An Analytical Study on Hofstede's Dimensions of National Culture: Implications for International Business Management

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Abstract

With increasing globalization, business activities are transcending national boundaries. Multinational corporations are agents of such globalized business operations and catalyze cross border commercial and industrial ventures. Dealing with different nations obviates exposure to different national cultures and managing the complexity arising out of the multiplicity of cultures. Thus management of international business, in essence hinge on compatibility of the management styles with different national cultures. National culture has certain distinguishing dimensions as professed by scholars like Hofstede and Trompenaar & Hampden-Turner. An understanding of these dimensions and the relations in between them will help international business management in monitoring and assessing the cultural environments and in formulating and executing successful and appropriate business strategies. This paper aims to critically examine the correlation between the different dimensions of national culture as identified by Hofstede and to interpret the observations so that the findings may pave the way for successful management of international business.

Key Words   : *National Culture, International Business, Hofstede, Dimensions of National Culture, Correlation.*

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Introduction

An understanding of different national cultures is important in all aspects of international business management. Since international business is becoming increasingly important with growing magnitude of globalization of commercial activities, knowledge of national cultures is important in interpreting results of environmental scanning. An understanding of national cultures is also important to the formulation and execution of strategies in international business management. Hofstede found in his research that national culture is influential enough to overwhelm corporate cultures. International business management deals with multiplicity of national cultures and as such an understanding of these differences is crucial in formulating and executing business decisions in different countries. A certain management style or practice might be successful in one nation, but fail in another. Because of cultural differences, managerial style and practices in different functional areas of management must be tailored to fit the particular country-specific situations. Knowledge of the differences in national culture is thus a vital determinant for successful international business management.

Objective of the study

The objective of the study is three-fold. Firstly the study aims to have a country-wise ranking for each of the four primary national cultural dimensions as identified by Hofstede. Secondly, the study aims to have a dimension-wise mean score for all the nations, as considered by Hofstede along with the measure of their variability. Thirdly, the study intends to test the nature and degree of correlation among the four principal national cultural dimensions and to test the statistical significance of the same so as to establish a relationship in between or dissociation among the said four dimensions of national culture.

Literature Review

Literature survey for the study has been done with the twin intention of delving into the concept and implication of culture at national and organizational levels as viewed by different scholars and authors & the interrelations among the two levels and to gain knowledge on the dimensions of national culture as identified by Geert Hofstede. The findings of the literature survey has been referred to at appropriate places in the following discussions.

The Concept of National Culture and its Implications in Business Management Studies

Culture is variously defined in terms of several common processes i.e. thinking, feeling, reacting, recognizing identities, environmental constructs, using technology, and commonly experienced events including the history, language, and religion of their members of a group which distinguishes that group with other groups. Culture is concerned with the development of coherent viewpoints which bring a cumulative effect to otherwise isolated experiences of a group, making them feel special yet allowing others to have a parallel experience (Veltman 1998). Culture is relevant for the development of socio-technical systems (Kummer & Leimeister2012). Culture is a group-level construct. Professions, organizations, societies and nations are among the groups that could be considered to have their own cultures. Hence National Culture, for the purpose of the study, is construed to be common behaviors, beliefs, values and attitudes shared by citizens of a nation. A national culture is the whole body of efforts made by a people in the sphere of thought to describe, justify, and praise the action through which that people has created itself and keeps itself in existence (Fanon 2003).

National and regional culture and cultural variations decisions regarding the choice of location and foreign entry modes deployed in international business management (Reis et al 2011; Kogut & Singh 1988). Importance of cultural issues is becoming increasingly evident in many applied disciplines including information technology (Ali & Brooks, Myers & Tan 2002). Management of international science projects is also affected by National culture (Shore & Cross 2005). National culture impacts the e-governance readiness of nations (Kovacic 2005). Failures of some International Joint Ventures can be attributed to incompatibility of national cultures of the parties involved (Avny et al). Cultural model of comparative industrial relations theory explains the cross-national pattern of industrial relations institutions and any change thereof (Black). There are empirical evidences of increased utility of national culture as a state legitimation strategy in response to economic protectionist capacity changes resulting from global political economic integration (Blad 2008). Differences in national cultures are important for domestic companies which consider international expansion (Bayias & Assimakopoulos 2011). National cultures affect organisational forms and structures as well as group support systems (Davison, Gibson 1994). National culture affects the composition and leadership structure of board of directors of corporate organizations (Li & Harrison 2008). National cultures and diversity of management perceptions are correlated (Guidroz et al 2005). Origin of corporate behaviour and the mechanisms that can help promote organizational effectiveness are affected by national

cultures as evidenced by empirically in Germany, Austria, Slovenia & Denmark (Gulev 2009). It has also been observed that employees may be resisting a company's corporate culture if it is in contrast with their respective national cultures (Katz 2005). National culture is an important determinant of business negotiation process (Sebenius 2009). Corruption, a burning problem in business management is linked with, along other factors inter alia, national culture (Rethi 2012). Configuration of national financial systems are affected by national culture (Tadesse & Kwok 2005). Scholars have cited instances of impact of national culture on knowledge sharing activities in global virtual collaboration (Smith & Dugan 1996). National culture also impacts economic ideology on managerial work values (Ralston et al 1995) Scholars argue that management practice must fit the national culture (Erez 2000). National culture thus has a pervasive effect on organizational and managerial aspects (Santos 2012).

Dimensions of National Culture

The various researches of Geert Hofstede (2003, 2010) and Alfons Trompenaars & Charles Hampden (2012) have been found globally in order to get a broad view of the culture. Hofstede's taxonomy is the most cited in the literature on national culture and his taxonomy has strong linkages to several streams of research (Reis et al 2011). As such this paper focuses on the initial four dimensions of national culture as identified by Hofstede (1983) i.e. Power Distance, Individualism, Masculinity versus Femininity and Uncertainty Avoidance. Though he extended the number of dimensions of national culture to six (http://www.geert-hofstede.com) with introduction of two new dimensions of Long-Term Orientation in 1991 based on research by Michael Bond and Indulgence versus Restraint in 2010 based on analysis by Michael Minkov. The last two dimensions have not been considered in this paper as the scores of all the nations for those two dimensions could not be obtained.

Brief descriptions of the four dimensions considered in this paper and their respective scales are as under.

Power Distance Index (PDI) : This dimension measures the degree of equality, or inequality, between people of one society and how much the less influent members accept the hierarchy. The institutions or organizations where less powerful members accept power is distributed unequally will have a high PDI. Those countries will be more likely not to allow significant upward mobility of its citizens, because they accept autocratic and paternalistic relations. A

low PDI indicates the society tends to reduce the differences between citizen's power and wealth. In those cultures people expect power relations that are more democratic. They relate to others regardless of formal positions, such as if they were consulting them. Subordinates are more comfortable with contributing to and criticizing the decisions of those who are hierarchically higher. PDI has a theoretical range from (-) 90 to (+) 210. The country scores varied between the inclusive limits of 11 to 104.

Individualism vs. Collectivism (IDV): It focuses on how much people of a society define themselves apart from their group and on how much the country emphasizes individual or collective achievements. A High Individualism ranking indicates that people are expected to develop and to be proud of their personalities and their choices. People often tend to form a higher number of looser relationships in those societies. A Low Individualism ranking typifies societies where the individuals are more likely to act as a member of a group e.g. family, town, profession etc. This collectivist nature tends to develop relationships between individuals, and reinforce extended families. The country scores varied between the inclusive limits of 6 to 91.

Masculinity vs. femininity (MAS): This dimension measures the degree the society reinforces the traditional masculine work role model or not. A High Masculinity ranking indicates the country gives a high importance on traditional male values like ambition, accumulation of wealth and power. Those societies emphasize high gender differentiation. In these cultures, males dominate a significant portion of the society, while females are under domination. In the opposite case, a low MAS will indicate that the society de-emphasizes the gender differentiation. In those countries, females are treated equally to males in all aspects of the society. The valuable things are relationships and quality of life. The country scores varied between the inclusive limits of 5 to 95.

Low vs. high Uncertainty Avoidance Index (UAI): It focuses on the level people try to cope with stress by fighting uncertainty and ambiguous situations within the society. A high UAI indicates a rule-oriented society, where citizens prefer explicit laws, rules and controls, in order to reduce the amount of uncertainties. A Low Uncertainty Avoidance ranking indicates the country has less concern about ambiguity and has a greater tolerance for informal situations. This is reflected in a society that is less rule-oriented, where people value implicit or flexible guidelines. UAI has a theoretical range from (-) 150 to (+) 230. The country scores varied between the inclusive limits of 8 to 112.

Research Methodology

The value of the four indices i.e. PDI, IDV, MAS & UAI for eighty countries were collected from http://www,geert-hofstede.com (accessed on May 10, 2013). The values of the four indices were on different scales as the terminal values were different. In order to facilitate comparison of central tendencies and variability as well as to test coefficients of correlation and statistical significance thereof, the indices were re-scaled on a continuum of 0 to 100 allowing two places after decimal. The rescaled scores were sorted from minimum to maximum to have a comparative idea of the scores of each country for the four identified cultural dimensions. The Mean scores and coefficients of variation were calculated for each of the cultural dimensions. Coefficient of correlation were calculated for the four cultural dimensional scores and were subjected to testing for statistical significance using two tailed t test at 5% level of significance.

Findings

The countrywise rankings for each of the four indices are contained in the annexure. Austria scores lowest in PDI while Slovakia and Malaysia scores highest. In IDV, Guatemala scores the lowest and USA tops the list. In MAS, Slovakia records the highest score with Sweden scoring the lowest and finally in UAI, Greece scores the highest with Singapore scoring the lowest.

The mean score of the eighty countries for PDI, IDV, MAS and UAI are 55.19, 40.68, 49.96 and 56.95 respectively. However the standard deviation for the four measures reveal that variability is least in MAS and UAI for which the standard deviations are 19.40 & 21.77 respectively. The corresponding coefficients of variation are 38.83% and 38.23% respectively. The standard deviations of PDI and IDV are comparatively higher at 23.26 and 27.09 with corresponding coefficients of variation at 42.14% and 66.60%.

The Coefficients of Correlation between the four dimensions are as follows.

	PDI	IDV	MAS	UAI
PDI	1	-0.636	0.106	0.231
IDV		1	0.107	-0.202
MAS			1	-0.058
UAI				1

It transpires that PDI is negatively correlated with IDV at a moderate level. However the correlation coefficients of PDI with MAS and UAI are weakly positive. IDV has a weakly positive correlation with MAS but a weakly negative correlation with UAI. Between MAS and UAI there is almost no correlation.

To Test the Statistical Significance of the Correlation Coefficients, We have framed the following Hypotheses:

Coefficients of Correlation	H_0	H_A
Between PDI and IDV	$H_01: \rho = 0$	$H_A1 \neq 0$
Between PDI and MAS	$H_01: \rho = 0$	$H_A1 \neq 0$
Between PDI and UAI	$H_01: \rho = 0$	$H_A1 \neq 0$
Between IDV and MAS	$H_01: \rho = 0$	$H_A1 \neq 0$
Between IDV and UAI	$H_01: \rho = 0$	$H_A1 \neq 0$
Between MAS and UAI	$H_01: \rho = 0$	$H_A1 \neq 0$

Two tailed t test is used to test all the hypotheses at 78 degrees of freedom i.e. $DF = n - 2$ where n = number of observations i.e. 80. Level of significance is taken at 5%.

The results of the testing of all the hypotheses are given below.

Null Hypotheses	Calculated values of t	Critical values of t at $\alpha = 5\%$	Decision
H_01	7.28	1.99	H_0 is Rejected
H_02	0.94	1.99	H_0 is Accepted
H_03	2.10	1.99	H_0 is Rejected
H_04	0.95	1.99	H_0 is Accepted
H_05	1.82	1.99	H_0 is Accepted
H_06	0.51	1.99	H_0 is Accepted

Thus the moderately negative correlation between PDI & IDV and the weak positive correlation between PDI & UAI are found to be statistically significant while all other four correlations are found to be statistically insignificant.

Inference

From the results of the testing of the formulated hypotheses, we have an indication that an increase in the degree of equality or inequality between people of one society and how much the less influent members accept the hierarchy is associated with a decrease in the degree to which people of a society define themselves apart from their group and how much the

country emphasizes individual or collective achievements. Similarly an increase in the level of the endeavor of people to cope with stress by fighting uncertainty and ambiguous situations within the society increases with the degree of equality or inequality between people of one society and how much the less influent members accept the hierarchy, though the degree of this association is weaker or less prominent in comparison to the former degree of association.

Limitations of the Study

This study is subject to certain limitations. Firstly only eighty countries have been considered whose data was available. The study has been based on the findings of Hofstede only. Other prominent studies on the subject i.e. that by Trompenaars has been kept outside the ambit of this study. Only four of the cultural dimensions identified by Hofstede have been considered for which data was available. Two other dimensions have not been considered in the study due to unavailability of respective scores of all the eighty countries for those two dimensions. The correlations between the selected four dimensions only has been considered for the study. As culture is a learned aspect, the other factors affecting culture at national level have not been considered in the study.

Future scope of the study

There is future scope of future study on how the cultural aspects at a national level as identified by Hofstede and Trompenaars & Hampden-Turner match against each other. The statistical significance and insignificance of the correlations as identified in this paper between Hofstede's dimensions may be tested for validity against similar studies on works of Trompenaars & Hampden-Turner. Studies may be undertaken to test the association of the constituents of national cultures and determinants of cultural aspects and various socio-economic variables at national and / or regional levels. Such studies shall help in achieving better understanding and interpretation of cultural environments in different countries and / or regions. International business management would be benefited from such studies as such studies would provide appropriate information not only to identify and solve cross-cultural problems but also to achieve synergistic effects by gelling compatible cultures to take better decisions in a multiplicity of cultural environments which international business management envisages.

Conclusion

International business management has to address different business environments in different parts of the world, of which cultural environment is a very important constituent. It is all-pervasive and tells upon almost all the functional aspects of cross-border business. Increasing globalization is compelling international business management to recognize, identify and address cross-cultural issues in management. Proper identification of the constituents and determinants of culture as well as the socio-economic factors which are affected by them and the degree of association or dissociation between them aid international business management in understanding, interpreting and designing business operations in

such a manner so as to fit in the various national cultures in the best possible manner.. Quantitative analysis of cultural dimensions and their association with various economic and social factors help taking objective, effective and efficient strategic decisions regarding conduct of international business operations.

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Annexure

Ranking of Countries for the Four Cultural Dimensions