane, the lower the HDI.

This negative correlation is also true between agriculture and social indicators. In 2000, the same relationship is for agriculture in general. The only indicator that improves with the participation of agriculture, and sugarcane specifically is income distribution. Represented by Theil index, the lower the index, the lower the concentration of income, which means that a negative correlation coefficient indicates that the sector is in fact related to less income inequality.

In São Paulo, the service sector has statistically significant correlation coefficients in relation to social indicators. These coefficients, although weak, could indicate the importance of the service sector for development.

Indicators	Service Agriculture participation		Industry participation	Sugarcane participation in	Sugarcane participation in
				agriculture	the economy
Illiteracy rate	-0.206*	0.624*	-0.270*	0.127	0.598*
Life expectancy	-0.025	-0.182*	0.148*	-0.034	-0.159*
Child mortality	0.024	0.197*	-0.158*	0.021	0.166*
Theil index	0.216*	-0.152*	-0.071	-0.319*	-0.279*
Percentage of poor people	-0.129	0.553*	-0.282*	-0.037	0.471*
Connection to the electricity grid	0.084	-0.322*	0.157*	-0.010	-0.303*
Sewer system connection	0.175*	-0.553*	0.245*	0.106	-0.427*
HDI	0.205*	-0.590*	0.246*	-0.131	-0.562*

TABLE 4 - CORRELATION COEFFICIENTS FOR SÃO PAULO IN 2000

Most of the results observed for 2000, can be reproduced for 2010. The correlations stay basically the same, with the exception of connection to the electricity grid, for sugarcane participation. The correlations for the service sector change, but are still weak. Industry also looses strength of proportionality.

IAL	TABLE 5 - CORRELATION COEFFICIENTS FOR SAC FAULO IN 2010							
Indicators	Service participation	Agriculture participation	Industry participation	Sugarcane participation in agriculture	Sugarcane participation in the economy			
Illiteracy rate	-0.131*	0.509*	-0.236*	0.198*	0.528*			
Life expectancy	0.159*	-0.335*	0.096	-0.109	-0.331*			
Child mortality	-0.180*	0.337*	-0.083	0.110	0.341*			
Theil index	0.115	-0.315*	0.128*	-0.063	-0.288*			
Percentage of poor people	-0.064	0.158*	-0.047	-0.035	0.154*			
Connection to the electricity grid	0.063	0.101	-0.147*	-0.037	0.084			
Sewer system								
connection	0.219*	-0.455*	0.145*	0.029	-0.392*			
HDI	0.155*	-0.478*	0.197*	-0.108	-0.435*			

TABLE 5 - CORRELATION COEFFICIENTS FOR SÃO PAULO IN 2010

## 4. CONCLUSIONS

This article is a complementary work to Machado (2012), Oliveira (2011) and Júnior e Júnior (2008), where the authors compare the average of social indicators between sugarcane and non sugarcane producing municipalities. The results are always better for those municipalities with sugarcane production. But the authors, most of the times, don't take other methods into consideration.

Specifically regarding the variable that indicates the relative importance of sugar cane cultivation, it is concluded that the presence of sugarcane does not negatively impact indicators of quality of life in the municipality. This can be concluded from the fact that agriculture in general has inverse correlation with the social variables, regardless the crop. However, the greater reliance of the local economy of sugarcane activity is associated, in general, with lower quality of life. The results indicate general trends: the higher the importance of agriculture in the local economy, and more specifically of sugarcane, the worst social indicators, and the higher the relative share of the industry sector in the local economy, better social indicators.

For the service sector there is no strong correlation. This could indicate that this sector doesn't require great development to be part of the local economy, since a municipality could have either high level services or just low quality with small investments services. This contrasts with the industry sector. With strong correlations, the industry sector requires more infrastructure, more qualified labor, which could indicate the strong correlations.

These correlations could have influence of other variables. For example, urbanization. The high participation of industry sector indicates a more urbanized municipality, whereas the agriculture sector indicates the opposite. Urban areas in Brazil tend to be more developed and with better access to health and education, when the urbanization is correctly planned (World Bank, 2013).

#### **REFERENCES**

Wonnacott, Ronald J.; Wonnacott, Thomas H. 1978. *Econometria*. Livros Técnicos e Científicos, Rio de Janeiro, Brazil.

Tabachnick, Barbara C.; Fidell, Linda S. 2007. *Using Multivariate Analysis*. Pearson, Northridge, USA. CONAB. 2013. *Acompanhamento da safra brasileira: cana-de-açúcar*. Available:

http://www.conab.gov.br/OlalaCMS/uploads/arquivos/13\_08\_08\_09\_39\_29\_boletim\_cana\_portugues \_-abril\_2013\_10\_lev.pdf. Last accessed 10th sep 2013.

IBGE. 2013. Produto Interno Bruto dos municípios. Available:

http://www.ibge.gov.br/home/estatistica/economia/pibmunicipios/2010/. Last accessed 10th sep 2013. Oliveira, Janaína G. 2011. Estudo dos impactos socioeconômicos regionais do setor sucroalcooleiro. Unicamp, Campinas, Brazil.

Machado, Pedro G. 2013. Análise de Indicadores Socioeconômicos em Municípios Canavieiros: estudos de caso em São Paulo e Alagoas. Unicamp, Campinas, Brazil.

Júnior, Alceu S C; Júnior, R T. 2008. *Indicadores Socioeconômicos e a cana-de-açúcar no estado de São Paulo*. FEA – RP, Ribeirão Preto, Brazil.

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## CONCERNS AND EXPECTATIONS OF HOSPITALITY MANAGEMENT STUDENTS

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## **ABSTRACT**

Hospitality management education encourages and prepares those who want to gain the skills, knowledge and credentials necessary to enter or get promoted in the hospitality industry which includes but is not limited to hotels, resorts, cruise ships, golf courses, country clubs, convention centers, and restaurants.

America's travel and tourism industry contributed \$6 trillion to GDP (9.1% of GDP) and 255 million jobs (8.7% of total employment) to employment in 2011. Its total contribution to GDP and employment are forecast to reach \$10 trillion and 328 million jobs, respectively, in 2022.

Hospitality education has grown significantly over the last thirty years. Recent growth has not been so strong. Therefore, it is imperative to understand the factors that influence career expectations and concerns of hospitality management students to ensure their career success.

This study investigated hospitality management students' perceptions regarding: (1) the level of importance of the factors that positively influenced their decisions to pursue an undergraduate degree in hospitality management, (2) the financial sources that support their undergraduate education, (3) the level of importance of the supportive elements that they expect will be important in their initial job assignments, and (4) their highest career expectations. Our findings would contribute to the efforts of the business schools and professional organizations in recruiting, retaining, and educating hospitality management students.

**Keywords:** Hospitality Management, Tourism, Travel, Lodging, Restaurant

## 1. INTRODUCTION

The lodging industry generated \$155.5 billion revenue in 2012, an \$8.1 billion increases over 2011 (American Hotel & Lodging Association, 2013). The sales of the restaurant industry are projected to total \$660.5 billion in 2013 (4% of GDP) (National Restaurant Association, 2013). According to World Travel & Tourism Council, America's travel and tourism industry contributed \$6 trillion to GDP (9.1% of GDP) and supported 255 million jobs (8.7% of total employment) in 2011. Its total contribution to GDP and employment are forecast to reach \$10 trillion and 328 million jobs, respectively, in 2022. Travel and tourism industry invested \$743 billion in 2011 and its investment is expected to rise 5.6 percent per year over the next ten years to \$1.3 trillion in 2022 (World Travel & Tourism Council, 2013).

Travel is among the top ten industries in 48 states and District of Columbia in terms of employment (U.S. Travel Association, 2013). Eighty-four percent of travel companies are small businesses (U.S. Travel Association, 2013) and 93 percent of eating-and-drinking place have fewer than 50 employees (National Restaurant Association, 2013). America's small businesses employ more than 50 percent of the private workforce and generate more than half of the nation's gross domestic product (Department of Labor, 2013). It is obvious that hospitality entrepreneurs are a main driving force of America's economy and a strong and vibrant hospitality industry is critical to a healthy economy and thriving society.

The U.S. Census Bureau reported that 64 percent of business owners had at least some college education at the time they started or acquired ownership in their businesses, (U.S. Census Bureau, 2002). Hospitality management education offers a solution to encourage and prepare those who want to be successful in the hospitality industry.

The purpose of this research is to investigate hospitality management students' perceptions regarding (1) the level of importance of the factors that positively influenced their decisions to pursue an undergraduate

degree in hospitality management, (2) the financial sources that support their undergraduate education, (3) the level of importance of the supportive elements that they expect will be important in their initial job assignments, and (4) their highest career expectations. The findings would contribute to the efforts of the business schools and professional organizations in recruiting, retaining, and educating hospitality management students.

#### 2. METHOD

Questionnaires were distributed to hospitality management majors in their junior or senior year of a bachelor's degree program at two universities in the Southern region of the United States in March 2013. The questionnaires primarily utilized numerical ranking with 5 denoting very important, 4 denoting important, 3 denoting neutral, 2 denoting not important, and 1 denoting not important at all. A total of 82 usable responses were collected. Results of the survey may apply to hospitality management students in the Southern region and may be generalized to other parts of the country only with caution.

## 3. FINDINGS

To determine whether there are significant differences among the survey respondents' rankings on the primary reasons for pursuing an undergraduate major in hospitality management, the primary reasons were sorted in ascending order based on the mean of ranks (Table 1), and stepwise F tests for equality of means were conducted. At first, we compared the means of ranks between employment opportunity  $(X_1)$ , and interest in hospitality management  $(X_2)$ , i.e., we tested the hypotheses

$$H_0$$
:  $\mu_1 = \mu_2$   
 $H_1$ :  $\mu_1 \neq \mu_2$ 

Since there was no significant difference, we included long-term earnings potential  $(X_3)$  in the hypotheses, i.e., we tested

$$H_0$$
:  $\mu_1 = \mu_2 = \mu_3$   
 $H_1$ : not all  $\mu_i$  are equal

We continued to add a factor to the hypotheses until the null hypothesis was rejected. When the following hypotheses were tested

$$H_0$$
:  $\mu_1 = \mu_2 = \mu_3 = \mu_4$   
 $H_1$ : not all  $\mu_i$  are equal

We rejected the null hypothesis (F=4.95, P=0.002) and classified the first three factors as Group 1.

To identify the second group, we started by testing

$$H_0$$
:  $\mu_4 = \mu_5$   
 $H_1$ :  $\mu_4 \neq \mu_5$ 

and repeated the same process we used to identify the first group. The fourth through sixth factors are classified as Group 2. The results are given in Table 1.

Table 1 reveals that employment opportunity, interest in hospitality management, and long-term earnings potential are more important than professional prestige, initial salary position, and private business owner potential in selecting a major. Astin et al (1987) studied undergraduate students' selection of major fields of study from 1966 through 1985 and found that the fields which have shown increases in popularity are fields with highest job opportunities. After twenty five years, their findings are still applicable to hospitality management students.

TABLE 1
PRIMARY FACTORS IN SELECTING AN UNDERGRADUATE MAJOR IN HOSPITALITY
MANAGEMENT

		Frequ	ency of	f Rank			Mean of		Group
Factors (X <sub>i</sub> )	5	4	3	2	1	Total	Rank	F-Value	Rank
Employment	64	16	2	0	0	82	4.76	$H_0$ : $\mu_i = \mu$	
Opportunity	78%	20%	2%	0%	0%	100%		i = 1,, 3	
(X <sub>1</sub> )								F = 1.60	
Interest in	65	12	5	0	0	82	4.73	P = 0.20	
Hospitality	79%	15%	6%	0%	0%	100%			Group 1
Management								$H_0: \mu_i = \mu$	
Long-Term	56	20	6	0	0	82	4.61	i = 1,, 4	
Earnings	68%	24%	7%	0%	0%	100%		F = 4.95	
Potential (X <sub>3</sub> )								P = 0.002	
Professional	44	28	6	2	0	80	4.43		
Prestige (X <sub>4</sub> )	55%	35%	8%	3%	0%	100%			
								$H_0$ : $\mu_i = \mu$	
Initial Salary	42	22	14	0	0	78	4.36	i = 4,, 6	
Position (X <sub>5</sub> )	54%	28%	18%	0%	0%	100%		F = 1.82	Group 2
, 27								P = 0.16	
Private	42	18	12	8	0	80	4.18		
Business	53%	23%	15%	10%	0%	100%			
Owner									

Table 2 displays the financial sources for obtaining education in hospitality management. It shows that a whopping 90 percent of the students have to work either full time or part time to financially support their college education. This finding is an indication of the economic status of most undergraduate students. It is also indicative of the fact that colleges must try different methods to persuade their students to study more and work less.

TABLE 2
FINANCIAL SOURCES FOR OBTAINING EDUCATION IN HOSPITALITY MANAGEMENT

Financial Sources	Frequency	Percent*			
A Job	74	90%			
Guaranteed Loans, Supportive Grants					
and/or Other Financial Aids	66	80%			
Scholarships	64	78%			
Tuition Rebate Programs	58	71%			
Internship and/or Work-Stidy Programs	52	63%			
Parents	46	56%			
* Total is over 100% because a student may depend on more than one financial sources.					

Students must be convinced that a good well-rounded education is the best investment for their careers. While acknowledging the need for employment during their academic training, creating study time and learning will give them the best returns for career success. According to the Georgetown University Center on Education and the Workforce, people with a bachelor's degree, on average, earn 75 percent more than those with just a high school diploma (Carnevale, Rose and Cheah, 2013).

Table 2 also shows that 80 percent of survey participants applied for guaranteed loans, supportive grants, and/or other forms of financial aid in order to obtain their undergraduate hospitality management

education. Clearly there is a strong need to continue federal, state, and local financial support to undergraduate students.

Table 3 lists the supportive elements that respondents expect will be important in their initial job assignments. The stepwise F tests were used again to test the equality of the means of ranks. Seventy-nine percent (79%) of them rated knowledge and skills obtained from college education very important in their future initial job assignments. Table 3 also reveals that the respondents expect their initial success in a job assignment will include assistance from their supervisors and in-house training. Twenty percent (20%) of respondents do not expect assistance from peers. This finding may indicate that due to competition, some may hesitate to seek assistance from peers, a tendency which may negatively impact their job performance.

Indeed, to provide students with the knowledge and skills, including developing a strong mentor relationship to become successful as entry-level professionals, is one of our missions. The environment in which business professionals operate has changed dramatically due to, among other factors, the rapid development of information technology, globalization, competition among business professionals, and severe unanticipated economic downturns (Albrecht and Sack, 2001; Wessels, 2004). Therefore, it is imperative for hospitality management educators to continuously revise and enrich hospitality management curricula and course content to meet the dynamic and fast-changing needs of the business world and excite students to pursue hospitality management as a career.

TABLE 3
IMPORTANT SUPPORTIVE ELEMENTS IN INITIAL JOB ASSIGNMENT

		Frequ	ency o	f Rank			Mean		Group
Factors (Y <sub>i</sub> )	5	4	3	2	1	Total	of	F-Value	Rank
College	62	14	2	0	0	78	4.77	$H_0$ : $\mu_1 = \mu_2$	
Education (Y <sub>1</sub> )	79%	18%	3%	0%	0%	100%		F = 4.42	Group 1
								F = 4.42, P = 0.04	
In-House	56	18	6	2	0	82	4.56	$H_0$ : $\mu_2 = \mu_3$	
Training (Y <sub>2</sub> )	68%	22%	7%	2%	0%	100%		F = 0.70	
								P = 0.40	Group 2
Assistance from	45	34	1	0	2	82	4.46	$H_0$ : $\mu_2 = \mu_3 = \mu_4$	Group 2
Supervisor (Y <sub>3</sub> )	55%	41%	1%	0%	2%	100%		F = 7.91	
								P = .0005	
Assistance from	30	35	13	2	2	82	4.09		
Peers (Y <sub>4</sub> )	37%	43%	16%	2%	2%	100%			Group 3

Table 4 displays the highest career expectations of those responding. Fifty-one percent (51%) of the students want to own a private business. In addition to focus on hospitality management courses, those students who want to be entrepreneurs must also master essential business subject components such as accounting, finance, information systems, marketing, human resource management, and strategy. Taking some courses in entrepreneurship is highly encouraged. Hospitality management educators may consider offering a course on entrepreneurship in hospitality and tourism. Table 4 also clearly shows a significant lack of interest in academia. Business schools are facing a shortage of academically qualified faculty (Bisoux, 2009). According to AACSB International, (1) there was a shortfall of more than 1,000 business doctorates in 2008 and the shortfall could reach 2,000 in ten years, (2) the proportion of academically qualified faculty has decreased substantially, and (3) business school faculty salary growth

has outpaced inflation – an obvious consequence of supply-and-demand imbalance (AACSB International, 2008).

Professors are role models who can positively influence the career choices of their students, and thus should constantly encourage hospitality management students who show significant potential to become

hospitality management educators. The strong job market for hospitality faculty and heightened salaries may attract more students into the academy.

Of the respondents, 32.5 percent have a career goal to reach a key administrative position within a corporation. Business subject components mentioned above are important not only to those who want to own their own businesses but also to those who want to climb the corporate ladder.

TABLE 4
HIGHEST CAREER EXPECTATIONS OF HOSPITALITY MANAGEMENT STUDENTS

Highest Career Expectations	Frequency	Percent
Owner of Private Business	41	51.25%
A Key Corporate Executive Position	26	32.50%
Hotel General Manager	8	10.00%
A Key Academic Executive Position	4	5.00%
College Professor	1	1.25%
Total	80	100.00%

## 4. SUMMARY AND CONCLUSIONS

Our analyses of data collected indicate that 90 percent of the hospitality management students have to work to financially support their college education. Though there is a strong need for continuing federal, state, and local financial support of these undergraduate students in pursuing careers in hospitality, we feel that, in addition to guaranteed loans and grants, internship programs should also play an important role in the financial support effort. Internship programs will not only offer a viable financial support alternative, but also provide real-world experiences while students are still in school. Internships can create an "intern to employee" model in which the company wins, and the student wins.

While internships provide the "real world experience," students expect to depend on the knowledge and skills obtained from a strong college education to function effectively in their initial job assignments. Moreover, fifty-one (51%) of the hospitality management students are interested in private ownership. In a rapidly and dramatically changing business world, it is imperative for hospitality management educators to continuously revise and enrich hospitality curricula and course content to meet the needs of the students. Offering a course on entrepreneurship in hospitality and tourism may be a good idea.

Extremely few of the respondents were interested in academia. This is an area of great concern and an area ripe for further examination. Hospitality management educators must exercise their role-model status to positively influence the career choices of their students. We hope hospitality management educators' influences accompanied by the efforts of professional organizations, a strong job market, and lucrative salaries will attract more students into academia. Given the current population situation with "Baby Boomers" retiring, the need for more educators has become even more important.

About thirty-three percent (33%) of our respondents have a desire to reach a key administrative position in corporate America. But with limited entry-level middle-management ranks, graduates will face slow promotion and sharp competition. To those who intend to climb the corporate ladder or eventually own a private business, we have the following suggestions:

- 1. Focus on a strong education. Education will always pay back more that the initial investment required. Education is the competitive advantage. The better students are hired and promoted first.
- 2. Develop leadership skills. Students must distinguish themselves through not only their grades, but also their leadership activities and potential, e.g., internships, community, and civic volunteer activities. Such projects provide excellent opportunities to strengthen leadership, communication, interpersonal relations, and team skills.
- 3. Be Patient. Downsizing, rightsizing, and restructuring have eliminated many middle management positions. The fewer the available positions, the slower the hiring and promoting.

4. Be ready for sharp competition. Fewer positions also mean strong competition. Promotions will not come quickly and easily. One has to outperform one's peers in order to be promoted. In addition to being well schooled in hospitality management, hospitality-management students must also be knowledgeable of the business functional areas, e.g., marketing and finance.

- 5. Improve communication skills. Excellent communication (oral, written, and listening) and interpersonal skills (the ability to get along with everyone) are critical to a successful career.
- 6. Join a high-growth company. In a high-growth firm, positions are more readily available; there is usually more room for growth, and these firms generally have excellent benefits, e.g. tuition reimbursement, which support continued education.
- 7. Change employers when blocked. When peers are promoted, one must honestly evaluate why. First evaluate yourself, and, subsequently, evaluate the entire environment. Changing employers may be one of the best ways to move ahead in one's career.
- 8. Learn a foreign language. Many firms in America have expanded or are going to expand globally. Moreover, the U.S. received 66.6 million international arrivals in 2012 (U.S. Travel Association, 2013). Those who are fluent in other languages have a clear competitive advantage over their peers.
- 9. Develop a mentor relationship. Identify and develop a strong relationship with a mentor within the organization can be instrumental to career success.

In conclusion, one's education, perseverance, commitment, and dedication are all keys to one's success in hospitality management or any other field (Timmons, 2008). Further, innovation is what drives successful career and business. Students must innovate to compete in the corporate environment and to create successful businesses.

## **REFERENCES**

- AACSB, n.d. "Business School Faculty Trends Report", http://www.aacsb.edu/ publications/datareports/. AICPA, n.d. "The CPA Vision Project 2011 and beyond", http://www.aicpa.org/ research/
  - cpahorizons2025/cpavisionproject/downloadabledocuments/cpavisionproject finalreport.pdf.
- American Hotel & Lodging Association, 2013. "2013 Lodging Industry Profile," http://www.bls.gov/opub/ted/2013/ted\_20130708.htm.
- Astin, A. W., Green, K. C., and Korn, W. S., 1987. "The American Freshman: Twenty-year trends 1966-1985, Cooperative Institutional Research program," American Council on Education, University of California, Los Angeles.
- Bureau of Labor Statistics, 2013. "Employment increases in leisure and hospitality, professional and business services in June," http://www.bls.gov/opub/ted/2013/ ted 20130708.htm.
- Bisoux, Tricia, 2009, "Solving the Doctoral Dilemma," BizEd.
- Carnevale, Anthony P., Stephen J. Rose and Ban Cheah, 2011. "The College Payoff", The Georgetown University Center on Education and the Workforce, http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/collegepayoff-complete.pdf.
- Department of Labor, n.d. "Business Ownership-Cornerstone of the American Dream", http://www.dol.gov/odep/pubs/business/business.htm.
- Department of Labor, n.d. "Encouraging Future Innovation: Youth Entrepreneurship Education", http://www.dol.gov/odep/pubs/fact/ entrepreneurship.htm.
- National Restaurant Association, 2013. "2013 Restaurant Industry Pocket Fact Book", http://www.restaurant.org/Downloads/PDFs/News-Research/Factbook2013 LetterSize.pdf
- Timmons, Jeffrey, 2008. New Venture Creation, 8<sup>th</sup> Edition, McGraw Hill
- U. S. Census Bureau, n.d. "Survey of Business Owners Characteristics of Business Owners: 2002", http://www.census.gov/econ/sbo/02/ cbosof.html.
- U.S. Travel Association, 2013. "U.S. Travel Answer Sheet: Facts about a Leading American Industry That's More Than Just Fun". http://www.ustravel.org/sites/ default/files/ page/2009/11/US\_Travel\_Answer\_Sheet\_March\_2013.pdf.

Wessels, P. L. 2004. "Information technology and the education of professional accountants". Meditari Accountancy Research, 12(1), 219–234

Willis, G., 2005, "Paying for College 5 Tips: Bringing College Costs within Reach", http://money.cnn.com/2005/03/29/pf/saving/willis\_tips/index.htm.

World Travel & Tourism Council, 2013. "2012 Annual Research: Key Facts", http://www.wttc.org/site\_media/uploads/downloads/world2013\_1.pdf.

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## PRICING OF GEOGRAPHICAL DATA AND FIRM GROWTH

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## **ABSTRACT**

The firm-level data on re-users of geographical data from 15 countries during the years 2003-2007 suggest that the pricing of public sector geographical data strongly relates to firm growth. Firms functioning in the countries in which public sector agencies provide fundamental geographical data freely or at maximum marginal costs have grown, on average, about 15 percent more per annum than firms in the countries where geographical data is priced according to the cost-recovery principle. The data further suggests that positive growth impact materializes already one year after switching to the marginal cost pricing scheme but a stronger growth boost takes place with a two year lag. Interestingly, marginal cost pricing has not generated notable growth among large firms; it has been SMEs benefiting most from cheaper geographical information. It seems credible that switching to marginal cost pricing of public sector information substantially lowers SMEs' barriers to enter new market areas in the provision of data-based products and services.

Key words: Public Sector Information, Pricing, Firm Growth, Technology Policy.

#### 1. INTRODUCTION

The fundamental importance of data for the economy is acknowledged both in the academic and practical policy oriented documents (see, e.g., Pollock, 2008; Vickery, 2011). The public sector is the largest provider of data in developed countries. Spatial data are among the most valuable databases held by public sector agencies. The major value and potential of spatial data lies in the private sector that has increasingly become also its holder. Particularly geographical information systems (GIS), navigation and location-based services (e.g., information on local attractions) and geomarketing (e.g., real estate consulting) are among potential high-growth business services. It is argued that public sector policy lines, particularly those concerning pricing, still hinder the development and growth of private markets for information services and products though. Scarce government budgets have led to the implementation of partial or full cost-recovery pricing of public sector information (PSI) – typically agencies providing PSI receive part of their funding from the government budget and partly covered their costs via PSI sales - in various countries.

There are currently very few reported quantitative analysis on the economic impacts of pricing of PSI. Newbery et al. (2008) provides an exception by analysing the welfare impacts of different pricing policies of PSI provision by the six largest trading funds in the UK. Their data suggest that moving from cost-recovery pricing to marginal cost and/or zero pricing of basic data products is a preferable solution. This paper provides, to the best of my knowledge, the first reported empirical analysis using firm-level data concerning the economic consequences of the use of different PSI pricing policies. It uses data from countries that have implemented different pricing schemes for public geographical data to empirically analyse the impacts of (maximum) marginal cost pricing on the re-user firms' growth. The data comprise data from 15 countries during the years 2003-2007.

Though this paper provides a novel contribution to the empirical analysis of the economic impacts of PSI, it links closely to a vast and well-established empirical literature exploring the determinants of firm growth (see Coad, 2007). The existence of Gibrat's Law - i.e., independence of a firm's growth rate on its size – has attained plenty of attention, with the preeminent conclusion that small firms tend to grow faster than the larger ones (see, e.g., Stam, 2010). Also, the theory-based hypothesis of positive relationship between innovation and growth (see, e.g., Aghion and Howitt, 1992) has inspired various empirical researchers but often the reported studies fail to confirm strong, or any, relationship between innovation and growth (Coad, 2007). There are also various studies focusing on the growth opportunities and firm performance. Different regulatory, legal and financial systems may generate differences in firms' growth rates across countries

(see, e.g., Beck et al, 2005; Bena and Jurajda, 2011). Also, various characteristics of country-specific or regional innovation system may affect business growth (Cassia et al., 2009). This study expands prior empirical analysis concerning firms' growth opportunities to those arising from the utilization of public sector information.

The rest of the paper is organized as follows. Section 2 formulates the hypothesis to be empirically tested. Section 3.1 presents the econometric models, 3.2 introduces the data used in the empirical analysis and 3.3 reports and discusses the estimation results. Section 4 concludes.

## 2. PRICING OF PSI AND FIRM GROWTH

Various reports emphasize the importance of PSI particularly for the sectors using geographical data (see, e.g., Fornefeld et al., 2009). The economic literature does not provide empirical analysis on the elasticity of demand for PSI but the reported examples suggest that change from cost-recovery based pricing of geographical data to MC pricing increases dramatically the use of geographical data. In 2006, Austria employed the Austrian Act of Surveying enabling change from the cost recovery pricing to the MC pricing model for public geographical data. The prices of various key data sources of the Austrian National Mapping and Cadastral Agency such as digital cadastral maps reduced up to 97 percent, and were followed by a substantial increase in orders and subscriptions of data. For instance, demand for digital cadastral maps increased over 250 percent and for landscape models over 1000 percent. An increase in demand for data arose particularly from the SMEs, and also new user groups such as geomarketing and health services firms emerge as the users of geographical data (Fornefeld et al., 2009).

In Spain, key geographical data are widely available free of charge via "Virtual Office of Cadastre" established in 2003 to provide better access and use of cadastral data and services. In 2004, the access to geographical data in Spain was improved via the launch of an Internet portal IDEE offering free access to essential geographical data. Dramatic increase in demand for data followed (http://www.sedecatastro.gob.es/OVCInicio.aspx). For instance, the number of cartography data consultations increased about 700 percent in one year, from over one million consultations to over 41 million consultations. In 2010, the corresponding number was over 124 millions indicating over 2300 percent growth in usage compared to that of 2004.

The pricing policies of PSI may have not only drastic implications for the demand for PSI but also for the size of the markets utilizing PSI. Pettifer (2009) argues that the fundamental reason for the size difference between the US and European meteorological markets are the different PSI pricing schemes adopted in the US and in Europe. He states that freely available data in the USA resulted in \$1.4 billion market in 2006 in value-added meteorological products in the USA, while the corresponding market size in Europe was \$372 million. The annual growth of meteorological markets in the US and Europe were – measured since 2000 – 17 and 1.2 percent, respectively.

The reported examples suggest that the price elasticity of demand for PSI is high: public sector agencies in various countries have witnessed a strong growth in demand for data they provide after switching from cost-based pricing of PSI to free or maximum MC priced information (see also, e.g., Newbery et al., 2008). Firms using data as a raw material for their products or services are likely to benefit most from the maximum marginal cost pricing practices. The availability of PSI at maximum MC price is further likely to promote innovation among the re-users of PSI and facilitate development of new data-based products and services. Innovation is the key engine of firm growth and particularly product innovation is often regarded as the most important strategy for market expansion (see, e.g., Hay and Kamshad, 1994). Our first hypothesis is thus the following:

Hypothesis 1: Firms tend to grow more when PSI is available at maximum marginal cost than they do when PSI is priced using cost-recovery principle.

The switch towards marginal cost pricing of PSI may not only promote innovation and generate generally more growth but it may also affect competition in the markets for information products and services. When public sector data are offered using the cost-recovery pricing principles, high price of data or substantial

collection costs (if a firm decides to collect the data itself) may form a barrier to access to data and barrier to entry to the markets for data-based products. This applies particularly for SMEs that have more limited resources than large firms. Large firms may thus be in a more favourable position when the public sector uses the cost recovery model, and benefit less from the switch to the MC pricing of data than SMEs. Our second hypothesis is thus:

Hypothesis 2: Particularly SMEs benefit from the marginal cost pricing of PSI and grow more than large firms when PSI is available at maximum marginal cost.

## 3. ECONOMETRIC ANALYSIS

#### 3.1 Econometric models

We measure growth (i.e. the dependent variable) by a firm's real sales growth between time t and t-1. This measure was chosen as it is the most commonly used and generally acknowledged measure of entrepreneurial growth. We explore the impact of the pricing of PSI on firms' sales growth by two models, the random effects model (RE) and the difference-in-differences (DID) model. The RE model was chosen as it captures well the contemporary relationship between the pricing of PSI and firm growth, while the DID method detects the growth contribution of different pricing schemes after the change in the pricing regime has taken place.

First, we employ the following RE models:

$$SALES \_GR_{it} = \alpha_0 + \alpha_1 MCPRICE_{it} + \sum_{j} \beta_j C_{it} + u_i + \varepsilon_{it}$$
 (MODEL 1)

, where the variable MCPRICE gets value 1 if a firm i's home country at time t provides essential public sector GI at maximum marginal cost prices, and 0 otherwise. Vector C denotes j control variables used in the estimated equations. We further estimate Model 1 separately for the SMEs and large firms to investigate whether the growth dynamics are different for small and large firms.

The DID method have certain advantages: it removes potential bias originating from permanent differences in firm growth between countries that employed new policy and in those that didn't. This before-after policy change approach compares firms that have faced the change in the pricing scheme at the same time against those firms in which home countries PSI were priced according to the cost recovery principles during the all sample years of analysis. The data provide us with best opportunity to evaluate performance impacts of 2004 PSI pricing policy change in Spain as it comprise a sufficiently large number of Spanish firms (i.e., 13 percent of observations) and as there is sufficient data concerning firms' growth before (i.e., in 2003) and after (i.e., in 2005 and 2006) the policy change. Other than Spanish firms from countries that have already employed MC pricing of geographical data were removed from the data for the DID analysis.

The dependent variable is the (log) level of turnover of a firm (variable TURNOVER). The following equation (from which firm-specific i-indicators are dropped for simplicity) is estimated for two cross-sections, before- and after-subsidy year:

$$TURNOVER = \alpha_0 + \alpha_1 MCPRICE + \alpha_2 T2 + \alpha_3 MCPRICE * T2 + \sum_{j} \beta_j C_j + u \qquad (MODEL 2)$$

, where coefficient  $\alpha_1$  captures the difference in firms' turnover levels between the Spanish and other firms in 2003, i.e. before the Spanish PSI pricing policy change. The time dummy T2 measures the time-related changes (due to aggregate factors) in firms' turnover that had taken place without the policy change. Coefficient  $\alpha_3$  is the focus of interest here as it captures the effect of policy change in Spain after policy implementation, at year T2.

## **3.2 DATA**

We use firm-level data from the architectural and engineering activities and related technical consultancy sector (SIC 7420) from 15 countries (i.e., Australia, Austria, Czech Republic, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Poland, Portugal, Spain, Sweden, the UK, the USA) extracted from the Orbis database. This sector is chosen for the empirical analysis as firms active in it are the major utilizers of geographical data and comprise suppliers of geographical data based products and services (e.g., digital mapping and navigation solutions). The used data consist of firm-level financial data from the years 2003-2007.

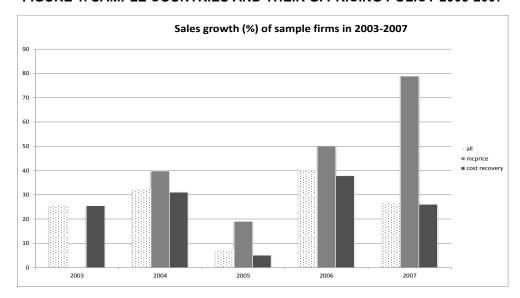


FIGURE 1. SAMPLE COUNTRIES AND THEIR GI PRICING POLICY 2003-2007

Not only the price of PSI but also its availability and coverage are likely to affect its utilization. The variable NATIONAL\_SDI gets value 1 if the approach and territorial coverage of the spatial data infrastructure (SDI) in a firm's home country is truly national, and 0 otherwise. The SDI is defined to be 'truly national' if "there is a clear initiative with a name, structure and organization responsible and/or legislation/strategy at the national level". This variable is formed on the basis of INSPIRE & NSDI State of Play Summary Report (Spring 2010).

We also control for various other factors previous studies suggest to possibly mattering for firm growth such as firm size, age, profitability, number of subsidiaries and the order of magnitude of competition (see Table 1 for the description of variables). The variable GDP\_GROWTH, a percentage change in the gross domestic product of a firm's home country, captures differences in the general economic trends or business cycles, possibly also generating cross-country differences in the growth of sample firms.

Description of variable	Variable name	MEAN (S.D)
(Turnovert – Turnovert-1)/Turnovert-1 where Turnover = firm's turnover (1 000 USD)* at a given year deflated by consumer price index.****	SALES_GROWTH	0.2825 (0.782)
Dummy variable that gets value 1 if a firm's home country has national geoportal offering spatial data at no charge or at maximum marginal costs, and 0 otherwise.**	MCPRICE	0.151 (0.358)
Dummy variable that gets value 1 if the approach and territorial coverage of spatial data infrastructure in a firm's home country is truly national, and 0 otherwise.**	NATIONAL_SDI	0.967 (0.178)

**TABLE 1. VARIABLE DESCRIPTIONS** 

Dummy variable that gets value 1 if a firm has less than 250 employees, and 0 otherwise.*	SME	0.950 (0.219)
Firm age.*	AGE	14.796 (11.482)
Return on total assets.*	PROFITABILITY	2.397 (8.984)
Number of a firm's subsidiaries.*	SUBSIDIARIES	1.232 (11.666)
Number of firms (100 000 firms) functioning at SIC74, other business activities, in a firm's home country.***	COMPETITION	3.603 (1.959)
(GDPt – GDPt-1)/GDPt-1 where GDP = real gross domestic product (1000 USD, constant prices, constant PPPs)****	GDP_GROWTH	0.028 (0.011)

<sup>\*</sup> Source: ORBIS database, \*\* Source: The annual INSPIRE 'Spatial Data Infrastructures: State of Play" reports from the years 2003-2010, and INSPIRE & NSDI State of Play Summary Report (Spring 2010), \*\*\*Source: OECD SDBS Structural Business Statistics, \*\*\*\*Source: OECD.Stat: National Accounts of OECD Countries.

## 3.3 ESTIMATION RESULTS

The estimation results of the RE model indicate that the MC pricing of geographical data is, indeed, positively related to the sales growth (see Table 2). Interestingly, the estimated coefficient of the variable MCPRICE is statistically significant in the estimations for all firms and for the SMEs but not when estimated among the sample of large firms. The estimated coefficients for MCPRICE suggest that firms located to countries with MC pricing of public sector geographical data have annually grown, on average, about 15-16 percent more than those located to the countries where geographical data is priced according to the cost-recovery principles. These empirical findings indicate that the marginal cost pricing of geographical data has substantially contributed to the sales growth of SMEs, while it didn't have a notable effect on the sales growth of large firms.

TABLE 2. THE ESTIMATIONS RESULTS OF THE RE MODEL FOR SALES GROWTH

SAMPLE	ALL	SME	LARGE
MODEL	Model 1	Model 1	Model 1
	0.150***	0.156***	-0.086
MCPRICE	(0.024)	(0.025)	(0.057)
	0.029	0.041	-0.097
NATIONAL_SDI	(0.048)	(0.051)	(0.072)
	0.007		
SME	(0.028)		
	-0.009***	-0.010***	-0.002***
AGE	(0.001)	(0.001)	(0.001)
DDOCITABILITY	-0.001	-0.000	0.001*
PROFITABILITY	(0.001)	(0.000)	(0.001)
CLIDCIDIADIEC	0.002**	0.001	0.001
SUBSIDIARIES	(0.001) -0.025***	(0.002) -0.026***	(0.001) 0.027
COMPETITION	(0.005)	(0.005)	(0.017)
COMPETITION	-1.148	-1.455*	7.666**
GDP GROWTH	(0.765)	(0.787)	(3.652)
+ year dummies	(/	( /	(,
+ year duminies			
Observations	15017	14261	756
Firms	11418	10936	513
R <sup>2</sup>	0.06	0.06	0.09

The robust firm cluster-specific standard errors are reported in the parentheses. Significance levels are reported on superscripts, where \*\*\* denotes significance level of 1%, \*\* significance level of 5% and \* significance level of 10%.

The estimation results of the DID models further indicate that the change from the cost-recovery principle to the (max) MC pricing of geographical data has facilitated firm growth. This applies both one and two years after the price scheme change - there are not enough observations to estimate the impacts of price scheme change three years after. The estimated coefficients of the variable MCPRICE\*T2 for all firms (SMEs) suggest that the annual growth of sales one and two years after switching to maximum MC pricing was, respectively, 7 and 19 (7 and 21) percent higher than among SMEs in countries using full or partial cost recovery principle in the pricing of geographical data. Again, the estimated coefficient for the variable measuring the impact of MC pricing of geographical data is not statistically significant when estimated among large firms.

The empirical findings concerning the control variables are quite like expected on the basis of prior studies. It seems that younger firms tend to grow more than the older ones, and that a larger network of subsidiaries increases firm growth. The growth dynamics of SMEs and large firms also seems to differ in that more competition tends to hinder the growth of SMEs but does not significantly affect the growth of large companies.

Dependent vari	iable: log (turn	over)				
	ALL FIRMS		SME		LARGE	
	T2=2005	T2=2006	T2=2005	T2=2006	T2=2005	T2=2006
	Coef./S.E	Coef./S.E	Coef./S.E	Coef./S.E	Coef./S.E	Coef./S.E
T2	0.211***	0.338***	0.208***	0.357***	0.335**	0.221**
	[0.025]	[0.026]	[0.024]	[0.026]	[0.151]	[0.114]
MCPRICE	-0.473***	-0.553***	-0.487***	-0.572***	-0.463***	-0.545
	[0.036]	[0.040]	[0.036]	[0.040]	[0.160]	[0.196]
MCPRICE*T2	0.070***	0.192***	0.074***	0.210***	-0.022	-0.042
	[0.028]	[0.034]	[0.028]	[0.034]	[0.123]	[0.151]
Observations	14278	13698	13640	13095	638	603
Firms	8253	8068	7943	7775	373	358
Wald[Model]	427.38***	551.68***	110.60***	163.78***	9.32***	24.32***
Adj.R2	0.36	0.39	0.12	0.11	0.23	0.37

TABLE 3. THE ESTIMATION RESULTS OF THE DID MODEL FOR SALES

The robust firm cluster-specific standard errors are reported in the parentheses. Significance levels are reported on superscripts, where \*\*\* denotes significance level of 1%, \*\* significance level of 5% and \* significance level of 10%.

## 4. CONCLUSIONS

The firm-level analysis of potential re-users of geographical data from 15 countries during the years 2003-2007 suggests that the pricing of PSI strongly relates to firm growth. Firms functioning in the countries in which public-sector geographical data was available at maximum marginal cost grew about 15 percent more per annum than firms in countries where data was priced using the cost-recovery principle. A positive growth impact materialized already one year after switching to the MC pricing scheme but a stronger growth boost took place with a two year lag. MC pricing has not generated a notable growth among large firms though. It seems credible that higher PSI prices create barriers for SMEs to enter markets for data-based products and services. The switch to the MC pricing may thus not only result in growing markets but also intensify competition and challenge large incumbent companies. Cheaper public sector data may thus benefit consumers via greater product variety and also cheaper prices.

This paper also addresses the importance of public sector data policy in affecting the magnitude of benefits accrued from the utilization of ICT and related innovation. Various countries still stick to the PSI

<sup>\*</sup> Control variables: Constant, NATIONAL\_SDI, SME, AGE, SUBSIDIARIES, COMPETITION and GDP.

laws and practices that were well-functioning in the pre-digitalization era but that, with the contemporaneous fast development of data-based products and services, are detrimental for a society as a whole as they hinder the development of new markets and firm growth, and further reduce the variety and prices of new data-based products and services available for customers.

One caveat of this study is that it is not possible to distinguish the actual re-users of PSI, and with no doubt, the data comprise firms neither using PSI nor offering data-based solutions. Thus, the estimation results rather reflect the average growth effect of MC pricing of public geographical data among all firms active in the architectural and engineering activities sector than among the PSI re-users in that sector. The reported estimates are thus likely to be a downward estimate of the actual firm-level growth impact. The empirical evaluation of this question is left for future work requiring more detailed firm-level information on the PSI reuse.

#### REFERENCES

- Aghion, P. and Howitt, P. 1992. "A model of growth through creative destruction", *Econometrica*, vol. 60, no. 2, pp. 323-351.
- Beck, T., Demirgűc-Kunt, A. and Maksimovic, V. 2005. "Financial and legal constraints to growth: Does firm size matter?", *Journal of Finance*, vol. LX, no. 1, pp. 137-177.
- Bena, J. and Jurajda, S. 2011. "Financial development and corporate growth in the EU single market", *Economica*, vol. 78, no. 311, pp. 401-428.
- Cassia, L., Colombelli, A. and Paleari, S. 2009. "Firms' growth: Does the innovation system matter?" *Structural Change and Economic Dynamics*, vol. 20, no. 3, pp. 211-220.
- Coad, A. 2007. "Firm growth: A survey", *Papers on Economics and Evolution* 2007-03, Max Planck Institute of Economics, Evolutionary Economics Group.
- Fornefeld, M., Boele-Keimer, G., Recher, S. and Fanning, M. 2009. "Assessment of the re-use of public sector information (PSI) in the geographical information, meteorological information and legal information services." Micus Management Consulting.
- Hay, M., Kamshad, K. 1994. "Small firm growth: Intentions, implementation and impediments". *Business Strategy Review*, vol. 5, no. 3, pp. 49-68.
- Newbery, D., Bently, L. and Pollock, R. 2008. "Models of Public Sector Information Provision via Trading Funds." Mimeo. February 26, 2008.
- Pettifer, R.E.W. 2009. "PSI in European meteorology An unfilled potential." Mimeo. 25.4.2009.
- Pollock, R. 2008. "The economics of public sector information." University of Cambridge. Mimeo.
- Stam, E. 2010. "Growth beyond Gibrat: firm growth processes and strategies." *Small Business Economics*, vol. 35, no. 2, pp. 129-135.
- Vickery, G. 2011. "Review of recent studies on PSI re-use and related market developments". Final Report. Information Economics. Paris.

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# EMBRACING THE NEED FOR LEADERSHIP IN THE NEW WORLD OF UNMANNED VEHICLES AND ROBOTICS

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### **ABSTRACT**

This case study examines the innovative technology of unmanned vehicles and robotics. It also examines the lack of proliferation agreements, treaties, policies, procedures, and implementation doctrine in the civilian and military sectors. National and international laws are needed to balance the ability to protect a sovereign homeland and the privacy of its citizens. World leaders must learn to adapt rapidly to new technology while being conscious of the legal, ethical, moral, and constitutional aspects in securing the freedom and rights of its individual countries. Tools are being developed with advanced capabilities, particularly in the field of unmanned vehicles and robotics. Nations have policies, doctrines, treaties, plans and procedures in place for guiding the use and deployment of virtually all prior categories of war weapons, vehicles and their operators; however, the world needs to implement similar, sophisticated planning for the adaptation of the military and civilian use of unmanned vehicles and robotics.

**Keywords**: Unmanned, robotics, policies, governance, leadership, technology, weapons, UAV, unmanned vehicles.

## 1. INTRODUCTION

If change is the only constant in the universe, why do some people and governments fight against the only thing that is constant in their lives?

As technology and the world around us change at an ever-increasing rate, it appears that policy and governance cannot keep up with this pace of change. This gives rise to the question whether or not policy and governance can keep pace or is this an issue of our governing bodies? Do the governing bodies not recognize and understand the implications of these radical transformations?

In July 1945, the first atomic bomb, code named Trinity, was detonated in the state of Nevada (2003). The Allies then employed this technology to end World War II in August 1945. Quickly after these events, the world governing bodies understood that there needed to be strict governance and guidelines for the civil and military uses of nuclear technology.

In 1957, Russia launched Sputnik, the first satellite, into space triggering the space race (Marek, 2007). Today more than 20 countries have active space programs launching manned and unmanned rockets into space almost every day. As of 2010, more than 52 countries had varying levels of recognized space programs (2012).

UAVs are similar to other technologies that change the course of the human race. Both the atomic bomb technology and space technology experienced an industrial and policy response with guidance from world governing bodies. The UAV industry is void of this rapid response even though UAVs and the robotic industry is changing our world and how live in it. The UAV and robotics industry will affect every country, region, city, and individual people in their daily lives in ways that other technologies have not.

## 2. Defining an Unmanned Aerial Vehicle (UAV)

There are numerous definitions to describe UAVs. The most simplistic definition is "an aircraft with no pilot on board" (2013d). While accurate, this definition does not provide a robust description of a UAV. The US Department of Defense definition provides more detail: "UAVs are defined as powered aerial vehicles sustained in flight by aerodynamic lift over most of their flight path and guided without an onboard crew. They may be expendable or recoverable and can fly autonomously or piloted remotely" (2013a). The National Council of State Legislatures provides another description: "Unmanned aircraft systems (UAS), also commonly called unmanned aerial vehicles (UAVs) or drones, have many applications for law enforcement, land surveillance, wildlife tracking, search and rescue operations, disaster response, border patrol and photography among others" (2013c).

This last definition includes alternative names and potential uses for these vehicles but it does not provide a clear description of the vehicle. These differing definitions are indicators that the US, as one of the UAV industry leaders, is unable to describe consistently and accurately a UAV or drone. To date, even basic definitions within the industry are not universal. This only serves to highlight systemic issues within the unmanned and robotic industries. In the center of this issue is the industry's lack of a single civilian legislative and military policy for drone testing, development, integration, and deployment. For commonality throughout this paper, the US military definition posted at the US Department of Defense website will be used: "aerial vehicles commonly referred to as UAVs are defined as powered aerial vehicles sustained in flight by aerodynamic lift over most of their flight path and guided without an onboard crew. They may be expendable or recoverable and can fly autonomously or piloted remotely" (2013a).

One issue affecting the lack of leadership and policy is the inability to agree to a particular definition of UAVs. Contributing to the problem is (a) the continuing evolution of UAV aircraft, (b) ways of controlling it, (c) communicating with it, (d) using it, and (e) the level of artificial intelligence incorporated into the UAV. Satellites and airplanes have very mature definitions. Without a singular definition, common citizens and industry experts have difficulty confining and responding to UAVs. The core issue is that the public and decision makers are only now starting to glimpse the revolutionary nature of UAVs.

## 3. A LOOK AT REVOLUTIONARY TECHNOLOGIES AND THEIR IMPLICATIONS

The UN clearly recognized the significance of the space race, the associated technology advancements, and the potential for a very volatile situation if a mutual understanding through treaties, policies, and procedures were not put in place. In 1959, the United Nations (UN) passed UN Resolution 1472 creating the Committee on the Peaceful Uses of Outer Space. This committee has negotiated and drafted five international treaties adopted by the UN General Assembly. In 1967, the General Assembly adopted the "Outer Space Treaty," formally titled "The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies". It took the UN under two years from the time Sputnik changed history until it had a committee and a governing body in place. Again, the world's governing bodies understood that strict governance, policy, and controls would need to be in place to control the proliferation and missions of space borne systems. (2013b).

Why is it that unmanned systems, which have been around for more than 164 years, still have little, if any, guidance, policies, or worldwide governance structures? Unmanned systems can carry lethal payloads and are tasked to do similar jobs as satellites, airplanes, helicopters and balloons, yet it appears the world does not want to agree on how the technology can be used, proliferated or even agree upon something as simple as on what bandwidth frequency unmanned systems can operate.

Why have military UAVs, or drones, proliferated so quickly? A primary factor is that the enemies of the West perceive that the West's strategic weak point is casualties, especially in foreign lands (Moelter, 2002). Drones have decreased those casualties and have the potential to reduce them dramatically in the near future. A second factor is that only drones can provide the type of persistence needed in the war against Narco-Terrorism. When the enemy refuses to wear uniforms and hides among the populace, it takes a great deal of observation to distinguish the enemy from the non-combatants. A third factor is that there have been few constraints on drone activity due to airspace and bureaucracy considerations. The US Federal Aviation Administration (FAA) and European Aviation Safety Agency (EASA) have had limited impact on military drones. The largely untapped humanitarian side of drones is rarely seen since the supporting governance and policy needed to support these missions has yet to be developed.

This case study specifically narrows its focus to US unmanned aerial vehicle issues. The United States is one of the leaders in the unmanned systems arena, to include the first significant use in combat of recoverable, autonomous, weaponized systems. Issues such as airspace, airworthiness, social issues, privacy issues, regulations, and the lack of policies, procedures, or governance are universal around the world. These concerns can be directly mapped to each country that is active in this technology area. The US has neither prepared nor developed comprehensive documentation or plans to address the challenges presented by unmanned vehicles and robots on the modern battlefield or inside its borders. The reports that do exist are narrow in focus and are not widely distributed.

What happens when a new, truly revolutionary technology is left unchecked, ungoverned, with only the human imagination creating structure in any form? Consider the Internet. In fewer than twenty years, the world has seen a technology blossom into what is now the lifeblood for most nations. This is a good example of what happens to a technology that was created for the good of all humanity, without guidance or policies from the governing bodies around the world. One of the great characteristics of the Internet is that it is meant to be free and open for information exchange, commerce, and worldwide communications.

What actually happened is a different story altogether. The governments around the world did not understand, and still do not understand, the true power of the Internet. They struggle to write laws against nefarious behavior. They struggle even more to agree what these laws should include, how to impose them, and what treaties would be intermingled within this framework. Entirely new industries have been created with Internet-related technology, including ever-imaginative ways to wage war.

Cyber- attacks now number in the millions each week and there appears to be limited means for law enforcement or other government entities to keep up. There are sparse national and international laws against hacking and cyber-attacks. The few laws that do exist are all but impossible to enforce. Cyber-crime accounts for 62% of all cyber-attacks as reported by Passeri in June 2013, "The **Distribution of Target** chart confirms the industry sector on top of the unwelcome attentions of the cyber-crooks, immediately followed by governmental targets. Bear in mind that the sample must be taken very carefully since it refers only to discovered attacks" (Passeri, 2013). This is an indication that the cyber problem is growing and getting worst year after year. It appears that governments have yielded to the criminal element and they have lost the battle in the cyber realm. Governments appear to have no true effort in place to enact rules, laws, or governance on a national or international scale that will positively affect this issue or attempt to interject basic rules of law enforcement into the cyber-crime situation (Passeri, 2013).

The lawless underground and the exponential increase in cyber-crime should give the human race pause when it considers what unmanned systems can and will do to their way of life. Technology has the ability to be harnessed for good or used for evil. Governing bodies help guide and direct technologies toward an agreed upon set of parameters, without them some people will tend to move toward the darker side of the human spirit and technologies could be put to work for the purposes of evil, instead of being for the good of all.

The UAV revolution started many years ago and got off to a slow start. It is only recently with the advent of key technologies such as GPS and the miniaturization of key items that include inertial navigation systems, high quality sensors and data links, so that the revolution has dramatically accelerated.

## 4. A BRIEF HISTORY OF UAVS

Drones, in one form or another, have existed since the nineteenth century. The earliest recorded use of an unmanned aerial vehicle for war fighting was on August 22, 1849, when the Austrians attacked the Italian city of Venice using unmanned balloons loaded with explosives (Naughton, 2002). It is only recently, however, that advances in on-board intelligence, reliability, and sensors have made drones militarily and commercially viable in large numbers. The original impetus for UAVs was that they would have a low acquisition cost, which in reality did not happen. Global Hawk, for example, was expected to cost \$10M (Defense Advanced Research Projects Agency figure) per aircraft and currently costs \$223M (Sia and Cohen, 2013). The mission effectiveness and lower operational costs, however, have made drones a cornerstone of the West's future military force structure.

Western countries are not the only countries that have, or soon will have, drones. According to a 2012 US General Accountability Office (GAO) report on the proliferation of UAVs, between 2005 and 2011 the number of countries that possess drones rose from 41 to 76. In addition, "The majority of foreign UAVs that countries have acquired fall within the tactical category. Tactical UAVs primarily conduct intelligence, surveillance, and reconnaissance missions and typically have a limited operational range of at most 300 kilometers. However, some more advanced varieties are capable of performing intelligence collection, targeting, or attack missions. Mini UAVs were also frequently acquired across the globe during this period" (Melito, 2012).

Currently, only three nations presently are known to be operating armed UAVs. They include the US, the United Kingdom, and Israel. (Heyes, 2013). Two additional countries are believed to have weaponized UAV programs.

#### **5. CYBER SECURITY AND UAVS**

UAVs can be designed and built to be autonomous, but must link to other support systems. If they are not utilizing encrypted signals, software, and other mechanisms, however, they become vulnerable to hacking very much like a home computer. A 2012 article from the American Institute of Aeronautics and Astronautics stated, "As these systems are unmanned, they cannot be directly monitored, and cyberattacks can jeopardize the mission, the vehicle, and potentially lives and property. Given the potential severity of the consequences of security breaches, it is important to assess the vulnerabilities inherent in cyber-physical systems...the increasing complexity of the networked embedded control technology, unmanned aerial systems (UASs) have become vulnerable to many cyber-attacks, and these vulnerabilities have not been thoroughly investigated" (Goppert et al., 2012).

Cyber-attacks against UAVs, their flight control systems, payloads (sensors) and their ground control systems are as real as a cyber-attack against any other known target. UAVs, however, generally do not enjoy the same protections as a generic personal computer. A follow up article in 2012 from the American Institute of Aeronautics and Astronautics states

"The United States Army, Air Force, and Navy have released plans for the increased use of UAVs, but have only recently shown interest in the cyber security aspect of UAVs. As a result, current autopilot systems were not built with cyber security considerations taken into account, and are thus vulnerable to cyber-attack. Since UAVs rely heavily on their on-board autopilots to function, it is important to develop an autopilot system that is robust to possible cyber [attacks]" (Kim et al., 2012).

## 6. ACTIONS BY THE US FEDERAL AVIATION ADMINISTRATION (FAA)

"The FAA predicts that by 2017 there will be as many as 10,000 (unmanned aerial systems) UAS in the US skies" (Dillow, 2013). The US Congress, military, federal departments and agencies, and state and local governments have been pushing the FAA to create a comprehensive set of regulations for all UAVs. After years of pleading, the FAA finally responded in February 2013 by issuing a request for proposals to create six test sites for unmanned aerial vehicles. Fifty teams from 37 states are competing for these test sites, affirming the very strong demand for companies to capture this high growth business area.

## 7. RECOMMENDATIONS FOR POLICIES

Unmanned vehicles and robotics pose an interesting policy and governance issue; one that does not fit the traditional policy realm since flexibility will be key to any implementation attempts. Traditional policy tends to miss the human factor including how the policy will meet the human needs of the population it intends to impact. Although originally designed for non-profit organizations, UAV policies could adopt John Carver's Policy Governance model. This would allow social science to include the human needs into the development of hardware and software. In this adaptation, the board would be a government body. The Carver's Policy Governance Model states, "Ends: The board defines which human needs are to be met, for whom, and at what cost. Written from a long-term perspective, these mission-related policies embody most of the board's part of long-range planning...the prediction of outcomes is by means of the Ends policies (human needs). However, Policy Governance is considerably less deterministic than traditional strategic planning, where the prediction not only extends to the outcomes achieved, but even the strategies by which they will be achieved and the scheduling of those strategies" (Hough, 2002).

The new automated non-physical cyber world, with its ability to be automated and programmed with predetermined responses, forces our thinking into new directions. Duke University Professor Charles Dunlap was quoted in June 2012 saying, "News reports that DARPA is seeking proposals for methodologies that would automate cyber responses in predetermined scenarios is an almost inevitable development given the speed in which cyber-attacks can cause harm. The very idea of autonomous weapons systems of any kind, cyber or kinetic, is controversial on legal, ethical and even pragmatic

warfighting grounds. Yet the development and deployment of such weaponry is sure to continue even as we sort out the law and policies to address it" (Wolverton, 2012).

The standard government policy methodology may not work to bind and control this type of technology and its uses. The realism the world may face is that, with such a late start into this new policy realm, there may only be compromise left on the table as to how far humanity allows this to go. At the current rate of development, there may not be enough time left to implement policy and governance leaving only strategic negotiations to create limits on the lethal uses of the technology. In a 2012 New York Times Article, Henning notes that "Without a new doctrine for the use of drones that is understandable to friends and foes, the United States risks achieving near-term tactical benefits in killing terrorists while incurring potentially significant longer-term cost to its alliance" (Henning, 2012).

#### 8. DRONES AND HUMANITARIAN EFFORTS

The resolution of right of way rules will dramatically affect the commercial viability of UAVs. If UAVs must give the right of way to all manned aircraft, then the liability associated with a collision could be cost prohibitive for a commercial business model. It would make logical sense to suggest that UAVs be required to give the right of way to balloons and sail planes; all other manned aircraft should give the right of way to the UAVs. This would limit liability while still maintaining the standard of sense and avoidance for the aircraft.

The lack of bi-country, multi-country and internal country procedures and regulations has put a hold on commercially viable humanitarian UAVs and their operations. The US, Europe, and other countries have extensive road systems. Around the globe, however, there are many countries with limited infrastructures. The ability to deliver medical supplies and perform medical evacuations from remote locations throughout a country is generally well within a government's budgetary capability. UAVs are best suited for missions at the two ends of the spectrum: intermittent/standby operations and high-tempo surge operations. These attributes are also well suited to a variety of humanitarian missions.

The UAV"s ability to deliver food and critical supplies in times of crisis can greatly expand the value and capabilities of governments and humanitarian organizations. Search and rescue operations and firefighting are two universal missions that save people and property throughout the world. UAVs could do very well to assist in monitoring dangerous situations from above or to extract individuals from a perilous situation.

# 9. DEMONSTRATING LEADERSHIP BY SHIFTING FROM A LOOSELY KNITTED STRUCTURE TO MANAGEMENT PRINCIPALS

The complex set of international laws along with the sophisticated integration of what and where technology is proliferated in dealing with UAV and robotic technologies discourages nations from addressing the issues head on. The solutions will not be easy and the coordination and collaboration that must occur will test the political will of the world. Borrowing from Henri Fayol's principles of management allows UAV policy to be flexible, yet hierarchical, striving for a unified governance and policy structure for the entire world to follow. The potential for UAVs and robotics to change human history is already upon us. It is now time to take back control of something that appears to be spinning out of control with no leader stepping up to make the difficult decisions that need to be made.

Fayol discussed the "Unity of command - For any action whatsoever an employee should receive orders from one superior only...Just as the Biblical injunction advises - no one can serve two masters" (Wren and Bedeian, 1994). What Fayol is saying is that dual command is a threat to authority, discipline, and stability. This is the reason there needs to be a single location for all governance and policy publication. Fayol then says you must have "Unity of direction ...one head and one plan for a group of activities having the same objective. It provides the coordination necessary for focusing...Unity of direction comes from a sound organization structure and is essential to unity of action" (Wren and Bedeian, 1994). The world needs to agree upon one direction for governance and an overarching policy for UAVs and robotics, as it does with other technologies such as atomic energy. Both the atomic energy sector and the UAV and robotics sectors have the ability to do great things for humanity, they also have the potential for great destruction and unknown long-term consequences.

The last principle borrowed from Fayol is one of "Subordination of individual interests to the general interest which is a plea to abolish ignorance, ambition, selfishness, laziness, weakness and all human passions" (Wren and Bedeian, 1994). Fayol tells us not to place an individual nation's interest over all nations" interests, or that interest above humanity's general welfare as this would inevitably lead to conflict among all parties.

#### 10. CONCLUSION

There is an immediate need for documented policies, doctrines, and treaties concerning national and international security risks associated with the proliferation and aggressive use of unmanned vehicles and robotics. Despite UAVs being in use for decades, the world just now seems to be ready to acknowledge that comprehensive structured policies and doctrines will help the global neighborhood to be better prepared for working with unmanned and robotic systems.

The US Government must develop policies, doctrines, and treaties that establish procedures and protocols for managing the uses of and addressing the potential threats to national and international security posed by unmanned vehicles and robotics. In addition, the government must share appropriate aspects of these documents to gain international consensus.

Addressing both global and homeland security issues in the draft policies allows individual countries autonomy for their homeland security while creating the framework for the commercial industrial sector. Government agencies have vacillated deciding which direction to choose. Now they need the assistance of professional and commercial organizations to create the regulations that all parties can follow and still flourish.

Throughout history, humans have accepted the inevitable loss of life in war, in terrorist strikes, through political assassinations, in drug wars, and in the criminal element. Deploying UAVs as remote killers of human beings is not in this list of accepted inevitabilities. Given America's advanced security, intelligence systems, and weaponry, adversaries recognize the advantages of attacking the US using unmanned vehicles and robotics. This will make it far more difficult to identify the attack source. With no proliferation agreements, treaties or comprehensive technology tracking programs in place, responding quickly, effectively, or planning preemptive actions against these attacks will be nearly impossible.

The US and its allies have largely ignored the potential threat and growing danger posed by unmanned vehicles and robotics. Analysis and planning will allow assessment of how the US and its allies should reshape the strategic and tactical planning confronting adversaries using unmanned vehicles and robotics. The US needs to decide on a range of responses, including possible retaliation measures, in response to threatened use or the direct loss of life by a UAV.

# 11. RECOMMENDATIONS FOR THE UNITED STATES

The United States Government should immediately begin to formulate a strategic National Security Policy relating to the implementation of unmanned vehicle and robotics to further US national interests in all levels of war as well as peacetime endeavors. This would include the actual actions or perceived threatened aggressive use of unmanned vehicles and robotics against the interests of the US, its armed forces, or its allies. If the US chooses to write and implement these policies and supporting documentation, it could provide a reproducible structure other nations who need similar policies that address similar concerns could use.

#### 12. RECOMMENDATIONS FOR INTERNATIONAL COMMUNITIES TO TAKE COLLECTIVE ACTION

The international community has supported the development of policies, doctrines, and treaties for nuclear weapons, land mines, and other offensive systems. To date, the international community has ignored the development of similar documents for unmanned vehicles and robotics. Developing new strategies and policies to address new technologies and the corresponding threats posed will allow the control of the increasing potential of the technology, while minimizing the negative aspects and risk. Structured correctly, these new documents could effectively manage and control the disciplines and operating boundaries relating to these systems. They also could protect the rights and sovereignty of an individual nation, the nation's armed forces, and the sovereignty of the nation's airspace, waterways, and

infrastructure and telecommunications networks. Guidelines written with sensitivity and understanding allow unmanned vehicle and robotic technology to enhance its use for commercial needs in a manner that does not encroach upon national and international security interests.

#### 13. FUTURE STUDIES

Limited research exists that evaluates the geopolitical impact of the proliferation of unmanned vehicles and robotics. Additional research is required to assess UAS and robotics use in future warfare. This research can pose questions such as what is the best way to approach safeguarding allied nations and their armed forces against aggressive UAS use.

Developing national policy frameworks insures that the guidance fits within the existing military and civilian policies while still providing support for the unique aspects of an unmanned vehicle.

It would also be worthwhile to review the current efforts by countries with existing UAV programs to examine how they have approached airspace, commercial airworthiness, and humanitarian operations.

## **REFERENCES**

- 2003. The First Atomic Bomb Blast, 1945 [Online]. EyeWitness to History. Available: http://www.eyewitnesstohistory.com/atomictest.htm [Accessed July 11 2013].
- 2012. Global Space Programs [Online]. Colorado Springs, CO: Space Foundation. Available: http://www.spacefoundation.org/programs/public-policy-and-government-affairs/introduction-space/global-space-programs [Accessed July 14 2013].
- 2013a. Introduction of the Unmanned Aerial Vehicles (UAVs) [Online]. Washington DC: US Department of Defense. Available: http://www.defense.gov/specials/uav2002/ [Accessed July 21 2013].
- 2013b. United Nations Committee on the Peaceful Uses of Outer Space [Online]. United Nations. Available: http://www.oosa.unvienna.org/oosa/en/Copuos/copuos.html [Accessed July 11 2013].
- 2013c. Unmanned Aircraft Systems (UAS) Legislation [Online]. Washington DC: National Conference of State Legislatures. Available: http://www.ncsl.org/issues-research/justice/unmanned-aerial-vehicles.aspx [Accessed July 2013].
- 2013d. Welcome to the UAV [Online]. The UAV. com. Available: http://www.theuav.com/ [Accessed July 21 2013].
- Dillow, C. 2013. Flying Solo. Project Management Institute, 27, 9-10.
- Goppert, J., Liu, W., Shull, A., Sciandra, V., Hwang, I. & Aldridge, H. 2012. Numerical Analysis of Cyberattacks on Unmanned Aerial Systems. American Institute of Aeronautics and Astronautics stated.
- Henning, J. C. 2012. Embracing the Drone. The New York Times, February 20, 2012.
- Heyes, J. D. 2013. Armed drones soon to be operated by dozens of countries; will they decide to strike U.S. targets? [Online]. Available:
  - http://www.naturalnews.com/040910\_armed\_drones\_drone\_attacks\_surveillance.html [Accessed July 14 2013].
- Hough, A. 2002. The Policy Governance Model: A Critical Examination [Online]. Brisbane, Australia: Centre of Philanthropy and Nonprofit Studies Queensland University of Technology. Available: http://www.academia.edu/272744/The\_Policy\_Governance\_model\_a\_critical\_examination [Accessed July 25 2013].
- Kim, A., Wampler, B., Goppert, J., Hwang, I. & Aldridge, H. 2012. Cyber Attack Vulnerabilities Analysis for Unmanned Aerial Vehicles. The American Institute of Aeronautics and Astronautics: Reston, VA, USA.
- Marek, A. C. 2007. Looking For Trouble. U.S. News & World Report, 142, 34-34.
- Melito, T. 2012. Agencies Could Improve Information Sharing and End-Use Monitoring on Unmanned Aerial Vehicle Exports. In: Office, G. A. (ed.). Washington D.C.: Government Publishing Office.
- Moelter, J. R. 2002. Effects of foreign perceptions of US casualty aversion on US international relations. DTIC Document.
- Naughton, R. 2002. The first air raid by balloons! [Online]. Available: http://www.ctie.monash.edu/hargrave/rpav home.html#Beginnings [Accessed July 12 2013].

Passeri, P. 2013. June 2013 Cyber Attacks Statistics [Online]. Hackmageddon.com. Available: http://hackmageddon.com/category/security/cyber-attacks-statistics/ [Accessed July 22 2013].

- Sia, R. & Cohen, A. 2013. Global Hawk: The drone the Pentagon couldn't ground [Online]. Washington DC: McClatchy Newspaper. Available: http://www.mcclatchydc.com/2013/07/16/196825/global-hawk-the-drone-the-pentagon.html#.Uiki0T\_Eong [Accessed September 5 2013].
- Wolverton, J. 2012. The Pentagon Is Developing Cyber Weapons That Launch Without Human Intervention [Online]. PrisonPlanet.com. Available: http://www.prisonplanet.com/the-pentagon-is-developing-cyber-weapons-that-launch-without-human-intervention.html [Accessed July 25 2013].

Wren, D. A. & Bedeian, A. G. 1994. The evolution of management thought.

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**Mr. Mumm** is well respected in the areas of systems engineering, emerging and disruptive technologies, and scientific research for governments and private sector clients. Mr. Mumm is experienced in designing policy and governance for advance technologies such as unmanned vehicles and robotics. This includes not only determining the specific uses, exceptions, and allowances; it also includes studying the unintended consequences and future use and misuse of such technology. Mr. Mumm is currently pursuing his doctorate in management with a concentration in homeland security at Colorado Technical University (CTU) in Colorado Springs, Colorado, USA.

# CALCULATION AND PRICING IN SMALL MANUFACTURING COMPANIES: THEORY AND PRACTICE

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#### **ABSTRACT**

This paper focuses on how small and medium sized manufacturing companies in Sweden and Norway calculate prices. Most of the companies are subcontractors. Customers have been loyal for a long time, but in recent years more and more have experienced that loyalty has declined. Competition has obviously become harder and the price is always a key factor in a customer-supplier relationship. Therefore, the price process becomes very important in an increasingly challenging market.

Good quality control of data recorded in the cost accounting system is a prerequisite for correct pricing. Along with market information and competitor information it should be basis for a correct price. The companies have to use empirical data from previous competition situations. If companies do not make use of the information, they will lose orders in the future.

**Keywords:** Norway, Sweden, Small manufacturing companies, Calculation, Pricing, Full cost, Contribution Cost, Conversion Cost, Throughput accounting.

## 1. INTRODUCTION AND BACKGROUND

For more than 25 years I have been working together with manufacturing companies in the region of Østfold (Norway) and Västra Götaland (Sweden). Both areas have many small manufacturing companies which are important for skilled and unskilled working force in the area. There has been a continuous decline in small industries in the region. From 2000 to 2011 a reduction in working force in manufacturing industries of more than 2000 persons. (Vareide 2012). The main reason is said to be hard competition from low cost country, especially from countries in Asia, but also from some countries in former Eastern Europe.

How to set prices in these companies are very different. The formal competences in accounting and calculation are limited. The companies are good in manufacturing and delivering, but they all say that one of the biggest challenges is to get new customers and selling their services. The price is essential and the main reason for losing customers is said to be the price. It is claimed that we cannot compete on prices.

## 2. RESEARCH QUESTION

How do medium sized and small manufacturing companies practice the calculation process? How do they set their price for their products? All companies in respect say that they are market oriented. This paper will focus how small manufacturing industries in high costs countries like Sweden and Norway calculate their prices.

### 3. RESEARCH METHOD

To find answers to these questions, I have tried to give a brief overview of the theory that should be behind the pricing process in companies. Further, I interviewed 15 business leaders to document how they actually did it and with what justification.

All of the managers were leaders of medium sized manufacturing companies. There were seven Norwegian and eight Swedish companies participating in the survey.

The aim of the interviews was to confirm whether the calculated rates or prices were based on traditional full order cost or whether they think completely differently. The enterprises had employees between 5 and 98. The largest enterprise has around 100 employees, and the company had established routines and processes for accounting system and calculation. Hundred employees are what we can call medium-

sized businesses in this region. The anticipation to the enterprises was that they had functional routines and was interested in dynamic pricing.

### 4. A BRIEF REVIEW OF THEORETICAL MODELS

Eugen Schmalenbach (1873-1955) is considered the German master in accounting and costing. Full Cost Calculation was introduced and become soon the most frequently calculation method in manufacturing enterprises around 1920, when much of the work of Schmalenbach was completed. The production was labor-intensive, and much of the cost was related to the cost of materials and labor. (Norstrøm, Magna - Econas tidskrift for økonomi og ledelse 2002). The share of indirect costs were much lower than today. Today the industry is characterized by high technology, high degree of efficiency through automation, which in turn leads to low share of wages, virtually no production to stock, and the introduction of Just -intime. (Eiken 2006) This has led to a total change of type of costs. The relationship between indirect and direct costs has changed. Now, in many ways, only the cost of materials is typical direct costs, although economists convert salary costs in operating the process to variable cost. A production worker, however, considers his wages as fixed.

We still have a financial reporting which largely follows the directions Schmalenbach came to in the beginning of the last century. The financial accounting differs from managerial accounting. Financial accounting is concerned with providing information to stockholders, creditors and others who are outside the organization. (Geense 2010) Much of the discussion is currently going on the same terms. The frames around accounting information today that is currently in use, is controlled to a large extent by the public sector interfering in their activity needs for information. Financial accounting has to follow these rules. It is through the statement of operations we can find the calculation base that can be used in the pricing process.

Financial Management in its traditional form is sometimes criticized for lack of relevance. Focus is on direct materiel and labor costs, serial production with inventory, and variance oriented steering against standards. But modern production is carried out by automated processes with a low share of direct wages, high ratio of overhead costs and closest to a flow-oriented and order production. What products actually cost to produce, are no longer essentially the sum of direct costs, but a result of automated production where cost structure has changed from direct costs to overhead costs.

In modern textbooks traditional Full Cost is presented as the major way to calculate. Contribution calculation has also great focus in these textbooks. The authors take for granted that it is possible to get a proper allocation of the indirect costs. The greater part the indirect costs make up, the harder it is to allocate it correctly to the products. But already in the book to Charles Horngren "Introduction to Management Accounting" he says "How precise can cost allocations be? Probably never as precise as might be desired." (C. T. Horngren 1984). Full cost calculation is normally carried out by the following procedure:

- 1. Cost accumulation
- 2. Cost Allocation to cost objects
- 3. To departments
- 4. To products

It means that all of the products must carry their share of all indirect costs regardless of whether they are affected by change in production or not. (C. T. Horngren 1984)

Managers can use product costs to setting of selling prices, use it for inventory valuation and income determination. (C. a. Horngren 1987). Managerial accounting practices are mainly designed to measure the efficiency of internal processes. One of the critics to managerial accounting is that there have been few changes over time the last 80 years.

The Contribution Margin (C. a. Horngren 1987) is a part of Cost-Volume-Analyses or Break-Even Analyses. The assumptions in the Cost-Volume- Analyses are that the variable costs are proportional, that the fixed costs are fixed and the price is constant. This is theoretical assumptions that seldom are

possible to meet in practice. The main issue in contribution method is to separate the variable and fixed costs

By high percentage of indirect costs the probability is high that the distribution of these, in relation to direct resource consumption, can be misleading. Significant indirect costs are allocated on the basis of limited resource consumption. The typical effect of additional calculation based on direct resource consumption, is that the simple high-volume variations, that draws most direct hours (due to high volume), is overwhelmed with overhead because each hour will be charged the standard hourly charge for indirect costs. The more complicated low volume variations ("specials") that draws directly fewest hours (due to low volume) is equivalent at a standard hourly allowance. In turn, such calculation errors lead to decision errors (typically mistakenly volume capacity reduction of "standard" and the opposite of "special").

The relationship between fixed and variable costs has also changed. Actually, costs still varies, but it is not necessarily linked to the production activity that causes changes. The term ABC - Activity Based Cost (R. a. Kaplan 2001) - is another way to allocate costs. Rather than use the traditional full cost method, we will try to find the activity that triggers a change of a cost category. There is no cost to itself that is important to check, but the activity that triggers a change. Vea (Vea 2002) explains ABC the easy way: "The activity cost divided by the rate and activity rate - the cost per purchase, per control time etc. Using this task costs can be charged products for their activity consumption. The cost per product unit is the division of the number." There is indirect cost which focuses in ABC and they are distributed among the different product variants by consuming activities. Examples of activities include purchase, maintenance, quality control etc.

It can always be discussed how accurate it is to carry out calculations of costs and revenues. There will always be necessary with a cost-benefit analysis by gathering information. Today it is used too much time checking that the charge for indirect costs is correct. It will change after product assortment and other situational variables during a period of time. The major process industries are perhaps the only ones that have the same types of costs over multiple periods. The small is more responsive to changes in demand and in product range.

These thoughts were highly current from Schmalenbach times to present day. The normal breakdown of the costs is into fixed and variable costs. Another dilution is direct and indirect costs. The direct costs is perceived often as variable while the overhead for a large part is perceived as fixed, but can also contain a variable part.

But what exactly is the difference between variable and fixed costs, and the difference between direct and indirect? It is certainly not a clear distinction between the concepts even though traditional textbooks depicting the clear terms, clearly defined. What determines different types of costs will depend on the situation - on the size of the order, making a routine delivery, a unique job, development work and not least, the capacity situation at the moment. Berthling-Hansen and Skaldehaug (Berthling-Hansen 2003) believes one must consider two key questions in this context:

- 1. Fixed/variable cost in relation to what? Which cost driver believed to best describe the cost that will be assessed?
- 2. Fixed / variable cost in relation to the time horizon? All costs which are impressionable if relevant horizon for cost analysis is very long.

The challenge is to find the cost incurred when and with given size, and in the context of the price, what the market is willing to accept. If cost is direct or indirect will depend on what product is bearing the cost. Is the salary of someone who works in several projects directly or indirectly? It will depend on how to allocate the employee's efforts on the various projects. Again, depending on how good registration systems the companies have to allocate labor cost on individual projects.

Traditionally, production volume is the cost driver in a manufacturing company. However, is it the production volume that causes changes in the costs? Costs will often vary with other cost-drivers than production volume. Today, there are almost only material costs that vary with usage or activity. Salary costs are often a major part of the cost of an industrial company, and wages have always been

considered as direct costs in terms of production employees. There is time analysis which measure the time they use in the production process. Production workers receive and perceive their wages as fixed, while we, as economists, would like to see it as variable cost. The point is how it changes. Do wages increase if production increases? The answer is both yes and no. It will increase if we exceed capacity limits, but will be the same as fixed cost as long we do not break the capacity of today. In other words, wages will be reasonably consistent over time, but if we break it down to individual products, it will vary with the utilization of the capacity. Another challenge is that changes in operating conditions impose rules and laws, investments, new employees, etc. This may have effects for a long time, so-called structural costs. It is important to focus on what makes the costs change, the so-called cost drivers. Costs are different in terms of capacity utilization, therefore it is important for the determination of the cost. The price should reflect the capacity utilization. This in turn, means that the price should be changed depending on capacity or the reserve in the order book. The question is: shall the company now reduce the price, or will it eventually give the employees layoff notice?

With increased automation it becomes more difficult to make a correct appraisal and registration of direct time. The distinction between direct and indirect time is often not as sharp. The low proportion of direct labor is also less interesting to use resources to determine this correctly. An alternative is to share manufacturing costs into two main categories: Direct materials (such as the short-term only completely "pure" product direct cost) and "rest" as in English literature called "Conversion Cost." (Accounting for Management 2012). Operator Salary will be included in the "Conversion Cost." This would imply a sharp simplification compared to the traditional management accounting and a "modern" task-oriented statements. In addition, it will be well suited for businesses operating in the follow-up focus on the production flow.

A newer approach to short periodic reporting is "Throughput Accounting". (Goldratt 2013). This is an approach that has its advocates among those who are particularly concerned with the flow of production. Throughput accounting limits the ability to push the costs of congestion of work in progress and finished goods for subsequent periods. The contribution is calculated as sales income minus direct material for units sold. All other costs are considered period costs and have to be covered by the period's contribution. The result is calculated as contribution minus conversion cost, minus selling, general and administrative expenses. The contribution is simply defined as revenues minus direct material.

This is in contrast to traditional management accounting, where part of the "conversion cost" via changes in inventories (increase work in progress and finished goods) is shifted to future periods. Short periodic reports based on "Throughput Accounting" will focus on sales, throughput and bottlenecks. A bottleneck in the production or sale provides aggregates of work in progress or finished goods. The capacity of the bottleneck will determine the outcome of a "Throughput Accounting" model and thus motivate measures to ensure the most unobstructed product flow in line with demand .

"Throughput Accounting" removes shades compared to traditional management accounting by only consider material costs as product costs, while the "Conversion Cost" is regarded as period costs.

The business model of Goldratt is based on three ways to measure if the business has achieved their goals regarding making money: The three measurements are 1. Throughput, - How the system generates money through sales and 2. Inventory - The money invested in purchase of things they intend to sell and 3. Operation expense – how much the system spends in order to turn inventory into throughput.

The question is how calculations and reports will be used. Product costs we need for pricing, policy objectives and stock ratings. The higher proportion of indirect costs, the harder it is to make good quality product calculations, especially for policy purposes. For long-term decisions, it is important that the calculation takes in consideration all economic effects from the products - from documentation and change to logistics, sales and service. This may call for detailed activity mapping and budgeting.

Conversely, with current reporting most conditions can be considered as given, and this suggests less detailed cost division in ongoing monitoring. Product flow is important. Throughput Accounting reports can continuously detect and control your attention to the relevant short-term problems (bottlenecks, inventory accumulation), perhaps more accurately and faster notification than a traditional cost accounting and a traditional business report can do.

One system is perhaps not enough. In a widely cited Harvard Business Review article (R. S. Kaplan 1988)) concludes one of the ABC theory's authors, Professor Robert S. Kaplan, "One Cost System is not enough". One and the same tools regrettably not necessarily to provide correct product costs for long-term ratings, stock values to use in the accounts, and ongoing monitoring and control of operations and cost.

The dream of the "integrated accounting system" should perhaps give way to a multitude of systems - based on so well established that new approaches - which caters to different tasks and purposes and for different business types, cost structures and production technologies. "Activity Based Costing" and "Throughput Accounting" can be two among several current approaches that can be combined in various ways.

#### 5. PRACTICE

The result of the study was in many ways, a confirmation of previous assumptions. All the companies are practicing a combination of full cost method and contribution method. As a basis for the overhead they use Direct Material and Direct Labor. All says that the market decides the price, but only one of the companies says that they collect data from public offers given by their competitors. Data from competitors were variables that were relatively seldom taken into consideration in practice, although most felt that they tried to take into account market variables.

Only one of the 15 companies was able to tell the product profitability of the individual order! This was a company with their own unique products. They had developed a calculation system by investing in IT skills. Together with help from their software vendor, who customizing the accounting system to the product process, they took advantage of the benefits of the accounting program. They got a clear delineation of which costs were related to the production process as variable, and which could be defined as period costs.

Even the larger enterprises used additional costs or overhead costs which were not directly related to the production, but were typical fixed costs or overheads. They were not able to clarify how these cost occurred. In all the businesses the company used the term contribution margin, but in 11 of 15, the companies used a higher rate of salary than the real salary or cost per hour in the production. An example: a production worker, which cost the company approximately NOK 300 (including social costs - approximately \$ 50 per hour), notified in calculation a salary of \$800 (\$ 131). They explained that in this salary, they had included costs to coverage of sales, administration, etc. This was included in the basis for the contribution margin. This is far from contribution theory. The justification for doing it like this, were that they had done it for many years. In this way, they hide the costs and not the least, possibilities to find a correct contribution margin.

One of the companies added all costs except the material cost. They had 15 full-time-equivalent (FTE) (Orient Point Consulting LLC 2013). If the full working year is 1950, it makes 29 250 total hours. If the total cost except material is 8 775 000, the cost per hour for all employees is SEK 300 (\$ 46). Then they added SEK 130 and got a final cost of SEK 430. (\$ 66) This was the price the customers find in the price list. The company could not explain what caused the extra \$ 20. They have done it like this for the last 15 years. This way of thinking was in fact the way they did it in multiple companies. And none of them could tell me why! We may look at the \$ 20 as a kind of added profit.

It was only three of the companies, plus the control enterprises, who had unique products. These companies have price lists. One of the companies had their list, but granted from 25 to 50 percent discount to loyal customers! The customers knew this. They call it quantity discount. Another had pricelist in three different levels: complicated, a little complicated and standard.

Use of market information was in none of these companies a great theme. This is due to a large part that they perceived themselves as sub-contractors. The customers were well known and they have a good relationship towards them. Customers are bigger and could for that reason also affect prices. As a small sub-contractor, they had to, in many ways, accept the price. Customers bought where the price was at its lowest. Some of these companies had framework agreements to ensure regular production, but most felt that it was difficult. They had no other variables to negotiate than quality and reliability of supply. Most

know their competitors, but only one had procedures in place to take care of the information that could be in the competition situation or bid to customers.

The overhead for profit is different between companies. They ad normally after "feeling", but the charge was rarely more than 10 %. Nine of the companies were open and tell that they did not know how much they ministered to the single order, but controlled liquidity through checking the level of their bank account. The good "feeling of business" is not to reject, but found little basis in theory.

The companies spend a lot of time to check the profitability, but even if they did try, they say that they have trouble to find the product profitability. None of them had heard about "Conversion Cost" or "Throughput Accounting". They were aware that it was only the material cost which varied with activity. Nevertheless, they did want to go on as they always had done, because they did not know how to change it

This is not surprising. Manufacturing companies have a tradition of thinking based on cost calculations. Every business is also unique regarding what they have of products, expertise and financial strength. This has resulted in unique pricing methods and way of calculating. It does not necessarily mean that they are doing things wrong, but most likely they have weaker control than they could have had. They do not really know if they earn on individual orders or products. The companies also believe that they are market oriented and all claim that it is the market that determines the price. In my opinion it is a partial truth. They all say that they are reluctant to go down on price or price list. Those who have price lists with "secret" discounts, as everyone knows, is not willing to deviate from this strategy. This indicates that it is actually required a new approach to pricing issues.

The system for pricing is normally based on full cost. The companies try to split the costs on every product or service they sell. They have an almost contribution method. The term contribution is not an exact specification. It is used differently form company to company. Managers deals with two kinds of variable costs: material and labor. But also rates for indirect costs are included in the prices. Therefore these companies have problems with compete on price. Flexibility in price is difficult when all the costs are added to the material and labor cost. Focus on bottleneck and throughput thinking, are absent.

## 6. CONCLUSION

Discussion and thoughts around pricing was a major challenge to everybody and all were very concerned about it. It was something they took with them in "sleep" and was very interested in how they could attack the challenge. No one had heard of "Throughput Accounting". It was full cost variances and contributions that were accepted concept. The adaptation was not "theoretically correct". As mentioned above, there was only one of these companies that I will consider to follow theory and exploit the contribution methods benefits. The other had an approach to the problem that normally was a mixture of full cost variances and contribution. There is a clear potential for improvement with regard to the pricing process and to develop it in relation to the market and the competitive situation they are in. Several also expressed that they had lost order due to that they would not compete on price. Afterwards, some of they had considered that the decision had been wrong. They all are in needs for improvement. All managers stated that this could be significantly improved and that it was a key issue for corporate strategy and competence development.

### **REFERENCES**

«Accounting for Management.» 2012.

http://www.accounting4management.com/conversion\_cost\_definition.htm (funnet November 25, 2013).

Berthling-Hansen, Pål og Skaldehaug, Espen. «Magma.» Beslutningsrelevante kostander, februar 2003.

Bragg, Steven M. *Troughput Accounting. A guide to Constraint Management.* Holochen, New Jersey: John Wiley & Son, 2007.

Eiken, Oddvar. «Logistikk og ledelse.» 5 Mai 2006. http://www.logistikk-ledelse.no/2006/ma/ma05-06.htm (funnet November 13, 2013).

Geense, Ir.M. «Managerial accounting.» 2010. http://www.managerialaccounting.org/.

Goldratt, Eliyahu M. and Cox,Jeff. *The Goal : A Process of Ongoing Improvement.* North River Press Publishing Corporation, 2013.

Horngren, C.T. and G. Foster. Cost Accounting, A Managerial Emphasis. Prentice-Hall, Inc, 1987.

Horngren, Charles T. «Introduction to Management Accounting.» I *Introduction to Managemnt Accounting*, 58-59. Englewood Cliffs, N.J.: Prentice/Hall International, Inc, 1984.

Kaplan, R.S. and D.P. Norton. *The Strategy Focused Organisazation*. Harvard Business School Publishing Corporation, 2001.

Kaplan, Robert S. «One Cost System is not Enough.» *Harward Business Review*, Januray 1988. *Norsk Standard NS 4102*. Norges Standardiseringsforbund.

Norstrøm, Carl Julius. Bedriftsøkonomens historie. Oslo: Fagbokforlaget, 2009.

—. *Magna - Econas tidskrift for økonomi og ledelse*. Mai 2002. http://www.magma.no/eugen-schmalenbach-den-tyske-laeremester (funnet Januar 28., 2013).

Orient Point Consulting LLC. «Orientpoint.com.» 2013. http://www.orientpoint.com/FTE.htm (funnet December| 8, 2013).

Schmalenbach, Eugen. Der Kontenrahmen. Leipzig: G.A.Gloeckner, 1929.

- —. Dynamische Bilanz. Leipzig: G.A.Gloeckner, 1926.
- —. Selbstkostrechnung und Preispolitik. Leipzig: G.A.Gloeckner, 1934.

The County Administrative Board in Jämtland County,. «Interreg- sverige-norge.com.» 17 August 2008. http://www.interreg-sverige-

norge.com/UserFiles/File/Interreg/Intran%C3%A4t/Programbroschyrer%20Sv-

Eng/Interregbroschyr eng 080917.pdf (funnet November 13, 2013).

Unknown. «Trinity University archives.» Paper read to the 6th Scientific Conference "Applikation von Mathematischer Modelle, Methodenund Rechentechmik in der Leitung der Volkswirtschaft" BRATISLAVA, Slovakia, April, 1990 redrafted - Glasgow, Oct.1996. 1996. http://www.cs.trinity.edu/rjensen/readings/history/forrester/c02AfterSchmalenbach.htm (funnet September 22, 2013).

Vareide, Knut og Storm, Hanna Nyborg. *Regional analyse Østfold.* Bø i Telemark, Norge: Telemarksforskning, 2012.

Vea, Erik. Logistikk og ledelse. 2002. www.logistikk-ledelse.no/2002/ma/ma06-01.htm (funnet januar 28, 2013).

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# GLOBALIZATION AS A TOOL FOR ECONOMIC DEVELOPMENT IN DEVELOPING COUNTRIES: THE CASE OF GHANA

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#### **ABSTRACT**

Globalization has become a term that has been evolving and will keep on evolving as researchers delve more into it. Researchers have defined it in several different ways, but common themes run through all the definitions. Countries and organizations in their bid to provide development, improve standard of living, or seek more avenues for marketing their goods and services extend their offerings to the rest of the world. This could be done through trade and commerce, Foreign Direct Investments (FDI) and other kinds of activities. It is difficult for a country, organization, or even individuals to succeed without opening up to the rest of the world and not lives in isolation. Even though some countries are sanctioned not to do business or conduct any kind of bilateral trade with other countries, (for example North Korea), there are still some gainful activities that go on with countries who do not subscribe to the sanctions. Although there are gains to be made in globalization, there are some negative influences that come along with it which must also be taken into account. This paper will thus focus on the benefits as well as the negatives and the political climate that enhances globalization.

Keywords: Globalization, economic activities, political atmosphere, negative influences,

#### 1. INTRODUCTION

The term globalization has become a household name in the business arena in the last decade and its definition keeps evolving. Most researchers have their own way of defining it, but it is interesting to note that these definitions have common themes which invariably are similar. According to Mittelman (2004), globalization is the coming together of historical transformation in the interactions among market forces, political authority, and the life-ways embodied in society (global), as they encounter and join with local conditions. Hill (2011) also maintains that globalization is a move toward a more integrated world economy in which nations are is dependent on each other. Last but not the least, Haynes (2010) focuses on the thought that globalization is a continuing system by which the world is more and more characterized by similar and common activity, emphasizing in particular the way highly important aspects of life – including wars, crime, trade and culture – are becoming increasingly globally interrelated.

It can be deduced from the above definitions that globalization encompasses almost everything and anything tangible and intangible from country to country, continent to continent, and from different parts of the world to the other. In other words, globalization comes into play when several different entities from different regions decide to forgo their exclusivity to form one huge enterprise, thereby opening up their worlds to each other's. The following pages of this paper will focus on reviews other research on globalization, demonstrate how globalization has been an engine of growth in developing countries such as Ghana, look at political conditions necessary for globalization to flourish, and examine the negative aspects of globalization.

#### 2. LITERATURE REVIEW

There is a reason that people, enterprises, business, organizations or even nations join forces and cooperate with each other. For businesses, one can confidently surmise that it is to expand markets for goods and services, maximize profits, or to dominate the global market. It is understood that businesses exist to make profit, and as often said, businesses exist to make profit, and that there is strength in numbers (DeBarr 2011). Since globalization is current reality of business, Perez-Batres (2010) maintains that economic activity that occurs across borders and nations through markets is a manifestation of international business. International business may be as simple as importing and exporting or as complex as globally integrated supply chains. Investors are pushing for more and more globalization of firms because it is seen as a vehicle for growth in that they are able to produce and sell more of their goods

and services in the world market. Friedman and Jones (2011) reveal that since the coming into being of the first global economy in the nineteenth century and the emergence of the early manufacturing multinationals, such as Saint-Gobain, Siemens, and Singer Sewing Machines, business historians have made it known that firms have not only responded to globalization but also driven and framed it. Knowing very well, that when organizations expand and grow, they help governments create the necessary employment opportunities for the host nationals, these foreign-based firms have gotten various governments to embrace globalization as a business opportunity. This has made it possible for organizations to, at times, mobilize government apparatus in favor of their international expansion. Cases in point are Germany, Japan, and even Ghana, a much smaller country. Global companies have gained the cooperation of these states when looking for large contracts abroad.

There is no doubt that technology plays and important role in globalization. For globalization to be successful, technology will have to be the driver. Schaeffer (2003) reveals that technology is a force for integration and makes the world a smaller and better place. Technology, it is said, brings good things to life. This is true, but only in part. New technology also plays a role that few people consider. It has enhanced communication between people, countries and businesses. "By most accounts, these technologies have made it easier and less expensive for people to talk with family, friends, and business associates, and to do so while on the move, from great distances" (Shaffer, 2003, p. 30).

It is noteworthy to mention that globalization increases the opportunities in most economies as people are able to attract the needed investments, capital, and resources such as labor and land to operate with. This allows small-scale businesses, which make up the private sector, to aid the public sectors in areas of job creation. According to Johnston-Anumonwo and Doane (2011), one perspective on globalization consistently emphasizes the point that the process of rapid liberalization and globalization, which were introduced and embraced in developing countries by policies instituted as a result of debt crises, provided significant and important new opportunities. Structural alterations that results from debt crises are as seen as "[an]over controlling bureaucracy that has lost touch with the general populace to relax its restrictions, liberalize its economic policies, and allow new income-generating informal activities as part of the effort to reduce government involvement in the entire economy" (Doane, 2011, p. 11.)

Furthermore, globalization has increased the reformation of governments and regimes which have been inimical to progress, and this has translated into market efficiencies and improved conditions. Nayar (2011) reveals that the connecting link between globalization and the common market is the quest for economic efficiency. For example, India has moved to economic liberalization mainly because it had concluded that the socialist autocratic regime was economically inefficient and had, as a consequence, retarded economic growth, thus perpetuating poverty and diminishing national capabilities, (Nayer, 2010). Thus, globalization has opened up the country to a more progressive system of government supporting foreign investments and, thereby, allowing businesses to flourish.

#### 3. GLOBALIZATION AS AN ENGINE FOR GROWTH AND JOB CREATION

Certainly, globalization has opened up the world for people to do business and to connect with their business partners, suppliers and customers. Distances between people and countries have been reduced to mostly just a phone call away. Gone were the days when telephone services were limited, and Ghanaians had to queue at fixed-line telephone booths in some selected urban areas of the country just to talk to business associates, family, and friends abroad.

Interestingly enough, Cooper and Boye (2006) postulate that the use of mobile cellular phones has seen a dramatic expansion by Ghanaians who had not been served well or underserved by the monopolistic fixed-line operation by The Ghana Telecom Company. In 1994, these fixed phone booths numbered just a few thousand, but, by June 2006, mobiles in Ghana were estimated at about 3.34 million (Cooper & Boye, 2006). The numbers was up from roughly 2.65 million at the beginning of the year, and an increase of 82.8% from the 1.45 million registered at the end of the year 2004 (Cooper & Boye, 2006). By contrast, telephone service infiltration in the metropolitan areas of India has moved up by 40–50% as compared to just a mere 2% in most rural areas, where 70% of the country's 1.1 billion people reside (Cooper & Boye, 2006).

Of course the proliferation of mobile phones services comes with jobs for the receiving country. Thanks to new and improved communications that multilateral organizations, conglomerates and people are able to connect and move around the world. Currently, there are about six major cellular phone providers operating in Ghana. Boateng, Kuofie, Yellen and Garsombke (2011) list the companies as Tigo, Zain, MTN, Kasapa, Glo and Vodafone, and this development happened in a space of about 20 years for Ghana. Boateng et al., (2011) state that as a result of these companies and the diffusion of cellular services, a lot of related employment has been provided in Ghana. Indirectly, other people have also gained employment from the establishments of the companies. Small businesses and individuals among others are able to offer other related services such as selling of accessories, pre-paid calling cards, repairing malfunctioning cellular phones, and many more other services (Boateng, et al., 2011).

Globalization has helped and continues to help a developing nation like Ghana to reduce poverty, improve the wellbeing of its citizens, and promote private sector growth to augment the government, which is the single largest employer. Boateng et al., (2011) reveal that the World Bank has cautioned the absence of employment is the greatest problem facing Ghana presently with youth unemployment at 25.6%. Researchers offered a lot of solutions to inquire how this daunting issue of unemployment can be effectively solved certainly the mobile phone companies are helping in their own small way. As result of the mobile phone companies, there has been an increase in employment, especially employers paying more than the minimum wage (GH¢ 2.655 per day,), about \$ .50 US -Ghanaian cedi currency. This is at least \$2 per day-- in Ghana assist to minimize. This has reduced rate in Ghana (Boateng et al., 2011).

The transfer of technology and knowledge helps to lift up people from poverty as well. Studies are underway to help Ghana become energy independent. With this, the country will be able to wean itself from the dictates of oil producing countries by producing biodiesel from locally grown cash crops such as jathopha, coconut, and palm oil. Caminiti, Cassal, OhEigeartaigh, and Zeru (2007) explain that the fuel industry is currently managed by the Ghanaian government, which imports 100% of crude oil used in the country, and refines it domestically. However, storage and distribution are managed by a private entity which is solely owned by the Ghanaian government (Caminiti et al., 2007).

Caminiti et al., (2007) insist that there is the possibility of the production of biodiesel in Ghana that could be assisted by the show of interest of the government and local people who are already in this nascent sector. With the potential of producing biodiesel, Ghana stands the chance of engaging in national and global trade utilizing primary local palm oil, coconut and jathropha. This new industry will provide absolutely positive developmental influence with regard to labor and income generation in varied degrees (Caminiti et al., 2007). This means that farmers, who are mostly peasants, will have to incorporate more mechanized methods of farming to be able to grow more of such crops to feed the biofuel mills. Once the farmers are mechanized, more people will have to be employed to operate the various machines in farms and offices will have to be set up to manage entire operations to meet world standard and become more competitive. The production of biofuels for both internal usage and export will also require transportation, storage and distribution either internally or across national borders. All these require labor. As people are employed, they earn income, stimulate the local. Thanks to globalization, people are able to move around the world to discover biofuels in other countries.

As countries open up their confines to the rest of the world, not only do they attract new and improved technology and employment, they also entice foreign investors to participate and invest their monies in that economy. The past three decades have witnessed a dramatic rise of foreign direct investment (FDI) inflows around the world. Hill (2011) reveals that yearly average outpouring of FDI rose from \$25 billion in 1995 to a registered record of about \$1.8 trillion during the fiscal year of 2007. Ghana has been a strong beneficiary of FDI. The FDI inflows into Ghana is categorized into stages:1983-1986 recorded an relative pittance of \$4 million annually; slightly better inflows of \$18 million between 1989 – 1992; and significant improvement happened in 1993-1996 with about \$233 million per annum (Abor, Adjasi, & Hayford, 2008). It is noteworthy to stress that most of the investments in Ghana are geared towards the manufacturing and mining industries (Abor et, al., 2008). Between 1994 and mid-2002, the Ghana Investment promotion Center (GIPC) enrolled 1,309 FDI programs. The distribution of the registered project in each industry includes: service (388), manufacturing (368), tourism (153), building and construction (106), agriculture (105), and export trade (91) (Abor et al 2008). By the end of June 2002 a sum of 1,309 programs including 912 jointly owned foreign-Ghanaian and 397 mainly foreign owned

programs were in operation, and had been valuated at a foundation cost of 1.72 billion U.S dollars (Abor et, al., 2008).

Abor et al., (2008) state that the recoded FDIs into Ghana generally originate from China, United Kingdom, United States, and Germany. Combined, these countries contributed investments in excess of \$750 million by the end of the 2002 fiscal year. The investment that has been streaming into Ghana over the years led to an enormous amount of job creation for the Ghanaians and citizens of neighboring countries since people can travel across national borders easily these days. In addition, investments also generate the transfer of knowledge and technical expertise to the receiving country, in this case Ghana. New equipment will requires the skills to operate thus training local labor, which is cheaper to use on the equipment, and local manpower will be needed to work in the industries that have received FDI.

#### 4. POLITICAL CLIMATE

Political systems around the world vary but countries, organizations, individuals, and groups generally prefer to deal with stable a political environment and conducive atmosphere. Globalization thus thrives when people have faith in the political system, and in such political systems is where job creation, transfer of technical-how, and employment opportunities becomes available. Many developing countries have suffered political instabilities, thereby making them unstable and unattractive to foreign investors, and, in some cases, local investors as well. Since independence, Ghana and most countries in the Sub-Saharan region have suffered political instability enhanced by the many coup d'états. This restricted the movement of organizations and people to either explore or carry out feasibility studies for doing business in that region.

But it is important to note and credit given to some of the developing countries in the Sub-Saharan region. At least they are trying to stabilize their political climate to make it more transparent and open to entice investment. A country like Ghana has had democratically elected governments since 1996 and can be seen to be quite democratic. Even though democracies in that region and some other developing countries cannot be compared to that of a Jeffersonian democracy, there is stability that is evidenced by the FDI received from 1996- 2002 in Ghana. The recent general election is being disputed in the supreme court of Ghana; this is a good sign that the people are leaning towards the courts for the settlements of issues and not through the barrel of the gun as used to be the case post-independence.

Relatively, Ghana enjoys some civil liberties compared to other developing countries. This is crucial for any type of development to take place, people must have confidence that changes are made through due process and not on the whims and caprices of a few people. This atmosphere fosters globalization because it attracts businessmen, investors, and other countries to want to engage a country of this nature in a bilateral relationship, trade, commerce or any type of joint activity that will benefit both parties. According to Debrah (2002), in Ghana universal adult suffrage at 18 exists coupled with a vociferous, watchful and vibrant media that often has been criticized for being harsh on policies emanating from governmental circles. Even though there are no official limitations on the freedom of speech, people require authorization from the police before they can embark on demonstrations.

It must be stressed however, that globalization does not only do well in Jeffersonian democracy. Countries such as India, China, and Malaysia, operate different kinds of political systems and yet have opened up their economies and are globalized enough. For instance Friedman (2007) postulated that as soon as the "Chinese joined the World Trade Organization (WTO), both they are rest of the world had to run faster and faster. This is because China's joining the WTO gave a huge boost to another form of collaboration-offshoring" (p. 137). So in essence, globalization will thrive as long as the people believe that in the economic system is open and credible even though globalization works better in tested democracies such as those in United States or Great Britain. It has not been heard that any democracy has ever been to war with another democracy for now and that gives hope for the future. However, it must be understood that the type of government is not a precondition for globalization to thrive even though it enhances the chances of globalization.

## 5. NEGATIVE IMPACT OF GLOBALIZATION

There are numerous benefits when a country opens up to the rest of the world. But globalization has also created numerous issues for countries, especially developing nations (as compared to their developed counterparts) that lack the sophistication and technology to deal with the negativity that comes along with globalization.

The British Broadcasting Corporation- BBC (2013) reported that more than 120 Chinese citizens were apprehended during a raid to check and control illegal mining in the Western part of Ghana. According to BBC (2013), an increasing number of Chinese nationals have been trooping into Ghana, Africa's second-largest producer of gold, since gold prices "soared at the start of the global financial crisis. The suspects are being held at a detention facility in the capital Accra, pending bail and other legal procedures "(BBC, 2013). Chinese embassy officials in return informed the BBC that they are investigating the situation (BBC, 2013). The issue of illegal mining is in tandem with the fact that majority of FDI that flows into Ghana is channeled into the mining sector (Abor et al., 2008) and people from other countries are taking advantage of the system to mine for more gold in the name of globalization.

There have been reported cases of unwholesome organizational practices involving a lot of global organizations. McCall (2011) states that during the last 10 years or so series of complaints were lodged against Coca-Cola. Among the complaints are the unjust business practices in numerous nations including Columbia. A local bottler for Coca-Cola in Columbia was accused of using of some sort of militarized group to curtail labor and union activities in the bottling plant.

In addition, another multinational organization Nike, stands accused of paying meager salaries and wages to its employees, and conditions at their facilities especially in some developing countries, are unhealthy, exposing workers to carcinogens in the workplace, (McCall, 2011). McCall (2011) reveals that in some instances the state of affairs at Nike-owned facilities is unwholesome; however, unhealthy conditions are the norm in factories of independent suppliers of Nike's products. Since Nike continues to do business with these independent suppliers, it is equally liable. This act of omission or commission of Nike and other global organizations makes concerned groups, individuals, and civil societies question the business philosophy of these international organizations and their motives. Are they about helping raise standard of living in countries in which they operate and, thereby, lifting people up from poverty into the middle class status and improving their way of life; or are they making astronomical profits at the expense of developing societies in Africa and elsewhere?

There are many other unhealthy and negative occurrences widely known, published, and documented happening around the world, especially in the developing nation. Many of these practices happen under the guise of globalization. One could say that they are the consequences of countries opening up to the rest of the world, or hazards of going global. Developing countries are torn between helping their people to develop and providing jobs or to remain as they are because of the unhealthy practices enumerated. Obviously they choose to deal with the negative practices since these global firms, and in some cases countries, keep increasing their presence in the developing world.

## **6. CONCLUSION AND RECOMMENDATIONS**

In conclusion, it can be said that globalization is the way forward in the twenty-first century for governments, organizations, firms, and nations. It is important to underscore the importance of globalization since it has become a factor of business where the production of goods and services has spread across continents. In addition, technology has also become the driver of globalization. Due to improved communications channels, business transactions are conducted in a swift manner, eliminating bottlenecks normally associated with international business transactions. In likewise manner globalization has also improved countries by changing regimes to be more progressive and accommodating. Countries have been able to attract the necessary investment from other countries, global organizations, individuals and groups. Even though there are some positives associated with globalization, there have been unhealthy practices such exposing employees to carcinogens and meager wages being paid to employees by global firms. Foreign nationals have been arrested for allegedly engaging in nefarious activities such as illegal mining of gold.

It is recommended, in future, research could be commissioned to delve more into the activities of some of the global firms with regard to how they obey laws of host countries. Just because they bring some benefits to developing countries, multilateral organizations could flout local laws with impunity under the guise of job creation and investments.

#### **REFERENCES**

- Abor, J., Adjasi, C. D., & Hayford, M. (2008). How does foreign direct investment affect the export decisions of firms in Ghana? *African Development Review*, *20*(3), 446-465. doi:10.1111/j.1467-8268.2008.00193.x
- BBC. (2013, March 27). Ghana arrests Chinese suspects in illegal mining crackdown. Retrieved March 31.
  - 2013 from BBC website.: http://www.bbc.co.uk/news/world-africa-21960772
- Boateng, O., Kuofie, M., Yellen, R., & Garsombke, P. (2011). Mobile phone providers create high paying jobs in Ghana. Journal of Economic Development, Management, IT, Finance & Marketing, 3(2), 68-80.
- Caminiti M., Cassal, M, OhEigeartaigh, M., & Zeru, Y. (2007). Feasibility study of biofuel production in Ghana: Assessing competitiveness and structure of the industry's value chain. Technoserve. The George Washington University.
- Cooper, R., & Boye, A. (2006). The scramble for BOP penetration in telecommunications. Greener Management International, (51), 89-98.
- DeBarr, R. (2011). Responding to globalization. *Economic Development Journal*, *10*(4), 20-26. Debrah, Y. A. (2002). Ghana. *Thunderbird International Business Review*, *44*(4), 495-513. doi:10.1002/tic.10028
- Johnston-Anumonwo, I., & Doane, D. L. (2011). Globalization, economic crisis and Africa's informal economy women workers. *Singapore Journal of Tropical Geography*, *32*(1), 8-doi:10.1111/j.1467-9493.2011.00416.x
- Friedman, L., T., (2007). The World is flat: A brief history of the twenty-first century. Picador, NY, *New York*
- Friedman, W. A., & Jones, G. (2011). Business history: Time for debate. *Business History Review*, 85(1), 1-8.
- Haynes, J. (2010). Democratization in the Middle East and North Africa: What is the effect of globalization?. *Totalitarian Movements & Political Religions*, *11*(2), 133-149. doi:10.1080/14690764.2010.511463
- Hill, C., L., (2011). Global business today. McGraw-Hill, NY
- McCall, J. (2011). Business and corporate ethics after Auschwitz. *Journal* of Ecumenical Studies, 46(4), 520-523.
- Mittelman, J. H. (2004). What is critical globalization studies? *International Studies Perspectives*, *5*(3), 219-230. doi:10.1111/j.1528-3577.2004.t01-1-00170.x
- Nayar, B. (2011). Globalization, the state, and India's halting march to common market: The political economy of tax reform under federalism. *India Review*, *10*(3), 201-245. doi:10.1080/14736489.2011.596782
- Perez-Batres, L. P. (2010). A Perspective on international business scholarship: Is it regional or Global? *Multinational Business Review (St. Louis University)*, *18*(1), 73.
- Schaeffer, R. K. (2003). Globalization and technology. Phi Kappa Phi Forum, 83(4), 30-33.

## **AUTHOR PROFILE**

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# THE RISING WORLD MARKET PRICE OF CORN AND ITS EFFECT ON POOR COUNTRIES

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## **ABSTRACT**

Food is an essential human need. People must have easy access to it when they need it and must also be able to store some for future use. However this is not the case with corn, rice, soybeans, and many more staples in the world food supply. Corn is the main source of calories for of most people living in developing countries; even in developed countries, it is an important source of nutrition, and even more so as a source of food for animals such as pigs, poultry and cattle. Over the past six years corn production has been rising, and greater production of food usually leads to lower prices. The natural assumption is that many people, especially the poor countries, will have access to enough to feed their populations. Unfortunately, this is not so. Hunger remains an extraordinary problem in the world. Even as production of corn is increasing, prices are increasing as well, making it difficult if for these countries to import enough corn to supplement local production for consumption. Many reasons account for the increase in corn production, but prominent among these is the use of corn for the production of ethanol. The United States, which is a major producer of corn, is championing corn-based ethanol as an alternative source fuel. Farmers are incentivized to grow more corn to feed ethanol mills instead of to feed the many hungry people of the world thus, the increase in corn prices. This article will explore this problem, its scope, and the drivers behind it.

**Keywords**: Price of corn, production, hunger, ethanol, developing countries.

## 1. INTRODUCTION AND PROBLEM STATEMENT

The need for food for humans and animals is essential for their survival and so it must be available for all people at any time, however this is unfortunately not the case for some parts of the globe. Even though some countries, especially the industrialized West, are generally able to feed their population and export more to developing countries, there are still hungry people even in the developed world. In this regard, when food prices increase the hardest hit are those developing countries that mainly rely on imports from Western countries. A country's trade policies, human rights mandates, human population growth, technological advancements, and energy consumption can directly affect the economic stability of many other countries. A major problem for many countries today is the continuing increase in food prices. Recently, high energy prices, globalization, growth in income, and climate changes are the main drivers that are transforming food consumption and production (von Braun, 2007). About 15% of the world's population (over one billion people) is regarded as hungry or malnourished. This hardship impacts women in particular (McMichael & Schneider, 2011). Most of these hungry people (65%) live in countries such as China, the Democratic Republic of Congo, India, Ethiopia, Bangladesh, Indonesia and Pakistan (McMichael & Schneider, 2011).

Crops such as beans, wheat and potatoes, and many grains are the staples that feed the world. For developing nations, they are often critical for survival (O'Brein, 2010; Durham & Avant, 2011). Currently corn, a staple food for people across the globe, is also the most common source of both ethanol to produce biofuel, and animal feed (O'Brien, 2010). The amount of corn diverted from use for food is therefore increasing exponentially as the demand for its use in other industries grows (O'Brien, 2010). Scientists project that with continued high oil prices, the swift increase in world biofuel production will the press world price of corn up by 20% by the year 2010 and up 41% by 2020 (Runge & Runge, 2010). The increase in corn prices will force poor nations to cut back on the importation of corn, even though this will increase hunger and starvation in these countries where corn is a staple food.

In the USA, the rise in food prices since 2007 has doubled that of the inflation rate mainly being driven by higher energy costs, the devaluation of the US Dollar, and dependency on crude oil (Armah, Archer, and

Phillips, 2009). The Earth Policy Institute's director, Lester Brown, perceives the global rise in food prices to be a chronic and trend-driven problem that has seen record increases for eight consecutive months mainly due to climate changes, turmoil in the Middle East, China's increase in food demand, and ethanol production (Fontevecchia, 2011). Interestingly, the demand for animal protein by the global population specifically from that of developing countries is not as significant as the diversion of crops to produce ethanol in having an effect on the rise of food prices (Fontevecchia, 2011).

This analysis will show how corn prices have been rising since 2007 and the literature review reveals that many researchers have ultimately reached similar conclusions. This paper is intended to identify the effects of corn diversion from food supplies and to illustrate the effects of these rising prices on developing countries. Corn is essential to the diets of thousands of millions of people in the developing countries, including those in sub-Saharan Africa. Hunger and malnutrition is becoming disturbingly common in many parts of the world. According to Lewis (2008), the dangers of hunger and malnutrition are mounting in the developing countries; hundreds of millions of the world's highly vulnerable populations are at risk. Chaotic situations around food have erupted from South Asia to West Africa as people reach stages of desperation (Lewis, 2008). In developing nations where there is dependence on imported food to feed the poor and hungry populations, local communities are joining the protest. Lewis (2008) reveals that incipient democracies are feeling the strain of food insecurity, and many governments have instituted specific policies such as price controls and export bans on food, thereby further distorting markets. Measures such as these present challenges to commerce and trade worldwide.

It has been shown that corn is an essential commodity and the main staple for most countries either as food for the population, for livestock, or as a source of alternative energy. Any action that causes the price of corn to rise represents a problem for populations throughout the word.

Consequently, the questions remain:

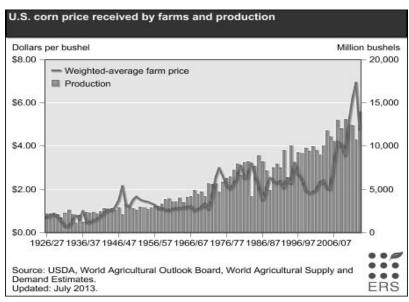
- 1. Why is the world market price of corn rising?
- 2. Who is benefiting from the price hikes, and who is losing?

#### 2. LITERATURE REVIEW

The issue of rising world market price of food, especially corn, has captured the attention of many researchers in the global area due to its importance as basic, irreplaceable sustenance for much of the worldwide population. One of the major reasons why corn prices continue to increase related to the policies implemented by many major governments with the objective to promote the production of ethanol and restrict the importation of other crops such as sugar cane. Initially a reasonable idea, using idle farmland to decrease the U.S.'s dependency on foreign oil began back in the 1970s. Since 2004 however, the world's ethanol production has tripled to more than 21 billion gallons and in the U.S. grain production that is solely dedicated to ethanol production has doubled to over 28.7 percent (Fontevecchia, 2011). With an increase in oil prices, ethanol production has not only become attractive to farmers, but also to politicians who now obtain support for pro-ethanol policies from interest groups (Fontevecchia, 2011). The Energy Independence and Security Act (EISA) of 2007 has a main objective to increase biofuel production from 40 to over 136 billion gallons of ethanol by the year 2022 (Farming, 2012). In order to meet this objective, nearly 80 percent of the U.S.'s current farmland would have to be devoted to the production of ethanol derived from corn (Farming, 2012). Another aspect to this problem is that the U.S. government is utilizing subsidies to help promote ethanol production while placing tariffs on certain crop imports such as sugar cane.

The subsequent increase in prices has been undoubtedly affecting many people and nations around the globe. According to Collins (2008), since the year 2003, costs of primary agricultural commodities like rice, wheat, and soybeans increased exponentially across the globe, impoverishing and further endangering the livelihoods of hundreds of millions of the globe's poor people living in vulnerable countries. Table 1 below, provided but the United States Department of Agriculture (USDA) (2013), illustrates the drastic and continuous rise of prices for US Corn from the 1920s through 2007 with the sharpest rise by far in 2007. We can continue to observe this trend today.

TABLE 1



(ers.usda.gov, 2013)

## 3. CATALYSTS FOR DIVERSION OF CORN FROM THE FOOD SUPPLY

The rate and level of price change is clear from the table, but the reasons for the change are of even greater interest. The variations in prices of primary commodities can in part be attributed to the changes in the demand and supply of grain in general; consequently, it is the changes that have triggered prices of cash crops such as corn to rise. In the view of Collins (2008), alterations in the principal demand and supply elements for food grains have certainly redounded to increase prices of food. Notably, there is the accelerating shifting of food crops production to biofuel in Europe and the United States; severe drought in Australia's wheat-producing regions; flooding in the United States grain zone; growing oil and fertilizer prices globally; and the acceptance of American and European meat-rich diets by the ever-increasing middle classes through Asia. As a major consequence of changes in dietary preference, grain is being diverted even further to supply cattle feed.

In addition, there are other extenuating factors that Collins (20008) argues have led to increase in prices of basic food crops. Collins (2008) explains that, attached to the recent developments enumerated above, long-term impedance to global agricultural production has eaten away the global food system's ability to withstand shocks to the changes in supply and demand: "Although decades in the making, loss of agricultural capacity worldwide caused by soil depletion, climate change, water scarcity, and urbanization has begun to take its toll on food production" (p. 9). In addition, decades of limitations on importations and inexpensive commodity exports by affluent nations has destroyed local food production capability in indigent countries, compelling most nations which used to be self-sufficient to depend on importation of food from rich western countries.

#### 4. LAND USE

This creates the problem of land use, which is a major factor when discussing the increase in the world market price of cash crops such as rice, wheat, corn, and nuts. This is because land must be available, accessible, and above all arable for cultivation of such crops. The absence of land could jeopardize food security, thereby causing prices to rise due to scarcity. Mallya (2011) is of the opinion that food grain cultivation is declining, first because of alterations in cropping patterns; second, because of to the use of land for other than agricultural purposes, namely, commercial and residential usage as a result the increasing urbanization in the rising economies (Mallya, 2011). According to Mallya (2011), the nature of agriculture almost everywhere is being affected by soil exhaustion, increasing scarcity of fresh water bodies, and diversion of irrigation water to sprawling urban centers.

With more land devoted to usage other than agricultural, production of grains for consumption is clearly suffering. In the U.S., many farmers have shifted from soybean production to corn production as it is currently more profitable (USDA, 2013). Xiaodong and McPhail (2012) posit that the huge development of the ethanol industry is shaping the United State corn and other similar commodity markets, including the shift of a meaningful volume of arable land to the production of corn. As a case in point, according to the acreage information as reported by the USDA, over 92 million acres were planted with corn in the 2011/2012 agricultural year, making it the second most extensive since 1944. Table 2 below, provided by the USDA, illustrates the drastic increase in yield provided by this extensive planting.

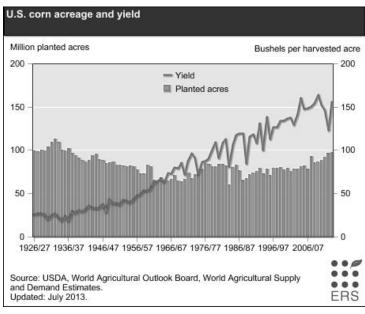


TABLE 2

(ers.udsa.gov, 2013)

Even in light of this massive increase, Mallya (2011) maintains that that sluggish or declining productivity in agricultural is a principal collaborator to the demand-supply gap in food grain crops. Basically, in almost all developing countries, crops from the utilization of high-yielding seed varieties have attained a plateau, and the productiveness of land is in reality declining (Mallya, 2011). Consequently, soil fertility is declining in accordance with soil erosion, groundwater is being depleted, and the inordinate use of chemical fertilizers is having an impact; and with an insignificant investment in the agricultural technology either by the private or public sectors, the already constrained supply-demand of food crops will further widen (Mallya, 2011).

Furthermore, the insufficiency of the global market has not helped food prices, especially grains such as corn. As a result, countries have adopted irregular measures to survive. Ojha (2012) looked at the issue of food prices through the malfunctioning of the global grain market, further stating that evidence exists to conclude that the situation is going to be worse in the near future. With the leanness of the major global market in cereals, the limitations imposed by most countries on the export of grains call for additional price increases (Ojha, 2012). Consequently most nations have initiated price controls, speculative bubbles are building up, and the artificial gap created as a result between cash and prospective prices has risen, provoking over-regulation on the part of some countries (Ojha, 2012). This has caused some commodity exchanges in Asia and Africa to cease future trading in grain while certain food aid benefactors have defaulted on food donations, thereby making it difficult for the World Food Program to gain easy access to grain for its philanthropic activities around the world (Ojha, 2012). Ojha (2012) is of the view that this scenario has triggered the rebuilding of national stocks by some developing countries and re-evaluating the advantages of food supply dependency regardless of the high cost. Therefore, the prices for food can only increase.

# **5. ALTERNATIVE ENERGY SOURCES**

Elobeid and Hart (2007) looked at the price of corn and other food crops in the light of the growing demand for alternative sources of energy as well. The effect of increased demand for ethanol in the United States has affected agricultural products and continues to threaten global food prices and security. Elobeid and Hart (2007) reveal that the majority of ethanol production from corn happens in the United States. It is also a significant producer and exporter of other commodities such as soybeans, pork, sorghum, and other products. Since the United States produces about 40% of the world's corn and accounts for about 70% of global trade, a rise in the demand for corn in the Unites States used for ethanol production should have a significant effect on not only the domestic market but also world market. Elobeid and Hart (2007) postulate that with the expansion of ethanol in the United States, the upsurge in the prices of corn will draw away land use from other cash crops like wheat and soybeans, which will trigger an increase in their respective prices. A case in point is that the ongoing ethanol expansion in the United States increased global corn prices by 60% in the year 2006.

The issue of ethanol expansion and the rising cost of grain prices, especially corn, attracts the attention of many researchers. Massive ethanol production has triggered world market price increases for corn and, if the trend in demand continues, global prices will continue to increase. According to Runge and Runge (2010), food crops such as oil palm, soybeans, and rapeseed palm are also considered to be the fundamental sources of biofuels. In other words, the prices for these crops reflect oil prices. Even so, the quest for corn and soybeans for biofuel consumption is enormous: one out of three acres of corn production in the United States in 2009 was used by manufacturing plants producing ethanol as opposed to usage by livestock or human beings. The situation has caused a huge competition between people and cars for grain supply.

Runge and Runge (2010) reveal that the talk of more production of biofuel remains heavy on the agenda of the United States. "Legislation passed in 2005 mandated that the production of ethanol reach 7.5 billion gallons by 2012. In 2007, the Energy Independence and Security Act upped this mandate to 15 billion gallons and also mandated 20.5 billion gallons by 2015 and 36 billion gallons by 2022", (para.20). The majority of the aggregate ethanol demand was to be fulfilled by corn, the remaining by different recent sources of ethanol, including but not limited to cellulose (Runge and Runge, 2010). With all these enactments, Runge and Runge (2010) insist that improved biofuels have not yet been commercially produced, meaning that the production of corn certainly has to increase further to nourish ethanol factories. The attendant effect of these pieces of legislation is that corn prices will increase to the detriment of livestock and humans.

## 6. FOOD SECURITY CONCERNS

According to Surugiu, Dolgopolova, and Surugiu (2010), another major factor in food prices such as that of corn is the problem of climate change. Continuing change in climate will have an effect not only on poor countries but also industrialized nations who are major food producers. There are four basic food security issues identified by Surugiu et al. (2010): access, supply stability, availability, trade and production. They rely not only on the socio-economic situations but also on the climate and farmers' ability to produce (Surugiu et al., 2010).

Surugiu et al., (2010) explain that some actions taken to curb climatic changes have been harsh and devastating. In an effort to alleviate the effects of climatic change, leaders and governments of various countries have increased biofuels production (ethanol and biodiesel) by offering stimulus and assuring markets avenues to consumers and producers, thereby transforming the production of biofuels into a multi-billions dollar market. Surugiu et al., (2010) point out that, according to the International Monetary Fund (2008), the growth in production of biofuel in the United States and Western Europe has elevated the price of food and elevated inflation. Therefore, biofuel production, originally though to be a solution to climate change, is having a negative effect on food supply as well as on natural environments.

The instability of United States dollar has also been cited as part of the cause of the rise in food prices. Clapp (2009) insists that the frailty-of the dollar is a major cause of commodity price increases. The value of the dollar as compared to other major currencies depreciated by 22% from 2002 to 2007 (Clapp, 2009). To escape economic disturbance as a result of the credit crisis, the US Federal Reserve cut interest rates repeatedly in 2007-08, weakening it substantially (Clapp, 2009). The dollar depreciated a full 8% against

the euro in April 2008 alone (Clapp, 2009). The irony of this is that anytime the value of the United States dollar falls, prices of goods in general go up globally. Clapp (2009) explains that this inverse relationship, which is experimentally consistent, seems to be due to various factors, even though some economists acknowledge that the relationship is not fully comprehended.

Further affecting food security is this significant shift from grain as a source food-feed to food-feed-fuel. Banerjee (2011) explains that the change from food-feed to bio-fuels has happened on different levels. It is evidenced and observed in the area of production (Banerjee, 2011). A bio-fuel such as ethanol, mainly chemically a hydro-carbon, may be generated out of any crop that is composed of sugar. Even though ethanol is generated from cereals such as corn or wheat, it can also be derived from sugarcane, sweet sorghum, or sugar beets (Banerjee, 2011). Therefore, increases in prices for bio-fuels is likely to spark off competition for naturals resources, tillable lands, and even funding and investment of both capital and other resources, thereby possibly shifting the output of food crops in support of the non-cereal crops used as raw materials in bio-fuel factories (Banerjee, 2011).

#### 7. METHODOLOGY

It is evident that global food prices especially corn has been rising for some time, and there have been notable effects on the world economy and, more disturbingly, the quality of life in poor countries. Even though some countries are gaining in terms of using corn to produce alternative source of energy-biofuels or exporting for foreign exchange, others seem to be losing from the attendant effect of hunger and malnutrition.

## 8. HYPOTHESES

1. Null Hypotheses

Ho: There is no notable relationship between corn prices and production.

2. The Alternative Hypothesis

HA: There is a significant relationship between corn prices and production.

Independent Variables Dependent Variable
Corn prices Hunger in third world

Corn production
Ethanol production

The above independent variables to be measured have significant effects on hunger especially in the poorer countries of the third world economies.

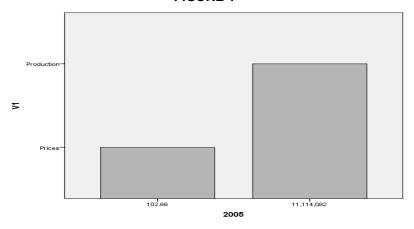
TABLE 3

Year	2005	2006	2007	2008	2009	2010	2011
	102.66	160.66	180.25	156.16	164.58	250.63	258.44
Price							
Production	1,111,408	1,053,486	1,303,787	1,209,164	1,309,186	1,244,686	1,235,961

Source: Food and Agriculture Organization; FAOSTAT

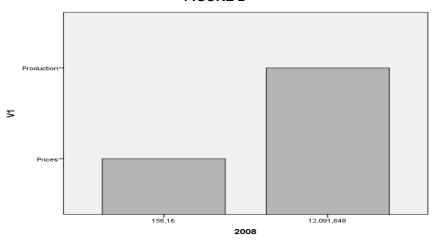
Table 3 above provides a comparison of price to production by the ton from the years 2005 – 2011. As the Table illustrates, price rose steeply from 102.66 in 2005 to 258.44 in 2011, and the dip in 2008 did not ultimately affect the overall price increase across this time frame.

## FIGURE 1



From Figure 1, it can be seen that United States farmers produced over 1 million metric tons of corn at a world market price of \$102.66. One distinct feature of the above graph is that production was good in that year. This meant that presumably more corn was exported to most parts of the developing world that depend heavily on corn as a staple food. It also meant that the United States generated foreign exchange from the exports of corn to other countries. But it must be said that the quest to supply food to the developing world especially by the United State, had not gained enough momentum.

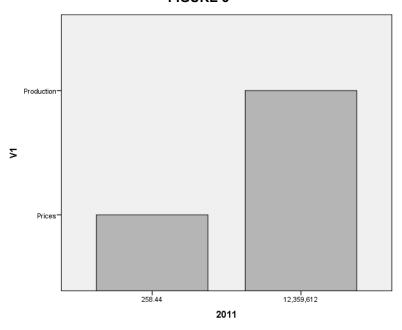
FIGURE 2



Even though the production and its corresponding prices of corn went up, they did not go up as expected. Price of corn went up over 53% whilst production also went up by over 100% metric tons. Mention must be made of the fact that the global financial crisis was in full force by then, and the United States currency was falling against major currencies (Clapp, 2009). The increase in both production and price could be largely attributed to the increase in demand for ethanol from corn, and consequently, one should have expected a decrease, but because the demand for alternative sources of fuel was gaining ground, both price and production notwithstanding, the financial crisis, gained a boost.

Production and prices increased in 2011- Figure 3 but, prices increased exponentially - \$102 and production about 26,000 metric tons.

## FIGURE 3



## 9. FINDINGS

The above graphs and tables depict consistent and substantial increases in corn prices and production, and on the face of it this should be a boost to both the United States and the emerging nations most dependent on corn. This is because the more a country exports the more likely it is to generate foreign exchange revenue while the other countries will get more of whatever is being exported, in this case poor countries to acquire corn to feed their population. According to Swan, Hadley and Cichon (2010) between 2007 and 2008 prices for fuel and food surged, placing millions of the world's population in danger of food scarcity. Swan et al. (2010) indicate that available information from the Food and Agriculture Organization reveals that estimates of the "number of undernourished people increased from 850 million in 2005 to 963 million in 2008. International food prices dropped after June 2008, but domestic prices in many developing countries remained high: (p. 107).

The number of people affected by these increases in food prices is not exaggerated as it is generally known that developing economies are significantly vulnerable to price volatilities in the world market. The currencies of these economies are pegged to that of the United States dollar in the international market, thereby making it difficult to import large quantities to feed their people. It must be mentioned that, even though some developing countries rely partly on their own production to feed their people, they also import a substantial amount of food. Despite the general belief, most countries in sub-Saharan Africa depend on a combination of their locally produced products and that of the world market to meet their food demands (Swan et al., 2010). By and large, what is produced locally is meager since these economies, though mostly agrarian, are seasonal farmers who depend heavily on nature. Swan et al. (2010) maintain that agriculture in most of these countries is predominantly controlled by rain-dependent farming, showing consistent price of food increases as stocks are exhausted in the periods leading to the harvest, normally during the season of rain. Many of the world's poor endure a multitude of problems such as low incomes, restricted sources of income, and increased prices of staple food like corn, which lead to high mortality and severe malnutrition (Swan et al. (2010).

One would have expected that as the main-staple corn production keeps increasing there will be enough to feed the world's poor, but this is not the case. Every single day, over 15,000 infants lose their lives through hunger-related reasons—severe malnutrition, severe undernourishment, lack of crucial vitamin, and deficiencies in vital minerals leading to infirmity and increased chances of illness (Mousseau, 2009). In simple terms, children who are the future of the world are dying of acute hunger since parents are not able to provide for their daily nutritional needs (Mousseau, 2009). Riots have erupted due to the

unaffordability of food in a lot of countries. The riots over food "stemmed from soaring food prices, which began an upward tick in 2002, and have surged since 2007. Last year, global wheat prices spiked by 150 percent, more than doubling the price of bread in many poor countries" (p. 73).

As was seen in Figures 1-3 and Table 3, corn production has increased consistently, and this should translate into the abundance of food as corn grains constitute a significant staple food of the globe. However Pimentel (2009) has a different explanation for the increase. Grains generally supply over 80% of the globe's food caloric intake but, corn which, is most relied upon in many developing countries, is being used for a different thing —ethanol in the developed world, especially the United States (Pimentel, 2009). Even though corn production in the United States has increased, it is diverted to the production of ethanol. The occasional shortage of oil in the United States and other countries has pushed political leaders and other policy makers to suggest corn and some other cash crops as alternative sources of fuel, particularly in the production of ethanol (Pimentel, 2009). Consequently, the United States produced about 9 billion gallons of ethanol using over 30 percent of United States corn grain.

If the push for more corn for the production of ethanol is repeated elsewhere in any part of the world, there will be serious ramifications, and the worst affected will be those in the third world countries who depend largely on the importation of corn for their daily diets. Banerjee (2011) minces no words in stating the consequences of any replication of what is happening in the United States. There is little doubt that the trend of using corn for the production of biofuel in any part of the world would be a fatal disaster to developing countries (Banerjee, 2011). Even without any such duplication, the production of corn based ethanol currently in the United States is causing undue hardship and hunger in the developing world, while the United States enjoys a semblance of a monopoly on exports of corn globally (Banerjee, 2011).

In addition, since globalization is the order of the day, trade has become inevitable for any country in the world. Nations have to trade with each other to gain the necessary foreign exchange revenue for various things such as developmental projects, or paying wages and salaries of employees. According to Banerjee (2011), in this age of globalization with heightened food commerce, the dynamics of cereal utilization transcend across national borders and into the areas of trade policies. For instance, it is very likely that United States will reduce the exports of corn to be able to prevent a slump in the local animal feed and food supply (Banerjee, 2011). As an added benefit in the US, this reduction would also decrease the price of animal feed even further. As an added burden to developing countries, the aftermath of a cut in exports will further increase cases of hunger, misery and malnutrition.

Attempts have been made to allay the fears of those in the third world and the poverty stricken countries, and of those who are not in favor of the use of corn for ethanol. Wilson, Won, Dahl, and Taylor (2008) indicate that corn growers in the United States opine that, if current trends (Figures 1-3 and Table3) continue, the United States will be able to generate 173 bushels/acre by 2015. This is expected with current demand to satisfy the quest for alternative sources of oil. But the question that still remains is: who will be the beneficiary of this increased yield? This is the concern of many, especially the poor countries.

#### 10. CONCLUSION

From the forgoing, it will be preposterous for anyone to think that the upsurge of the price of corn will abate to become affordable for many in the third world who mostly live in abject poverty. Because production is increasing, the law of demand and supply suggests that increasing production should bring down prices, but that is clearly not what is happening. Prices are increasing with a corresponding increase in production. The United States, which produces and exports 40% of the world's corn across the world, has found a new reason- biofuel- to produce more corn not for export (Elobeid & Hart, 2007).

With the continued increase in oil prices, the use of biofuel is becoming more popular in some Western nations, and the United States is leading in the pack. In its endeavor to be oil independent, the United States government has been channeling the country's resources into the production of corn based ethanol. This way the United States government will not have to subject the country to the dictates, whims and caprices of the other oil producing countries. Policy makers are enacting laws that will further the production of corn to feed ethanol mills around the United States (Runge & Runge, 2010). Politicians have found that ethanol appeals to voters in some corn growing states that play a leading role in the

selection of the President of the United States, and are therefore championing the production of more corn for ethanol.

The price of corn remains high even when production is rising, and United States politics, world influence, and maybe most importantly, value of the dollar has been seen to be the cause. The dollar is the major trading currency of the world and is pegged against most currencies. Therefore, anytime its value slumps, it causes ripple effect in world trade and commerce by reducing the price of goods and increasing imports. This means that most countries, especially poor nations which have weaker currencies, will need more of their currencies to trade globally. Consequently, when corn prices go up, importing more corn will require substantial amount of US dollars to purchase, and this normally causes inflation in most already bad economies. The situation limits the ability of poor countries to import more staples like corn, if it is available for them. Realistically, regardless of the value of the U.S. dollar, current U.S. politics, and other influences of wealthy countries, poor countries can not afford for the practice of corn diversion from the food supply to continue.

Direction for future research into this topic is revealed through this analysis in the opportunity to approach this problem from the perspectives of farmers in poor countries. For years, farmers in these countries complained about their inability to compete in the global grain market due to the inundation of cheap grain from the US. Now that food staples such as corn are becoming too expensive to import in adequate amounts, investigation should be taken to the reaction of the farmers: have they lost the ability to produce grain domestically after so many years of cheap imports? Has the maximum production capacity already been met, thereby forcing their dependence on expensive, imported grains such as corn? In addition, the question remains as to the effect of the high cost of corn on the ability of poor countries' farmers to purchase other items needed for domestic production, such as fertilizer and equipment.

#### **REFERENCES**

Ahman, P, Archer, A & Phillips, G 2009, 'Drivers leading to high food prices, biofuels are not main factor', *The Society for In Vitro Biology 2009*, viewed 3 July, 2013,

http://www.springerlink.com/content/wh063731746866x4/fulltext.html.

Banerjee, A 2011 'Food, feed, fuel: Transforming the competition for grains', *Development & Change*, vol. 42, no. 2, pp. 529- 557.

Bhat, K 2008, 'Misplaced priorities', Harvard International Review, vol. 30, no. 1, pp. 30-33.

Boukaabar, B & Dellil, M 2012, 'Interval estimate of the threshold and the poverty rate by the methods of the simulation', *International Business Research*, vol. 5, no. 10, pp. 212-226.

Clapp, J 2009, 'Food price volatility and vulnerability in the global south: considering the global economic context', *Third World Quarterly*, vol. 30, no. 6. pp. 1183-1196.

Collins, B 2008, 'Hot commodities, stuffed markets, and empty bellies', *Dollars & Sense*, vol. 227, pp. 9-21.

Couvinhas, A, Ferrara, P, Coelho, D, Jorge, S, Walter, J, Jacobs, K, & Soares, M 2012,

'Ergonomic considerations for a systemic approach: The millennium maize mills project in northern Mozambique', *Work*, vol. 41, pp. 568-575.

Durham, S & Avant, S 2011 'Working to provide international food security' *Agricultural Research*, vol. 59, no. 9, pp. 4-13.

Elobeid, A & Hart, C 2007, 'Ethanol expansion in the food versus fuel debate: How will developing countries fare?' *Journal of Agricultural & Food Industrial Organization*, vol. 5, no. 1, pp. 1-23.

Energy Weekly News 2012, Farming; meeting biofuel production targets could change agricultural landscape 2012, Energy Weekly News, viewed 31 July 2013, http://search.proquest.com/docview/926624929

Fontevecchia, A 2011, 'Why world food prices will keep climbing', *Forbes,* viewed 4 June 2013, < http://web.ebscohost.com.ezproxylocal.library.nova.edu/

Lewis, R G 2008, 'What food crisis?' World Policy Journal, vol. 25, no. 1, pp. 29-35.

Mallya, P D 2011 'Can global food inflation be blamed for food Inflation in India?' *International Journal of Global Business*, vol. 4, no. 2, pp. 1-14.

McMichael, P & Schneider, M 2011, 'Food security politics and the millennium development Goals', *Third World Quarterly*, vol. 32, no. 1, pp. 119-139. doi:10.1080/01436597.2011.543818

- Mousseau, F 2009, 'Toward a future without want', *World Policy Journal*, vol. 26, no. 2, pp. 73-81. O'Brien, D 2010, 'Corn', *Agricultural Research*, vol. 58, no. 5, pp. 12-13.
- Ojha, R 2012 'Global food crisis: Policy lapses or market failure?' *Advances in Management*, vol. 4, no. 7, pp. 19-23.
- Pimentel, D 2009, 'Corn ethanol as energy', *Harvard International Review*, vol 31, no. 2, pp. 50-52.
- Runge, C & Runge, C 2010, 'Against the grain', Foreign Affairs, vol. 89, no. 1, pp. 8-14.
- Surugiu, M Dolgopolova, I & Surugiu, C 2010, 'Perspective on biofuels and implications for climate change: Grains as fuel or is there a limit?', *Young Economists Journal / Revista Tinerilor Economisti*, pp. 875-86.
- Swan, S Hadley, S & Cichon, B 2010, 'Crisis behind closed doors: Global food crisis and local hunger', *Journal of Agrarian Change*, vol. 10, no. 1, pp. 107-118.
- US Department of Agriculture 2013, *USDA Economic Research Service: Corn*, viewed 1 August 2013, < http://www.ers.usda.gov/topics/crops/corn.aspx.
- US Department of Energy, Energy Efficiency, & Renewable Energy 2011, *Alternative fuels and advanced vehicles data center Ethanol*, viewed 19 July 2013, < http://www.afdc.energy.gov/.
- Von Braun, J 2007, 'The world food situation new driving forces and required actions', *International Food Policy Research Institute*, viewed 5 May 2013, <a href="http://www.ifpri.org/sites/default/files/pubs/pubs/fpr/pr18.pdf">http://www.ifpri.org/sites/default/files/pubs/pubs/fpr/pr18.pdf</a>
- Wilson, W W Won, K Dahl, B & Taylor, R 2008, 'Impacts of ethanol expansion on cropping patterns and grain flows', *Review of Agricultural Economics*, vol. 30, no. 4, pp. 642-663.
- Xiaodong, D & McPhail, L 2012, 'Inside the black box: The price linkage and transmission between energy and agricultural markets' *Energy Journal*, vol. 33, no. 2. pp. 171-194.

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# DIGITAL REPUTATION: A PARADIGMATIC SHIFT FOR INDIVIDUALITY AND BUSINESS

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#### **ABSTRACT**

The continuum continues.....at the risk of being pedantic, this segment of the ongoing conceptual longitudinal and meta-analysis of the "digitation" phenomenon concluded that the technological identity may be superseding our historic persona resulting in a paradigmatic shift of the impact to individual and business reputation. Reputation as explored and examined herein, has evolved to a state of continual rapidity requiring an exhaustive and comprehensive understanding and attention to keep pace with potential pitfalls and exposures. Historic mitigation of barriers to technological innovation has been reinforced through this research initiative, and has taken on greater impact to the evolving digital personal profiles that are emerging for individuals and businesses. Cottage industries related to data mining, reputation management and improved personal/technological security considerations have evolved and are growing quickly. Follow on research related to digital "crumbs" and their requirement for proactive attention and management has evolved and is an increased area for exploration and examination.

**Keywords**: Societal Transformation, Digitation of humankind, Technology, Digital Reputation, Social Impact of Technology

## 1. INTRODUCTION

Cassio in William Shakespeare's play Othello intones:

"Reputation, reputation, reputation! Oh, I have lost my reputation! I have lost the immortal part of myself, and what remains is bestial". (Crowther, ed., 2005)

Reputation describes one's honor; integrity, and dignity knitted into a singular vale. Solove (2004) submits "We currently live in a world where extensive dossiers exist about each of us. These dossiers are in digital format, stored in massive computer databases by a host of government agencies and private-sector companies" (p.13). The aggregate of the dossiers formulate the essence of our reputation. Svantesson (2009) reported that "Protecting one's reputation has arguably become harder in this time of youtube, 'blogs', and mobile phone cameras" (p.1). Dictionaries vary some in their definition of reputation. Combining the number of defining attempts; for this paper, reputation is the overall quality or character as seen or by the public in general. This definition is not new to the digital society. What is new is the social media that is storing and conveying the characteristics that establish the reputation of individuals and organizations. Reputations built over decades can be changed or destroyed in a virtual moment. The following are several examples illustrating the reputation impact of digital media:

"Email is at the center of the scandal that brought down CIA Director David Petraeus, one of the country's most decorated generals" (Gaudin, 2012, p.1).

"I am here today to again apologize for the personal mistakes I have made and the embarrassment I have caused," Weiner further summarized that the announcement brought swift relief to his Democratic colleagues, who had become increasingly uneasy as details emerged about Weiner's online contacts with women — including his sending of explicit photos of himself to them over Facebook and Twitter (Hernandez, 2011, p.1).

"Superintendent Nancy Sebring's earlier-than-expected departure from the Des Moines public schools was prompted by the discovery that she had carried on sexually explicit conversations using her district email account, some of them during the workday, school officials confirmed Friday." (Stegmeir, 2012, p.1). "She had violated the district's technology policy, which prohibits use of school computers and email accounts for personal use or the exchange of sexually explicit materials" (Bhasin, 2012, p.1).

"A decorated Army captain has been relieved of command after his exchange of sexually explicit **emails** with former Des Moines schools superintendent Nancy Sebring" (Krogstad, 2012, p.1).

This analysis is a continuation of a longitudinal and (conceptually qualitative) meta-analysis research related to the ongoing paradigmatic shift (Kuhn, 1996) based on technological and societal transformations associated with "digitation" (Ponschock & Becker, 2012).

The research is rooted in the foundational phenomenological study on data archaeology and mining (originally introduced in 2007). As the transformation progresses, reputation becomes a primary construct in the "digitation" of society in general and mankind specifically. Warmoth (2000) theorized "human intelligence evolved during the last ice age. The culminating phase of human biological evolution was intimately intertwined with the development of language and other forms of culture" (p.5). "Evolutionary biologists theorized that the life we see today hasn't always been like this, it has evolved from a previous form via the unconscious, automatic processes" (Evolution, 2002, p. 1). This research examined how the "digitation" process is an accelerant to both further evolution and subsequent transformation. "Psychologists and sociologists use social context to study social changes over time. Social context theory is based on the interplay between social forces that affect individual behavior and individual and group actions that change society" (Briggs, 2012, p. 1).

"Digitation" has distorted the boundaries of reputation conveyance. Prior to the digital era an individual's reputation may have been communicated through friends, cohorts, clients, or individual actions. "Gossip is no longer the resource of the idle and vicious, but has become a trade, which is pursued as an industry as well as effrontery" (Warren & Brandeis, 1890, p. 193). Justice Brandeis was reacting to the new technology of the time; the mass-circulation newspaper (Ermann, Williams, & Shauf, 1997). The internet has accelerated the ability to spread gossip well beyond that of a mass-circulation newspaper. Technology and the internet have introduced communities that do not exist in geography and have no tangible physical presence. These virtual villages or townships (Ponschock & Greif, 2007) are not represented by geography, social class, or financial accounting. Instead, their cyber position is defined and driven by curiosity (Luthra, 2006). As Laurie Anderson musician/artist wrote "Technology is the campfire around which we gather" (Intel Brochure, 2004, p. 2). A century ago, social interactions involved relationships with others who were within a short walking radius (Ermann, Williams, & Shauf, 1997). Companies advertised on radio or local papers, many by word of mouth. Deals were struck with a handshake in the local coffee shop. Organizational size permitted employees to more readily see the whole. For many, especially in the industrialized West, small face-to-face communities are disappearing (Ponschock & Becker, 2010). Reputations can and are being created, and altered by strangers; individuals you have never met. "Details about our private life on the internet can become permanent digital baggage" (Solove, 2007, p. 10). Gossip can tarnish an individual's or company's reputation; it exists as a bundle of half-truths and incomplete tales. While campfire stories dwindle as the fire goes out; internet ashes are left behind forever.

As the "digitation" of society transforms humankind into a digital "person"; maintaining an accurate reputation has become the origin for a new social discipline – reputation management. "Our reputation matters quite a lot to us, but it also matters a lot to others in society, who use it to determine whether to trust me" (Solove, 2007 p. 34). Character references are melting away as a requirement of the past. Social media including Facebook, and YOUTUBE (accurate or not) are the "documents" of record. To the requestor this "is" your reputation (Solove, 2007). The authors contend that individual and company reputations are interwoven in the digital web of contextual data. The "digital person" can be, has been or can impact the trust shield protecting reputation.

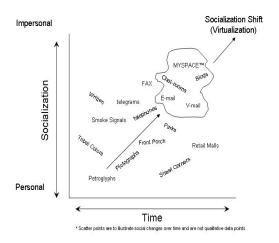
Reputation can be contextually defined (Rhee & Valdez, 2008) and socially impacted. Social context theory is based on the interplay between social forces that affect individual behavior and individual and group actions that change society. While reputation is personal; it also has a socially phenomenological grounding. Berger and Luckman (1967) advanced the concept of social construction when they noted that everyday life is "not only taken for granted as reality by the ordinary members of society in the subjectivity meaningful conduct of their lives, it is a world that originates in their thoughts and actions and is maintained as real" (p. 20). A paradigmatic shift (Kuhn, 1996) is occurring in the way members of the digitally transformed society interrelate (Mumford, 1970). It is changing from one of personal relationships between individuals to virtual chats. Ponschock (2007) argued that technology has been driven by the "new Media" over the past 10 years (see Figure 1) (Kranzberg, 1989).

Social networking enabled by the internet and advances in Information Communication and Technology -ICT are performing transformational roles across all segments of society (Ponschock & Becker, 2011). These constructs are enablers of societal "digitation". The internet has become the encyclopedia, telephone, photo album, recipe box, and much more for greater than 2.3 billion users worldwide. It is also the stage on which humankind displays, creates, or tarnishes a reputation. A recent Nielsen report indicates that "80 percent of active Internet users spend nearly a quarter of their total time at social networking and blog sites" (Dortch, 2012, p.2). While the electronic form of social interaction has its limitations - the convenience and ease-of-use of social networks through blogs, forums, and e-mail-lists can lead to a society that is actually much more connected than ever before. Social media has now allowed this sphere of friends, colleagues, and enemies to become global. These social networks can enhance or destroy reputations.

FIGURE 1: SOCIALIZATION PARADIGMATIC SHIFT

(© 2007 Ponschock)





## 2. BUSINESS REPUTATIONS

Gibson, Gonzales and Castanon (2006) theorized that "Reputation is arguably the single most valued organisational asset" (p.15). "Corporate reputation is increasingly regarded as a highly valued, intangible asset that is difficult to imitate and accordingly may provide a sustainable competitive advantage (Reddiar, Kleyn, & Abratt, 2011, p.29). (According to the Conference Board; approximately 65 percent of major corporations do not monitor social networking Web sites like Facebook, YOUTUBE, or the video-oriented MetaCafe (Jackson, 2009). A Ponemon Institute survey of 2011 posited that 85 percent of the respondents indicated that one of the five most important factors impacting an organization's reputation was Internet and social media communications. According to the survey results, reputation is only two

categories lower than a company's concern with its financial health. Ninety two percent of these same respondents indicated that data privacy and security was extremely important to the security of the company's reputation.

Even the best customer service will not guarantee that satisfaction of every customer (Rodriguez, 2013). As an example; a law firm in Florida was shocked when it found that everyone searching for legal services and the firm of Rumberger, Kirk & Caldwell also displayed Lying Scumbags, a web-site by Billy R. Kidwell, a former plaintiff who sued General Motors, concerning an alleged defective pickup truck. The derogatory link was visible for everyone to see. Anyone checking for the law firm online couldn't miss the ugly slur (Rose, 2011). The law firm did not have the ability to execute a defense or have its 'day in court'.

Companies conducting e-commerce, (Berman & Bell 2011) must be prepared for the possibility that one day they will encounter the painful realization that when "Googled" your company is portrayed less than factual because of a derogatory post that appears on search engine results from Google, Yahoo, Bing or extraneous blogs. In fact, hundreds of thousands of dollars of sales are lost each day as a result of false, erroneous or misleading search engine results. Whether the negative content is from a competitor, a news site, or a blog, the impact can be financially troubling. Reputation Management Consultants can resolve many issues but the financial losses that may never be known combined with the cost of consultants can be permanently lost.

"While the Internet can be a powerful tool in enhancing a company's reputation, it also is fertile ground for information that can damage, or, in some cases even destroy a company's reputation." (Akin, 2010, p.1).

"Social media has evolved into a radicalized moral compass, capable of destroying a Brand in seconds" (Woodward, 2010, p.1). A positive online reputation is critical in the field of digital commerce. Perspective customers and future business partners will conduct research before sealing a deal.

### INDIVIDUAL REPUTATION – HOW CAN YOU MANAGE WHAT YOU CAN'T CONTROL

"What is honor?" asks Falstaff in *Henry IV*, Part 1. "Honour is a mere scutcheon:...." That shield can be easily tarnished or removed totally in the digital cyber-sphere. Your online reputation may reflect who you are or it may paint a picture of someone that you would not recognize. Remember, your digital anthology becomes your online reputation. It has been reported that 24 percent of college admission advisors have checked social media content while reviewing a candidate. More startling – 70 % of company recruiters have rejected potential employees basing on online findings. "Your public self is exactly that. It is what is seen in the virtual public eye and your public self reflects not only the actual you, but the perceived public image of you" (Ivester, 2012).

A 2005 story now almost a legend started when a woman was on the subway in her native South Korea when her dog decided that this was a good place to do its business. The woman made no move to clean up the mess, and several fellow travelers got agitated. Yes; she should have been criticized and humiliated on the spot. However, the devastation of "Poop Girl's" reputation did not stop when the subway stopped. A passenger took a picture of her with a cell phone camera, it posted on a popular internet website and from that point it went viral. "Within days, her identity and her past were revealed. Requests for information about her parents and relatives started popping up and people started to recognize her by the dog and the bag she was carrying" (Krim, 2005). Shortly after the cyber-sphere of blogs, taunts, and inquiries the "Poop Girl" even quit her position at a University. Accurate or inaccurate rumors can spin out of control (Solove, 2007).

In the internet /cyber world a "Catfish" is someone online who's really pretending to be someone else for the objective of fostering a romantic relationship. This could be using social media sites such as Facebook and Twitter, as well as on Internet dating sites. A recent ABC News Headline read "Notre Dame: Football Star Manti Te'o Was 'Catfished' in Girlfriend Hoax." Te'os reputation was shattered. We will never know if this was the reason the Notre Dame football star finished second for the Heisman Trophy or did not get picked in the first round of the NFL draft. (Curry, et al., 2013). What is known; Te'o and his tamished reputation will live forever on the cybersphere of gossip. Te'o was reported as saying "This is incredibly embarrassing to talk about, but over an extended period of time, I developed an emotional relationship with a woman I met online." Te'o continued "We maintained what I thought to be an authentic relationship by communicating frequently online and on the phone, and I grew to care deeply about her. ... To realize that I was the victim of what

was apparently someone's sick joke and constant lies was, and is, painful and humiliating." Notre Dame's athletic director, Jack Swarbrick reportedly stated: "But the thing I am most sad of is—" he added, pausing to apologize and wipe away tears, is "that the single most trusting human being I have ever met will never be able to trust in the same way ever again" (Curry, et al., 2013). He fell for a girl he never met based on an invented social media presence.

"Catfish" is an example of how the "digitation" of humanity is rapidly progressing beyond chatting and email. Reputations can be affected by what is mined from web sites beyond social networking. Personal mining can take place in advanced site such as Ancestry.com. DNATribes.com offers inexpensive DNA tests that may prove a different lineage. It is also reported that this ongoing research, explores the genetic links between cultures around the world, challenging old ideas about ancestry and identity. DNA, can combine genealogy, medical technology, and social networking.

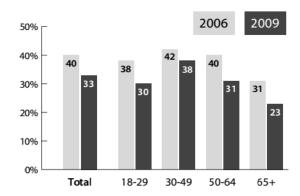
#### 4. DIGITAL TOLERANCE

A 2010 PEW research report found that online reputation-monitoring via search engines increased from 47% in 2006 to 57%. This 10% increase would appear to conflict with the findings that 33% of internet users say they worry about how much information is available about them online, down from 40% in December 2006. Worry is down but monitoring is up. (Madden & Smith, 2010) Concerns over personal information vary considerably among age groups. (Figure 2)

FIGURE 2: (MADDEN & SMITH, 2010, P.22)

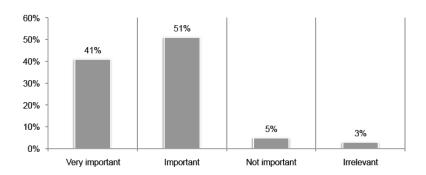
# Concerns over personal information

% of internet users in each age group who say they worry about how much information is available online about them, over time



The 2009 research show concerns over personal information are down across all groups. The authors theorize that the tolerance for digitization is producing immunity across all ages. This tolerance can be contrasted with a 2011 Ponemon Institute study showing that 92 % of the corporate management respondents indicated that reputation or brand protection was important or very important. (Ponemon, 2011) These divergent illustrations would indicate that we are more tolerant of our personal reputation than of our corporate image. (Figure 3)

**FIGURE 3: (PONEMON, 2011, p.9)** 



#### 5. REPUTATION MANAGEMENT

Struggles to manage reputations are becoming a twenty-first century skill and emergent industry. Reputation management is also referred to as Online Reputation Management or the acronym ORM. ORM involves monitoring online information characterizing you or your company and eradicate the damage if possible (O'Reilly, 2013). Reputation systems attempt to "unsqueeze the bitter lemon" Resnick et al. 2000, p. 47.

Reputation systems are both content-driven and user-driven (de Alfaro, et. Al.,2011). Both categories of reputation systems rely on feedback theory. (See Figure 4)

INTERNAL CHANGE
as a result of noticing reaction to own action
in comparison with a pre-set criteria or desired outcome.

3. NOTICE REACTION

FIGURE 4: SIMPLE FEEBACK LOOP

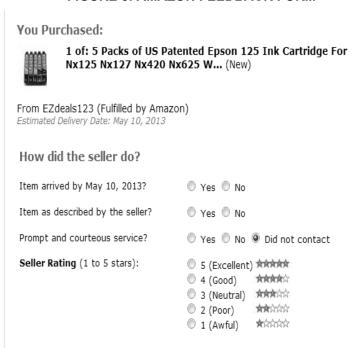
(Tompinks & Lawley, 2005, p.3)

"From an individual's viewpoint, a feedback loop exists when my system notices how the world responds to my behaviour and I adjust my behaviour in response that response, and so on. At any point my options are to do more or less of what I am already doing, or change to a different kind of behaviour. Either way, my aim will be keep things as they are or to change things to get more of what I want and less of what I don't want. However, you cannot get a systemic perspective from an individual's point of view. In a healthy system I take into account that other people are doing the same, that we are all part of a wider system that no one part can control.

It is interesting to note that the use of the word 'feedback' in everyday language has been accompanied by a shift of attention. "(Tompinks & Lawley, 2005, p.2)

Content-driven management is based on the analysis of transactions and input responses. User drive systems can be related to the feedback sought on sites like Amazon where the buyer's rating of the transaction or service is solicited. This type of feedback can be biased. (Al faro et al., 2011).

FIGURE 5: AMAZON FEEDBACK FORM



"Reputation systems seek to establish the shadow of the future to each transaction by creating an expectation that other people will look back on it. The connections among such people may be significantly weaker than in transactions on a town's Main Street, but their numbers are vast in comparison." (Resnick et al. 2000 p.45)

FIGURE 6: DIPICTION OF HOW A REPUTATION SYSTEM OPERATES

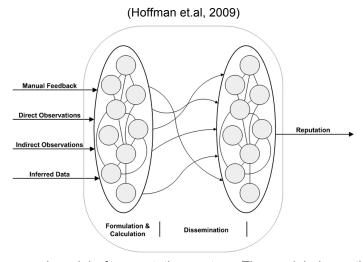


Figure 6 portrays the general model of a reputation system. The model shows the input to the system comes from multiple sources. Based on the source, the system produces a reputation metric through the use of an algorithm. Once calculated, reputation metric values are then disseminated. The large ovals

encapsulate the reputation system itself; performing as interpreter and the distributed system. (Hoffman et al., 2009)

Reputation management takes on two distinctive features; observation and extermination. It is challenging at best and may be impossible in the worst case scenario to eliminate inaccuracies or even find the initiator of the fallacy. Individuals and businesses can be defined by what appears on Google, Yahoo and Bing. "In fact, hundreds of thousands of dollars are lost each day because of false, erroneous or misleading search engine results. Whether the negative listings are from a competitor, a news site, or a message board, the impact can be financially challenging at best and devastating at worst." (Shandwick, 2009)

http://www.online-reputations.com/privacy.html

Reputation systems are intended to contribute in the protection of the buyer. A good seller reputation has been shown to reduce transaction-specific risks and therefore generate price premiums for sellers (Ba and Pavlou, 2002). Family, friends, and neighbors are traditionally asked first for reputation feedback before hiring services like contractors, plumbers, or gardners.to find out if they can recommend someone for the job. Over 1.5 million households use the reputation feedback system "Angies List". This system follows a subscription model. With a pay to use model, filtering is more likely. Feedback opinions will come from clients who actually use the services of the supplier unlike Craigslist or the yellow pages. Figure 6 illustrates a sample of a "Angies List" feedback form.



FIGURE 7: ANGIES'S LIST FEEBACK FORM

# 6. IDENTITY V. PRIVACY ON THE DIGITAL FIELD OF PLAY

A Phenomenological study (Ponschock, 2007) has shown that digitized society's use of the technological conveniences provide an opportunity for the provider to routinely collect personal information generated by daily transactions. The research provided clarity that transactions collected and stored in digital "vaults" approach a permanent life span. Aspects pertaining to individual and company life in social media, blogs, or other Internet pages can become everlasting digital baggage (Solve, 2007). Levin and Abril (2009) reinforce these findings. It can be argued that a combination of the two constructs collection and longevity, results in greater volume of data in digital form than was present in tangible forms of the past (Ponschock, 2007) It can also be argued that the mining of the personally stored data can easily impact reputation of both individuals and corporations. "When online socializers perceive a threat to privacy, it is really their reputation, dignity, persona, or online identity that is in peril." (Levin & Abril, 2009).

More importantly, digital technology has broadened access to collected, aggregated, and mined personal information. Data is being collected that few even know about. As an example; cameras, in Los Angeles County called automatic license plate readers (ALPRs), are on locations, including stop lights, street signs and in squad cars. It has been report that each camera can record as many as 1,800 plates per

minute, and more than 160 million "data points" have been collected in Los Angeles County. According to Jennifer Lynch, an attorney for Electronic Frontier foundation; "By matching your car to a particular time, date and location — and building a database of that information over time — law enforcement can learn where you work and live, what doctor you go to, which religious services you attend, and who your friends are," (Miller, 2012)

At this point in the chain of logic, there is no distinction between data collected through the daily transactional activity, e-mail, or conversations via the many social networking facilities. Based on the participants view, it appears that access to personal information is more easily available than it was before digital collection.

### 7. TRIANGULATION AND CONCLUSION

Reputation can be compromised in many ways through a collection of digital traits, facts and biometrics. Fingerprints, DNA, and facial recognition and digital content make up the "digital you". Some the digital characteristics fabricating an online reputation were examined in a 2010 PEW research report. (Madden & Smith, 2010) Figure 8 illustrates what we think others can see.

Is this available on the internet, or not--or are you not sure? (% of internet users unless otherwise noted) Don't know Yes No Company or employer\* 44 Photo of you 42 Birth date 33 47 35 Email address 31 50 Home address 26 Things you have written (w/ your name on it) 23 Which groups or organizations you belong to 22 63 Home phone number 21

FIGURE 8: WHAT WE THINK OTHERS CAN SEE

(Madden & Smith, 2010, p.16)

\* based on employed internet users
\*\* based on internet users who have a cell phone

Political party or affiliation 12

Cell phone number\*\* 12

More recently, reputation systems have been proposed as a means to filter out ersatz content (pollution), a means to identify and provide incentives for quality submission and a way to create résistance to others (de Alfaro, et al., 2011),

This meta-analysis triangulates multiple studies providing a synthesis of numerous dialogues on the impact of digital reputations as society. "Digitation" has influenced the way society and its actors function. Beniger (1986) a seminal thinker on society and evolutionary control theorizes: "As in earlier revolutions in matter and energy technologies, the nineteenth-century revolution in information technology was predicated on, if not directly caused by, social changes associated with earlier innovations" (p.9); "Because technology defines the limits on what a society can do, technological innovation might be expected to be a major impetus to social change"(p.8).

Having synthesized these studies, it is the authors' contention that the real-world and cyber-worlds has become interwoven establishing the foundation of the "digitation" of society. Internet reputation is more important than ever. Schiller (2010) reports "According to a Microsoft survey of more than 1,200 hiring managers in December 2009, 79% of companies and recruiters reviewed online information about job applicants and 70% had actually rejected candidates based on what they found.

"Understanding how online reputations form, evolve, and dissipate is far from simple. And in this era of ever-present hyper focused social networking, people frequently spread information about themselves with little thought or restraint, only to watch it spread across the internet in days or even hours." (p.1)

The authors purport that reputation is only one of numerous data points that contribute to the eventual transformation (Scharmer, 2007) of society and humankind. This report is the continuum of the journey society and humankind is traveling toward the speciation event that will transform the technological milieu to the digital being. The authors have presented the exploration of several data points. Figure 9 is a diagrammatic representation of transformational convergence. Using comparable meta-analysis; the authors will perform ongoing correlational research connecting the remaining data points in the "digitation" phenomenon.

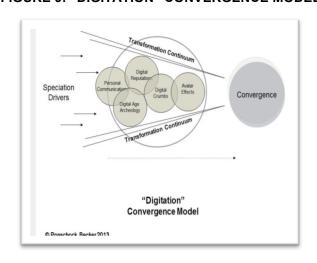


FIGURE 9: "DIGITATION" CONVERGENCE MODEL

"Digital "crumbs are the epicenter on the transformation continuum. The Authors have discovered during this and previous studies that the trail of "digital" crumbs (i.e. identity, privacy, and utmost personal data) are pervasive and warrant an examination and report separate from the data points they affect.

#### **REFERENCES**

Akin, C. J., & Pinker, L.T. (2010, February). *Protecting Your Company's Reputation on the Internet*. Paper presented at the meeting of ABA Section of Litigation Corporate Counsel CLE Seminar.

Ba, S., & Pavlou, P.A. (2002). Trust can mitigate information asymmetry by reducing transaction-specific risks, *MIS Quarterly Volume*, 26(3).

Beniger, J. (1986). The control revolution: Technological and economic origins of the information society. Cambridge, MA: Harvard University Press.

Berger, P.L., & Luckman, T. (1967). The social construction of reality: A treatise in the sociology of *knowledge*, Garden City, NY: Doubleday.

Berman. S.J., & Bell. R. (2011). *Digital transformation: Creating new business models where digital meets physical.* Somers, New York: IBM Institute for Business Value.

Bhasin, K. (2012, June 5). Be Careful With Your Work Email, So You Don't End Up Getting Burned Like This Former Superintendent. Retrieved June 20, 2013, from http://www.businessinsider.com/case-study-former-superintendent-nancy-sebrings-emails-2012-6#

Briggs, J. (2012). Social Context Theory. Retrieved May 15, 2013, from http://www.ehow.com/about 5414476 social-context-theory.html#ixzz2PiNNGk24

Crowther, J. (2005). No Fear Othello. Retrieved September 13, 2013, from http://nfs.sparknotes.com/othello/

Curry, C., James, M.S., & Harris, D. (2013 Jan 16). Notre Dame: Football Star Manti Te'o Was 'Catfished' in Girlfriend Hoax. Retrieved June 16, 2013, from http://abcnews.go.com/US/notre-dame-football-star-manti-teo-dead-girlfriend/story?id=18232374

- de Alfaro, L. A., Kulshreshtha, A., Adler, B., & Pye, I. (2011, August). Reputation Systems for Open Collaboration. Communications of the ACM. 54(8), 81-87.
- Dortch, M., (2012). Dortch on SaaS & cloud computing: The blog. Retrieved May 21, 2012, from http://dortchonsaas.blogspot.com/2011/11/inventory-management-and-mobile-social.html
- Ermann, M. D., Williams, M. B., & Shauf, M. S. (1997). *Computers, ethics and society.* New York: Oxford University Press.
- Evolution (2002). The theory of evolution part II. Retrieved May 1, 2012, from http://h2g2.com/dna/h2g2/alabaster/A737985
- Gaudin, S., (2012). Email lessons from Gen. Petraeus' downfall It may be easier than you think to trace emails, so be mindful of what you are sending. Retrieved September 19, 2013 from http://www.cso.com.au/article/442164/email\_lessons\_from\_gen\_petraeus\_downfall
- Gibson, D., Gonzales, J.L. & Castanon, J. (2006). The importance of reputation and the role of public relations. *Public Relations Quarterly*, 51(3), 15-18.
- Hernandez, R., (2011). Weiner resigns in chaotic final scene. Retrieved June 1, 2013 from http://www.nytimes.com/2011/06/17/nyregion/anthony-d-weiner-tells-friends-he-will-resign.html/?pagewanted=all&\_r=0
- Hoffman, K., Zage, D., & Nita-Rotaru, C. (2009). A survey of attack and defense techniques for reputation systems. ACM Computing Surveys, 42(1), 31.
- Ivester, M., (2012). Iol... OMG! What every Student Needs to know about online reputation management, digital citizenship and cyberbullying. Reno, NV: Serra Knight.
- Jackson, R. A. (2009). Keeping your reputation clean: Corporate missteps and evolving risks can leave organizations open to negative stakeholder perception and destroyed trust. *Internal Auditor*. Institute of internal Auditors, Inc. Retrieved October 25, 2013 from HighBeam Research: Http://www.highbeam.com/doc/1G1-201869432.html
- Kranzberg, M. (1989). IT as revolution: The information age. In T. Forester (Ed.). *Computers in the human context* (pp. 19-32). Cambridge, MA: MIT Press.
- Krim, J., (2005. July 7). Subway Fracas Escalates Into Test Of the Internet's Power to Shame. *The Washington Post.*
- Krogstad, J.M., (2012, July 7). *Updated: Army captain relieved of command over Nancy Sebring emails*. Retrieved September 16, 2013 from http://www.desmoinesregister.com/article/20120707/NEWS/120707004/Updated-Army-captain-relieved-command-over-Nancy-Sebring-emails
- Kuhn, T.S. (1996), Structure of scientific revolutions. Chicago: University of Chicago Press.
- Levin, A., & Abril, P. (2009). Two Notions of Privacy Online. *Vanderbilt Journal Of Entertainment & Technology Law*, 11(4), 1001-1051
- Luthra, N. (2006). The "Real" and the "Virtual" in public space (Master Thesis, University of New York at Buffalo) (UMI 1431955).
- Madden, M., & Smith, A., (2010). Reputation management and social media: How people monitor their identity and search for others online. Retrieved May 20, 2013 from
- http://pewinternet.org/Reports/2010/Reputation-Management.aspx
- Miller, J.R., (2012). Student-tracking system at Texas schools prompts privacy concerns. Retrieved September 12, 2013 from www.foxnews.com/us/2012/09/12/texas-school-district-defends-use-student-tracking-mart-id-card/#ixzz2ETorDCuy
- Miller, J. R., (2013). *Big Brother: LA police sued over massive data collection gleaned from cameras.*Retrieved September 12, 2013 from http://www.foxnews.com/us/2013/05/10/la-police-sued-over-massive-data-collection-gleaned-from-cameras/#ixzz2Su5MCjvZ
- Mumford, L. (1970), Myth of the machine: The pentagon of power. New York: Harcourt.
- O'Reilly, T. (2013). Introduction to Online Reputation Management for Financial Services Professionals. Amazon, Kindle edition
- Ponemon (2011). Reputation impact of a Data breach: U.S. study of executives and managers. Ponemon Institute LLC

Ponschock, R. L. (2007). Computer technology, digital transactions, and legal discover: A phenomenological study of possible paradoxes (Doctoral dissertation, Capella University, 2007) (UMI No. 3246872).

- Ponschock, R.L,. & Becker, G.F., (2010). Virtuality of boundaries: the iceberg in the current business curriculum: A mandate for systemic thinking. *Association for Global Business Proceedings, 22, Paper 29. ISSN: 1050-6292.*
- Ponschock, R.L,. & Becker, G.F., (2011). CLOUD Technology: A Transformational Dynasty on the ICT evolutionary continuum and contemporaneously a societal speciation event. *European Journal of Management*. *ISBN*: 1555-4015.
- Ponschock, R.L., & Greif, T. B. (2007). Archeological excavating in virtual villages: A primer on discovery of artifacts from a digital community. *Proceedings of the IABE 2007 Annual Conference*, 3 (1), 260-265.
- Reddiar, C., Kleyn, N., & Abratt, R. (2012, September) Director's perspectives on the meaning and dimensions of corporate reputation. *South African Journal of Business Management.* 43(3), 29-39
- Resnick, P., Zeckhauser, R., Friedman, K., & Kuwabara, K. (2000). Reputation Systems: Facilitating trust in internet transactions. *Communications of the ACM*. 43(12) 45-48
- Rhee, M. & Valdez, M.E. (2008). Contextual Factors Surrounding Reputation Damage with Potential Implications for Reputation Repair. *Academy of Management Review* 34(1)146-168
- Rodriguez, T. (2013, October). Six Steps for Managing Your Online Reputation. *AAOS Now.* 6 (10). 29-29.
- Rose, B. (2011). STAKING your Reputation. ABA Journal, 97(4), 48-53.
- Shandwick, W., (2009). *Risky Business: Reputations online* Retrieved May 15, 2013 from http://www.online-reputations.com/
- Scharmer, C. O. (2007). *Theory U: Leading from the future as it emerges.* Cambridge. MA: Society for Organizational Learning.
- Shiller, K., (2010, November). Getting a grip on reputation. Information today 27 (10).
- Solve, D. J., (2004). *The digital person: Technology and privacy in the information age*. New York, NY. New York University Press.
- Solve, D. J., (2007). *The future of reputation: Gossip, rumor, and privacy on the internet.* New Haven, CT: Yale University Press.
- Stegmeir, M. (2012, Jun 2). Nancy Sebring's sexually explicit emails disclosed. Retrieved August 1, 2013 from
  - http://pqasb.pqarchiver.com/desmoinesregister/doc/1019427585.html?FMT=ABS&FMTS=ABS:FT&type=current&date=Jun+2%2C+2012&author=STEGMEIR%2C+MARY&pub=Des+Moines+Register&edition=&startpage=&desc=Nancy+Sebring%27s+sexually+explicit+emails+disclosed
- Svantesson, D. (2009). The right of reputation in the Internet era. *International Review of Law, Computers & Technology*. 23(3), 169-177
- Tomkins, P., & Lawley, J. (2005). *Feedback Loops* Retrieved April 28, 2013 from http://www.cleanlanguage.co.uk/articles/articles/227/2/Feedback-loops/Page2.html
- Warmoth, A. (2000). *Social constructionist epistemology*. Retrieved May 21, 2012, from http://www.sonoma.edu/users/w/warmotha/epistemology.html
- Warren, S. D., & Brandeis, L.D. (1890). The Right to Privacy. *Harvard Law Review*, Vol. 4 (5), 193-220 Woodward, D. (2010). Reputations at RISK. *Director* (00123242), 63(10), 56.

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# TURNOVER IN THE HOSPITALITY INDUSTRY: A QUALITATIVE PHENOMENOLOGICAL STUDY

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#### **ABSTRAC**

This study focuses on exploring the reasons and motivating factors that cause employees to remain in hospitality despite the high turnover rate in the industry. The precise problem is the employee turnover phenomenon. The study provides strategic approaches for increasing employee retention to industry leaders and managers.

Keywords: Employee Turnover, Motivation, Organizational Culture, Effective Leadership

#### 1. INTRODUCTION

The hospitality industry provides many jobs around the globe and contributes extensively to international gross domestic products. Hospitality along with tourism industry is very important for the economy as it can keep some people working when others go on vacation. Retaining employees is fundamental for the hospitality sector and achieving a higher retention rate entails an effective managerial initiative. Employee turnover affects business organizations in unproductive ways; the hospitality industry seems to encounter the highest amount of employee turnover (Butt, 2008). The employee turnover rate is exceedingly soaring (Bureau of Labor Statistics, 2013), standing at over 37% annually in the hospitality industry (Walsh & Taylor, 2007).

On a monthly basis, the turnover rate in hospitality is nearly 16%. The Bureau of Labor Statistics (2013) showed the monthly turnover rate to be lower in other industries; retail at 4%, construction at 5%, and education at 2.5%. Hall (2010) noted 75% of workers leave hospitality after six months, 53% after one year, and only 12% remain after three years. Management needs to find ways to encourage employees to stay as such a high turnover rate may discourage good employees from staying. Management should take steps toward reducing turnover rates right away and continue looking for methods to address this phenomenon (Dysvik & Kuvaas, 2010). Turnover can diminish the image or reputation of an organization; it causes remaining employees to act and behave negatively. Reducing employee turnover can be accomplished by bringing happiness to the workplace and treating all employees well—if employees are not happy, the turnover rate is likely to keep rising. The researcher proposes that hospitality employees signal happiness when they sense their immediate manager's willingness to work with them. In their research study, Kalargyrou and Woods (2011) found that establishments with adequately trained supervisors who are passionate about aiding workers tend to have lower worker turnover. Employee turnover causes negative impacts on employees and organizations within the hospitality sector. Employee retention is vital for the hospitality industry as it employs more people than any other industry within the private sector both domestically and globally.

Employee retention in the 21st century necessitates management adaptation as new workers demand more accommodations than ever before (Solnet, Kralj, & Kandampully, 2012). Executives in the tourism industry should attract workforces with a constructive outlook as retaining workers all the way through is beneficial to the industry. Diminishing employee turnover should be an objective of every organization in the hospitality sector; a firm is in business to make a profit, not to incur preventable losses. High worker turnover does lead to internal and external customer dissatisfaction (Chen, Wang, & Chu, 2010). This is a problem that needs attention because employee changeability continues to lead to uncertainty and

instability in the industry. Worker separation occurs because an establishment may lack organizational planning and management support.

# 2. RETENTION THROUGH MOTIVATION AND EMPOWERMENT

Retaining employees contributes to industry progression regarding effectiveness, production, and customer satisfaction. Motivating employees can take many forms; for example, employees may be motivated by the behavior of their managers, owners, or other stakeholders. Varoglu and Eser (2006) stated that workers look for different motives to remain with their organizations even outside the hospitality sector. When employees perceive they are valuable to the organization, they tend to develop some motivation (Janta, 2011). Motivating techniques are essential parts of leading an organization effectively.

Motivating employees is very important for an organization because the more motivated the employees, the more likely they will advance on projects or planned goals on hand. Empowering is a way of satisfying employees who aspire to be managers and are requesting ample commitment. Sut and Perry (2011) conducted a study on empowering employees and found it generates positive behavior and individual satisfaction. Hospitality is an interactive industry where individual satisfaction leads to reducing employee separation and augmenting employee retention. Empowerment and motivation entail constant inspiration Hon (2012) from the leadership of an organization.

Leadership helps an organization succeed when the leader applies different talents and is willing to work with everybody. Warner (2011) indicated that executives must have the necessary expertise to guide an organization in a way it can succeed, for leading adequately is essential. Developing and implementing an empowering strategy motivates teams to be more interested in being part of an organization. Cooperative inspirations tend to link leaders and employees in running an organization according to its business principles. Collaboration can lead to succession and leaders should always promote that approach (McMullen & Adobor, 2011).

Employees can make a unique difference and stay in the hospitality industry if they are motivated and feel appreciated by their managers. It can be challenging for managers to motivate everyone at the workplace because every employee has a unique need. However, it is achievable when some motivating techniques are put in place. Managers need the ability to properly influence employees and inspire them in distinct ways ((Kalargyrou, Pescosolido, & Kalargiros, 2012). A firm is in business to make a profit; however, before such profit can be made, various techniques need to be in place and one of them is to entice employees to stay. Concerning employee motivation, the question is what really motivates an individual to stay at work? The answer depends on what each employee appreciates or values because each person has unique needs and expectations within an organization.

Money might be a motivator for one employee while time off may be more valuable for another. Understanding that an inspired member of an organization can be more approachable and likely to make greater efforts to achieve desirable outcomes can be beneficial to management and a hospitality entity as a whole. This study is auspicious for hospitality leaders to promote a steady workforce by becoming aware of ways to influence workers to stay. The researcher wanted to explore employee turnover in the hospitality industry because of personal experience and passion for the industry. The researcher worked in the industry for nearly two decades and learned how challenging it can be to keep employees.

Employee motivation requires interpersonal skills from a manager, team leader at every organizational level. AlBattat and Som (2013) suggested excellent management-employee relations and employment stability can lead to preservation. Motivation is important because employees who stay in the hospitality industry often want to be promoted into management positions. Workers stay in an organization that satisfies their expectations, indicating top management needs to reproduce or instill enjoyment, dynamism, and eagerness in employees (Ineson, Rhoden, & Alexieva, 2011). Organizational effectiveness in the hospitality sector is a dependent of employee retention. Members of management need to motivate employees on a daily basis and lead them in hospitable ways.

# 3. ORGANIZATIONAL CULTURE

Organizational culture contributes to both employee turnover and employee retention. If employees embrace the culture, they are likely to stay and if employees do not, they would most likely go away.

Organizational culture leads the way on how a corporation works and behaves. It is the responsibility of management to ensure employees learn a "new culture" because every organization has a unique one. Hospitality organizations need to have strong cultures and profound understandings of employees' needs if they want to succeed in terms of employee retention (Gosenpud & Vanevenhoven, 2011).

Concerning organizational culture, a hospitality organization needs to have a unique culture as it strives to satisfy both internal and external customers. Instilling organizational culture in employees to encourage them to stay entails leadership visualization; that is, changing from an outside environment to an inside environment. Hofstede (1994) proposed that structural philosophy is not the same as nationwide philosophy relating to association within the business entity. Mwaura, Sutton, and Roberts (1998) agreed with Hofstede's proposal and added that even though management may not be able to alter workers' standards, management can instill the establishment's philosophies in workers. Mwaura et al. demarcated organizational philosophy as established principles, approaches, or standards designed for a business entity.

Organizational culture compels management to motivate workers as a way of persuading them to become accustomed to new systems. Communicating organizational purpose to workers can help an organization differentiate from its competitors. Hospitality entities not only compete for customers, they also compete for employees. Getting workers to stay in the hospitality industry stipulates organizational leaders to choose members who share an organization's vision and tradition (Piersol, 2007). Some hospitality organizations, such as Marriott International and Southwest Airlines, have been in operation for decades. Those organizations appear to have created cultures that workers embrace enthusiastically.

Cherrie (2012) conducted a study focusing on organizational culture and found that it plays a very important role in leading diversity within an organization. Having a strong organizational culture in the hospitality industry is essential. Employees can recognize the importance of business integration and therefore embrace company principles. Hospitality management does not only involve managing hotel operations, it involves counseling, modeling, and mentoring to increase retention. Organizational development can be easier for an organization that develops employee retention strategies. The leader of a hospitality establishment needs to bear in mind the importance of verifying the culture of an organization to ensure that it fits all team members.

#### 4. EFFECTIVE LEADERSHIP

Reducing employee turnover and increasing employee retention require effective leadership in the hospitality industry. Effective leadership is the ability to earn respect from followers at the workplace and admirers in the community where an organization is situated (Kouzes & Posner, 2008). Good leadership is the ability to wear a different hat for each occasion whenever the leader takes a new approach to strengthen an organization in terms of employee retention. An effective leader is one who predicts the unseen and envisions the future (Larsson & Eid, 2012). An effective leader is one possessing a desirable panache along with an affable personality to inspire everybody.

Leadership is the ability to find a solution for every problem and to lead others so they can follow designed strategies and run the organization smoothly. A good leader is one who leads an organization to achieve employee retention through team cooperation and performance (Dike, 2012). An important step any leader needs to take is to communicate with workers on a regular basis and mention expectations. Contemporary leaders need to be aware of all environments and willing to satisfy everybody; that is, each member of an organization or society. The leader needs to display positive manners, instill organizational culture in everyone, and be charismatic enough to gain trust. Quinn and Dalton (2009) proposed that leadership entails fruitful achievement of the following responsibilities: scenery course, forming alliance, as well as keeping promise. Dike (2012) indicated workforces transmit individual difficulties to the workplace.

In order to enable workers to be effective and entice them to stay, the leader needs to provide and demonstrate support by instilling the organization's philosophy in them. Previous examination exposed that effective organizational guidance is essential for accomplishing goals and objectives (McMullen & Adobor, 2011). Cooperative creativities tend to link leaders and employees in running an organization according to its business principles. When a leader sets the course, he or she should articulate organizational aims, dreams, or purposes in a clear and positive way so employees can understand. It is

the leader's responsibility to know that developing good rapport with members of an organization can lead to more integration, respect, and stronger trust in management (Chang & Tsai, 2011). Most employees behave and perform well if they see trust coming from top management at the workplace.

#### **5. RETENTION STRATEGIES**

Industry leaders should maintain positive rapport and incorporate new relationships as a new generation joins hospitality organizations. Today's leaders should strive to maintain open communication, particularly with entry-level employees. Entry-level employees add value to the organization because they have constant contact with each other and customers. Management would gain valuable insight by maintaining constant communication with regular employees in hospitality organizations. Industry leaders should encourage employee involvement and empowerment.

The hospitality industry is people-oriented and has a need for instant decision-making. An entry-level employee should be able to provide concrete advice and new ideas to upper level management at any given time. Regular employees may be more suitable to solve customer problems because of the constant interaction. Empowering regular employees would be beneficial to management and the hospitality industry. Contemporary guests want quality service in a rapid manner, so granting some basic decision-making power would be auspicious for everybody.

#### **REFERENCES**

AlBattat, ARS & Som, APM 2013, 'Employee dissatisfaction and turnover crises in the Malaysian,' hospitality industry: *International Journal of Business and Management*, 8(5), 62-71.

- Bureau of Labor Statistics 2013, 'Job openings and labor turnover,' Washington, DC: Author. Retrieved from http://www.bls.gov/news.release/pdf/jolts.pdf
- Butt, K A 2008, 'Impact of compensation on the turnover intentions of employees: A case of Pakistan telecom sector,' *The Business Review, 10*(2), 178-184.
- Chang, Y H & Tsai, Y F 2011, 'Cross-cultural leadership challenges for hospitality: Immigrant Entrepreneurs in Texas,' *The Business Review*, *17*(1), 284-290.
- Chen, Y, Wang, W C & Chu, Y C 2010, 'Structural investigation of the relationship between working satisfaction and employee turnover,' *The Journal of Human Resource and Adult Learning, 6*(1), 41-50
- Cherrie, J Z 2012, 'China's changing workplace: Dynamism, diversity and disparity, 'The Economic and Labour Relations Review: ELRR. 23(2), 141-144.
- Dike, D. W. (2012). Changes in the role of supervisors in managerial leadership theories: An historical perspective. *International Journal of Management*, 29(3), 189-194.
- Dysvik, A & Kuvaas, B 2010, 'Exploring the relative and combined influence of mastery-approach goals and work intrinsic motivation on employee turnover intention, 'Personnel Review, 39(5), 622-638. doi:10.1108/00483481011064172
- Gosenpud, J & Vanevenhoven, J 2011, 'Using tools from strategic management to help micro-entrepreneurs in developing countries adapt to a dynamic and changing business environment,' *Journal of Applied Business Research*, *27*(5), 1-13.
- Hall, G 2010, 'Fast food industry employees and job esteem: A descriptive study (Doctoral dissertation),' Retrieved from ProQuest Dissertations & Theses database. (AAT 3412442)
- Hofstede, G 1994, Management scientists are human. Management Science, 40(1), 4-13.
- Hon, AY 2012, 'Shaping Environments Conductive to Creativity: The Role of Intrinsic Motivation', *Cornell Hospitality Quarterly*, *53*, 1, pp. 53-64.
- Ineson, E M; Rhoden, S & Alexieva, I 2011, 'Success in hotel management: Implications for M-level course design in Bulgaria, 'Journal of Hospitality, Leisure, Sports and Tourism Education, 10(2), 30-49.

Janta, H 2011, 'Polish migrant workers in the UK hospitality industry,' *International Journal of Contemporary Hospitality Management*, 23(6), 803-819.

- Kalargyrou, V; Pescosolido, A; & Kalargiros, E A 2012), 'Leadership skills in management education, 'Academy of Educational Leadership Journal, 16(4), 39-63.
- Kalargyrou, V & Woods, R H 2011, 'wanted: Training competencies for the twenty-first century, 'International *Journal of Contemporary Hospitality Management*, 23(3), 361-376.
- Kouzes, J M & Posner, B Z 2008, 'Leadership challenge,' (4th ed.). San Francisco, CA: Jossey-Bass. Larsson, G & Eid, J 2012, 'An idea paper on leadership theory integration', *Management Research Review*, 35(3), 177-191.
- McMullen, R S & Adobor, H 2011, 'Bridge leadership: A case study of leadership in a bridging organization', *Leadership & Organization Development Journal*, *32*(7), 715-735.
- Mwaura, G; Sutton, J & Roberts, D 1998, 'Corporate and national culture: An irreconcilable dilemma for the hospitality manager? *International Journal of Contemporary Hospitality Management, 10*(6), 212-220.
- Piersol, B 2007, 'Employee engagement and power to the edge', *Performance Improvement, 46*(4), 30-33
- Quinn, L & Dalton, M 2009, 'Leading for sustainability: Implementing the tasks of leadership', *Corporate Governance*, 9(1), 21-38.
- Sut, I. W H & Perry, C 2011, Employee empowerment, job satisfaction and organizational commitment', *Chinese Management Studies*, *5*(3), 325-344. doi:10.1108/17506141111163390
- Varoglu, D & Eser, Z 2006, 'How service employees can be treated as internal customers in hospitality industry', *The Business Review*, *5*(2), 30-35.
- Walsh, K & Taylor, M S 2007, Developing in-house careers and retaining management talent: What hospitality professionals want from their jobs', *Cornell Hospitality Quarterly*, 48(2), 163-182.
- Warner, B 2011, 'On the legacy of Theory Y', Journal of Management History, 17(2), 193-201.

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# EFFECTS OF INCREASED DIVERSITY ON JOB SATISFACTION IN KOREAN MULTINATIONALS IN KOREA

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#### **ABSTRACT**

The ever-increasing number of companies operating in multinational and therefore multicultural contexts demands an ever-deepening understanding of diversity. Korean multinationals have recently begun increasing the diversity of their employees at their headquarters in Seoul. Multiple studies have been conducted on diversity in North America and Europe but very few have been conducted in a homogeneous society like South Korea. The objectives of this paper are to provide a better understanding of foreigners' job satisfaction while working in a homogeneous group. The study conducted in-depth interviews with eight foreigners in eight different companies working in the human resources department. They were all working at the headquarters of a Korean multinational in Seoul. The study covered areas ranging from acceptance to general work experience. The results showed that job satisfaction is directly related to acceptance into the group. Also, being a foreigner was of no real importance in relation to having more negative experiences in the organization.

Keywords: Foreigners, Job Satisfaction, Diversity, Multinationals, South Korea

# 1. INTRODUCTION

The ever-increasing number of companies operating in multinational and therefore multicultural contexts demands an ever-deepening understanding of diversity. How diversity affects an organization in terms of employee satisfaction, creativity, communication, and turnover determines the future success of the organization (Milliken, 1993). Since global expansion of business implies an increase in the number of multicultural interactions, MNEs focused attention on the effects of organizational diversity. In theory, this seems like an easy goal to achieve, and creating groups with diversity should be a positive human resource strategy (Cox & Blake, 1991); in reality, it is often not the case. These groups face a wide range of challenges and many times perform below expectations.

Recently, Korean organizations have begun hiring foreign employees in the hope of improving their position in the global marketplace. The variety of Korean organizations' members' observable attributes barely reaches beyond age. For example, Korea is a country that has experienced little immigration, women aged 15 years or older working in 2011 were the lowest percentage, and the participation of females with higher education was the lowest among the 34 members of the OECD (Seo, 2012). A large number of Korean organizations only employ a small number of foreigners, so basing the study on performance would not accurately represent what is happening inside the diverse groups. Instead, it will focus on the foreign members of each group and their job satisfaction.

The study is designed to gain a better understanding of the effects that diversity has on the important organizational outcome variable of job satisfaction in a monolithic organization. Many studies have been conducted on diversity in countries where citizens regularly interact with people of different ethnicities. When focusing on diversity related to ethnicity using samples from countries like the US, Canada or countries located in the EU, the results are significant, but focusing on a traditionally homogeneous country like Korea and on the employees on the group-level as manifested in social integration presents opportunities for new insights.

This paper will provide a better understanding of how foreigners react after being placed in a homogenous group, and therefore ways to improve future performance.

# 2. LITERATURE REVIEW

# 2.1. Organizational diversity and performance

The last few decades witnessed a wide range of studies on organizational diversity. A number of researchers argued that team diversity has a positive effect on performance due to attributes related to cognitive thinking (Cox & Blake, 1991; Hambrick, Cho, & Chen, 1996). It has also been shown that homogeneous groups have a greater chance than heterogeneous groups of having higher satisfaction rates, be socially integrated, and experience lower turnover rates (e.g., O'Reilly, Caldwell, & Barnett, 1989).

It is necessary to begin with a clear definition of "diversity" itself, because of the complex social and cultural assumptions attached to the word. Multiple researchers have presented the idea of separating diversity into two main sections: observable or readily detectible attributes and those that are less visible or underlying attributes (Cummings, Zhou, & Oldham, 1993; Jackson, 1992; Jackson, May, & Whitney, 1995). Observable attributes consist of race, ethnic background, age, and gender whereas less visible attributes are education, functional background, length of time in the organization, socioeconomic background, personality, and values (Cummings et al., 1993; Jackson et al, 1995; Tsui, Egan, & O'Reilly, 1992). The reason for pointing out the types of diversity is because of how people react toward them. When somebody encounters observable attributes they immediately react according to prejudices, which can be either positive or negative.

There is already a large body of research on the advantages and disadvantages of diversity in organizations. On the one hand, diversity has been advertised as a competitive advantage because of minority views. Cox and Blake argue that 'Research by Charlene Nemeth found that minority views can stimulate consideration of non-obvious alternatives in task groups.' (1991: 50); and diverse teams have been more creative than homogenous teams (Hambrick, et al.; Triandis, Hall, & Ewen, 1965). On the other hand, the larger the diversity of the team or group, the less unified it can be (O'Reilly, et al., 1989) and the higher the levels of dissatisfaction and turnover (e.g., Jackson, Brett, Sessa, Cooper, Julin, & Peyronnin, 1991; Wagner, Pfeffer, & O'Reilly, 1984).

# 2.2. Role of diversity on psychological connections and organizational performance

Job satisfaction has long been vital to organizational research (Agho, Mueller & Price, 1993). A number of studies show that there is a correlation between ethnic identity and career outcomes related to minority groups because they experience more negative incidents than employees of the ethnic majority (Ibarra, 1995). Verkuyten, de Jong, and Masson (1993) conducted a study in the Netherlands that found that non-Dutch leaned more in the direction of being dissatisfied with their jobs than their Dutch colleagues. The degree to which a person has a positive orientation toward their organization of employment is a reflection of their job satisfaction (Bettencourt & Brown, 1997; Quinn & Staines, 1979).

Research shows there is a connection between a person's acceptance into an organization, or at least the perception of acceptance, and job satisfaction (Lawler, 1994; MorBarak & Cherin, 1998). Similarly, fit has been found to be connected to job satisfaction; people who feel they do not fit in with their colleagues suffer from poor job satisfaction (DeFrank & Ivancevich, 1998; Sanchez & Brock, 1996). Their level of satisfaction was related to the amount of time they spent with colleagues of the same or similar backgrounds: more time with similar colleagues improved job satisfaction. Members on a team spend a lot of time interacting, and these small occurrences consist of most of the information that is used to make work decisions. Behavioral studies have been trying to determine for years whether these daily interactions contribute to completing tasks or not (Larkey, 1996).

Research shows that members that are racially or ethnically different from their team or supervisor tend to be less committed to the team. If employees feel excluded, they tend to feel that they will not be able to reach their full potential (Mor Barak, 2002). Their psychological connection to their teammates is weaker compared to members who are of the same ethnic background. A sense of inclusion is important in wanting to continue to be part of the organization (Mor Barak & Cherin, 1998).

It is important for each group member to have a clear understanding of their role in the group. Spector (1997) found role ambiguity and role conflicts are related to lack of autonomy and job dissatisfaction (Arches, 1991; Jex & Beehr, 1991).

# 2.3. Propositions and Research Framework

Behavioral studies confirm that the degree of interaction among colleagues is critical to making work decisions and completing tasks (Larkey, 1996). This paper examines the moderating effects of ethnicity on job-related performance and the variables affecting the sense of inclusion. This is based on previous studies suggesting ethnic identity and career outcomes are related to minority groups (Ibarra, 1995; MorBarak & Cherin, 1998). Foreign employees who have a different ethnic background are likely to have a weaker psychological connection to the group (Francis, 1996). When a sense of inclusion is absent, foreign employees tend to feel that they will neither be able to reach their full potential nor want to remain part of the organization (Barak, 2002; MorBarak & Cherin, 1998).

Hypothesis 1. Employees of different ethnicity who feel psychological connections would have high job satisfaction.

Hypothesis 2. Employees of different ethnicity have more negative experiences at work, which leads them to have less job satisfaction than their Korean coworkers.

#### 3. METHODOLOGY

A qualitative study method was chosen for the information provided by the interviews. The specific focus of this paper is job satisfaction for employees that are both foreigners as well as the minority in Korean organizations. Theoretical sampling was chosen as the best method for gaining better control of multiple independent sources of information; this method uses a technique called data triangulation (Scott 2008; Cassell and Symons 2004). For this paper it was used to gain a better understanding of job satisfaction.

The ground theory strategy was used to spot dominating themes within the research data. The dominating themes were then used to form a theory to represent the findings. Since the research is based on interviews with the stakeholder, theoretical sampling is applied (Saunders, Lewis, and Thornhill 2009). The in-depth interviews provide a plausible summary of attitudes to personify the wider research problem where the researchers are looking to find better processes (Patterson and Bae 2013).

The process chosen requires the formation of constrained theories from the data, and in turn these theories can be used to nominate a new theory to focus on (Patton 2002, 238; Marshall 1996). The sample was selected from key stakeholders who have extensive knowledge of minority employees in a Korean company, or *chaebol*, located in Seoul. Instead of choosing executives of companies as the major stakeholders, lower-level employees in human resources were chosen, because they tend to have the most firsthand experience with the subjects of this study. All of the interviews were conducted between July and September of 2013.

# 3.1. Data Collection and Final Sample

A total of eight stakeholders from eight different Korean companies located in Seoul, South Korea were interviewed individually. The interviews took place near their place of work either in a coffee shop or a restaurant and lasted around forty-five minutes. The interviews began with the researcher explaining the purpose of the study and encouraged the interviewees to expand as much as possible on each answer. It was also emphasized that they should speak about not only their own experiences but also situations they have observed in the workplace. The interviewer recorded the answers in a notepad as the interviewees spoke. After each section was completed the interviewer doubled-checked the notes by reviewing them with the interviewees to ensure there were no misunderstandings.

# 3.2. Respondent demographics

The stakeholders were of different nationalities and of non-Korean decent: There were four Americans, three Canadians, and one Indian. Each interviewee had to meet a set of requirements in order to be considered well informed on the subject. They needed to have a master's degree, at least two years' experience in Korea at a Korean *chaebol*, more than one foreign employee in their workplace, and work in human resources.

# 3.3. Data Analysis

Korean culture played a very large role in the interviewees' answers. According to *The Hofstede Center*, Korea is considered a collectivist society. The center describes a collectivist society as "based on strong relationships where everyone takes responsibility for fellow members of their group. In collectivist societies offence leads to shame and loss of face, employer/employee relationships are perceived in moral terms (like a family link), hiring and promotion decisions take account of the employee's in-group, management is the management of groups." (Hofstede 2013)

# 4. FINDINGS AND DICUSSION

# 4.1. Acceptance and Job Satisfaction

The first part of the interview focused on the foreigners' inclusion into the group. The question was simply "Does acceptance equal job satisfaction?" One person stated that because it is a Korean company, being included in the group is very important to job satisfaction. Inclusion is the first step toward satisfaction because "acceptance leads to inclusion which leads to trust and which leads to more work. If you aren't part of the group you get held back because often you don't have the correct information to move forward." Another interviewee stated, "Being left out of the group can make the foreigner feel undermined or not important to the team."

Interviewees did not blame Korean co-workers exclusively. Often the foreigners put themselves into positions that block their inclusion into the group. "One problem that hurts foreigners is they don't always understand how important it is to be part of the group and accidently push themselves out. Sometimes the foreigner and the Koreans have different expectations from each other, both in the workplace and the social setting of the company." Another important point raised in the interviews:

Different people answer this question differently: What is more important, social satisfaction or job satisfaction, and are they separate or do they have to go hand in hand?

# 4.2. Acceptance and full potential

The follow-up question was about the chances a foreign employee has of reaching their full potential if they are not accepted into the group. One of the interviewees said, "To reach your full potential in a strong culture like Korea's, you must be a part of the group. It is the only way to reach your full potential because being in the group builds that personal connection which leads to trust." Another interesting idea raised during the interviews: Minorities who are included in the groups tend to have more meaningful tasks and stay busier than foreigners who do not become part of the group.

# 4.3. Work Experience

Interviewees were then asked if Korean employees might actually have a harder time at work than foreign employees. All of the interviewees had similar answers. "Koreans probably have a worse time at work because they have limited options; this is the life of a Korean office worker. Foreigners take things more personally and often look for ways they are being attacked or slighted." And, "Foreigners often come to Korea with the idea that they are an international person but during difficult situations they become very inflexible and fight. This leads to them feeling sorry for themselves and blaming everyone else."

#### 5. CONCLUSION

The goal of this paper was to determine the effect of increased diversity on job satisfaction for foreign employees in Korean companies. There were two hypothesizes but the results confirmed only one of them. Regarding Korean companies and Korean culture, it is vital to be a part of the group to experience job satisfaction. Not being part of the group has so many negative consequences that whatever one's idea of job satisfaction, it will be impossible to reach.

Surprisingly, the second hypothesis was shown to be incorrect. Foreigners have fewer negative experiences in the workplace than their Korean coworkers. The difference is that Koreans simply accept these experiences as part of the norm and continue on with their workday. The foreigners, on the other

hand, take these experiences personally and let frustration build. Foreign employees tend to exaggerate their problems or even look for problems that are not really there.

#### **REFERENCES**

- Agho, A.O., Mueller, C.W., & Price, J.L. 1993. Determinants of employee job satisfaction: An empirical test of a causal model. *Human Relations*, vol. 46, no. 8, pp. 1007–1027.
- Arches, J. 1991. Social structure, burnout, and job satisfaction. Social Work, 36(3): 202-206.
- Bettencourt, L.A. & Brown, S.W. 1997. Contact employees: Relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing*, vol. 73, no. 1, pp. 39–61.
- Cassell, C. & G. Symon. 2004. Essential Guide to Qualitative Methods in Organizational Research. London: Sage Publications.
- Cox, T. & Blake, S. 1991. Managing cultural diversity: Implications for organizational competitiveness. *Academy of Management Executive*, vol. 5, no. 3, pp. 45-56.
- Cummings, A., Zhou. J., & Oldham, G. R. 1993. Demographic differences and employee work outcomes: *Effects on multiple comparison groups*. Paper presented at the annual meeting of the Academy of Management, Atlanta. GA.
- DeFrank, R.S. & Ivancevich, J.M. 1998. Stress on the job: An executive update. *Academy of Management Executive*, vol. 12, no. 3, pp. 55–66.
- Hambrick, D.C., Cho, T.S., and Chen, M-J. 1996. The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly*, vol. 41, no. 4, pp. 659-684.
- Hofstede, G. 2013. Geert Hofstede cultural dimensions. http://geert-hofstede.com/south-korea.html. Accessed September, 2013.
- Ibarra, H. 1995. Race, opportunity, and diversity of social circles in managerial network. *Academy of management journal*, vol. 38, no.3, pp. 673-703.
- Jackson, S. E. 1992. Consequences of group composition for the interpersonal dynamics of strategic issue processing. In J, Dutton, A. Hufi, & P. Shrivastava (Eds.). *Advances in strategic management*, vol. 8, pp. 345-382. Greenwich, CT.
- Jackson, S. E., Brett, I. F., Sessa, V. I, Cooper, D. M., Julin, J. A., & Peyronnin, K. 1991. Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology*, vol. 76, no. 5, pp. 675-689.
- Jackson, S, E, May, K. E., & Whitney, K. 1995. Understanding the dynamics of diversity in decision making teams. In R. A. Guzzo & E. Salas (Eds.), *Team effectiveness and decision making in organizations:* pp. 204-261. San Francisco: Jossev-Bass.
- Jex, S.M. & Beehr, T.A. 1991. Emerging theoretical and methodological issues in the study of work-related stress. *Research in personnel and human resources management*, vol. 9, no. 31, pp. I-365.
- Larkey, L. K. 1996. Toward a theory of communicative interactions in culturally diverse workgroups. *Academy of Management Review*, vol. 21, no. 2, pp. 463-491.
- Lawler, E. III. 1994. Creating the high involvement organization. In Galbraith, & Lawler III (Eds.), *Organizing for the future*, pp. 172–193. San Francisco: Jossey-Bass.
- Marshall, M.N. 1996. Sampling for Qualitative Research. *Family Practice*, vol. 13, no. 6, pp. 522-525. Milliken, F. J. & Martins, L.L. 1996. Searching for common threads: understanding the multiple effects of diversity in organizational groups. *Academy of Management*, vol. 21, no. 2, pp. 402-433.
- Mor Barak, M.E. & Levin, A. 2002. Outside of the corporate mainstream and excluded from the work community: a study of diversity, job satisfaction and well-being. *Community, Work & Family*, vol. 5, no. 2, pp. 133-157.
- Mor Barak, M.E. & Cherin, D.A. 1998. A tool to expand organizational understanding of workforce diversity: Exploring a measure of inclusion–exclusion. *Administration in Social Work*, vol. 22, no. 1, pp. 47–65.
- O'Reilly, C. A., Caldwell, D. F., & Barnett, W. P. 1989. Work group demography, social integration, and turnover. *Administrative Science Quarterly*, vol. 34, no. 1, pp. 21-37.
- Patterson, L. & Bae, Song. 2013. Gender (in)equality in Korean firms: results from stakeholders interviews. *Journal of Organizational Culture, Communications and Conflict*, vol. 17, no. 1, pp. 93-113.

Patton, M. Q. 2002. *Qualitative Research and Research Methods, 3rd edition.* Thousand Oaks, CA: Sage Publications.

- Quin R.P. & Staines, G. 1979. Quality of employment survey, 1973–1977: Panel. Ann Arbor, MI: Inter-University Consortium for Political and Social Research.
- Sanchez, J.I. & Brock, P. 1996. Outcomes of perceived discrimination among Hispanic employees: Is diversity management a luxury or a necessity? *Academy of Management Journal*, vol. 39, no. 3, pp. 704–719.
- Saunders, M., Lewis, P., & Thornhill, A. 2009. *Research methods or business students.* 5th ed. Harlow, UK: Pearson Education Limited.
- Scott, W. R. 2008. *Institutions and Organizations: Ideas and Interests*. 3rd ed. Thousand Oaks, CA: Sage Publications.
- Seo, E. July 3, 2012. South Korea Shuns Moms at Peril as Workforce Shrinks. *Bloomberg*. http://www.bloomberg.com/news/2012-07-03/south-korea-shuns-moms-at-peril-a-workforce-shrinks.html. Accessed January, 2013.
- Spector, P.E. 1997. Job satisfaction: Application, assessment, causes, and consequences. Thousand Oaks: Sage.
- Triandis, H. C., Hall, E.R., & Ewen, R.B. 1965. Member homogeneity and dyadic creativity. *Human Relations*, vol. 18, no. 1, pp. 33-54.
- Tsui, A. S. Egan, T. D., & O'Reilly, C. A. 1992. Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, vol. 37, no. 4, pp. 549-579.
- Verkuyten, M., de Jong, W., & Masson, C. N. 1993. Job satisfaction among ethnic minorities in the Netherlands. *Applied Psychology: An International Review*, vol. 42, no. 2, pp. 171-189.
- Wagner, G. W., Pfeffer, J., & O'Reilly, C. A. III.1984. Organizational demography and turnover in top-management groups. *Administrative Science Quarterly*, vol. 29, no. 1, pp. 74-92.

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# DO TRAINEES LIKE THEIR TRAINING? TRAINEE PERCEPTION ON TRAINING AND EXAMINING WHAT METHODS ARE USED

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#### **ABSTRACT**

Training is an important part of an employee's work experience. It is used to teach a new hire how to do the job, to train a promoted employee, and to help transition organizational change. Most studies on training examine objective data, such as expenses or technology that is used while there are fewer studies that look at training from the employees' point of view. This study will attempt to see the relationship between participants' perceptions of training and characteristics of training as well as seeing what kinds of methods organizations use. Interviews were conducted with a sample size of 18, obtained by convenience sampling. A Pearson correlation reveals a strong positive correlation between trainee perception and characteristics of training. Lectures and on-the-job trainings were the most commonly used methods.

**Keywords:** training, trainee perception, training methods

# 1. INTRODUCTION

Training is a very important component of a person's work role. For many new employees, training is how they learn to do the job. Without it they couldn't be expected to work satisfactorily. Training is also used to teach existing employees new skills, whether it's due to expanded responsibilities, a change in the organization, or in preparation for a promotion. Training can enhance skills from basic literacy to interpersonal sensitivity (Knoke & Kalleberg, 1994). Training is defined as a planned effort by a company to facilitate the employees' learning of knowledge, skills, and behaviors necessary for job success (Noe, 2010). In small companies, training is the responsibility of the company founder with participation of the other employees in training new hires. Larger companies can have departments dedicated to training. such as human resources. Companies also have the option of outsourcing their training so that it is conducted by outside organizations. Training can even provide a competitive advantage in the organization's respective industry (Noe, 2010). Changes in the world today have affected the way training is used. Employers use job training as a method to cope with changes in technology, market competition, organizational restructuring, and demographic shifts (Knoke & Kalleberg, 1994). Companies and organizations also find training important as they couldn't expect their employees to perform effectively. As companies are investing the money into training, they should also want to make sure that their employees are successfully transfer what they learn into the actual job. Organizations spend billions of dollars per year on training and development (Saks and Belcourt, 2006). The failure for employees to effectively use what they learn is a potential problem that companies face (Shantz & Latham, 2012). This results in poor performance which could lead to re-training or termination.

There are organizations that conduct research on the training practices of companies, such as the American Society for Training and Development (ASTD) and the Bureau of Labor Statistics. The information tends to be objective data, such as company expenditures or the types of technology used. Noe (2010) recommends that information from these publications be viewed as estimates of practices rather than exact numbers. On another note, as these publications tend to examine objective data, they don't often look at employee opinions. Trainee reactions are a relatively neglected, but important aspect of training evaluation (Giangreco, Sebastiano, & Peccei, 2009). Many organizations do collect this kind of data for their own purposes but it is usually not published or made widely available because it is difficult to generalize to other areas of business.

# 2. LITERATURE REVIEW

Noe (2010) organizes training methods into three broad categories: presentation methods, hands-on methods, and group building methods. Many organizations incorporate more than one method into their training programs. Presentation methods include lecture and audiovisual techniques. Classroom training is the most common representation of presentation methods. Lectures involve the trainer verbally communicating what they want the trainees to learn. Audiovisual techniques involve the use of overheads, slides, and videos. Audiovisual techniques tend to be used simultaneously with lectures (Noe, 2010).

Hands-on methods include on-the-job training (OJT), simulations, case studies, business games, role plays, and behavior modeling. OJT is when new or inexperienced employees learn in the work setting and during work by watching peers or managers performing the job and trying to imitate their behavior. OJT is considered to be one of the oldest and most used informal training (Noe, 2010). Self-directed learning places all of the responsibility of learning how to do the job on the shoulders of the employee. Trainees learn predetermined content at their own pace and without a trainer providing instructions. Simulations are a training method that represents a real-life situation. The decisions that the trainees make will produce outcomes that would happen if they were on the job. Simulations allow the trainees to see the consequences of their decisions in a risk-free environment. Case studies describe how employees or an organization dealt with a difficult situation (Noe, 2010). In a case study, the trainees have to analyze and critique the actions taken in the given situation. They may provide suggestions on what alternative actions could have been made. Business games involve the trainees gathering information, analyze it, and make decisions. They are typically used for developing management skill. The games mimic the competitive nature of business and the trainees are actively involved. Role playing involves the trainees acting out parts that are assigned to them. They act out the roles based on the situation described to them. In behavior modeling, the trainee is presented with a model who demonstrates the important behaviors that they should replicate and trainees are provided opportunities to practice what they observed. Behavioral modeling is best used when the trainee has to learn skills and behaviors (Noe. 2010).

Group building methods trains a group of people to work as a team or to improve group effectiveness. Examples of group building methods include adventure learning, team training, and action learning. Adventure learning develops teamwork and leadership skills through structured activities (Noe, 2010). Wilderness training, drum circles, and cooking classes are examples of adventure learning. It is common for adventure learning programs to involve physically challenging activities but it can also include activities that require coordination and not be physically demanding. Team training coordinates team performance to achieve a common goal. Team training consists of three components: knowledge, attitudes, and behavior. Action learning provides the team or work group an actual problem and the team must work on solving that problem. Because the team is working on a real-life problem, they are expected to follow through on their action plan and are accountable for their decisions. Action learning is used to solve important problems, develop leaders, build high-performance teams, and transform organizational culture (Noe, 2010).

Knoke and Kalleberg (1994) conducted a study that examined employer practices on job training. Previous research by labor economists had shown that there are various variables that affect training practices. Organization size is one factor that influenced the choice of method. Large organizations have formalized job structures, have internal labor markets, are more unionized, and operate in environments that foster investments in training (Knoke & Kalleberg, 1994). There has been other research that suggested a curvilinear relationship between organization size and training, where the smallest and the largest employers provided the most training (Knoke & Kalleberg, 1994). Unionization as factor had more contradicting effects. While a union can help keep an organization's hiring and training costs low by making sure there is a low turnover rate, unions will also pursue their own interests within the organization, at worst at the expense of non-union members (Knoke & Kalleberg, 1994). Workforce composition is thought to be a factor that influenced training as well but only in circumstances where discrimination occurs. For example, an employer may result in providing less extensive training for a female employee who is pregnant (Knoke & Kalleberg, 1994). Internal structure is a fourth factor that may affect training decisions. Social organization and division of labor explain how worker attributes and

interests are matched with employer decisions and job requirements and create norms regarding various practices. The external environment is the last factor to affect training decision. For example, organizations will find training more valuable when skilled workers are harder to find and when they have the resources for cross-training their current employees and move them to other positions without negatively affecting production (Knoke & Kalleberg, 1994). Business seek resources needed for their daily activities but when resources become scarce, they must work with what they have and seek alternate solutions. For their study, Knoke and Kalleberg (1994) used a sample of 688 establishments drawn from data from the 1991 National Organizations Survey. The results of their study showed that employer-provided training was most extensive in organizations that had elaborate internal structures that operated in complex market environments.

The evaluation of training is seen as crucial because of the investments that companies put toward training (Giangreco et al., 2009). As a human resource practice, it is deserving of monitoring and evaluation. Since training is typically mandatory of employees, it is important that the organization be able to justify its current practices. The evaluation is especially important when the training has been outsourced (Giangreco et al., 2009). Kirkpatrick's hierarchal model of training has four main levels which training can be evaluated: (1) trainee reactions, (2) what was learned, (3) the degree of transfer to the job, and (4) the extent that training improved individual and organizational performance (Giangreco et al., 2009). The evaluation is typically given at the end of the training course. Most organizations tend to only give the post training evaluation and do not conduct any other evaluations later on. By collecting trainee reactions to the training and understanding why they feel that way, organizations can work toward a more effective planning, design, and management of training (Giangreco et al., 2009). For their study, Giangreco et al. (2009) focused on the level 1 of Kirkpatrick's model (trainee reactions). The authors developed multiple hypotheses for the study but the most relevant will be discussed here: (a) the perceived efficiency of training is positively related to trainees' overall satisfaction with training, (b) the perceived usefulness of training will be positively related to trainees' overall satisfaction with training, and (c) perceived trainer performance will be positively related to trainees' overall satisfaction with training (Giangreco et al., 2009). Surveys were completed by 2697 employees who attended an outsourced training program. The surveys were distributed over 10 months, which was the time it took for all the employees to receive the training. Perceived training efficiency, perceived usefulness of training, perceived trainer performance, and overall satisfaction were used as the variables. Survey results showed that on average, participants had a high level of overall satisfaction with training. Overall satisfaction also had a positive correlation with the other variables so all of the hypotheses developed in the study were supported (Giangreco et al., 2009).

When employees are not trained properly, they cannot be expected to do their jobs well. Monetary investments in training could yield deficient results (Shantz & Latham, 2012). If the lack of transfer of training becomes a serious problem, organizations are forced to rethink their training strategies and must find a more suitable method of ensuring employees are using what they learn. Shantz and Latham (2012) cite two theories that could be used in designing interventions that could repair transfer of training; the social cognitive theory and self-persuasion theory. Bandura's social cognitive theory makes self-efficacy an important factor in effectively applying the skills learned in training to the job and Aronson's selfpersuasion theory explains that one of the most powerful sources of persuasion is oneself (Shantz & Latham, 2012). Previous research has shown that self-efficacy is a good predictor of learning and performance because self-efficacy influences the goals an employee establishes for themselves and influences the persistence that an employee possesses when trying out new and difficult tasks (Shantz & Latham, 2012). For their study, Shantz and Latham (2012) tested the effectiveness of the written selfquidance (WSG) as an intervention strategy to increase participants' self-efficacy, which would in turn, boost transfer of training. WSG takes about 20 minutes to complete and it asks participants to write a selfaffirming letter themselves about the training content that was most relevant to them. This strategy essentially has the participants write a motivating letter to themselves. The study used 35 IT professionals who were seeking employment. Over 11 weeks, participants attended four one-day training sessions on how to secure a permanent job in the industry. After the training program, participants were asked to complete a WSG. Five weeks after training, the participants were divided into a control group and experimental group. Both groups were given a brief review of what they learning in training but the experimental group were given the opportunity to read the WSGs they wrote. Mock interviews were

conducted and self-efficacy was measure before the interview. The results showed that the experimental group had higher ratings from the interviewers than the control group. Shantz and Latham (2012) conclude that self-efficacy mediated the relationship between WSG and performance.

Transfer of training can sometimes be difficult. External reports in 2001 indicated that only 10% of what is learned is ever used on the job (Saks and Belcourt, 2006). This is very problematic as training is used to affect organizational outcomes and results. Saks and Belcourt (2006) conducted a study to see if organizations are using any strategies in order to foster transfer of training. The failure to transfer what was learned in training to the job is serious because that would mean the trainees' performance was not improved and therefore would not produce organizational outcomes. Past research on the transfer of training has been more focused on individual and situation factors or as intervention strategies on individuals (Saks and Belcourt, 2006). There have also been research that attempted to examine transfer of training on an organizational level but this kind of research is often difficult to conduct because of the additional factors involved (Saks and Belcourt, 2006). Pre-training, during training, and post training activities are describes as strategies that can be used to facilitate transfer of training. The authors hypothesized that each of the timing of training activities will have a positive relationship with transfer of training. Additionally, they hypothesized that organizations are more likely to use during training strategies than pre- and post-training strategies (Saks and Belcourt, 2006). For their study, 150 participants from a Canadian training and development society completed surveys. Participants were asked to provide a percentage of employees in their respective organizations that effectively applied what they learned in training during three different time periods: immediately after training; 3 months after training; and 6 months after training. Participants were also asked to indicate the extent that the organizations utilized pre-training, during training, and post-training activities. The survey also inquired about more specific activities that were used in each period. The results of their study showed that there was a positive relationship between transfer of training and each period of training activities (pre-, during, and posttraining). Additionally, the results also showed that organizations did use during training strategies more than pre-training and post-training (Saks and Belcourt, 2006). The benefits of utilizing pre-training and post-training activities were only seen in the organizations that implemented them. It would also mean that an organization would be able to achieve the best results of transfer of training if they implemented strategies in all three periods of training.

Technology has also changed the way that training is conducted. Information and communication technologies (ICT) have changed production processes and business activities (Batalla-Busquets & Pacheco-Bernal, 2012). The changes that have occurred in the workforce have permitted companies to be more flexible in creating job titles, to further develop labor activities, modify worker responsibilities within the company, and even change the economic sector (Batalla-Busquets & Pacheco-Bernal, 2012). The increasing use of technology results in businesses requiring employees having or learning new sets of skills. Training activities conducted by companies would need to improve the professional competencies and skills of their workers so that they can meet the challenges of a global business world (Batalla-Busquets & Pacheco-Bernal, 2012). Batalla-Busquets and Pacheco-Bernal (2012) define elearning as the distance learning technology that allows interaction and asynchronous communication among the trainees as well as having access to teaching resources. On-the-job e-learning was a new form of training in the early 2000s and it has grown consistently since then (Batalla-Busquets & Pacheco-Bernal, 2012). E-learning should ensure that the technology is effectively able to develop the skills and knowledge of the employees and to support career progression. The objectives that prompt the use of elearning are: to identify and record training needs of workers in order to facilitate learning; provide up-todate training and support to the employees that need it; evaluation of established training objectives to assimilate employee knowledge; and to establish a registry and record of training activity for each employee (Batalla-Busquets & Pacheco-Bernal, 2012). Research has shown that e-learning has provided benefits to organizations, such as cost reduction, flexibility and adaptability, permanent updating, and personalized attention (Batalla-Busquets & Pacheco-Bernal, 2012). For their study, Batalla-Busquets and Pacheco-Bernal (2012) investigated the effectiveness of e-learning from the perspective of the trainee. Questions that they developed sought to indentify the workers' perceptions toward virtual training and if there were any differences in their perception between virtual training and face-to-face training. Additionally, they wanted to see what were the intrinsic motivations of the employee toward the training they received (Batalla-Busquets & Pacheco-Bernal, 2012). The authors surveyed over 2000 employees

from CaixaBank. The results showed that the employees had higher opinions of certain aspects of virtual training over face-to-face training but they otherwise had a positive view of virtual training. For example, they thought virtual training had better time flexibility and up-to-date content. On the other hand, they also thought face-to-face training was better in explaining the content of the training and a better ability to seek clarification when needed (Batalla-Busquets & Pacheco-Bernal, 2012). With regards to motivating factors, trainees also had positive views. They perceived the training to be a method to advance professionally, as a way to keep their jobs, and that training was a way to link them to the company (Batalla-Busquets & Pacheco-Bernal, 2012).

This study will examine trainees' satisfaction with their training. Through participants' reaction, there will be an analysis of the kinds of methods that organizations have used during training. Participants will have a higher satisfaction with their training when the training program was thorough (covered sufficient topics within a reasonable time frame) and when the organization used a variety of training methods.

#### 3. METHOD

For this study, 18 participants were selected using convenience sampling and snowball sampling methods of family, friends, and colleagues. 9 were females and 9 were males. Participants' ages ranged from 23 to 36. Samples were drawn from Carlos Albizu University (Miami Campus) in Miami, Florida, and through Facebook. Individuals will be contacted and asked if they may undergo the interview. A large number of people in this population are bilingual or multilingual, with English being one of the spoken languages though English will only be used when speaking with individuals. If they accept a copy of the informed consent was emailed to them. If participants could not do it at the time of solicitation, a date was scheduled to conduct the interview later. The interviews were conducted either by phone or by instant messaging. Since the participants were questioned directly, anonymity was not possible. All responses were kept confidential. All individuals asked will be of legal working age (at least 18). The questionnaire asks about their training experiences.

# 4. INSTRUMENTATION

Participants are asked what their position titles are, who their employer is, the starting year of their current position, and their opinions of their training periods. Through participants' responses, there will be an examination of the types of training methods and strategies used by employers. Questions were inspired by the importance and expectations of training as well as past research, as described in the literature review. Variables that the interview questions look at include length of training, the types of training methods and the tools used, and whether participants had positive or negative views toward their training experiences. Giangreco et al. (2009) emphasized how important an organization must be able to justify their training practices so a question was included whether participants were ever given an opportunity to provide feedback for their training. Batalla-Busquets and Pacheco-Bernal (2012) discussed how technology is now playing a role in training so participants were also asked about what kind of tools and equipment their employers used during training.

#### 5. RESULTS

Most participants were on their first position for their respective employer. A few of them were promoted to higher positions. The participants had started their current positions within 3 years of the date of the interview. Their training period ranged from 1 day to 3 years. One participant reported having received no training for their reported position. Almost every employer used more than one method in their training, the most common method used was the lecture and audiovisual techniques, followed closely by on-the-job training. About half of employers utilized the exact same tools and equipment that the employee would use in the actual job. While the actual tools and equipment can vary by position, for many of the participants, it includes some form of technology, such as phones, computers and computer programs. About half of the participants were trained alone, there were no other new employees hired at the same time as them. Additionally, over half of the employees reported having used 100% of what they learned in training within the first month of working in their position. On the confidence scale (question 9), the most common response given by participants was a 7 (from a scale of 1 to 10). Most participants had positive views of their training experiences and did not have any suggestions on what they would change.

Interestingly, most employers provided their employees the opportunity to provide feedback on their training experiences, even among some of those who reported negative views of training. Unsurprisingly, since on the job training was commonly used and it is considered to be an informal training, many of the participants have been involved in informal training, where they helped train a new employee. A Pearson correlation and regression analysis was calculated used Microsoft Excel 2007. Training characteristics (length, number of methods, and types of tools used) were correlated with trainee satisfaction. The calculation resulted with an r = 0.46. As Pearson results range from -1 to 1, an r of 0.46 is a strong positive correlation. The regression analysis had a p value of 0.05. The critical value is 1.98 and a t-test output of 2.09. With an alpha of 5%, the statistical analysis supports the hypothesis.

# 6. DISCUSSION

The results suggest that participants responded positively to trainings that were thorough. For many positions, there was a high volume of knowledge and skills that was required for the job so as trainees, when they were given enough time to be able to learn and process what was taught, they perceived the training to have been effective. Since participants reported starting their current positions within 3 years of the date of their interview, they could have had a better recall ability of their training experience because of the time frame. Lectures were the most commonly used training method and they were usually accompanied with on the job training. The nature of on the job training is very helpful to trainees as employees are able to see how to get the job done right, they can try out the tasks firsthand, and there is usually support from their coworkers if a question arrives. On the job training is considered to be an informal method of training as the manager or trainer is not usually involved. Due to this informality, it is typically advised that OJT not be the only method used by organizations because the experienced worker that is paired with the new employee may not be an effective employee to begin with. In addition, there is some information about the job or company that may not be covered during OJT. As with any study, limitations were present. The interview questions used created for this study so internal validity was not established. As the study used the interviews to collect data, there were challenges associated with this method of data collection, such as interpreting and scoring data and obtaining a sufficient sample size.

#### **REFERENCES**

- Batalla-Busquets, J. and Pacheco-Bernal, C. 2012. "On-the-job e-learning: workers' attitudes and perceptions." *The International Review of Research in Open and Distance Learning*, vol. 14, no. 1, pp. 40-65.
- Giangreco, A., Sebastiano, A., and Peccei, R. 2009. "Trainees' reactions to training: an analysis of factors affecting overall satisfaction with training." *The International Journal of Human Resource Management*, vol. 20, no. 1, pp. 96-111.
- Knoke, D. and Kalleberg, A.L. 1994. "Job training in U.S. organizations." *American Sociological Review*, vol. 59, pp. 537-546.
- Noe, R.A. 2010. Employee Training and Development, 5e, McGraw-Hill, New York, USA.
- Saks, A.M. and Belcourt, M. 2006. "An investigation of training activities and transfer of training in organizations." *Human Resource Management*, vol. 45, no. 4, pp. 629-648.
- Shantz, A. and Latham, G.P. 2012. "Transfer of training: Written self-guidance to increase self-efficacy and interviewing performing of job seekers." *Human Resource Management*, vol. 51, no. 5, pp. 733-746.

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# THE IMPACT OF A NATION'S SUBCULTURES ON ORGANIZATIONAL PERFORMANCE: A CASE STUDY OF NIGERIAN AND THE USA BANKING SECTORS

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#### **ABSTRACT**

This paper reviews the impact of a nation's subcultures on organizational performance in a developing and developed country's banking sector; using Nigeria and the USA as case in point. Currently, there are many research and articles on culture and its impact on organizational performance but very few in a nation's subcultures and their impact on organizational performance. Because of this dearth of research materials in subcultures and its impact, this paper aims to present new knowledge and importance of understanding the impact of subcultures on organizational performance for the benefits of business practitioners, academics, and general readers, thereby extending the current and future body of knowledge on cultures to subcultures.

Keywords: Subcultures, organizational performance, Nigeria, USA.

# 1. INTRODUCTION

This paper begins with a brief introduction of Nigeria. Nigeria is the most populous country in Africa. "There are actually three main tribes [subcultures] in Nigeria: the Hausa, Yoruba, and Igbo (also known as Ibo). Together, they account for approximately 68 percent of Nigeria's total population of [almost 200 million], (Random House, 2002). Nigeria is home to a large number of different ethnic groups with over 250 languages. Nigeria is multifarious society with many subcultures that can have considerable impact or influence on overall organizational performance.

The US has five major subcultures or regions. They include Northeast, Southeast, Middle West, Southwest, and the West. As in any multifarious societies, each of these subcultures is unique in their ways of life. That is, each subculture is different and unique.

Culture is seen as "stable set of beliefs, values, and behaviors commonly held by a society, being derived from social anthropology as a framework for understanding "primitive" societies, (Kotter and Heskett, 1992). On the one hand, organizational culture is set of important assumptions about the organization and its [shared] goals and [shared] practices that member of the company share. For examples mission, vision, core value, strategies, product lines, and rituals, among others represent an organizational culture.

On the other hand, subculture is a segment of a larger culture that has distinct values and cultural norms. Subcultures, like cultures, are not fixed. They change over time, although change may happen gradually. Organizations are rarely characterized by single cultures (Wilkins and Ouchi, 1983); instead, subcultures are pervasive and have important effects in most organizations

(Gregory, 1983; Barley and Louis, 1983).

Reviewing many published literatures on culture and organizational performance, it become apparent that most of the researchers' epistles and findings were mostly focused on western-oriented national and organizational cultures. Little has been written or published about subcultures from the lens of the developing countries and its impact on organizational performance. Hence, that is the focus of this paper.

# 2. RESEARCHER'S STATEMENT

In the field of organizational leadership, a lot has been written about culture, organizational culture, and organizational performance. However, not much has been written on nation's subcultures and its influence or impact on organizational performance, especially in multi cultural society. Having been

working in the banking sector in the US for about a decade, I learned that even though the US is a fifty state country, the country is divided as shown in the map.



FIGURE 1: UNITED STATES MAP BY REGION

Source: United States Map by Region http://www.google.com

South: 34.4% of Total U.S. Population Northeast: 20.4% of Total U.S. Population Midwest: 24.0% of Total U.S. Population West: 21.2% of Total U.S. Population

From my experience, I found that many banks in the US are sub cultured in terms of their operations and culture. That is to say, major US banks adopt strategies and cultural practices that fit each region of the US. This experience is what I want to explore as I began my PhD program to look at Nigeria from multi sub-cultural society and how such subculture can impact organizational performance of Nigerian and American banks. As shown in the map of Nigeria below, it can be said that Nigeria is similar to US in terms of population and cultural diversity. So, understanding how Nigerian banks cater to their different subcultures would be a worthy academic expedition especially how subcultures influence or impact the banks' performance in a multicultural society.

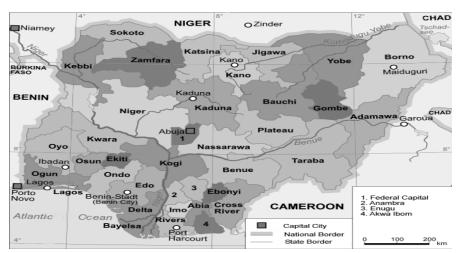


FIGURE 2: MAP OF THE FEDERAL REPUBLIC OF NIGERIA

Source: Map of the Federal Republic of Nigeria <a href="https://en.wikipedia.org/wiki/Nigeria">https://en.wikipedia.org/wiki/Nigeria</a>

# 3. TOPIC OVERVIEW

Culture is seen as "stable set of beliefs, values, and behaviors commonly held by a society, being derived from social anthropology as a framework for understanding "primitive" societies, (Kotter and Heskett, 1992). On the one hand, organizational culture is set of important assumptions about the organization and its [shared] goals and [shared] practices that member of the company share, examples: [mission, vision, core value, strategies, product lines, and rituals, etc). Similarly, subculture is a segment of a larger culture that has distinct values and cultural norms. Subcultures, like cultures, are not fixed. They change over time, although change may happen gradually. As a businessperson, one is inevitably part of more than one subculture. Organizations are rarely characterized by single cultures (Wilkins and Ouchi, 1983); instead, subcultures are pervasive and have important effects in most organizations (Gregory, 1983; Barley and Louis, 1983). Reviewing many published literatures on culture and organizational performance, it become apparent that most of the researchers' epistles and findings were mostly focused on western-oriented cultures. Little has been written or published about subcultures from the lens of the developing countries.

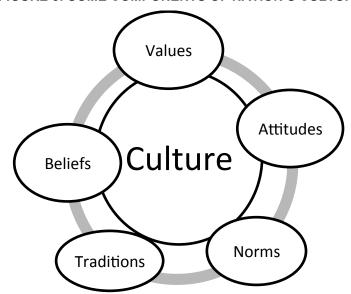


FIGURE 3: SOME COMPONENTS OF NATION'S CULTURE

Source: Original Figure by the Author, Sylvester Okoro

Culture, as we can see from this literature review, refers to the attitudes, beliefs, norms, values, traditions, and morals that the people of a particular society have and cherished. The focus of this study is to examine the impact of subculture on organizational performance among Nigerian and American banks. As shown in the diagram above, culture has many components.

#### 4. THE PURPOSE STATEMENT

From the foregoing, the purpose of this paper is to examine the sub-cultures on organizational performance among Nigerian and American banks. This study is being embarked upon because subculture in the global business arena has received little attention among many scholars and practitioners over the years. Therefore, this study aims to further our knowledge about how nation's subculture impact organizational performance. People from different cultures develop certain patterns of life, philosophy and value systems, which influence their behaviors and leadership styles. Business experience abroad has shown how widely these cultures and subcultures vary from country to country, and from culture to culture (Trompenaars, 1993). In order to lead effectively in another culture, a leader [firms] must understand the social values, customs, norms, leadership behavior and work-related cultural values of the host country's workforce (Fatehi, 1996).

Cultures vary within a nation, and therefore it makes sense to conduct a study on the subcultures in Nigerian and its impacts on organizational performance among Nigerian and American banks. If there are differences in subcultures in the US, it would not be out of place to say that similar sub-cultural differences abound in Nigeria. And it won't be out of place to say that local culture or subculture has a lot to do with how companies perform in many countries, even if these businesses are operating in the same line of business. Therefore, understanding how subculture affects firm's organizational performance in Nigerian and American banks is imperative because it has practical purposes that would be useful to corporate leaders in the financial industries, students, general public who wants to enhance their knowledge about effects of local cultures in Nigerian and other countries especially developing countries.

# 5. RESEARCH QUESTION

- How do sub-cultures affect organizational performance in Nigerian and American banks?
- How can leaders manage subcultures so that their values and goals are similar with those of the organizational goals?

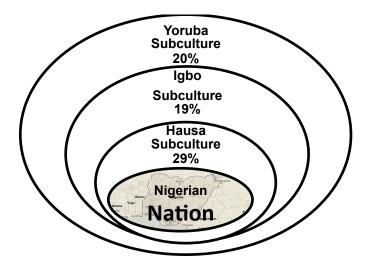
#### 6. HYPOTHESES

"Hypotheses are single tentative guesses, good hunches—assumed for use in devising theory or planning experiments intended to be given a direct experimental test when possible," (Eric Rogers, 1966). "A hypothesis is a conjectural statement of the relation between two or more variables," (Kerlinger, 1956). "Hypothesis is a formal statement that presents the expected relationship between an independent and dependent variable," (Creswell, 1994). In view of this, subcultures have significant impact on any organizational performance in a diverse cultural environment such as Nigeria or the US.

# 7. THEORETICAL FRAMEWORK

Even though the literature[s] on culture and its impact on organizational performance are vast, there are only few studies that actually examined the impact of subcultures on organizational performance in any developing country such as Nigeria. Nigeria has three major subcultures; Hausa, Igbo, and Yoruba and these three subcultures account for about 68 percent of Nigeria's over 200 million population. The diagram below shows the three major subcultures in Nigeria. That is, the data will be gathered through the use of cross sub-cultural interviews, focus groups, and observation[s] with some the sub-cultural local chiefs, opinion/business leaders, chief executive officers of top Nigerian and American banks from the three major subcultures, and business professors from each subculture.

FIGURE 4: MAJOR SUBCULTURES IN NIGERIA



Source: Okoro, S.I. (2013)

# 8. RATIONALE/JUSTIFICATION FOR STUDY

This study is needed because it would create needed awareness to a lot of people about the effects of subculture on organizational performance not only on the Nigerian financial services sector but also to other developing countries with such diversity. For instance, the study would enlighten readers about how many banks Nigerian has, their composition and leadership, and their founders and link them to what subculture is involved.

The importance of subculture and organizational performance cannot be overemphasized given that "cultural differences influence leadership styles, norms, role expectations, and traditions governing the relationship among various members of society. These are strong determinants of effective leadership behavior in a society" (Fatehi, 1996). Leadership is an essential ingredient in the success or failure of all organizations. According to Fiedler (1967:11), leadership is "an interpersonal relation in which power and influence are unevenly distributed so that one person is able to direct and control actions and behaviors of others to a greater extent than they direct and control his." In addition, "one of the priorities of the new civilian government in Nigeria is to attract businesses from all over the world. Studies comparing Nigeria and other countries of the world such as Japan, Europe, China, etc. would benefit both the foreign investors and the Nigerian business community" Osuoha (2000). And it is essential that foreign investors understand the sub-cultural composition of Nigeria. This is because doing business in Nigeria or in any diverse country requires some form of knowledge about the culture and subcultures of such nation.

### 9. DEFINITIONS

This paper has a lot of terms that need some form of definitions for better understanding of nation's subculture. Hence, the paper has included some definitions, such as:

" ...a subdivision of a national culture, composed of a combination of factorable social situation such as class status, ethnic background, regional and rural or urban residence, and religious affiliation, but forming in their combination a functional unity which has an integrated impact on the participating individual" Milton Gordon, (1947).

"Organizational culture is commonly defined as an identifiable set of values, beliefs and norms shared by members of an entire organization or subunit (Schein, 1993; Trice and Beyer, 1993). Organizational culture is a source of shared understanding and sense making, and organizational culture shapes the beliefs, expectations, and behaviors of organizational members (Schein, 1993; Trice and Beyer, 1993; Smirich and Calas, 1987).

Jones is broadly accepted. He considered organizational culture as "a set of shared values and norms that controls organization members' interaction with each other, and with suppliers, customers and others outside the organization.

"Organizations have been defined as —social relations deliberately created, with the explicit intention of continuously accomplishing some specific goals or purposes (Stinchcombe, 1965, p. 142)

Organization culture is the sum total of the interactions between the individual and the organization (Witte & Van Muijen, 1999), including the shared perceptions and shared practices (Hofstede et al., 1990);

The term organizational culture was first defined by Pettigrew (1979) as the system of such publicly and collectively accepted meanings operating for a given group at a given time. The system consists of the publicly and collectively accepted terms, form, categories, and images used by individuals to interpret a given situation to themselves.

Metaphor is a method to explain a phenomenon or create meaning by using one element of experience to understand another. Gareth Morgan uses this tool for building up theories about organization and management. He suggests the way of observing and thinking about organizations through different metaphors such as mechanistic, organic, political or cultural approach, etc.

Performance is a contextual concept associated with the phenomenon being studied (Hofer, 1983). In the context of organizational financial performance, performance is a measure of the change of the financial state of an organization, or the financial outcomes that results from management decisions and the execution of those decisions by members of the organization.

Organizational performance is based upon the idea that an organization is the voluntary association of productive assets, including human, physical, and capital resources, for the purpose of achieving a shared purpose (Alchian & Demsetz, 1972; Barney, 2001; Jensen & Meckling, 1976; Simon, 1976. In other words, organization performance refers to the effectiveness of the organization in fulfilling its core purposes and objectives

What is a nation's subculture? A nation's subculture is "local cultures" scattered throughout a nation.

#### 10. LIMITATIONS

Although this paper is carefully written, yet, there are still some limitations and shortcomings that might be present. To begin with, the population of the study appears small compared to the entire population of each chosen sub culture. So people might question the applicability of a study with small sample size to entire population. Also, the interviews and focus groups that will be conducted by the author, might unavoidable contain certain degree of subjectivity can be found. According to Yin, (2009), as a "verbal report" (p.108), the interview may be subject to bias, poor recall or poor or inaccurate articulation." Interview may be limited by "reflexivity," that is a situation whereby the participants provide an appropriate response to satisfying interviewer, but which may not be true or accurate.

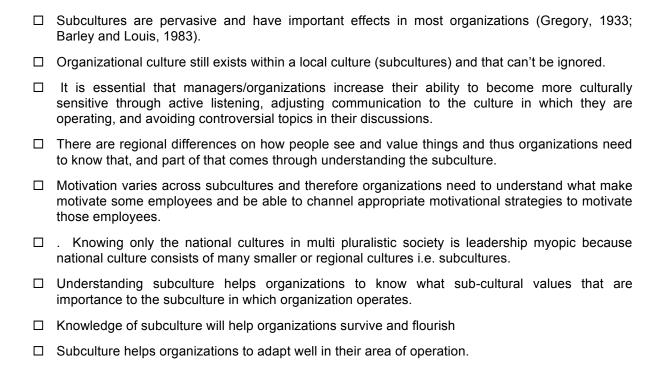
# 11. FINDINGS

Despite the above limitation, this study will contribute to body of knowledge in subculture as an independent variable while performance is seen as dependent variable. (Jones 1996) doubt about the reliability of any single indicator of culture and organizational performance encourages the identification of substitutes for those found wanting or alternative or additional measures. (Zakaria 1997) asserted that one of the relevant determinants of organizational performance is employee's behavior. Such factors include family upbringing, beliefs, values, norms, morals, collectivism or individualism.

Why Nation's Subculture is Important?

Studying nation's subcultures is important because:

☐ Organizations are rarely characterized by single cultures (Wilkins & Ouchi, 1983).



Occupation

Some Elements of A Nation's Subcultures

Religion

Religion

**FIGURE 5: NATION'S SUBCULTURES** 

Source: Okoro, S.I. (2013)

# 12. CONCLUSION

As expounded above, the purpose of this study is to examine the impact of subcultures on organizational performance among Nigerian and American banks. The aim of this study is to help both educational institutions and global business organizations to know the impact of subculture on organizational performance and to use that share that knowledge to their students and investors.

Furthermore, reviewing available literatures showed that there have not been a lot of academic and scholarly efforts in this area and that also encourages me to conduct this study.

The cultures of the three dominant groups in Nigeria, Ibo, Hausa and Yoruba exhibited different work behaviors and can invariably affect the organizational performance. Above all, nation's subculture has impact on organizational performance among Nigeria and American banks as shown in the diagram below.

Subcultures
Organization

Purpose/Goals

Internal/Extenal
Environment factors

FIGURE 6: ORGANIZATIONAL INTERNAL AND EXTERNAL CONSTITUENTS

Source: Okoro, S.I. (2013)

#### **REFERENCES**

Adler, N. J. (1983). A typology of management studies involving culture. Journal of International Business Studies, 14(2), 29-47.

Alchian, A., & Demsetz, H. (1972). Production, information costs, and economic organization. American Economic Review, 62: 777-795.

Barley, S. (1983). Semiotics and the Study of Occupational and Organizational Cultures. Administrative Science Quarterly 28:393-413.

Barney, J. B. (2002). *Gaining and sustaining competitive advantage* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Bennis, W., & Nanus, B. (1985). Leaders: The strategies for taking charge. New York: Harper & Row Publishers.

Creswell, J. W. (1994). Research design: Qualitative & quantitative approaches. Thousand Oaks, CA: Sage.

Fatehi, K. (1996). International management: A cross-cultural and functional perspective. Upper Saddle River, New Jersey: Prentice Hall.

Gordon, Milton (1947). Kitty Foyle' and the Concept" of Class as Culture," in The American Journal of Sociology, Vol. LUI, No. 3, pp. 210-17.

Gregory, K. (1983). "Native-view Paradigms: Multiple Cullum and Culture Conflicts in Organizations." Administrative Science Quarterly 28: 359-76.

Hofstede, G. Bond, M. H. (1998). The Confucius Connection: from Cultural Roots to Economic Growth. Organ Dyn, pp. 5-21.

Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*: 305-360.

Jones E. Frank (1996). Understanding Organizations. A Sociological Perspective. Toronto. Copp Clark. Kerlinger, F. (1956). Foundation of Behaviorial Research, 3<sup>rd</sup>. ed. Harcourt and Brace Co., Orlando, FL. Kotter, J. P. & Heskett, J. L. (1992). *Corporate culture and performance*. New York: Free Press.

Lok, P. Westwood, R. & Crawford, J. (2005). Perceptions of organizational subculture and their significance for organizational commitment. Applied Psychology: An International Review, 54, 490–514.

Louis, M. R. (1983). Organizations as culture-bearing milieux. In L. R. Pondy, P. J. Frost, G. Morgan,&T.C Dandridge (Eds.), *Organizational symbolism* (pp. 39-54). Greenwich, CT: JAI Press.

Map of the Federal Republic of Nigeria https://en.wikipedia.org/wiki/Nigeria

Morgan, G (1986). Images of Organization, Sage Publications, Beverly Hills, CA, US.

Osuoha, C. O. (2000). Cross-cultural leadership styles: A comparative study of U.S. and Nigerian business leaders. (Doctoral dissertation, Nova Southeastern University, 2000). Dissertation Abstract International, vol. 61, issue 12, # AAT9999322.

Ouch, W.G & Wilkins, A.L (1983). Organizational Culture. Annual Review of Sociology, 11, 457-483.

Pettigrew, A. (1979). Studying Organizational Culture. *Administrative Science Quarterly*, 24,570-581. Psychology Press.

Pyrczak, F. (2008). Evaluating Research in Academic Journals: A Practical Guide to Realistic Evaluation (4<sup>th</sup> ed). Glendale, CA: Pyrczak Publishing

Random House. (2002) Geographica: The complete Atlas of the world, "Nigeria".

Rogers, E. M, (1966). Physics for the Inquiring Mind. Princeton University Press, Princeton, NJ, 1966

Schein, E. H. (1990). Organizational culture. American Psychologist, 43 (2), 109-119.

Schein, E. H. (1995). Organizational culture. Campus Verlag, Frankfurt/New York.

Smircich, L., & Calas, M. B. (1987). Organizational culture: A critical analysis. In F. Jablin, L. Putnam, K. Roberts & L. Porter (Eds.), <u>The handbook of organizational communication</u> (pp. 228 - 263). Beverly Hills, CA: Sage.

Stinchcombe, A. (1965). Social structure and organizations. In J. G. March (Ed.), *Handbook of organizations*. Chicago: Rand McNally.

Trice, H.M. & Byer J.M (1992). The Cultures of Work organization. Englewood Cliff, NJ Princeton Hall.

Trompenaars, F. (1993). Riding the waves of culture: Understanding diversity in global business. Chicago, IL: Irwin.

United States Map by Region

http://www.google.com/imgres?imgurl=http://www.enchantedlearning.com/usa/statesbw/censusregions.GIF&imgrefurl=http://www.enchantedlearning.com/usa/statesbw/regions.shtml&h retrieved from internet on 4/5/2013

Witte K. D. & Van Muijen, J.J (1999). Organizational Culture. Hove, East Sussex, UK.

www.businessdictionary.com/definition/organizationalperformance.html#ixzz2KaKOSkJ M- Retrieved from Internet on 2/11/2013

www.nijacol.com/the-top-ten-tribes-of-nigeria/, retrieved from internet on 4/5/2013

www.nijacol.com/the-top-ten-tribes-of-nigeria/, retrieved from internet on 4/5/2013

Yin, R. K. (2009). Case Study Research: Design and Methods (4<sup>th</sup> ed.). Thousand Oaks, CA. Sage Publications Inc.

Wilkins, A.L. & Ouchi, W.G (1983). Efficient Cultures: exploring the relationship between culture and organizational performance. Administrative Science Quarterly, 28, 461-488.

*Zakaria, Y (1997).* The cultural context of business: A study of firms in northern Nigerian society. Thesis (Ph.D., sociology)--Uppsala University, 1997 (p. 214-218).

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# VALIDATING ORGANIZATIONAL CAPABILITIES IN TERMS OF EXPORT PERFORMANCE: AN EXPLORATORY ANALYSIS BASED ON THE PERCEPTIONS OF MANAGERS IN THE PORTUGUESE FOOTWEAR INDUSTRY

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#### **ABSTRACT**

In this paper, based on the perceptions of managers, the authors seek to identify the most significant organizational capabilities for better performance among Portuguese footwear producers. The analysis is based on the assumption that capabilities are developed through the allocation, accumulation, reconfiguration, refurbishment and leverage of resources and routines to build capabilities that can be used to respond to external changes in the environment. In the study, company directors were invited to assess their business performance and the key variables in the achievement of competitive advantage. The capabilities were derived using factor analysis, and their impact on performance was determined using multiple regression techniques.

Keywords: export capabilities, export performance, RBV, DCA

#### 1. INTRODUCTION TO THE PROBLEM

From an economic point of view, the increase in external demand is now the main tool used to induce growth in the Portuguese economy. External demand must be assumed to be a key strategy for increasing the competitiveness of Portuguese organizations and economy (Agency for Investment and Foreign Trade of Portugal, EPE, 2011). The enhancement or maintenance of organizations' sustained competitiveness through internationalization and, in particular, export, constitutes a challenge and is assumed to be a natural result of the use of integrated business strategies, public programs and theoretical studies.

Value creation and increases in levels of competition can only be achieved using distinctive capabilities, which result from internal processes, based on the management of resources and their inter-relationship with the environment. In this context, two theories provide valuable contributions to the evaluation and validation of resources and processes in order to achieve superior performance: the Resource-Based View (RBV) theory and Dynamic Capabilities Approach (DCA). Resources have been widely explored in the literature related to organizational strategy and occupy a central role in intent and strategic planning. They can be assumed as a source of performance and competitive advantages for organizations (Barney 1991, Wernefelt 1984, Teece, Pisano e Shuen 1997, D. J. Teece 2007). Since 1980, resources have begun to play a vital role in the analysis of business performance (Porter 1979, Porter 1987, Prahalad e Hamel 1990). In recent decades, new concepts have been exposed revealing a dynamic perspective on the management of different types of organizational resources, effects of the environment and its structure as instruments use to gain competitive advantages and create value for organizations.

RBV and DCA cannot be viewed as two separate constructs. They are related and have been used as the basis for the creation of strategic value. In the RBV, the role of asymmetry in resources (and nature) is discussed; the DCA suggests that differences in performance are the result of a firm's ability to accumulate, reconfigure, renew and leverage resources to build capabilities that can be used to respond to changes in the business environment (Eisenhardt e Martin 2000, Winter 2003, Sirmon, Hitt e Ireland 2007). We use these dimensions in the study of internationalization and, in particular, export performance.

Internationalization has been studied in depth. Several issues were validated, such as the processes, stages and forms of internationalization, the degree of internationalization among firms or territories, inducing factors, motivations and constraints on the exporting process and export performance. However,

there are still no substantial steps allowing firms to determine the most valuable resources and activities (routines) in the process of internationalization and, above all, how they can be transformed into capabilities that have a direct impact on performance.

There is no consensus in the literature regarding the importance and impact of different capabilities identified as determinants of export success (Robertson e Chetty 2000). We will assume that dynamic capabilities enhance value generated by firms through the aligning of resources and routines in new strategic processes (Knudsen e Madsen 2002). Identifying exactly what capabilities are can give us with insight into how managers organize their firms in pursuit of competitive advantages. In this sense, an objective of this study is to determine the most valuable capabilities for exporters of the footwear industry and, if possible, their weight and influence in export performance. In the study, we will also assume that capability development can be linked to the exporting stage of each firm. The impact on the firm's performance will be differentiated taking into account the exporting stage or internationalization process.

We believe that by identifying these variables, we will provide additional information and knowledge for decision and policy makers, providing information for the development of new policies and tools for leveraging the performance of the footwear export industry.

This study aims at the identification of key capabilities to be developed by footwear producers. We seek to model the way resources, activities and routines can be combined and leveraged for achieving a better export performance. An exploratory study that bring multiple elements together in capabilities that could explain better performance and greater competitiveness on exports and exporting stages.

#### 2. THEORETICAL CONTRIBUTIONS

The development of exporting capabilities is associated to organizational resources, firms' location, firms' characteristics as age or size, business ties, type of activity and corporate objectives (Leonidou 1998). Leonidou associate firms export behavior and performance to several dimensions: propensity to initiate export operations; degree of commercial aggressiveness in overseas markets; stages of the export development process; and forces stimulating/obstructing export activity. Many studies tried to associate organizational factors with dependent variables measuring aspects of the firm's export activity. According to Leounidou (1998) the most frequent examples are categorization of manufacturing units into exporters and non-exporters; export performance, usually expressed as the ratio of export sales to total corporate sales; and, classification of companies according to their stage of export development process.

Patterson (2004) developed a theoretical model based on the RBV, the Theory of Reasoned Action (TRA) and the Stages of Internationalization approach. According to Patterson "these three theoretical foundations suggest that several categories of constructs need to be incorporated into any model that examines the reasons behind the initial export decision. First, RBV suggests that firm capabilities and competitive factors have been useful in explaining export. Second, TRA suggests that variables related to the attitudes towards the benefits, risks and barriers to exporting must be included. Finally, the stages model suggests individual characteristics and firms experience should also be included".

In the study, the notion of capability occupies a central role. Many researchers discuss capabilities in terms of a black box, rarely defining them and, instead, defining what they can do and their effects (Bitar e Hafsi 2007). According to Bitar and Hafsi, the concept of capabilities with which we are familiar is a paradox. It is always easier to state what a capability is not than to explain what it is. Many researchers describe capabilities as a key element of competitive advantage, but few define capability (Spanos e Prastacos 2004).

To achieve the proposed objectives we have conducted a review to knowledge already produced in the field of export performance measurement, resources, process and capabilities already derived and their relation to the phase of the exporting company.

# 2.1 MEASURING EXPORT PERFORMANCE

Export performance is defined as the result of a company's export activity. It appears to have been established that the multidimensional nature of the construct includes aspects related to effectiveness, efficiency and adaptability between the processes and outcomes (Freeman 2009). Effectiveness will be translated in terms of products and in relation to distinctive competitor paths that can be measured by economic indicators goals. Efficiency is translated by the profitability of the results of export processes. Adaptability is indexed to the contingency perspective of the export process guidance as we respond to opportunities and threats in the market (assumed in a strategic perspective) (Toften e Olsen 2003).

A review conducted in 2000 by Katsikeas, Leonidou & Morgan allowed for the establishment of more than 40 variables to validate export performance. A synthesis of the most significant measures discovered may be examined in figure 1. Export intensity, represented by the ratio of exports to total sales, has been the most common indicator used to measure export performance.

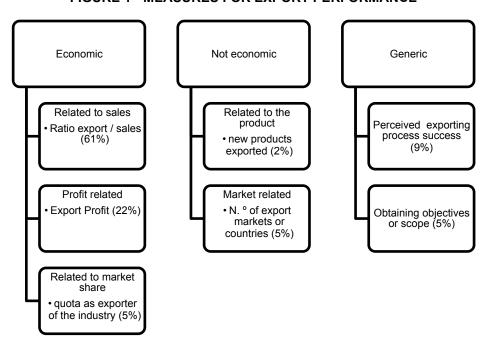


FIGURE 1 - MEASURES FOR EXPORT PERFORMANCE

Source: Adapted from Katsikeas, Leonidou, & Morgan, Firm-Level Export Performance Assessment: Review, Evaluation and Development (2000)

Sousa (2004) analyzed 43 studies related to export performance. He concludes that information is usually collected using questionnaires directed to top managers. The unit of analysis is the firm. The majority of studies use multivariate analysis of data, such as factor analysis, cluster analysis, discriminant analysis, multiple regressions and structural equations. The complexity of the models used to explain export performance was intensified by the use of subjective measures. In the last decade, several authors have begun to use structural equation models. Sousa also validates the growth in the use of subjective measures based on manager perception. Their perceptions are registered on a Likert scale with 5 or 7 points or 10-point scales. These scales address managers' degree of satisfaction with global export performance, overall performance in comparison with competitors, success in export and the fulfillment of expectations, among other aspects. Sousa argues that the use of this measure will capture the richness of the manager's perception of such key strategic elements as market expansion, competitive responses, and degree of market penetration, among other elements. He also makes note of the emergence of studies intended to assess the performance of an organization in comparison with that of the organizations main competitors. This type of approach, based on benchmarking, is presented as a robust

measurement technique because it is easier to evaluate the performance in comparison with a competitor than in absolute terms (Piercy, Kaleka e Katsikeas 1998).

The review made by Freeman (2009) and based on the analysis of 41 studies on export performance allows for the following observations: the method of data collection is based on questionnaires; most studies focus on manufacturing organizations, and half of these were dedicated to a particular industry; most of the firms studied belong to Anglo Saxon countries, Asia and Nordic countries.

# 2.5 TYPES, STAGES OR LEVEL OF EXPORTING EXPERIENCE

The concept is based on the The Uppsala model of internationalization (Johanson e Wiedersheim-Paul 1975, Johanson e Vahlne 1977, 1990). The model suggests that the analysis of capabilities also follows a pattern based on sequential learning. Internationalization is a cumulative process in which relationships are continually established, developed, maintained and dissolved, in order to achieve company goals. The process is based in the concepts of experience and learning. This pattern may be associated with the phase or stage of export.

Westhead (2008) used the term "types" to identify the exporting experience. According the author there is a lack of studies focusing on the reasons for exporting and not exporting reported by "types" of firms with regard to their "state" along the exporting experience spectrum. This concept is similar to the traditional exporting stage. The exporting stage or "the type" of exporting experience is related to the accumulation of resources available to firms and their influence to the propensity to enter foreign markets. Jones and Coviello (2005) have stated that multiple theoretical perspectives need to be considered to study firm internationalization behavior and performance. According to Bell et al. (2003) the internationalization process can be studied from the lens of "states" ("types" or "stages"). The analysis of different exporting stages are critical to policy-makers and has been used to provided support and assistance to "non-exporter", "passive exporter" and "active exporter" firms in UK (Crick 1995). Westhead (2008) identifies four "types" of private SMEs with regard to their "state" along the exporting experience.

According to Gonzalez & Cunha (2012) different stages of internationalization require different functions and different levels of technology and resources. The development of capabilities was associated to the firm exporting stage. Their Study was based on Kraus (2006) internationalization model of Brazilian producer exporter companies. Kraus understands internationalization as "a process that takes place over time, in which the producer and exporter expand his involvement and commitment to international operations." The model, represented in figure 2 state four progressive steps, representing the manufacturer commitment in operations abroad.

. Internationalisation with or without Active investment Pre Active Exporter Passive Exporter Irregular Pre Exporte Non Exporting Company Pre Involvement Active Involvement Committed Involvement Passive Involvement **Emphasis** on Market **Emphasis on Production** 

FIGURE 2. INTERNATIONALIZATION MODEL OF PRODUCER EXPORT COMPANIES

Source: O Processo de Internacionalização das Empresas: O Caso Brasileiro, Kraus (2006)

# 2.3 RESOURCES, ACTIVITIES AND ROUTINES ASSOCIATED WITH EXPORT PERFORMANCE

Success in export activity were linked to resources and routines related to **production**, **technology and innovation**. Problems linked to lack of product design, quality or difficulty in satisfying the requirements imposed by consumers in target markets were associated with the achievement of competitive advantages (Katsikeas et al., 1995). Factors related to product design were correlated with an effort to develop new innovative practices linking exporters and agents (Lim et al., 2003). The positive relationship between exports and the level of R&D and patents has been proven by several authors (Ong & Pearson, 1984; Baldwin et al., 1994; Moine, 1995). According to Lefebvre & Lefebvre (2001), R&D should be viewed as one of the key factors affecting export performance. Camisón & Villar (2009) drives a technological and innovative capability using elements such as product innovation, technology innovation at the process level, level of scientific and technical information and knowledge generated (patents, registrations).

Exporting firms are characterized by the introduction of innovations, technological improvements and equipment upgrading (Julien et al., 1997). Success will include the implementation of structured R&D activities. Export processes in the apparel industry were associated with new product development processes supported by R&D and innovation (Robertson & Chetty, 2000). Kaleka (2002) uses the following variables as elements of product development capability: launch of new products; the improvement or modification of existing products and the adoption of new methods and processes in the production of goods and services as key elements of product development capability. Research and development of new production processes, as well as the ability to introduce new products, are factors that were directly associated with success in the exporting process (Zou et al., 2003) (Lefebvre & Lefebvre, 2001). According to Evers (2011), we can add value to a product by developing R&D capabilities in three operational areas: technology and logistics, new product development, and the development of production processes.

Technological learning strengthens the knowledge that supports the processes of initiation and the development of innovation with regard to product and process. Technological learning can enhance performance through the design of innovative solutions that enable rapid responses to the market (Zahra et al., 2000). Research and development for new production processes, as well as the ability to introduce new products, are factors that were directly associated with exporting success (Zou et al., 2003) (Lefebvre & Lefebvre, 2001).

Export performance was also associated to capabilities linked to relational dimension, market knowledge, sales and marketing. According Julien et al. (1997) exporting companies share some similarities in terms of their behavior and abilities. One similarity involves a commitment to the differentiation of their products and the diversification of their portfolio. Robertson & Chetty (2000) associate product differentiation, and marketing aggressiveness with export performance. Diversification strategies based on brand management, product ownership, distribution agreements and networking have been positively related to export performance. Product reputation, investment and brand recognition were some of the factors derived from the study presented by Belso-Martinez (2006). He also associated product differentiation in terms of marketing to export performance. In the construct of distinctive capability, in exporting, Camisón & Villar (2009) use factors such as brand, access to the distribution network, customer service, and market knowledge and delivery time as key elements of commercial capability. Diversification and product portfolio were also associated with an increase in export processes (Killen et al., 2008). Katsikeas (1994), Julien et al. (1997). Lefebvre & Lefebvre (2001) mentioned other authors who also validated the importance of this element to export performance (Namiki, 1988; Depelteau and Denis, 1985; Markides, 1995). The existence of an extended line of products and services and their development were included as variables in the study of Chetty & Robertson (2000). They use the concept of commercial aggressiveness and the exploitation of open and informational channels between agents and distributors. Correct dealer identification, distribution channels and logistics may enhance the reduction of transaction costs and the maximization of market knowledge (Katsikeas et al., 1995). Zou et al. (2003) highlight the role of capabilities in distribution as a key to export performance. Knowledge of logistic systems, proximity to the customer / distributor and service support were some of the factors listed in their study.

The use of the Internet reduces the impact of geographic distance to negligible levels. Prasad et al. (2001) shows that the internet is a powerful moderating variable for developing skills in marketing. It is positively correlated with export performance of firms.

Katsikeas et al. (1995) refer to the problems associated with the loss of competitive advantage linked to public policies for the promotion of exports and its degree of use by companies.

Processes associated with the **development and integration of resources (human and financial) and learning** were also considered relevant to the development of exporting capabilities. The availability of qualified personnel and experts in the export process were the factors listed by Katsikeas et al. (1995) as needed for competitive performance. Westhead (2008) identifies the level of qualification of human resources as being beneficial to export success. Camisón & Villar (2009) resorted to factors such as worker qualification, motivation, level of integration in the firm and internal communication. According to Julien et al. (1997), the development of firms export capabilities are connected to the development of its human resources. Lim et al. (2003) emphasizes the role of managing and team building and its correlation to an effort to develop new innovative practices linking exporters and agents in its value chain. Ruzzier et al. (2007) validate the role of human capital in the internationalization of SMEs. They identify several factors positively associated with internationalization processes. They highlight the role of education as an engine for achieving competence. They argue that management and leading capabilities are connected to the Manager's know-how and are linked to concepts such as motivation, leadership, team building, negotiation skills and level of industry knowledge.

The planning of export activity at a commercial and marketing level has been defined as critical to adaptation to the requirements of different markets (Morgan et al. 2003). Göçer & Karadeniz (2007) associated, positively and significantly to the intensity of exporting firms, the level of planning. Market study, planning processes and the adjustment of products / services were considered essential to the success of the internationalization process (Martinez, 2007). Julien et al. (1997) refer to the importance of the information system (market information), distinguishing among goals, and sources of information, programs, activities and methods to promote access to markets. Problems associated with a lack of knowledge and market information may inhibit the development of processes, regulating the type of market entry (Katsikeas & Morgan, 1998). Market study, planning, and product adaptation were considered essential to internationalization success (Martinez, 2007).

Problems linked to the cost of capital for financing exports, the inability to self-fund and difficulty in accessing debt capital were problems associated with the achievement of competitive advantages (Katsikeas et al., 1995). Financial constraints and the inability to access and use external funds constitute a strategic barrier that can limit firms' development of export capabilities (Westhead, 2008). Westhead also developed an "organizational capability" based on factors such as workers' qualification and motivation, level of integration in the organization and internal communication. In the managing process, HR assessment is critical to export success.

During the internationalization process, firms will cover several difficulties: a reduction in financial capacity, imperfect information and barriers to entry imposed by other companies or governments. In response to these limitations, organizations base their business strategy on two levels: commercial agreements and strategic alliances with domestic companies (networking) and dependence on intermediaries (distributors or subcontracting agents) to increase their exports (Ortiz & Ruiz-Carrillo, 2005). Aspects such as adaptation, commitment, communication, cooperation and trust are revealed as essential to building relationships that enhance exporting value for all parties. Differentiation in the relationship is a source of competitive advantage and enhances export performance (Ural, 2009).

Kaleka (2002) also features a capability indexed to the supplier relationship that includes factors such as developing and maintaining strong relationships with suppliers and identifying sources of supplies. The relationship with suppliers was positively and significantly associated with the dimension of advantages in terms of costs and negatively with the extent of the product and service. A strong relationship and an attitude of sharing between intermediaries in the export process are also factors listed as relevant to the acquisition of differentiated capabilities in exporting (Morgan et al., 2004). Close relationships with

suppliers and their integration with capability were named as a supply network capability by Belso-Martinez (2006). International learning includes designing processes, developing and maintaining collaborative relationships with customers, suppliers and partners with respect to export processes (Rodriguez et al., 2010). Top manager involvement and commitment are also considered determinants in the export process (La, Patterson & Styles, 2005) (Martinez, 2007).

In the study, the data gathering was based on a questionnaire in which we grouped resources and activities identified in the literature review and positively associated with export performance. The items included in the questionnaire were grouped into the following groups of constructs:

- A Capabilities related to production, technology and innovation;
- B Capabilities linked to relational dimension, sales and marketing, and;
- C Capabilities associated with organizational dynamics and learning (the development and integration of resources). scope of the study, conceptual framework, hypotheses AND RESULTS

# 2.4 SCOPE OF THE STUDY AND CHARACTERISTICS OF THE PORTUGUESE FOOTWEAR INDUSTRY

The scope of the study and its application was limited to the footwear sector, including only footwear producers. The national statistical report of the structural and profile characterization of exporting SMEs in Portugal for the period of 2007-2009 (INE - Instituto Nacional de Estatística 2011) has revealed substantial differences between exporting and non-exporting SMEs. In 2009, only 10% of Portuguese firms were engaged in exporting, but they share some distinguishing characteristics. They represent 28% of employment, which indicates a higher dimension in terms of the number of employees, 40% of business volume and 34.6% of Gross Value Added. Exporting firms have exhibited greater efficiency in production. Exporting firms are characterized by improved financial solvency ratios and financial autonomy (in 2009, these aspects were measured as 0.47 and 0.32, respectively). In 2009, Portuguese SMEs are concentrated in the regions of Lisbon and the North of Portugal, representing 66% of all Portuguese SMEs. SMEs based in northern Portugal have greater weight in terms of national export. In 2009, 33.861 SMEs were exporting goods, accounting for 44.6% of the national value of exports, which represents 31.725 million euros. The major market for Portuguese SMEs' exports remains the EU, accounting for 76.1% of exports in 2009. The primary groups of products exported by Portuguese SMEs between 2007 and 2009 were machines and equipment, clothing, base metals, agricultural products and footwear. However, in disaggregated terms, according to INE data, the primary product exported was footwear. This fact is the primary reason for selecting footwear manufacturing firms in this study. Other factors also influenced the choice of the footwear sector; its growth in 2010, the reputation of Portuguese footwear worldwide and the degree of industry concentration in the districts of Porto and Aveiro (thus facilitating communication with the always difficult "actors" of the market).

The effort to recognize the most valuable capabilities in the internationalization of Portuguese footwear manufacturers involves a reduction of the complexity produced by the vast number of variables and factors, identified by investigators, experts and business leaders as being directly related to the performance of exporting firms (Leonidou e Spyropoulou, An analytical review of the factors stimulating smaller firms to export - Implications for policy-makers 2007, Sapienza, et al. 2006, Whitelock 2002, Zeng, et al. 2008, Morgan, Kaleka e Katsikeas 2004, Rodriguez, Martinez e Wise 2010).

In the absence of modelled structures that allow us to use a confirmatory technique using structural equations (applied to the footwear industry), we chose to use an exploratory analysis that seeks to identify the underlying dimensions, understood as organizational capabilities, in an attempt to determine which elements are the most influential or the most significant with regard to export performance.

The capabilities were derived using a factor analysis (FA). The weight of each capability on export performance was validated using regression analysis. As the performance variable, we used a generic the concept of competitive performance in exports.

### 2.5 OBJECTIVES AND HYPOTHESES OF THE STUDY

This study aims at the identification of key capabilities to be developed by footwear producers. We seek to model the way resources, activities and routines can be combined and leveraged for achieving a better export performance. An exploratory study that bring multiple elements together in capabilities that could explain better performance and greater competitiveness on exports and exporting stages.

Major hypothesis: The multiplicity of resources, activities and routines, traditionally associated with export performance, can be configured in capabilities and associated with export success and increase in the competitiveness of Portuguese companies exporting footwear.

## The hypothesis:

- H1. Each capability, found thought the factorial analysis, has a positive and significant effect on the performance of exporting firms;
- H2. The relative importance of each capability on performance varies with characteristics or behaviors of the firms:
- H2a. The relative importance of each capability on performance varies with the internationalization process or stage, namely by the involvement in external markets by the use of Foreign direct investment;
- H2b. Capabilities are differentiated as a result of access and use of instruments and export incentives provided by external agents

## 2.6 STUDY UNIVERSE, SAMPLE SELECTION AND METHODOLOGY

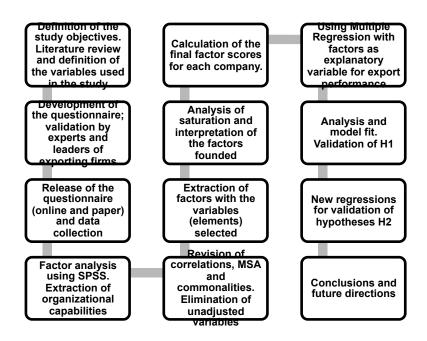
The study was based on a questionnaire built on elements identified in the literature as significant to the explanation of export performance. The phases and process defined and used in the study are provided in Figure 3. The questionnaire was made available to top managers in the footwear industry, AICEP (government export agency) technicians and other export agents, who validated the importance of the elements listed to the process and export promotion. Based on the assumptions made, the questionnaire includes firm data characterization and the following elements:

- The evaluation of the position of each company in the exporting process (exporting stage);
- The perception of export performance revealed by the managers and a set of items to validate the consistency of their responses.
- A set of resources, activities and routines validated in the literature as being important for the development of export capabilities.

The number of companies engaged in the manufacture of footwear in Portugal is of 1.375, 1.088 of which are located in the districts of Porto and Aveiro (source: Informa D&B database, consulted on 19.12.2011). The concentration of the industry in a homogeneous geographic area minimizes the impact that uncontrolled variables may have in the study (Hurtado 2003); thus, in our analysis, we limit the firm scope to the districts of Oporto and Aveiro (located in the North of Portugal).

Resources, activities and routines identified in the literature review were available for evaluation in the questionnaires. The information is available in Table 2 and grouped by construct.

FIGURE 3 - RESEARCH PROCESS PHASES



Source: Prepared for the study

Table 1 summarizes the technical aspects of the fieldwork, major characteristics of the sample used, data analysis and techniques employed in the study.

**TABLE 1 - TECHNICAL ASPECTS OF RESEARCH** 

Unit of analysis	Firm
Population studied	SMEs CAE 15201 - Manufacture of footwear
Information sources	Principal: survey   Secondary: Full and financial reports obtained from Dun & Bradstreet
Geographic scope	Portugal - Porto and Aveiro Districts
Sample size	101 Validated questionnaires representing 7.2% of the national population and 9.3% of the study population
Fieldwork	Conducted between February and November 2011
Questionnaire	Distributed to top managers, based on their perceptions. Based on closed questions and validated with experts and <i>stakeholders</i>
Data analysis and techniques employed	Frequency analysis, contingency tables, ANOVA, factor and regression analysis
Software used	IBM SPSS Statistics 20; Gretl 1.9.6

Source: Elaborated by the authors

TABLE 2 - ITEMS LISTED IN THE QUESTIONNAIRE AND EVALUATED BY MANAGERS

		NAINE AND EVALUATED BY MANAGERS
Item used (process, activity, routine that can enhances competitive advantages and export performance)	Construct association	Source
Product design		Katsikeas, Pierce & Ioannidis (1995); Lim, Sharkey & Heinrichs (2003)
Industrial property (registration and protection of patents and product design)		Moini (1995); Lefebvre & Lefebvre (2001); Camisón & Villar (2009)
Product differentiation		Julien, Joyal, Deshaies & Ramangalahy (1997); Robertson & Chetty (2000); Belso-Martinez (2006)
Research and development of new products	А	Julien, Joyal, Deshaies & Ramangalahy (1997); (Lefebvre & Lefebvre (2001); Kaleka (2002); Zou, Fang & Zhao (2003); Morgan, Katsikeas & Kalega (2004); Camisón & Villar (2009); Evers (2011)
Use of new materials in product development		Introduced by the authors
Research and development for new production processes		Julien, Joyal, Deshaies & Ramangalahy (1997); Lefebvre & Lefebvre (2001); Zahra, Ireland & Hitt (2000); Kaleka (2002); Zou, Fang & Zhao (2003); Camisón & Villar (2009); Evers (2011)
Effective presence on the Internet		Prasad, Ramamurthy & Naidu (2001)
Direct access (without intermediaries) to distribution channels and sales in foreign markets		Katsikeas, Pierce, & Ioannidis (1995); Robertson & Chetty (2000); Morgan, Zou, Vorhies & Katsikeas (2003); Zou, Fang & Zhao (2003); Camisón & Villar (2009)
Development and management of trademarks and brand		Lim, Sharkey & Heinrichs (2003); Belso-Martinez (2006); Camisón & Villar (2009)
Integration and participation in international exhibitions/events and public programs to promote industry	В	Julien, Joyal, Deshaies & Ramangalahy (1997); Katsikeas, Pierce & Ioannidis (1995)
Development and management of extended product portfolio		Katsikeas (1994); Julien, Joyal, Deshaies & Ramangalahy (1997); Robertson & Chetty (2000); Lefebvre & Lefebvre (2001); Killen, Hunt & Kleinschmidt, (2008); Evers (2011)
Access to information on target markets, business processes and legal conditions for access		Katsikeas, Pierce & Ioannidis, (1995); Katsikeas & Morgan (1998); Robertson & Chetty (2000); Kaleka (2002); Morgan, Kalega & Katsikeas (2004); Martinez (2007); Evers (2011)
Experience of the Directors and Managers of the firm		Katsikeas, Pierce, & Ioannidis (1995); Morgan, Katsikeas & Kalega (2004); Ortiz & Ruiz-Carrillo (2005); Martinez (2007); Ruzzier, Antončič, Hisrich, & Konecnik (2007)
Increase in the education level of the organization's human resources		Westhead (1995); Katsikeas, Pierce, & Ioannidis (1995); Camisón & Villar (2009); Westhead (2008).
Export process planning (before entry into a given market or country)	С	Katsikeas & Morgan, (1998); Morgan, Zou, Vorhies & Katsikeas (2003); Karadeniz & Göçer (2007); Martinez (2007)
Ability to access external funding		Li & Ogunmokun (2001); Kaleka (2002); Katsikeas, Pierce & Ioannidis (1995); Westhead (2008); Makasure, Henson & Cranfield (2009); Freeman (2009)

Assessment/evaluation of human resources' performance	Camisón & Villar (2009)
Access to and development of cooperation networks within firms in the industry (partnerships between competitors)	La, Patterson & Styles (2005); Ortiz & Ruiz- Carrillo (2005); Freeman (2009); Ural (2009); Rodriguez, Martinez & Wise (2010); Evers (2011)
Development and training of human resources	Freel (2000); Wethead (1995); Lim, Sharkey & Heinrichs (2003); Camisón & Villar (2009); Julien, Joyal, Deshaies & Ramangalahy (1997); Ruzzier, Antončič, Hisrich & Konecnik (2007)
Motivation, leadership and management of workgroups (team building)	Ruzzier, Antončič, Hisrich & Konecnik (2007); Camisón & Villar (2009)
Greater engagement between the firm and suppliers	Morgan, Kalega & Katsikeas (2004); Kaleka (2002); Belso-Martinez (2006); Rodriguez, Martinez & Wise (2010)
Management commitment. Vision, goals and strategic plan defined and disseminated by the organization	La, Patterson & Styles (2005); Martinez (2007)

Source: Prepared for the study

## 2.7 FACTOR ANALYSIS RESULTS

The first stage was dedicated to the analysis of the factors listed as relevant to the development of capabilities and validation of their weight and nature in the global export process. Table 3 show the results obtained in the factor analysis.

TABLE 3 - RESULTS OF FACTOR ANALYSIS: FACTOR LOADINGS, VARIANCE AND TESTS

Variables			Factor	loadings		
Valiables	1	2	3	4	5	6
Use of new materials	, 841					
Research and development of new production processes	, 799					
Research and development of new products	, 773					, 320
Greater engagement between the firm and suppliers	, 757					
Development and management of extended product portfolio		, 677	, 360			
Motivation, leadership and management of workgroups (team building)		, 673				
Experience of the Directors and Managers of the firm		, 660		, 453		
Export process planning (before entry into a given market or country)		, 611			, 338	
Management commitment. Organization's vision, goals and strategic plan defined and disseminated by the organization		, 546				
Industrial property (registration and protection of patents and product design)			, 740			
Effective Internet presence			, 705		, 313	
Development and management of trademarks and brand			, 665			, 361
Integration and participation in international exhibitions/events and public programs to promote industry		, 369	, 638			
Ability to access external funding				, 676		

Increase in the education level of the organization's human resources				, 627		
Development and training of human resources		, 334		, 614		
Assessment/evaluation of human resources' performance		, 387		, 461		
Direct access (without intermediaries) to distribution channels and sales in foreign markets					, 693	
Access to and development of cooperation networks within firms in the industry (partnerships between competitors)	, 321				, 651	
Access to information on target markets, business processes and legal conditions for access	, 492				, 454	
Product design			, 389			, 625
Product differentiation						, 615
% Variance explained	16,063%	13,396%	11,815%	10,617%	8,746%	6,584%
Cumulative % variance explained	16,063%	29,459%	41,275%	51,892%	60,638%	67,221%
Statistical Test	кмо:	0.810	Bartlett	's Test:	775.571	Sig.0.000
Reliability factors (Cronbach's alpha)	0.868	0.789	0.73	0.716	0.664	0.684
Items per factor	4	5	4	4	3	2
Reliability of all variables			0.0	394		

Source: Prepared for the study

The analysis of the correlation matrix of the items revealed the existence of weak correlations between some variables. The variable elimination process was based on correlations and their significance tests. During this process, the communality values obtained using extraction after rotation was also used to eliminate some items. In the model presented, variables with commonality values below 0.6 were rejected (Maroco 2010). The elimination of some variables was a natural process affected by the number of items valued by managers according to the questionnaire and by the number of observations in the sample.

Principal Components was the factor method of extraction used. The extraction of factors was based on the Eigenvalues obtained. By default, the method only considers valid factors with eigenvalues greater than 1. The method of orthogonal rotation chosen was the Varimax. The results are provided in table 3. The Keiser-Meyer-Olkin test (KMO) provided a value of 0.810, indicating that the analysis should be considered good and perfectly executable. The Bartlett test provides a value less than 0.01 (Sig. = 0.000), leading to the conclusion that the variables are correlated (rejecting the null hypothesis). The dimension reduction technique allowed for the grouping of 22 elements into six primary components (in our study, understood as capabilities) with eigenvalues greater than 1. The six factors obtained explain more than 67% of the variance of the information. The proximity of the variance explained by each factor found must be remembered. The results obtained using the Cronbach's reliability test confirm that all components are consistent. The reliability of factors 5 and 6 can be questioned, but we must emphasize that its value was affected by the reduced number of variables that compose the factor (Maroco e Garcia-Marques 2006).

Given the number of factors to be extracted, we performed a compositional analysis of the saturation factor to assign a meaning to the capabilities identified and associated with performance among firms in the footwear industry. We identify each factor with the following capabilities:

**Capability 1** (16.063% of the total variance): **Management and innovation in the production process.** Reflects a clear concern for productive capability and covers the aspects related to product manufacturing and processing. Value *inputs* such as new materials, production processes, development and innovation in product and process.

**Capability 2** (13.396%): **The organization's direction and strategic alignment.** Interpreted as the skills and experience of top management. Modelled by the allocation, integration and development of organizational resources. Reflects a combination of variables constructed on the ability of managers, leadership, strategic planning and the organization of the export process.

**Capability 3** (11.815%): **Promotion and development of brand and product image.** Includes variables such as brand development, trademark protection, design, patents, exploitation and improvement of commercial channels, and the dissemination of product portfolio.

**Capability 4** (10.617%): <u>Financial and human resource management.</u> This capability consists of processes linked to the ability to access external financing and the development, assessment and evaluation of the organization's human resources.

**Capability 5** (8.746%): **Distribution channel development and control.** This capability consists of processes linked to the study of foreign markets and direct access. The capability includes the development of partnerships and collaborative networks.

Capability 6 (6.584%): Design and product differentiation.

After validation of the capabilities and their influence in successful exporting processes, we will confirm the weight of each on the firms' export performance.

### 2.8 THE MEASURE OF EXPORT PERFORMANCE USED IN THE STUDY

In the study, the variable used to measure export performance has a subjective nature, and it was based on the manager's perception. We asked managers to assess the performance of their organization in terms of its performance compared to its competitors. The performance, understood in terms of a competitive perspective, becomes a broad and multidimensional concept, complex in its definition and extremely difficult to measure (Dess e Robinson 1984). The addition of the word "competitive" is intended to explain that the valuation was performed on a comparative basis, using benchmarking with regard to competition. This assessment was conducted based on the dimensions of competitive performance and subsequently validated using a battery of items. The goal is to provide greater consistency to the assessment made by managers. We regressed the global assessment made by the managers with a set of items that the literature positively associated with competitive performance.

Building on the work of Karjewski & Ritzman (2001), we define a range of items to validate different dimensions of competitive performance. Competitive orientation has been defined as a set of structural decisions that emerge from the company's corporate strategy and the requirements imposed by customers (Rosenzweig, Roth e Dean 2003). The use of 4 generic dimensions to support market competition has traditionally been accepted by the academic community (Ward, et al. 1998):

- Cost: associated with labor and productivity, material, equipment, and operating and productive costs;
- Quality: defined as the set of characteristics of the product or service and its role in customer satisfaction. Incorporates concepts such as product performance, reliability and compliance of the product or service;
- Flexibility: based on the needs and requirements imposed by the client. Can be analyzed as the ability to readjust manufacturing in response to increases in market demand;
- Time: involves the aspects related to the operationalization of the value chain, reflected in the ability to deliver products on time or meet the planned cycles.

In recent years, new studies have been conducted to align the competitive priorities of manufacturing firms, and new dimensions have been linked to the achievement of competitive advantages. Islam and Karin (2011) suggest six competitive dimensions: price, quality and reliability, delivery, flexibility (in terms of design and production capability), company reputation and customer relationships. Vachon et al. (2009) introduced interaction with suppliers as a competitive priority. In their study, they identify cost

management, price / quality relation, production flexibility, production and logistics as forming a competitive dimension. Innovation at both the product and the process levels has also been referenced as a source of competitive advantages (Marques e Ferreira 2009).

More recent studies suggest that these competing priorities can be readjusted in two key dimensions: efficiency and responsiveness (Islam & Karim, 2011). The term efficiency refers to competition based on cost, waste management and disposal of all operations that add no value to the product. Responsiveness is referred to as the ability to respond to changing market conditions. Responsiveness reflects dynamic response, reactive capability and business agility to respond to changes in market demand.

Bearing in mind the potential difficulty of assessing the firm's comparative performance, in the questionnaire, a set of items was defined to ensure the validity of the valuation developed by managers. These items include the perception of managers regarding the competitive dimensions related to price, cost, product differentiation, innovation, flexibility, compliments of deadlines and the customer relationship. The purpose of using these items was to prove the reliability of the manager's perception with regard to the manner in which manager validates the performance of his firm. After the validation of the competitive elements presented, we asked the managers to validate the performance of their firms. We used a scale of 0 to 10 points, which has the following meaning: 0 – My firm's performance has been worse than that of the firms competing in the market; 10 - My firm's performance is better than that of the competition. The use of a 10-point scale was intentional. The association with a metric 10 base allows the manager to have better interpretative aptitude (Dowes 2008). Considering the volatility of this indicator, we use regression analysis and its coefficient of determination (R2) to certify the adjustment between the global valuation of competitive performance and the level of agreement revealed in a battery of statements concerning the practices of the organization with regard to specific competitive factors presented in the questionnaire. The R is 0.802, and the R2 is 0.644, rendering the dependent variable (competitive performance) more robust and reducing the degree of subjectivity that a variable based on the perception usually reflects.

# 2.9 VALIDATION OF THE IMPACT AND RELATIONSHIP BETWEEN CAPABILITIES AND PERFORMANCE

The specified model is defined as follows:

$$PC_{i} = \beta_{1} + \beta_{2}C1_{i} + \beta_{3}C2_{i} + \beta_{4}C3_{i} + \beta_{5}C4_{i} + \beta_{6}C5_{i} + \beta_{7}C6_{i} + \varepsilon_{i}$$

, where:

 $PC_i$  - Is the dependent variable and reflects the performance measured by the competitive performance of the firm ;

 $C1_i$ ;  $C2_i$ ;  $C3_i$ ;  $C4_i$ ;  $C5_i$ ;  $C6_i$  represents the score (computed using factor analysis for each firm) for capability 1 - Management and innovation in the production process; C2 - The organization's direction and strategic alignment; C3 - Promotion and development of the brand and product image; C4 - Financial and human resources management; C5 - Distribution channel development and control; C6 - Design and product differentiation.

Expected signs and relation:  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ ,  $\beta_5$ ,  $\beta_6$ ,  $\beta_7 > 0$ . Considering the hypothesis formulated capabilities are expected to have a positive effect on the performance of exporting firms.

Summary Model R Square Adjusted R Square Std. Error of the Estimate Durbin-Watson R 780<sup>°</sup> .608 .574 1.260 1.692 Predictors: (Constant), C6, C4, C5, C3, C2, C1 Dependent Variable: Competitive Performance ANOVA<sup>a</sup> Sum of Squares Model df Mean Square F Sig. 18.099 .000<sup>b</sup> Regression 172.339 6 28.723 1 111.090 Residual 70 1.587

**TABLE 4 - RESULTS OF THE ESTIMATION** 

	Total	283.429	9	76									
	a. Dependent Variable: Competitive Performance												
	b. Predictors: (Constant), C6, C4, C5, C3, C2, C1												
			Coe	fficients									
	Model		dardized cients	Standardiz Coefficier		Sig.	Collinearity	Statistics					
		В	Std. Error	Beta			Tolerance	VIF					
	(Constant)	6.058	.144		42.061	.000							
	C1	1.374	.150	.688	9.158	.000	.993	1.007					
	C2	.440	.146	.226	3.008	.004	.994	1.006					
1	C3	298	.145	154	-2.058	.043	.995	1.005					
	C4	.315	.142	.165	2.211	.030	1.000	1.000					
	C5	.290	.143	.152	2.026	.047	.999	1.001					
	C6	142	.142	075	998	.322	1.000	1.000					
		a. Depend	lent Variable:	Competitive	Performance								

Source: Developed for the study

The results provided in table 4 reveal a coefficient of determination of 0.608, attesting that 60.8% of the total variation in performance is explained by the capabilities used in the model. As the analysis is based on perceptions, the indicator reflects an acceptable adjustment (Maroco, 2010).

The multicollinearity problem does not exist because the factors are orthogonal and able to explain the structure of inter-correlations between the variables.

The individual significance tests reveal the existence of an explanatory variable that is not significant.

$$H_0$$
:  $B_j = 0$   $j = 2,3,4,5,6,7$   $H_1$ :  $B_j \neq 0$   $To \ accept \ H_0$ :  $\frac{\hat{\beta}_j}{\hat{\sigma}_{\widehat{\beta}_j}} \sim T_{(N-k)}$ 

**TABLE 5 - INDIVIDUAL SIGNIFICANCE TESTS** 

Parameter / Variable	Observed Statistical Test	P- value	Comments				
C1	9.158	0.000	Individually significant for a significance level of 1%				
C2	3.008	0.004	Individually significant for a significance level of 176				
C3	-2.058	0.043					
C4	2.211	0.030	Individually significant for a significance level of 5%				
C5	2.026	0.047					
C6	-0.998	0.322	Individually not significant to a level of significance of 5%				
Co	-0.990	0.322	(p-value <0.05, implying <b>no rejection</b> )				

Source: Prepared for the study

The analysis provided in tables 4 and 5 demonstrates that variable C6, capability Design and Differentiation, is not significant, and it will be removed from the model.

Global significance test of the model

$$H_0$$
:  $B_2=B_3=B_4=B_5=B_6=B_7=0$  
$$j=2,3,4,5,6,7$$
 
$$H_1$$
:  $\exists B_j\neq 0$  
$$To\ accept\ H_0$$
:  $\frac{MS\ Regression}{MS\ Residual}\sim F_{(k-1;N-k)}$ 

The sample value of the F statistic is equal to 18.099, and the p-value = 0.000. As the p-value <0.01, we can reject Ho. There is statistical evidence that the estimated model is globally significant at a significance level of 1%.

We used the White heteroscedasticity test to determine whether the presence of a strong dispersion of data around the model regressed. The test, performed using the software Gretl, demonstrated no statistical evidence of heteroscedasticity. The R2 of the auxiliary equation was 0.366854, with a statistic test value of 28.247759 and a p-value of 0.398285. Therefore, we will not reject the null hypothesis, validating the assumption of homoscedasticity and ensuring that the estimated data are homogeneously dispersed and more concentrated around the regression model.

The absence of autocorrelation was validated using the Durbin-Watson (DW) test.

The coefficients of capability C3 - Promotion and development of the brand and product image and C6 - Design and product differentiation present a negative sign, indicating a negative affectation of these variables on firm performance. The affectation is different from that expected and will be analyzed in the adjusted model; no changes are expected in the model.

**TABLE 6 - ADJUSTED MODEL** 

	Summary												
Mod	el	R	R Squar	e Adjuste	e Adjusted R Square			Error	of the Es	stimate	Durb	oin-V	/atson
1		.776 <sup>a</sup>	.602		.574			•	1.260			1.67	'6
				a. Predict	ors: (C	onsta	nt). C5	5. C2, C	C4, C3, C	21			
			b	. Depende	nt Vari			etitive F	Performa	ince			
						AN	OVA <sup>a</sup>						
		Model		Sum of So	uares		df	Mear	า Square	<b>;</b>	F		Sig.
		Regr	ression	170.75	59		5	3	4.152	21	.521		000p
1		Res	sidual	112.67	70	7	71	1	.587				
		T	otal	283.42	_		76						
			a	ı. Depende									
				b. Predict	ors: (C	onsta	nt), C5	i, C2, C	C4, C3, C	C1			
						Coef	ficients	i					
		Mode	l	Unstan	dardize	ed S	Standa	rdized	t	Sig.	Co	lline	arity
				Coeff	icients		Coeffic				S	tatist	ics
				В	Std. E	rror	Ве	ta			Tolera	nce	VIF
		(Cons	stant)	6.057	.14	4			42.059	.000			
		С	:1	1.374	.15	0	.68	38	9.162	.000	.993	3	1.007
1		С	2	.440	.14	6	.22	26	3.009	.004	.994	1	1.006
'		С	:3	298	.14	5	154		-2.057	.043	.995	5	1.005
		С	:4	.315	.14	2	.16	35	2.211	.030	1.00	0	1.000
		C	5	.291	.14	3	.15	52	2.030	.046	.999	9	1.001
			a	a. Depende	nt Vari	able:	Compe	etitive F	Performa	nce			

Source: Prepared for the study

In the adjusted model (elimination of capability design and product differentiation), illustrated in table 7, the R² passes from 0.608 to 0.602. Note that the elimination of a variable does not imply loss in the model adjustment, which continues to be considered acceptable.

Individual significance tests did not alter the structure expressed in the previous analysis, revealing that the explanatory variables may be considered significant: C1 and C2 have a significance level of 1%, and C3, C4 and C5 have a significance level of 5%.

The global significance of the model is maintained, and the homoscedasticity, as well as the absence of autocorrelation, is also validated.

#### 3.VALIDATION OF THE HYPOTHESES

**H1:** Each capability validated has a positive and significant effect on the performance of exporting firms.

TABLE 7 - PERFORMANCE OF THE FIRMS EXPLAINED BY THE CAPABILITIES EXTRACTED

Explanatory Variables (Capabilities)	В	β	%	t	Sig
C1	1.374	0.688	0.497	9.162	0.000
C1	0.44	0.226	0.163	3.009	0.004
C3	-0.298	-0.154	0.111	-2.057	0.043
C4	0.315	0.165	0.119	2.211	0.030
C5	0.291	0.152	0.110	2.03	0.046
F - Global Significance - Statistics	21.521	Sig = 0.000			
R.	0.776				
Rsquare	0.602				

Source: Developed for this study

Hypothesis 1 was not validated. The coefficient of capability C3 - **Promotion and development of the brand and image of the product** is negative and can be verified in table 7. The affectation is different from expected and can be explained by the relationship of the dependence of most Portuguese footwear producers on the subcontracting process, the lack of investment in product portfolio promotion and the absence of distribution channel exploitation. The analysis of the firms' advertising spending in the sample is presented in the table 8 below. The data analysis leads us to the conclusion that spending on advertising and marketing (corporate communication and promotion) may be associated with a relation based in subcontracting production or dependence on trade agents that control the distribution channels. The analysis of the firms' internet presence revealed that 65% do not have a web site or a registered domain.

TABLE 8 - EXPENDITURES ON ADVERTISING AND MARKETING FOR FIRMS IN THE SAMPLE

N	Validates	95
IN.	Missing	6
Average		€ 16,353.94
Median		€ 700.00
Mode		00.
Standard Dev	viation	€ 44,877.99
Minimum		00.
Maximum		€ 343,591.23
	25	€ 35.00
Quartiles	50	€ 700.00
	75	€ 9,923.39

Source: Developed for this study based on 2009 financial reports in the Informa D&B database.

The weight of capabilities follows the variance achieved in FA; however, the relative importance of the variable management and innovation in the production process becomes higher, representing

approximately 50% of the explanatory magnitude in the regression model. The remaining variables, in descending order of importance, are as follows: the organization's direction and strategic alignment; financial and human resource management; the promotion and development of brand and product image and, finally, the distribution channel development and control.

The relative importance of each capability on performance varies with the internationalization process or stage, namely by the involvement in external markets by the use of Foreign direct investment

To validate whether the relative importance of each capability on performance varies with the internationalization process or stage, we use a dummy variable -Foreign direct investment (FDI) – in an attempt to identify differences in behaviors based on the use of FDI. To assess H2a – that capabilities are differentiated by the stage of internationalization - we ran the multiple regression using the FDI variable as a control variable. The results can be analyzed using the table 9.

TABLE 9 - REGRESSION RESULTS FOR PERFORMANCE USING FDI AS A CONTROL VARIABLE

Explanatory	E	3	f	3	Weigl	nt (%)	Sig	
Variables								AU_FD
(Capacities)	NU_FDI	AU_FDI	NU_FDI	AU_FDI	NU_FDI	AU_FDI	NU_FDI	ı
C1	1.290	1.571	.648	.770	41.8%	65.3%	.000	.001
C1	.449	.478	.223	.265	14.3%	17.1%	.010	.110
C3	434	.300	237	.131	15.2%	8.4%	.007	.446
C4	.386	359	.226	- 131	14.5%	8.4%	.009	.427
C5	.391	349	.220	- 144	14.2%	9.3%	.012	.379
F - Global								
Significance -	21.521	21.521						
Statistics	Sig = 0.000	Sig = 0.000						
Sample								
R.	0.794	0.85						
Rsquare <sup>2</sup>	0.631	0.723						
	Note: A	.U_FDI - alrea	dy-used Fl	DI; NU_FD	I - never us	sed FDI		

Source: Developed for this study

The results are conditioned by the sample and the small number of firms that have used FDI during their internationalization process (only 18 companies). The analysis of table 9 demonstrates that the regression results obtained using only companies that never used FDI are similar to those obtained with the global regression; moreover, the level of significance and the explanatory power of the model were increased. Conversely, when we validate the capabilities found for firms that have already passed the stage of direct or indirect export, we conclude that the only capability that maintains a significant relationship with performance is management and innovation during the production process. Note that, for this group of firms, the promotion and development of brand and product image is now positively associated with competitive performance.

The results point to the need to identify capabilities for each of the firm exporting stages. This result leads us to decompose the export process into stages, which may be linked to how products are promoted. We emphasize the heterogeneity of capabilities in comparison with the exporting stage and the need to perform the analysis at a more micro level. In general, we can say that the overall results characterize only 82% of the sample companies, as they do not portray the capabilities required for businesses that have evolved from simple export processes into FDI.

To validate H2b - that the relative importance of each capability to performance varies with firm characteristics or behaviors and, thus, that capabilities are differentiated as a result of access to / use of instruments and export support by government programs - we also use multiple regression to quantify the weight of each variable in competitive performance, considering whether firms have resorted to external support. The results can be analyzed using the table 10.

TABLE 10 - REGRESSION RESULTS OF EXPORT PERFORMANCE INTEGRATING THE USE OF EXTERNAL SUPPORT

Explanatory Variables	lanatory Variables B			β	Weigl	ht (%)	S	Sig
(Capacities)	U_ES	NU_ES	U_ES	NU_ES	U_ES	NU_ES	U_ES	NU_ES
C1	1.013	1.408	.531	.691	50.3%	46.6%	.005	.000
C1	0.127	0.430	.062	.230	5.9%	15.5%	.708	.008
C3	0.346	-0.326	.120	192	11.4%	12.9%	.458	.016
C4	0.662	0.207	.292	.119	27.7%	8.0%	.064	.130
C5	-0.094	0.476	049	.252	4.7%	17.0%	.750	.002
E Clobal Significance	4.492	27.061		Legend:				
F - Global Significance - Statistics Sample	Sig. =	Sig. =	U_ES -	firms that a	already use	ed tools and	d externa	l support
- Statistics Sample	0.004	0.000		programs t	o enhance	their expor	t process	S.
R.	0.681	0.881	NU_ES - Companies that did not use the tools and					
P square	0.463	0.776	exte	rnal suppo	rt program	s to enhan	ce their e	xport
R square	0.463	0.776			proc	ess.		

Source: developed for this study

It must be emphasized that only 43.75% of the sample firms had access or used support from industry associations, technology centers or public programs to promote exports.

We conclude that the initial model is adjusted to firms that did not use any kind of support or assistance during their export activity. The promotion and development of brand and product image continues to be negatively associated with competitive performance for this type of firm; development and domain of distribution channels now have greater relevance to explaining performance.

The model and capabilities extracted using factor analysis represents a lower level of adjustment to explain the performance of firms that had access to external support or incentives. It is essential to make note the importance that the management of financial and human resources appear to have for this type of organization (being a significant variable). Another fact to remember is related to the positive relationship that the promotion and development of brand and product image begin to have with business performance, although it is not significant.

In the study, we also attempt to relate the relative importance of each capability on performance with features such as an organization's exploitation of its own brand, export intensity or firm size in terms of the number of workers. This task was not feasible because of the small size of the sample.

It appears clear that the creation and development of a capability is affected by characteristics, stages in the exporting process and other firms' behaviors. This assumption is particularly related to how firms exploit business relationships and channels of access to different markets. The hypothesis that the relative importance of each capability to performance varies with characteristics or behaviors of firms is thus validated in the proposed dimensions.

#### 4. CONCLUSIONS AND NEW DIRECTIONS FOR STUDY

The results highlight the complex nature of capability and elucidates why small changes can have a significant impact on a capability's efficiency (Teece, et al. 1994). The capabilities understood from a dynamic perspective must be faced using an organizational process that is specific and strategic (e.g., management and process innovation), in which managers and leaders create and reconfigure capabilities based on the communalities of their resources and idiosyncratic details of the firm so that they can generate valuable competitive advantages (attempting to be as rare, inimitable and irreplaceable as possible). This point can only be reached through a process based on learning mechanisms (Eisenhardt e Martin 2000). It appears clear that the relationship between capability and performance is affected by various dimensions and should be adjusted in accordance with not only the characteristics of firm resources or processes, but above all, level of internationalization or degree at which the firm operates. Only in this manner can we align policies and tools to support the process of internationalization and the needs of firms operating in the market.

The role of heterogeneity in the construction of capability is assessed via DCA. The model suggests that the routines or configurations of resources and activities are not generic, but rather, specific to certain organizations. Each type of organization develops its own configuration capabilities, which are shaped by its specific environment, history and future anticipations (Day, 1994). Although two capacities may emerge from different elements, they can have similar effects. Furthermore, the resource type, the source of resources, and acquisition method, as well as investments, can lead to different settings for capabilities that may have similar functional goals in the same industry. There is no general "container" with an established list of components for the formation of a specific capability. Different stages in the exporting process lead to different needs and consequently to different capabilities.

This complex nature of capability explains why small changes can have a large impact on the efficiency of capability and stresses the importance of coherence (Teece, et al. 1994) between the different components of a capability and the context in which firm is embedded.

Westhead (2008) identifies four types of exporters: uninterested, disappointed, capable and committed exporters. The results allow us to conclude that the degree or stage of export affects the capability "formula". Capability development is a result of the momentum generated by the internal processes of the organization, the position and the company's commitment in terms of export experience. The exporting condition can be associated to capability development. The correct distinction between different types of exporting firms will be the main key to the development of strategies and tools for supporting export performance.

Another future direction for research in this area is the validation of differences between stages associated with the export process and among different exporting business.

The results also suggest that the analysis of capabilities to develop also follows a pattern based on sequential learning (Johanson and Vahlne 1990) . This pattern may be associated with the phase or stage of export and the type of foreign market access.

Primary type of access to foreign markets Competitive Performance (scale Through commercial Through national Subcontractor Directly, exploring of 0 to 10) agents from and commission (producing for their own channels Total destination market: agents: others) Cum. Frea. Cum. Freq. Cum. Frea. Cum. Frea. Frea. Freq. Freq. Frea. %. %. %. %. 10 3.2% 3.8% 0 0.0% 0 0.0% 2 1 1 9 4 16.1% 2 11.5% 1 4.5% 0 0.0% 7 8 6 35.5% 2 2 2 12 19.2% 13.6% 9.5% 7 5 2 20 7 58.1% 38.5% 6 40.9% 19.0% 61.5% 6 5 74.2% 6 4 59.1% 3 33.3% 18 4 76.9% 3 72.7% 7 66.7% 17 5 3 83.9%

TABLE 11 - PERFORMANCE VERSUS TYPES OF ACCESS TO FOREIGN MARKETS

Total Source: developed for this study

2

3

31

90.3%

100.0%

4

2

26

4

3

Table 11 show the relationship between the evaluations of competitive performance conducted by managers with the type of access of each firm to foreign markets. We verified a trend of a positive association between controlled access to the market and higher levels of competitive performance.

92.3%

100.0%

95.5%

100.0%

5

1

22

5

2

21

90.5%

100.0%

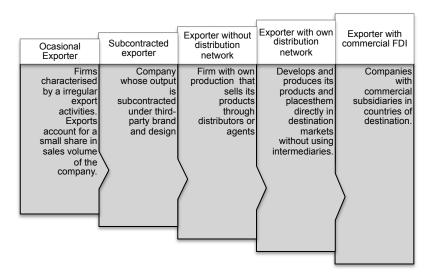
16

8

100

Thus, it is author's deep conviction that the alignment of capabilities and its relative weight in explaining firm performance will be conditioned to the level at which the exporting firm is working. For the footwear industry, we suggest the decomposition of the exporting process into five stages presented in figure 4.

FIGURE 4 - STAGES PROPOSED FOR THE EXPORTING PROCESS OF PORTUGUESE MANUFACTURING FOOTWEAR FIRMS



Source: Elaborated by the authors

Confirmatory studies could be developed and based on the capabilities derived in this study but differentiated, considering the export phase in which the company operates. The reduction of heterogeneity in terms of business and market relationships is thus an enhancer factor for greater homogeneity in the analysis of resources and capabilities and their relationship to export performance.

## **REFERENCES**

"Accounting for Management." 2012.

http://www.accounting4management.com/conversion\_cost\_definition.htm (haettu 25. November 2013).

Agência para o Investimento e Comércio Externo de Portugal, E.P.E. "Guia do Exportador." *Aicep Portugal Global.* 

http://www.portugalglobal.pt/PT/Internacionalizar/GuiadoExportador/Paginas/12AImport%C3%A2ncia daExporta%C3%A7%C3%A3o.aspx (haettu 23. 11 2011).

Barney, J.B. "Firm Resources and Sustained Competitive Advantage." *Journal of Management* Vol. 17 (1991): 99-120.

Bell., J., R. Mcnaughton, S. Young, ja D. Crick. "Towards ann integrative model of small firm internationalisation." *Journal of International Entrepreneurship* Vol.1 (2003): 339-362.

Belso-Martínez, Jose A. "Why are some Spanish manufacturing firms internationalizing rapidly? The role of business and institutional international networks." *Entrepreneurship & Regional Development* Vol.18, May (2006): 207–226.

Berthling-Hansen, Pål og Skaldehaug, Espen. "Magma." *Beslutningsrelevante kostander*, februar 2003. Bitar, J., ja T. Hafsi. "Strategizing through the capability lens: sources and outcomes of integration." *Management Decision* Vol. 45, 3 (2007): 403-419.

Bragg, Steven M. *Troughput Accounting. A guide to Constraint Management.* Holochen, New Jersey: John Wiley & Son, 2007.

Camisón, César, ja Ana Villar. "Capabilities and propensity for cooperative internationalization." International Marketing Review Vol. 26 Iss: 2 (2009): 124-150.

Chetty, Sylvie, K., ja R.T. Hamilton. "The Process of Exporting in OwNner-controlled Firms." *International Small Business Journal* 14 (2) (1996): 12-25.

- Crick, D. "An investigation into the targeting of UK export assistence." *European Jorunal of Marketing* Vol.29 (1995): 76-94.
- Day, G. "The capabilites of market-driven organizations." *Journal of Marketing* Vol.58 (1994): 37-52.
- Dess, G. B., ja R. B. Robinson. "Measuring organisational performance in the absence of objective measures: the case of a privately-held firm and conglomerate business unit." *Strategic Management Journal* 5 (1984): 265-273.
- Dowes, John. "Do data characteristics change according to the number of scale points used? An experiment using 5 point, 7 point and 10 point scales"." *International Journal of Market Research* 50, 1 (2008).
- Eiken, Oddvar. "Logistikk og ledelse." 5. Mai 2006. http://www.logistikk-ledelse.no/2006/ma/ma05-06.htm (haettu 13. November 2013).
- Eisenhardt, K., ja J. Martin. "Dynamic Capabilities: what are they?" *Strategic Management Journal* 21 (2000): 1105-1121.
- Evers, Natasha. "International new ventures in "low tech" sectors: a dynamic capabilities perspective." Journal of Small Business and Enterprise Development Vol.18, N.º 3 (2011): 502-528.
- Freeman, Joanne. Factors Contributing to Successfu Export Performance of Regional and Metropolitan SME Exporters. Dissertação de Doutoramento, University of the Sunshine Coast, Camberra: University of the Sunshine Coast, 2009.
- Geense, Ir.M. "Managerial accounting." 2010. http://www.managerialaccounting.org/.
- Goldratt, Eliyahu M. and Cox, Jeff. *The Goal: A Process of Ongoing Improvement*. North River Press Publishing Corporation, 2013.
- Gonzalez, R.K, ja S.K. Cunha. "Internationalization Process and Technological Caability Trajectory of Iguacu." *Jorunal of Technology Management and Innovation* Vol.7 (2) (2012): 117-129.
- Horngren, C.T. and G. Foster. Cost Accounting, A Managerial Emphasis. Prentice-Hall, Inc, 1987.
- Horngren, Charles T. "Introduction to Management Accounting." Teoksessa *Introduction to Managemnt Accounting*, 58-59. Englewood Cliffs, N.J.: Prentice/Hall International, Inc, 1984.
- Hurtado, N.E. "La percepción de barreras a la exportación: um estudio empítrico em PYMES." *Revista Europea de Dirección y Economia de la Empresa* 12, n.º4 (2003): 167-184.
- INE Instituto Nacional de Estatística. "Estudos sobre Estatísticas Estruturais das Empresas. O perfil exportador das PME em Portugal 2007/2009." 2011.
- INE. Estudos sobre Estatísticas Estruturais das Empresas. O perfil exportador das PME em Portugal 2007/2009. Instituto Nacional de Estatística, 2011.
- Islam, Mazharul, ja Azharul Karim. "Manufacturing practices and performance: Comparison among small-medium and large industries." *International Journal of Quality & Reliability Management* 18, 1 (2011): 43 61.
- Johanson, J., ja J. E. Vahlne. "The internationalization process of the firm a model of knowledge development and increasing foreign commitments." *Journal of International Business Studies* Vol. 8, Spring/Summer (1977): 23-32.
- Johanson, Jan, and Jan-Erik Vahlne. "The mechanism of internationalization." *International Marketing Review* 7, N.° 4 (1990): 11-24.
- Johanson, Jan, ja Finn Wiedersheim-Paul. "The internationalization of the firm four Swedish cases." *The Journal of Management Review* October (1975): 305-322.
- Jones, M., ja N. Coviello. "Internationalisation: conceptualising and entrepreneurial process of behaviour in time." *Journal of International Business Studies* Vol.36 (2005): 284-303.
- Julien, Pierre-Andre, Andre Joyal, Laurent Deshaies, ja Charles Ramangalahy. "A Typology of Strategic Behavior Among Small and Medium-sized Exporting Business: A Case Study." *International Small Business Journal* Vol.15, N.°2 (1997): 33-49.
- Kaleka, Anna. "Resources and capabilities driving competitive advantage in export markets: guidelines for industrial exporters." *Industrial Marketing Management* Vol. 31 (2002): 273-283.
- Kaplan, R.S. and D.P. Norton. *The Strategy Focused Organisazation*. Harvard Business School Publishing Corporation, 2001.
- Kaplan, Robert S. "One Cost System is not Enough." Harward Business Review, Januray 1988.
- Karadeniz, E.Esra, ja Kenan Göçer. "Internationalization of small firms. A case study of Turkish small and medium-sized enterprises." *European Business Review* Vol 19 N. ° 5 (2007): 387-403.

Karjewski, Lee J, ja Larry P. Ritzman. *Operations Management: Strategy & Analysis*. 6<sup>a</sup> Ed. Prentice Hall, 2001.

- Katsikeas, Constantine S, Nigel F. Pierce, ja Chris Ioannidis. "Determinants of export performance in a European context." *European Journal of Marketing* Vol. 30, N.º 6 (1995): 6-35.
- Katsikeas, Constantine, Leonidas Leonidou, ja Neil A. Morgan. "Firm-Level Export Performance Assessment: Review, Evaluation and Development." *Journal of the Academy of Marketing Science* Volume 28, n.º4 (2000): pp. 493-511.
- Killen, Catherine P., Robert A. Hunt, ja Elko J. Kleinschmidt. "Project portfolio management for product innovation." *International Journal of Quality & Reliability Management* 25 (1) (2008): 24-38.
- Knudsen, Thordjom, ja Tage Madsen. "Export Strategy: A Dynamic Capabilities Perspective." *Scandinavion Journal of Management* Volume 18 (2002): pp. 475-502.
- Kraus, Pedro G. "O Processo de Internacionalização das Empresas: O Caso Brasileiro." *Revista de Negócios Blumenau* Vol. 11 (2) (2006): 25-47.
- La, Vinh Q., Paul G. Patterson, ja Chris W. Styles. "Determinants of export performance across service types." *Journal of Services Marketing* Vol.19, N.º 6 (2005): 379–391.
- Lefebvre, Élisabeth, ja Louis Lefebvre. "Innovative capabilities as Determinants of Export Perrmance and Behaviour: A Longitudinal Study of Manufacturing SME's." Teoksessa *Innovation and Firm Performance: Econometric Explorations of Survey Data*, tekijä: A Kleinlenecht ja A. Monhen. Palgrave (MacMillan Press), 2001.
- Leonidou, Leonidas C. "Organizational Determinants of Exporting: Conceptual, Methodological, and Empiracal Ensigths." *Management International Review* Vol.38 (1) (1998): 7-52.
- Leonidou, Leonidas C., ja Stavroula Spyropoulou. "An analytical review of the factors stimulating smaller firms to export Implications for policy-makers." *International Marketing Review* 24, n.º 6 (2007): 735-770.
- Li, L., ja G. Ogunmokum. "The influence of interfirm relational capabilities on export advantage and performance: An empirical analysis." *International Business Review* Vol. 10 (2001): 399-420.
- Lim, Jeen-Su, Thomas Sharkey, ja John Heinrichs. "New Product Development Practices and Export Involvement: An initial Inquiry." *International Journal of Innovation Management* Vol. 7 (2003): 475-499.
- Makasure, Oliver, Spencer Henson, ja John Cranfield. "Performace of microenterprises in Ghana: a resouce-based view." *Journal of Small Business and Enterprise Development* 16, 3 (2009): 466-484.
- Maroco, João. Análise Estatística com utilização do SPSS. 3ª Edição. Edições Sílabo, 2010.
- Maroco, João, ja Teresa Garcia-Marques. "Qual a fiabilidade do alfa de Cronbach? Questões antigas e soluções modernas?" Leikannut ISPA. *Laboratório de Psicologia* 4 (1) (2006): 65-90.
- Marques, Carla S., ja João Ferreira. "SME Innovative Capacity, Competitive Advantage and Performance in a 'Traditional' Industrial Region of Portugal." *Journal of technology management & innovation* 4, 4 (2009): 53-68.
- Martinez, J.Irene Jiménez. "Determinantes para la Internacionalización de las Pymes Mexicanas." Análisis Económico Vol. XXII, N.º 49 (2007): 111-131.
- Morgan, Neil A., Anna Kaleka, ja Constantine S. Katsikeas. "Antecendets of Export Venture Perfomance: A Theoretical Model and Empirical Assessment." *Journal of Marketing* 68 (2004): 90-108.
- Morgan, Neil, Shaoming Zou, Douglas Vorhies, ja Constantine Katsikeas. "Experiential and Informational Knowledge, Architectural Marketing Capabilities, and The Adaptive Performance of Export Ventures: A Cross-National Study." *Decision Sciences* Vol.34 (2003): 287-321.
- Norsk Standard NS 4102. Norges Standardiseringsforbund.
- Norstrøm, Carl Julius. Bedriftsøkonomens historie. Oslo: Fagbokforlaget, 2009.
- —. *Magna Econas tidskrift for økonomi og ledelse.* Mai 2002. http://www.magma.no/eugen-schmalenbach-den-tyske-laeremester (haettu 28.. Januar 2013).
- Orient Point Consulting LLC. "Orientpoint.com." 2013. http://www.orientpoint.com/FTE.htm (haettu 8. December| 2013).
- Ortiz, Rubén Fernandez, ja José I.C. Ruiz-Carrillo. "Capacidades directivas y aprendizaje en las pymes exportadoras." *Cuadernos de Gestión* 5, 2 (2005): 75-94.
- Patterson, G. Paul. "A Study of Perceptions Regarding Service Firms Attitudes Towards Exporting." *Australasian Marketing Journal* Vol. 12 (2) (2004): 19-38.
- Piercy, Nigel F, Anna Kaleka, ja Constantine S. Katsikeas. "Source of Competitive Advantage in High Performing Exporting Companies." *Journal of World Business* Vol.33, N.º 4 (1998): 378-393.

Porter, Michael E. "From competitive advantage do corporate strategy." *Harvard Business Review* May-June. (1987).

- Porter, Michael E. "How competitive forces shape strategy." *Harvard Business Review* March- April. (1979).
- Prahalad, C.K, ja G. Hamel. "The core competence of the corporation." *Harvard Business Review* May-June (1990): 2-15.
- Prasad, V. Kanti, K. Ramamurthy, ja G.M. Naidu. "The Influence of Internet–Marketing Integration on Marketing Competencies and Export Performance." *Journal of International Marketing* Vol. 9, N.º 4 (2001): 82-110.
- Robertson, Christopher, ja Sylvie K. Chetty. "A contingency-based approach to undertanding export performance." *International Business Review* Vol.9 (2000): 211-235.
- Rodriguez, C. M., C. R. Martinez, ja J. A. Wise. "Strategic Capabilities in Export Performance: The Case of Mexico. Paper presented at the annual meeting of the BALAS Annual Conference, ESADE, Barcelona, Spain." *Annual Meeting of the BALAS Annual Conference*. Barcelona, Spain: BALAS, 2010.
- Rosenzweig, E.D., A.V. Roth, ja J.W. Dean. "The influence of an integration strategy on competitive capabilities and business performance: an exploratory study of consumer products manufacturers." *Journal of Operations Management* 21, 4 (2003): 437-56.
- Ruzzier, Mitja, Bostjan Antoncic, Robert D Hisrich, ja Maja Konecnik. "Human Capital and SME Internationalization: A Structural Equation Modeling Study." *Canadian Journal of Administrative Sciences* Vol.24 (2007): 15–29.
- Sapienza, Harry J., Erkko Autio, Gerard George, ja Shaker A. Zahra. "A capabilities perspective on the effects of early internationalization on firm survival and growth." *Academy of Management Review* 31, n.º 4 (2006): 914-933.
- Schmalenbach, Eugen. Der Kontenrahmen. Leipzig: G.A.Gloeckner, 1929.
- —. Dynamische Bilanz. Leipzig: G.A.Gloeckner, 1926.
- —. Selbstkostrechnung und Preispolitik. Leipzig: G.A.Gloeckner, 1934.
- Sirmon, David G., Michael A. Hitt, ja D. Ireland. "Managing Firm Resources in Dynamic Environments to creat Value: Looking inside the black Box." *Academy of Management Review* 32, 1 (2007): 273-292.
- Sousa, Carlos M.P. "Export Performance Measurement: An Evaluation of the Empirical Research in the Literature." *Academy of Marketing Science Review* Vol.9 (2004): 1-22.
- Spanos, Yiannis E., ja Gregory Prastacos. "Understanding organizational capabilities: towards a conceptual Framework." *Journal of Knowledge Management* 8, 3 (2004): 31-43.
- Teece, D., R. Rumelt, G. Dosi, ja S. Winter. "Understanding corporate coherence: theory and evidence." Journal of Economic Behavior & Organization Vol.23, n.° 1 (1994): 1-30.
- Teece, David J. "Explicating Dynamic Capabilities: The nature and microfoundations (sustainable) enterprise performance." *Strategic Management Journal* 28 (2007): 1319-1350.
- Teece, David J., Gary Pisano, ja Amy Shuen. "Dynamic Capabilities and Strategic Management." Strategic Management Journal 18,7 (1997): 509-533.
- The County Administrative Board in Jämtland County,. "Interreg- sverige-norge.com." 17. August 2008. http://www.interreg-sverige
  - norge.com/UserFiles/File/Interreg/Intran%C3%A4t/Programbroschyrer%20Sv-
  - Eng/Interregbroschyr\_eng\_080917.pdf (haettu 13. November 2013).
- Toften, K, ja S. Olsen. "Export market information use, organizational knowledge, and firm performance." *International Marketing Review* Vol. 20, N.°1 (2003): 95-110.
- Unknown. "Trinity University archives." Paper read to the 6th Scientific Conference "Applikation von Mathematischer Modelle, Methodenund Rechentechmik in der Leitung der Volkswirtschaft" BRATISLAVA, Slovakia, April, 1990 redrafted Glasgow, Oct.1996. 1996. http://www.cs.trinity.edu/rjensen/readings/history/forrester/c02AfterSchmalenbach.htm (haettu 22 . September 2013).
- Ural, Tulin. "The effects of relationship quality on export performance. A classification of small and medium-sized Turkish exporting firms operating in single export-market ventures." *European Journal of Marketing* Vol. 43 No. 1/2, 2009 (2009): 139-168.
- Vachon, Stephan, Alain Halley, ja Martin Beaulieu. "Aligning competitive priorities in the supply chain: the role of interactions with suppliers." *International Journal of Operations & Production Management* 29, 4 (2009): 322 340.

- Vareide, Knut og Storm, Hanna Nyborg. *Regional analyse Østfold.* Bø i Telemark, Norge: Telemarksforskning, 2012.
- Vea, Erik. *Logistikk og ledelse*. 2002. www.logistikk-ledelse.no/2002/ma/ma06-01.htm (haettu 28. januar 2013).
- Ward, P.T., J.K. McCreery, L.P. Ritzman, ja D. Sharma. "Competitive priorities in operations management." *Decision Sciences* 29, 4 (1998): 1035-1046.
- Wernefelt, B. "A resource-based view of the firm." Strategic Management Journal 5 (1984): 171-180.
- Westhead, Paul. "International opportunity exploitation behaviour reported by "types" of firms relating to exporting experience." *Journal of Small Business and Enterprise Development* Vol.15, N.° 3 (2008): 431-456.
- Whitelock, Jeryl. "Export Competitive Advantages: The Relevance of Firm Characteristics." *International Marketing Review* 11, n.° 3 (2002): 33-53.
- Winter, S.G. "Understanding dynamic capabilities." Strategic Management Journal 46 (2003): 27-45.
- Zahra, Shaker, Duane Ireland, ja Michael Hitt. "International Expansion by New Venture Firms; International Diversity, Mode of Market Entry, Technological Learning, and Performance." *Academy of Management Journal* Vol. 43, N.°5 (2000): 925-950.
- Zeng, S.X., Xie, X.M, C.M. Tam, ja T.W. Wan. "Competitive priorities of manufacturing firms for internationalization: an empirical research." *Measuring Business Excellence* 12, n.° 3 (2008): 44-55.
- Zou, Shaoming, Eric Fang, ja Shuming Zhao. "The Effect of Export Marketing Capabilities on Export Performance: An Investigation of Chinese Exporters." *Journal of International Marketing* Vol. 11, N.º 4 (2003): 32-55.

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## **CULTURAL DIMENSIONS IN ROMANIAN ORGANIZATIONS**

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### **ABSTRACT**

The theory of cultural dimensions elaborated by Geert Hofstede (www.geert-hofstede.co) has become a paradigm in organizational management. Studies about cultural dimensions are important and actual because culture strongly influences organizational behavior. This study suggests reconsidering cultural elements as important behavioral factors in management systems. Organizational culture influences managerial practices, communication, relations between institutionalized groups. This study is part of an ample research named "Managerial Behavior in Romanian Organizations" (COMOR), made by The Scientific Society of Management from Romania (SSMAR). The objectives of the present study, respectively identifying cultural dimensions in companies within the national area and their influence in management have been achieved. The results of this study are to be corroborated with other results and will serve in placing Romanian Management within international comparisons.

Keywords: cultural dimensions, organizational culture, management

#### 1. INTRODUCTION

Organizational culture, defined by Hofstede as "collective mental programming that distinguishes the members of an organization from the members of another organization" (Hofstede, 2001) holds numerous and various acceptations of which one notices: implicit and explicit value sets that help company members to integrate into collectives that are trained in achieving objectives; the climate and practices developed by a company in a certain/given environment; the beliefs of each individual and the rules of the group; the collective behaviors that are sustained or inhibited by guidelines and rituals etc. According to other authors (Schein, 2010; Hofstede and Minkov, 2010) organizational culture is given by behavioral components that are achieved together: language, traditions, rituals/customs; group guidelines; principles and values stated in a public manner; official philosophy; game rules; climate – resonant or dissonant; thinking patterns; symbols impregnated in material elements of the companies etc.

The present study took place by respecting the described procedures from the methodological setting of the COMOR research, so as to offer a high degree of confidence to the opinions expressed by the respondents.

Individuals' values and time are essential in the study of a culture. Each individual is influenced by the environment in which he was formed and his behavior in the organization is the result of education, beliefs, prejudices, stereotypes that hallmarked him or not. Organizational culture appears as a rational and irrational behavioral mix regarding what is good or bad, true or false, adequate or inappropriate, allowed or unaccepted etc. Behavior within companies is influenced by national culture, by the models transmitted as being accepted by the Romanian environments. A first remark takes into consideration the cultural stereotypes inherited and retransmitted into the Romanian cultural environment, two of the most harmful being obedience towards power/submission and shyness in front of authority.

The most known analysis instrument of some cultural dimensions has been attained by the Dutch professor Geert Hofstede, who studied the organizational behavior from some tens of countries and managed to indentify more cultural dimensions that differentiate one country from another. On the official site of the Hofstede model (http://www.geert-hofstede.com) there even are estimated values regarding Romania, but these are not the result of any field research. In 2005 Interact Training Company from Bucharest together with The Gallup Organization from Romania, published a research that offered extremely interesting ideas that show a new perspective over the evolution of the Romanian business environment. The cultural dimensions and the managerial behavior in Romanian organizations studied by the COMOR Project will substantially contribute in the scientific understanding of the precise nature of the specificity of organizational culture, in improving inter and intra-organizational communication, in

conflict removal that begins from cultural differences. The research as part of the macroeconomic project is representative for our country, similar studies of such dimension being inexistent.

#### 2. LITERATURE/REVIEW

The analysis of culture is particularly important when attempting to manage organization-wide change. Some important studies (Schein, 2010; Hofstede and Minkov, 2010) continue to be an important source of data for cross-cultural researchers. Thus, Hofstede and Schein remain two of the most influential researchers in the field of national and organizational cultures. Hofstede's work has been expanded by a very large empirical study conducted by the GLOBE group (House, Hanges, Javidan, Dorfman, & Gupta, 2004). In this paper we chose to use both Hofstede and GLOBE models, but also others results (Brewer, P. & Venaik, S. 2011; Schwartz, S.H. 2011; Birkinshaw, J, Brannen, M.Y., & Tung, R.L. 2011; Hoyt, 2010; Schein, 2010; Taras, V., Steel, P., & Kirkman, B.L. 2010; Maseland & van Hoorn 2009; Gould, S.J., & Grein, A.F. 2009; Javidan et al. 2006; Chao, G.T. & Moon, H. 2005 etc). The studies of cultural dimensions are a phenomenon with many consequences on societies, including a better communication between companies and people. After Schein, the culture in the 21 century is "a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration" (Schein, 2010). The environment is changing and people need to change too.

### 3. PURPOSE, OBJECTIVES AND HYPOTHESIS OF THE STUDY

The following study had an observing complexion. The theoretic purpose was that of highlighting the dimensions of organizational culture in Romanian companies.

In this study we have verified the existence of the following cultural dimensions: Masculinity versus femininity; Power distance; Uncertainty avoidance; Individualism versus collectivism; Short term versus long term orientation; Indulgence versus Restraint characterized by their specific forms. Statistical information was taken from the COMOR Project for lasi, Suceava, Vaslui and Braila counties.

#### 4. RESEARCH METHODOLOGY

This study holds the opinions expressed by 241 respondents from laşi County, 132 from Brăila County, 75 from Vaslui County and 222 from Suceava County. The total number of respondents in this study is of 670 and is considered to be sufficiently relevant for the objectives of the research. The means used in this study are located in the COMOR Project.

The study endorsed the measuring of cultural dimensions that influence the management of the studied companies as well as collective behavior regarding identified cultural elements.

## **5. DATA ANALISIS AND INTERPRETATION**

From the statistical analysis of the **Masculinity versus femininity** dimension, it has turned out that its characteristics are to be found in similar proportions in males as well as in females. The finding places Romanian organizations in the middle, if the gender scale is taken into consideration. The study confirms Hofstede's results as well as those of other specialists. Romania is characterized as a feminine society, either as a society with moderate masculinity (Lungescu and Mihut, 2005) or in the middle – having a tendency towards masculinity. From the perspective of the present study, Masculinity versus femininity is expressed through: ambition, self-centeredness, hierarchy, motivation, interpersonal relations, and the role of managers.

The spectrum of value judgments expressed by the respondents suggests a partial assent that expresses the fact that managers are not preoccupied enough with stimulating the ambition of their employees. The urge towards the objectives of the organization is quite modest. Low values of the average score from the observed counties also highlight the crisis from the labor market, as well as the decrease of professional motivation and the increase of the wish of having a job. Gender differences are not significant.

The analysis according to the gender variable of self-centeredness characteristic highlights the fact that male respondents prevail in questions regarding consistency and empathy, while at the question regarding dominance, the percentage is mostly of females; personal initiative is insignificant – the superiors dominate. Self-centeredness in Romanian organizations appears as a dangerous combination

between an exaggerated feeling of pride and sufficiency, both products of an inflated ego that gives a distorted self-image. Managers (seem to) think that they are "the center of the universe" and begin placing personal status, personal agenda as well as personal satisfaction above those of the ones they directly influence with their thoughts and actions. People want less self-centeredness within the company.

Regarding organizational hierarchy, one notices that masculinity dominates even though gender is an involuntary characteristic as well as nationality. Thus, authority positions are mostly occupied by males, males are encouraged more than females in professional development programs, labor is usually done by males; in case of failure the consequences are greater for males than for females; opportunities for occupying managerial positions are more available for males.

Regarding motivation, it results from the study that most of the respondents consider that when giving gratifications/awards, performance should be taken into consideration. According to gender, the differences are insignificant. There is also a significant number of respondents who consider that motivation should have as criterions performance as well as other factors as working experience, blood relatives, politics, business, and liking/sympathy. Most of these are subjective, emotional factors.

Interpersonal relations expressed by manager behavior are considered as being relatively good and there are no significant differences according to gender. People share their feelings with group members, are friendly, communicative and care about others. This type of behavior is desired to be intensified in the future. "The role of managers" expressed through inspiration, vitality, training, organization and realization invite to creating an "educational" culture, respectively adopting new organizational structures, increasing liberty and confidence given to inferior employees. Holding a middle position at this dimension, one notices that in Romanian companies both types of attributes manifest: male – preferring realization, heroism, assertiveness and material success, as well as female – orientation towards relating, modesty, supporting the weak, and life's quality.

A brief interpretation of synthesis indicators of the "Power distance" cultural dimension leads towards the following conclusions. The specific manifestation forms analyzed are: criticism of hierarchy; distance towards hierarchy; graded hierarchy; confidence; order; privileges and mood. The scores of "hierarchy criticism" form of expression in the current situation signify the fact that employees consider that subalterns from the organization accept variants given by their superiors even if they disagree, even though they are asked to comment the decisions their superiors make in case they disagree. The scores for the desired situation highlight the employees' desire of diminishing graded hierarchy. Confidence gets high scores in all four counties, meaning that in general employees and young people in the company are encouraged to fight for continuous improvement of professional performances as well as of those obtained in their activity, and managers give their subalterns freedom in choosing methods for reaching their goals/targets. Comparing with the results for the desired situation, one may notice that employees want to improve this form of expression.

Regarding order, one may notice that in general, work tasks are well described in the position description, instructions and work procedures are detailed, managers offer guidance regarding the manner of obtaining the established goals. Scores for the situation desired by employees highlight the fact that order must play a more important part in management of the company.

Privileges obtain scores that attest that gratifications/giving awards is based on performance as well as on other factors. The scores for the desired situation highlight the fact that employees consider that discriminating criteria should be eliminated from gratifications/giving awards, as well as privileged positions for relatives, friends etc.

Regarding the mood, scores indicate the fact that people in the company are proud of the results of their managers, are friendly and communicative, and are loyal towards the company. The scores for desired practice highlight the fact that the mood should have a more important part in management of the organization.

"Uncertainty avoidance" is characterized by the following specific forms of expression: adopting the new, attitude, power/leadership disapproval; organization; plans; procedures, rules; problem solving, strategies.

The following result from this study:

Attachment exists in companies, but not enough, while motivation should have a more important role in company management. Respondents want that affirmation, aspirations, attitude, behavior, opinions, decisional structures have a greater part in company management, less privileges and subordination. Results of the analysis show that in the analyzed organizations, people prefer avoiding uncertainty. Most respondents agree to have highly structured jobs with few unexpected events. Management requirements and instructions are spelled out in detail, so people know what they are expected to do. The organization has rules or procedures to cover work situations. Respondents want job stability and they don't like to be surprised by unknown situations. Members of this sample seek orderliness, stability, to cover situations in their daily lives. With a medium level of uncertainty avoidance in cultural practices and high on in the cultural values, the study confirms the GLOBE model. In the same time, our results support Hofstede findings and UAI score for Romania: most respondents are seeking certainty and they desire detailed instructions, rules and procedures and stable work. We cannot fully compare the results, because Romania has not been yet included in Hofstede's and Globe's dataset and there are many differences in operationalization of the UA dimension.

The "Individualism versus collectivism" dimension is identified though the following cultural characteristics: affirmation / aspirations; attachment; attitude; behavior; motivation; opinions; privileges; decisional and subordination structures. Males as well as females agree that in general it is better for teamwork to exist, even though this phenomenon isn't practiced in companies. An organization's position on this dimension is reflected in whether people's self-image is defined in terms of "I" or "we." A great part of the respondents consider that people in the organization should be a team. Practically, they don't do anything for this. Managers are interested to maintain this behavior: each individual is manipulated more easily than a team

Short term versus long term orientation explain the attitude towards time and future.

A brief interpretation of synthesis indicators of the "**Short/long term orientation**" cultural dimension leads us to the following conclusions:

In Romania, people have an interesting mixture between long and short – time orientation. An organization with a short-term orientation is usually predictable and normative. In these organizations people show respect for the rules, but they don't believe them. They are focusing on achieving quick results. They prove a great propensity to save for the future. Their savings are for themselves and not for the society or nature. The perception of time is an individual cultural dimension. Managers seem to know the absolute truth, employees are obedient.

Organizations with a long-term orientation are prepared to change. The future is uncertain and the rules depend on context. In a short term orientation, people think they have control over what happens to them.

The **Indulgence versus Restraint** dimension is quite different in our sample. The research showed that formal rules are dominantly. The rules do not apply equally spaced, but on subjective criteria. Thus, it is found that the organization coexist indulgence with constraints. Differences between employees are made by interests.

#### 6. CONCLUSIONS

Organizational culture, using the modern meaning of human resource management, represents a major component for increasing the performances of any organizational structure. It sums a set of values that influences the functioning and performances of the company in a regime interfering with organizational climate that expresses the mood of the collective.

Respondents of this study manifest dually, under the aspect of their own perception and flexibility related with periodically imposed performance standards as "visible" or "invisible" values.

The visible part is frequently represented by:

- material values constructions, furniture;
- employee behavior highlights the level of all-round education, attitude, rigor as well as professional standards acquired in time.

The invisible part is composed of dominant base attitudes, beliefs, and values that are managed by the prominent group of the personnel that holds power by:

- promoting novelties, sustaining creativity, innovation and adapting modern management procedures and techniques;
- maintaining tradition, preserving the manner of power exertion and maintaining formal authority and exigency relations.

These two manifestations have a dialectic tendency of mutual influence and thus can or cannot compete in the increase of professional performance and target reaching.

The approach of organizational culture in realistic terms allows the identification of incorrect behavior of some employees and managers, behavior that reaches the targets of the company. This behavior usually manifests in different manners, based on selfish nature motivations (obtaining material, professional advantages etc.), by expressly breaking the deontological guidelines or by omitting to complete actual/concrete professional obligations.

The experimental research also took place having the purpose of discovering the values accepted by the company members, the current as well as the desired situation. After having finished the study, we conclude that in the observed companies, culture is of power type, the authority-paternalist style being predominant in leadership. We may observe that employees desire another type of organizational culture, one that would take into consideration their abilities, aptitudes and talent, one that would appreciate their work and offer them more freedom of action. They count on teamwork, needing a strong manager that is capable of leading them towards performance achievement.

Managers that are aware of the need of building/training and changing organizational culture specifically emphasize human resources and pay attention to employee politics. The endeavors of people express the disparity/gap between the current reality and the desired situation, or think it may be possible. This highlights the importance of behavioral comprehension at the workplace, both of the individual as well as of the group in order to build an organizational culture that would lead to long-lasting development. The distance towards power has an increased score in Romania, this expressing the disparity between society members. Power distance may also be defined by the inferior-leader/manager relation. A significant difference of power is synonym with a strong social conformism, with submission towards a superior status. Managerial style is autocrat (dictatorial) or paternalist, according to other social characteristics. Subalterns "develop" their lack of initiative and accept being led; actually needing authoritative management – as Hofstede emphasizes, authority only survives where it meets submission. Arguing open against the leader/manager isn't allowed, it being considered that the latter "is always right". In order to achieve a rather higher informal status, subalterns do not compete with hierarchic superiors (as it happens in small EP companies), but try "to be in amiable terms with the superior" using a servile behavior most of the time: don't argue, try to carry out every order (or at least make it seem that they carry out the order), even if it doesn't belong to their organizational setting, accept any of his/her behavioral elements, resort to eulogies and adulations, try to "sabotage" their mates. Therefore PD also measures the servility members of a certain culture have. The leader/manager has a wide variety of privileges, most of them unofficial, that accordingly characterize his/her social status and not the occupied position in the formal structure of the company or of society. Subalterns carry out any orders, even though these are dissonant with the specific of their activity or are even opposite to the objectives of the company.

Actual Romanian management is still an inertial one, and its exponents fake their behavior and democratic style, their manifestations and authority exertions being specific to past autocrat styles. Management in Romanian companies mostly neglects the emotional side and organizational culture. The decisions of formal authorities are considered as being sufficient and employees have to unconditionally conform. The cultural Romanian environment is vitiated with perplexing stereotypes and political decisions that contravene the values of the educated individual. Modern society is a rather emotional than rational one. Confiding in the group, attachment, subjective motivation, collaboration and not exclusively rational dominance are the strong parts of managers.

### **REFERENCES**

- Brannen, M. Y., & Thomas, D. C. 2010. "Bicultural individuals in organizations: Implications and opportunity". *International Journal of Cross-Cultural Management*, 10(1), pp. 5–16.
- Birkinshaw, J, Brannen, M.Y., & Tung, R.L. 2011. From a distance and generalizable to up close and grounded: Reclaiming a place for qualitative methods in international business research. *Journal of International Business Studies*, 42(5), pp. 573-581.
- Brewer, P. & Venaik, S. 2011. Individualism-Collectivism in *Hofstede and GLOBE. Journal of International Business Studies*, 42(3), pp. 436-445.
- Carl, D., Gupta, V., & Javidan, M. 2004. Power distance. In R. House, P. Hanges, M. Javidan, P. Dorfman, & V. Gupta (Eds), *Culture, leadership, and organizations: The GLOBE study of 62 societies*, pp. 513–563. Thousand Oaks, CA: Sage.
- Chao, G.T. & Moon, H. 2005. The cultural mosaic: A metatheory for understanding the complexity of culture. *Journal of Applied Psychology*, *90*, pp. 1128-1140.
- Chelcea, S. 2007. Methodology of Sociological Research, Economic Publishing, Bucuresti, Romania.
- Earley, P. C. 2006. "Leading cultural research in the future: A matter of paradigms and taste", *Journal of International Business Studies*, 37(6), pp. 922–931.
- Erdem, T. Swait, J. & Valenzuela, A. 2006. "Brands as signals: A cross-country validation study", *Journal of Marketing*, 70(1), pp. 34–48.
- Gould, S.J., & Grein, A.F. 2009. Think glocally, act glocally: a culture-centric comment on Leung, et al., *Journal of International Business Studies*, 40(2):, pp. 237-245.
- Griffith, D. A. Cavusgil, S. T. & Xu, S. 2008. "Emerging themes in international business research", *Journal of International Business Studies*, 39(7), pp. 1220–1235.
- Grove, C. N. 2005. Introduction to the GLOBE Research Project on Leadership Worldwide, http://www.grovewell.com/pub-GLOBE-intro.html.
- Grove, C. N. 2005. Worldwide Differences in Business Values and Practices: Overview of GLOBE Research Findings, <a href="http://www.grovewell.com/pub-GLOBE-dimensions.html">http://www.grovewell.com/pub-GLOBE-dimensions.html</a>.
- Hofstede, G. 1980. *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G.Cultural Dimensions, http://www.geert-hofstede.com.
- Hofstede, G. 2001. *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*, 2nd Edition, and Thousand Oaks CA: Sage Publications.
- Hofstede, G. J. Pedersen, P. Hofstede, G. 2002. *Exploring Culture: Exercises, Stories and Synthetic Cultures*, Intercultural Press.
- Hofstede, G. Hofstede, G. J. 2005. *Cultures and Organizations: Software of the Mind*, 2nd Edition, and McGraw-Hill USA.
- Hofstede, G. 2006. "What did GLOBE really measure? Researchers' minds versus respondents' minds"., *Journal of International Business Studies*, 37(6), pp.882–896.
- Hofstede, G. Hofstede, G. J. Minkov, M. 2010. *Cultures and Organizations: Software of the Mind*, 3rd Edition, and McGraw-Hill USA.
- Javidan, M. House, R. J. Dorfman, P. W. Hanges, P. J. & De Luquet, M. S. 2006, "Conceptualizing and measuring cultures and their consequences: a comparative review of GLOBE's and Hofstede's approaches", *Journal of International Business Studies*, p. 37.
- Johnson, J. P., Lenartowicz, T., & Apud, S. 2006. Cross-cultural competence in international business: Toward a definition and a model. *Journal of International Business Studies*, 37(4), pp. 525–543.
- Hong, Y. Y., Morris, M. W., Chiu, C. Y., & Benet-Martínez, V. 2000. Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist*, 55(7), pp. 709–720.
- House, R. J. & Javidan, M. 2004. "Overview of GLOBE", in Culture, leadership and organizations: The GLOBE study of 62 societies, pp. 9–28. Thousand Oaks, CA: Sage.
- House, R. J. Hanges, P. J. Javidan, M. Dorfman, P. W. & Gupta, V. 2004. Culture, leadership, and organizations: The GLOBE study of 62 societies. Thousand Oaks, CA: Sage.
- Hoyt, C. L., 2010. "Women and Leadership", in *P. G. Northouse. Leadership: Theory and Practice, Thousand Oaks,* CA: SAGE, pp. 301-333.
- Koopman, P. Den Hartog, D. & Konrad, E. 1999. "National culture and leadership profiles in Europe: Some results from the GLOBE study", *European Journal of Work and Organizational Psychology*, 8(4), pp. 503–520.

Landis, D. 2008. Globalization, migration into urban centers, and cross-cultural training. *International Journal of Intercultural Relations*, 32(4), pp. 337–348.

- Leung, K. Bhagat, R. Buchan, N. Erez, M. & Gibson, C. 2005. "Culture and international business: Recent advances and their implications for future research". *Journal of International Business Studies*, 36(4), pp. 357–378.
- Luca, A. 2005. Studiul despre valorile şi comportamentul românesc din perspectiva dimensiunilor culturale după metoda lui Geert Hofstede, http://www.i-interact.ro.
- Lungescu, D. Mihuţ, I. 2005. Dimensiuni culturale în managementul românesc, www.managementmarketing.ro/pdf/articole/1.pdf.
- Marinescu, G. 2010. Management Public Modern, Editura Tehnopress, Iași, Romania.
- Marinescu, G. 2007. "Managers in the modern organization: Men or Women", *The International Journal of Learning*, Common Ground Publishing, Melbourne, Australia, vol.14.
- Marinescu, P. *Managementul Instituţiilor Publice*, ebooks.unibuc.ro/StiinteADM/ Marinescu/14.htm, p. 13. Maseland, R. & van Hoorn, A. 2009. "Explaining the negative correlation between values and practices: A note on the Hofstede–GLOBE debate", *Journal of International Business Studies*, 40(3), pp. 527–532. Mihut, I. 2002. *Euromanagement*, Editura Economică, Bucureşti, Romania.
- Năstase, 2004. Cultura organizațională și managerială, Editura ASE, București, Romania.
- Parboteeah, K. P. Addae, H., & Cullen, J. 2005. "National culture and absenteeism: An empirical test", *International Journal of Organizational Analysis*, 13(4), pp. 343–361.
- Ridderstråle, J. Norstrom, K. 2007. Karaoke Capitalism, Editura Publică, București, Romania.
- Rokeach, M. 1973. The Nature of Human Values. New York: Free Press, USA.
- Roşca, C. Roşca, D. Sîrbu, M. s.a. 2010. COMOR-Exploratory Research on the Organizational Culture and the Managerial Behavior in Romania, *Business and Leadership magazine*, year 3, no. 1(5)/.
- Roşca, D. Roşca, A.S. Sîrbu, M. 2011. The Methodological Framework of COMOR Research, *Ovidius University Annals* Economic Sciences Serie, vol. XI, issue 1, pp. 1843-1847.
- Sackman S. 2001. *Cultural Complexity in Organizations*, John Wiley & Sons Ltd., New York, USA. Schein, E. 2010. *Organizational Culture and Leadership*, Jossey Bass, A Wiley Imprint, San Francisco,
- Schein, E. 2010. *Organizational Culture and Leadership*, Jossey Bass, A Wiley Imprint, San Francisco USA.
- Schwartz, S.H. 2011. Studying Values: Personal Adventure, Future Directions. *Journal of Cross-Cultural Psychology*, 42(2), pp. 307-319.
- Taras, V., Steel, P., & Kirkman, B.L. 2010. Negative practice-value correlations in the GLOBE data: Unexpected findings, questionnaire limitations and research directions. *Journal of International Business Studies*, 41(8), pp. 1330-1338.
- Thomas, D. C., & Inkson, K. 2003. *Cultural intelligence: People skills for global business*. San Francisco, CA: Berrett-Koehler.

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## AN ANALYSIS OF STRATEGY IN THE FINANCIAL SERVICE INDUSTY

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#### ABSTRACT

Growth is essential for the survival of a firm in a market. Firms in both regulated and unregulated industries have to be competitive to maintain the required growth for the survival of the firm. The financial service industry plays an important role in our economy and serves as the backbone of the economy. The global crises of the financial service industry have had a significant impact on the economic growth and the market value of firms. The sudden crises in the financial service industry and the significant decline in stockholder wealth raise the question of whether the failure of the financial service institutions was a result of the firms' management strategies. The study examined management strategy, industry environment, and market efficiency to determine the cause of increase and decrease in the wealth of the stockholders. The results of the study suggest that in a free market economy growth strategy trumps the traditional approach to the strategy.

**Keywords**: Growth Strategy, Generic Strategies, Risk and Return, Economy

## 1. INTRODUCTION

The financial service industry is the backbone of the economy. The industry is a channel for supplying the capital needs for businesses' survival, growth, and day-to-day operations. The financial sector plays an important role in the global economy; the crises and the failure of several financial institutions in the financial service industry have significantly affected the growth of the global economy. The crises seem to be the result of demand for financial products and services and lack of regulation of the financial service industry in the US. Lack of regulation and demand provided an opportunity for the financial service industry to be creative and innovative in developing products and services like any other industry in the economy. The financial service industry is not like any other industry in the economy because of its role in the economy as a provider of cash inflows for businesses and consumers. In a non-financial service industry, if a company introduces new products or services and the products or services fail in the marketplace, the company may go bankrupt, and the lenders and stockholders absorb the losses. In the financial service industry, if a company goes bankrupt, the losses are absorbed by the lenders, stockholders, depositors, insuring agencies, government, taxpayers, and economy. In general, management of the financial service industry has ignored risk in their strategy. Management introduced new products and services that were based on complex mathematical models and ignored its impact on the stakeholders. The focus of the financial service companies was to create a competitive edge in the marketplace and to create short-term value for stockholders by marketing new products and services. The problem with this competitive strategy was that management was not fully aware of the high risk involved in these products and services (SEC, 2009). The products were not fully tested in the marketplace, and there was no systematic approach for determining the risk involved in the growth strategy (SEC, 2009). Management of financial services companies, while implementing the competitive strategy, ignored the basic principle of risk and return. Several firms in the industry were as only focused on the potential returns from the financial products and services, not risk and return. The investors were not fully aware of the risk involved because of the complexity of the products and services portfolios of the firms. The regulators may or may not have been aware of the risk involved because of the traditional approach of fixing the problems after the problems occur. Based on the publicly available information from the Security and Exchange Commission (SEC) (i.e., testimony of SEC officials at the Congressional hearing (SEC, 2009)), it seems as if the agency was not aware or did not pursue the symptoms that led to the failure of the major financial institutions in the financial service industry.

At this time, it is not clear whether the investigation of the symptoms that were brought to the attention of the SEC would have stopped the economic crises or started the crises a few years earlier. It will take years to determine what would have been the outcome if the agency had been more active in pursuing

the leads provided by the researchers and analysts. This type of research focus requires full cooperation of management and the regulating agencies. Both management of the financial service industry and regulating agencies are investing their resources in addressing the current crises at hand. At this time, is not possible to gather information from management, because possible civil and criminal liabilities may arise with the disclosure. Under these circumstances, it is more productive to conduct research using the historical information that is publicly available to the researcher to understand the factors that led the US financial service industry to these crises. This topic is of interest to researchers in competitive strategy, strategic management, and financial service management. Researchers in financial service management are interested in understanding the management strategies that led to the current crises and understanding the impact of the failure of the US financial service industry on global financial institutions, financial markets, and economies. Management researchers are interested in understanding why the growth strategy based on innovation and creativity led to the collapse of the financial service industry in the US.

### 2. RESEARCH PROBLEM

Financial institutions play an important role in our economy, and the failure of the major financial institutions in the financial service industry leads to economic crisis. This is because the financial service industry differs from any other industry in terms of stakeholders and how they raise money, invest money, and generate profits. Firms in the non-financial industry raise money in the form of debt, preferred stock, and common equity and invest in productive assets to produce products or deliver services to generate profits. In the financial service industry, capital includes borrowing and common equity. Institutions' loans and investments are based on the relationship between capital and deposits. The capital-to-deposit ratio is a determinant of the financial service firm's ability to lend, invest, and make profits, which means the growth of the firm depends upon the capital-to-deposit ratio. Firms in the industry with this constraint have to be very innovative and creative in lending and investing to generate profits. The question raised in the financial service industry is whether the sudden business failure in the financial service industry was the result of innovation and creativity or a high-risk strategy to compete in the marketplace. The question of concern to management researchers, practitioners, and regulators in the financial service industry is whether the crisis in the financial service industry was the result of management strategy, market efficiency, or lack of oversight by the regulating agencies. Investor confidence and the economic stability of the nation depend on strong and stable financial institutions and financial markets. The crisis in the financial service industry affects both businesses and individuals. An analysis management strategy, market efficiency, and regulations were analyzed to determine the factors that contributed to the crises in the financial service industry.

The purpose of this research was to determine whether the crises in the financial service industry were the result of the management strategy and to ascertain what we can learn from the crises of the financial service industry. The first research question asked whether the financial service industry's management strategy of introducing new products and services to create a competitive edge in the marketplace was a factor in the collapse of several large financial service firms. The second research question asked whether the market is efficient in reflecting the fair value of the security in the financial service industry. The third research question asked whether there is a relationship between the crises in the financial service industry and the regulation of the financial service industry. The focus of the research was on ten large financial service institutions that became financially insolvent and contributed to the US financial crises. The first research question revealed whether there was a relationship between the management strategy and the financial crises in the financial service industry. An analysis of historical data revealed whether the financial crisis was the result of the management strategy over a period of time or the result of variables from the external environment. The second research question asked whether the market was efficient in reflecting the fair value of the security. An analysis of the stock price of the ten selected financially insolvent firms revealed whether the market was efficient in reflecting the fair value of the security and whether the information was manipulated by management to reflect value in the market artificially. The third research question asked whether the financial crises of financial service firms were the result of regulation or lack of regulation. The analysis of qualitative data such as regulations revealed whether these crises were the result of regulation.

### 3. LITERATURE REVIEW

A review of the current literature shows that there is no empirical evidence that explains the financial crisis of the financial service industry and its relationship to management strategy, market efficiency, and regulation. However, there are many opinions and suggestions that the financial crisis of the financial institutions was the result of deregulation and investment in risky products and services. There is a lack of literature on the financial crisis and its relationship to management strategy, market efficiency, and regulations because information on the crisis was only made public in the last three years. The research focus has been more on the strategies used to solve the problems rather than what brought the crisis to the industry. The financial service industry is like any other industry from the point of view of investors, because they are in business to make money, and management has to generate wealth for stockholders. To generate wealth for stockholders, management is constantly looking for new products and services to create a competitive advantage in the marketplace. The five generic competitive strategies that are widely used by businesses to create a competitive advantage in the marketplace and capture and maintain market share are (1) low-cost provider, (2) focused low-cost strategy, (3) focused differentiation strategy, (4) broad differentiation strategy, and (5) best-cost provider strategy (Porter, 1980). Several other researchers have suggested that the five generic strategies are available for firms to create a competitive advantage in the marketplace. The analysis of management strategy may reveal whether the focus of management was on cost or differentiation in the financial service industry. Moreover, it guides the researcher in determining whether management's push for complex, innovative products and services was the result of the performance-based management strategy or the market-generated demand for the products and services.

The financial crises of the financial service industry provide an excellent opportunity to raise a question regarding whether management's focus on the five generic strategies (without taking into account risks and returns) was a good way to serve the interests of stockholders and firms. In addition, it is time to review whether using the five matrix-based generic strategies is the best way to compete in the marketplace. The problem with matrix-based strategies is that they focus on market opportunities (market share and competitive advantage) rather than opportunities for stockholders. It is assumed that market share or competitive advantage may generate value for shareholders. The experience of the financial service industry suggests that market share and competitive advantage may not protect firms from bankruptcy. In this dynamic and complex environment, formulating a strategy based on a matrix is not enough to survive in the marketplace. Risk and return must be linked to the generic strategies and turn the matrix into a dimensional model for strategy formulation.

Market efficiency has been the focus of business strategy research, and in this research, the analysis of market efficiency may reveal the reasons for business failure in the financial service industry. In an efficient market, efficiency depends on how fast the market digests all of the available information to reflect the implicit value of the security. Fama (1965); Fama, Fisher, Jenson, and Roll (1969); Lori (1974); and Hagin (1979) suggest that the market is efficient when new information is processed rapidly by the market to reflect the fair value of the security. The efficient market hypothesis is important in understanding how large financial institutions over a short period lost a significant portion of the market value (Table 1). In an efficient market, all of the available information including expected performance is incorporated in the current price. If the market was efficient, the market value of large financial institutions should have been declining over a period of time based on their financial product and service strategy. The negative cash flow and the bad assets were the results of the past several years of management strategy to buy and sell creative and innovative products based on complex mathematical models. The management strategy was to satisfy the market demand for products and services, focus on financial performance, and ignore risk. This strategy should have been reflected in the systematic risk of the firms and in the bankruptcy indicators. The bankruptcy models of Altman (1968), Zmijeswki (1984), and Shumway (2000) are available to monitor bankruptcy and are used by analysts to monitor bankruptcy. Chava and Jarrow (2004) investigated the accuracy of the bankruptcy hazard rate models of US companies using monthly data over the time period 1962-1999. The results of Chava and Jarrow (2004) suggest that shorter observation intervals improve bankruptcy predictions and that accounting variables add little predictive power when market variables are included in the bankruptcy model. Moreover, the study supports the notion of market efficiency in the semi-strong form, which is publicly available information including accounting information. The review of the literature suggests that in an efficient

market, the price of the security reflects all of the available information and the bankruptcy models have the predictive power when market variables are included in the bankruptcy analysis. The literature provides a sound theoretical base to analyze the financial crisis of the financial service industry and its relation to management strategy, market efficiency, and regulation.

#### 4. DATA AND METHODOLOGY

The purpose of this mixed study is to examine the business failure in the financial service industry and its relationship to management strategy, market efficiency, and regulation. The sample of the study was drawn from the list of financial institutions that were rescued under the Troubled Assets Relief Program (TARP) program. The ten financial institutions were selected based on size of assets, because large financial service institutions have a significant impact on both the domestic and global economy. The study included both domestic and US-based international financial service companies. The research study used both qualitative and quantitative analyses to determine whether the market was efficient in absorbing information in a rapid fashion to reflect the implicit value of the security, whether there were indications of bankruptcy before the financial crises, and whether regulations were in place to alter the regulators. The actual and expected returns for a period of ten years were calculated for the ten selected firms, and a t-test was used to determine the significance of the abnormal returns. This methodology is appropriate to test market efficiency by analyzing the abnormal returns during the period. An analysis of publicly available information was used to determine whether the selected firms showed indications of bankruptcy before the financial failure occurred and turned into a global financial crisis. A qualitative analysis was used to study the role of regulation in the business failure of the financial service firms. According to Creswell (2005), employing quantitative and qualitative data provides an adequate understanding and addresses the research problem of a study. In this explanatory mixed-research method design, both quantitative and qualitative data were collected simultaneously and integrated to provide a better understanding of the financial crisis in the financial service industry and its relationship to management strategy, market efficiency, and regulation. The explanatory mixed-method design was appropriate for the study, because it enhanced the understanding of the quantitative data and provided an additional explanation that would have been missing had only quantitative analyses been used. In the mixed-method study design, the quantitative data is given a higher priority than qualitative data to extract additional information from the quantitative data. To study the relationship between management strategy, market efficiency, regulations, and the financial crises, the last ten years of stock prices, publicly available information on bankruptcy indicators, management strategies, and regulations were analyzed.

## 5. ANALYSIS

The analysis of the management strategy of the ten financial services firms drawn from the TARP program shows that management was clearly communicating with stockholders about their performance in annual reports, online media, print media, and corporate communications. The analysis of annual reports and print and online media shows that most of the firms were interested in differentiating their products and services to create a competitive advantage in the marketplace. The differentiating strategy requires creativity, innovation, and entrepreneurship. Most of the firms were successful in creating and innovating products for the mortgage markets. The creativity and innovation resulted in the firms developing higher-risk products and services. It is not clear whether management was fully aware of the potential risk. The risk was not communicated to the market, either because the traditional risk-evaluating firms failed to identify the risk associated with the creative and innovative mortgage products or because they were not adequately familiar with the new products and services to evaluate the risk involved. The firms were able to sell high-risk products and services and add risky assets to portfolios without understanding the true risk involved in the assets.

The analysis of stock prices, risk indicators, expected returns, actual returns, and bankruptcy indicators suggests that the financial performance of the selected firms in the financial service industry was consistent with risk and return theory. An analysis of stock prices reveals that the financial service industry firms outperformed the market over the period of the study. The analysis of expected return and actual return shows that there were no excess returns available to investors over the period of the study. The result of the analysis of expected and actual returns suggests that the market was efficient in reflecting the fair value of the security based on the available risk information. The analysis of risk

indicators in relation to real estate prices and interest rates did not reveal any significant changes in the level of risk of the selected firms in the financial service industry during the period of the study. This suggests that changes in real estate prices and increases in real estate industry risk did not influence the risk of the financial service industry. Increases in real estate prices and decreases in interest rates may have increased the volume of business in the financial service industry, but it did not affect the risk behavior of the industry. The result of the analysis shows the market was efficient in reflecting the fair value of the security, and the risk was consistent with return during the period of the study (Tables 2 and 3). The sudden business failure may be rationally explained by the content of the information. It may have been the complexity and technicality of the information that made it too difficult for the market to digest the information to reflect the fair value of the security. The analysis of the qualitative data suggests that a lack of deregulation of the industry led to innovative and creative products and services and higher growth in the industry. The SEC—the regulatory agency whose responsibility it is to protect investors and maintain fair, orderly, and efficient markets and facilitate corporate formation (SEC, 2009)—has failed to protect investors and maintain an efficient market. A review of the actions of the regulatory agency suggests that the agency has been reactive rather than proactive in their effort to maintain an efficient market. In the financial service industry, to protect depositors and investors, the regulatory agency has to play a proactive role in making sure the firms are accessing and communicating the risk involved in products, services, and assets bought and sold to investors and the market. The fierce competition in the industry may have led to management's higher-risk strategies to achieve higher returns. The reactive role of the regulatory agency may have allowed the financial service firms to buy and sell risky assets to improve their financial performance. The analysis of the stock prices and the market data revealed that excess profits were not available in the financial service industry, which suggests that there was no evidence of market inefficiency. The analysis of capital structure and financial performance indicators suggests that the crises were not the results of the short-term strategies of financial service firms, but long-term strategies that involved high risks and risks in transferring products and services.

### 6. CONCLUSIONS

The results of the study suggest that management's strategy to outperform in the marketplace may have resulted in high-risk products and services and the acquisition of risky assets in the portfolios of firms. The traditional risk-evaluating firms' failure to evaluate the risks of assets may have contributed to the growth of risky financial products and services. The results of the study also support the fact that the market was almost efficient in reflecting all of the available information in the fair value of the security based on the available risk information. In other words, information on financial products and services was complex and technical and was not reflected in the risk measure of the financial firms' securities. The results of both qualitative and quantitative analyses suggest that the financial crises of the US financial industry were the result of a combination of factors, including lack of regulation, introduction of new investment products, operation of unorganized financial markets, and managements' attitude towards risk in the financial service industry. The lesson management and researchers may learn from the crises that there is a fundamental difference between the business models of non-financial service firms and financial service firms. In non-financial service firms, there is separation between customers and investors. Investors have the choice of risk in investments. In financial service firms, customers are both customers and investors. Customers are not fully aware of the risk involved when depositing their funds and buying financial products. It seems as if financial service management has been using a consumer product and service model to market financial products and services. The failure of the firms in the financial service industry may have been the result of the management strategy or the inability of the market to digest complex and technical information on products and services. Finally, the current study suggest that a competitive strategies without understanding of risk and return is a process of selecting a strategy by throwing a dart on the dartboard of the five generic strategy.

#### **REFERENCES**

Argyres, N., & McGahan, A. (2002). Introduction: Michael Porter's Competitive Strategy. Academy of Management Executive, 16(2), 41-2.

Altman, E. (1968, September). Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy, Journal of Finance.

Bachmann, J. (2002). Competitive strategy: It's O.K. to be different. Academy of Management Executive, 16(2), 61-5.

Brandenburger, A. (2002). Porter's added value: High indeed!. Academy of Management Executive, 16(2), 58-60.

Barney, J. (2002). Strategic management: From informed conversation to academic discipline. Academy of Management Executive, 16(2), 53-7.

Chava, S., and Jarrow, R. (2004). Review of Finance 8, Kluwe Academic Publisher, Netherlands, PP.

Cline, K. (2005). Refresher on Strategy. Banking Strategies, 81(5), 24-8, 30, 32-4.

Creswell, J. W. (2003). Research design. Thousand Oaks: Sage Publications.

Creswell, J. W. (2005). Educational research: Planning, conducting, and evaluatin quantitative and qualitative research. 2nd ed. Upper Saddle River, New Jersey: Prentice Hall.

Davidson, S. (2001). Seizing your competitive advantage. Community Banker, 10(8), 32-4.

Fama, E. (1970, May). Efficient Capital Markets: A review of Theory and Empirical Work, Journal of Finance, XXV, No. 2, PP. 383-417.

Fama, E., Fisher, L., Jensen, M. Roll, R. (1969, February). Adjustment of Stock Price to New Information, International Economic Review, PP. 121.

Federal Deposit Insurance Corporation. (2009). http://www.fdic.gov.

Federal Reserve System. (2009). http://www.federalreserve.gov

Franklin, A., and Santomero, A, (1998). The Theory of Financial Intermediation, Journal of Banking and Finance 21, PP. 1461-1485.

Hagin, R. (1979) Modern Portfolio Theory, Homewood, Illinois: Dow Jones-Irwin, PP. 7-85.

Lori, J., and Brealey, R. (1978). Modern Development in Investment Management: A Book of Readings. 2nd ed. Hinsdale, Illinois: Dryden Press.

Ormanidhi, O., & Stringa, O. (2008). Porter's Model of Generic Competitive Strategies. Business Economics, 43(3), 55-64.

Pitts, R., Lie, D. (2003). Strategic Management: Building and Sustaining Competitive Advantage: Thompson, South-Western.

Porter, M. (1980). Competitive Strategy: Techniques for Analyzing Industries and Competitors, New York: Free Press.

Porter, M. (2008). The Five Competitive Forces That Shape Strategy. Harvard Business Review, 86(1), 78-93.

Retail Delivery: Special Report. (2005). Banking Strategies, 81(5), 23-68.

Securities and Exchange Commission. (2009). http://www.sec.gov.

Shumway, T. (2001). Forecasting bankruptcy more accurately: A simple hazar model, Journal of Business 74, PP. 101-124.

Spanos, Y., & Lioukas, S. (2001). An examination into the causal logic of rent generation: contrasting Porter's competitive strategy framework and the resource-based perspective. Strategic Management Journal, 22(10), 907-34.

Thompson, A., Strickland, A., Gamble, J. (2009). Crafting and Executing Strategy: Text and Readings. New York: McGraw-Hill.

Troubled Asset Recovery Program - TRAP. (2009).

http://www.federalreserve.gov/bankinforeg/tarpinfo.htm

Walker, Gordon. (2009). Modern Competitive Strategy. New York: McGraw-Hill.

Zmijewski, M. E. (1984). Methodological issues related to the estimation of financial distress prediction models, Journal of Accounting Research 22, PP. 59–82.

# **TABLE 1: LIST OF 10 COMPANIES**

Name of the Institutions	Decline in Price
Citi Group	\$50.00 - \$3.00
AIG	\$49.00 - \$2.00
Bank of America	\$52.00 - \$8.00
Wells Fargo	\$32.00 - \$16.00

J.P. Morgan	\$50.00 - \$29.00
Goldman Sachs	\$140.00 - \$86.00
Morgan Stanley	\$42.00 - \$7.00
PNC Financial Service	\$70.00 - \$35.00
US Bank Corp	\$35.00 - \$16.00
Sun Trust	\$50.00 - \$6.00

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