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CULTURAL ASPECTS OF BUSINESS & IT ALIGNMENT

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Abstract

Aligning IT to business needs is still one of the most important concerns for senior management. The message of Business & IT Alignment (BIA) is logical and undisputed, but implementation apparently difficult. As part of a research program on the differences between the theory and practice of BIA this paper explores the impact of (national) cultures on the maturity of BIA.

The paper relies on Hofstede's framework of cultural dimensions (Hofstede, 1980) to understand the concept of culture. We present a compact literature review on the influence of culture on IT that leads to the conclusion that there is an influence and that it is likely that also alignment of business and IT will be affected by cultural aspects. After a brief introduction we than analyze this influence by conceptually assessing the potential impact of Hofstede's cultural dimensions on the variables of BIA maturity.

Keywords

Business & IT Alignment, National Culture, Organizational Culture.

Introduction

Information technology (IT) is changing the way companies organize their business processes, communicate with their (potential) customers and deliver their services (Avolio, Kahai & Dodge, 2001). A key success factor for a successful company is an effective and efficient alignment of the way IT is supporting business strategies and processes. The necessity and desirability of aligning business needs and IT capabilities is examined in numerous articles (Pyburn 1983, Reich and Benbasat 1996, Chan et al. 1997, Luftman and Brier 1999, Maes et al. 2000, Sabherwal and Chan 2001) and its importance well recognized (Cumps et al. 2006). The annual survey on top management concerns by the Society for Information Management (www.simnet.org) however ranked 'IT and Business alignment' as the No. 1 concern for four years in a row (Society of Information Management, 2003, 2004, 2005, 2006). In last year's survey, alignment lost its doubtful honor as the 'top concern' to drop to only the second place on the list (Society of Information Management, 2007). The alignment between business needs and IT capabilities therefore still is a prominent area of concern.

After many years of research into the business & IT alignment (BIA), Chan & Reich (2007) list over 150 studies, this concern should be surprising. Should it be concluded that academic research still cannot provide solutions for the issues business and IT executives are faced with in practice? We believe this is at least partly true. Some questions that practitioners face are not addressed in academic literature (Chan & Reich, 2007; Silvius, 2007).

Amongst these questions is the impact of culture on BIA. Several authors (Watson et al., 1997; Kaarst-Brown & Robey, 1999; Baker, 2004) suggest a relationship between the effectiveness of BIA and the culture within an organization. Other authors show that national cultures affect the way IT is used or perceived (Veiga, Floyd & Dechant, 2001; Livonen et al, 1998). This paper aims to explore the way culture affects the maturity of BIA in organizations.

It is important to study the impact of culture on the alignment of business and IT because organizations are increasingly depending on IT for their communication and business processes. Information has become ubiquitous in many organizations and IT is therefore one of the most important resources of production and knowledge. However, embedding IT in organizations requires careful consideration of the organization's culture and the culture of its surrounding countries (Ross, 2001; Westrup et al, 2003).

After a brief paragraph on the background of the paper, we introduce a framework for studying national and corporate cultures. The following paragraph explores the literature on the relationship between culture and IT in order to establish whether any relationship can be expected. After this introduction we introduce the concepts of Business and IT Alignment and a framework to study the maturity of BIA in organizations. The last part of the paper presents an analysis of how national cultures can be expected to influence BIA maturity scores.

Background

The central question that this paper addresses is how does culture influence the alignment of business and IT in organizations. This question resolves from a research program aimed at exploring and understanding the differences of BIA in theory and in practice. With this knowledge the theory on BIA can be further developed.

Step one of the research was a literature review on the topic. The literature review focused on the following questions.

- *How is BIA defined and interpreted?*
- Which theories are developed on BIA?
- What was the development path of BIA?

This literature is not reported in his paper, but some relevant parts are included in the paragraph defining BIA. The second step in the program was a number of focused group discussions in order to explore the practical side of BIA. The discussions were aimed at exploring the following questions.

- Which issues are faced in aligning IT with business requirements in practice?
- Which actions are taken to align IT with business requirements?

This research was reported in Silvius (2007). The results of the discussions give input to the construct of BIA as a result of the relationship between business professionals and IT professionals instead of a systematic methodology. This insight was also found with in other studies (Luftman et al., 1999). The relationship can be well established and matured within an organization, with a clear process and assessment, or it can be still in its infancy. The third step of the research program therefore focuses on the assessment of the maturity of BIA in real-life companies and on understanding the factors that influence these assessments. The results of BIA maturity assessments are recently reported by Luftman (2007) and, on a much smaller scale, by Silvius (2007b). Both studies pay little attention to the influence of culture on the assessment scores of individual companies. Given however the influence of culture on the use and perception of IT, as was found in several studies (referenced in the paragraph 'Culture and IT'), it seems not unlikely that culture may also have an influence on BIA maturity.

Culture

Hofstede (1991) defines culture as "the collective programming of the mind, which characterize the members of one organization from others." By "collective programming" Hofstede refers to the symbols, heroes, rituals and values that collectively define a culture. *Symbols* are specific words, gestures, objects of status symbols that carry a particular meaning to people of the same culture. *Heroes* are people, real or imaginary, dead or alive, that have the ability to influence behaviour based on their status, skills or charisma. *Rituals* are activities that in itself are seemingly unnecessary, but in the culture are considered essential. Symbols, heroes and rituals are the practices of a culture. They are visible and observable to an outside spectator. At the core of a culture lie the values. *Values* are "broad tendencies to prefer certain states of affairs over others" (Hofstede, 1991). They represent how things "ought to be".

These four concepts relate to each other, as is shown in the 'union' metaphor (figure 1).



Figure 1. Manifestations of culture at different levels of depth (Hofstede, 1991).

Cultures come in many different kinds or layers. Such as national cultures, organizational cultures, organizational subcultures and occupational cultures (Gefen & Straub, 1997; Hofstede, 1991). In this paper we investigate the impact of national cultures on Business IT Alignment. We therefore rely on Hofstede's dimension framework to understand more about the concept of national culture. Hofstede (1980) presented a model of national cultures, based on a survey of more than 50 countries involving more than 120,000 respondents. The model characterizes culture on four dimensions. These dimensions are:

• PDI (Power Distance Index)

The power distance index is an indication of the extent to which less powerful members of a society accept unequal distribution of power. It reveals dependence relationships in a country. A low PDI shows limited acceptance of power inequality and less dependence of subordinates on managers. It also shows a preference for consultation and cooperation.

• IDV (Individualism vs. collectivism)

In cultures that are considered highly individualistic, individuals are loosely tied and are expected to look out for themselves and their family. In 'collectivist' cultures, people are integrated into strongly cohesive in-groups, and group loyalty lasts a lifetime. In individualistic cultures, time, punctuality and schedules are considered highly important, whereas in collectivistic cultures personal relationships and contacts prevail.

- MAS (Masculinity vs. femininity)
 In the dichotomy masculine versus feminine, a masculine culture values assertiveness, performance and material success. In a feminine society values like quality of life, tenderness and modesty prevail. In a feminine culture, individuals don't like to stand out or be unique, whereas in a masculine society success and career are valued highly.
- UAI (Uncertainty Avoidance Index) The uncertainty avoidance index is defined as "the extent to which the members of a culture feel threatened by uncertain or unknown situations" (Hofstede, 1991). Cultures with a high UAI have a large need for rules and regulations to guide tasks. Cultures with a low UAI are less rule-dependent and are more trusting (Mooij, 2000).

Based on follow-up research among students in 23 countries around the world, and criticism that the model represented a very 'western' way of thinking, a fifth dimension was added (Bond, 1984).

- LTO (Long Term Orientation vs. Short Term Orientation)
 - This dimension is an indication of the perception of time in a culture and is based on the heritage of Confucius, the most influential Chinese philosopher who lived around 500 B.C. Values associated with Long Term Orientation are thrift and perseverance; values associated with Short Term Orientation are respect for tradition, fulfilling social obligations, and protecting one's 'face'.

While Hofstede's framework may not be perfect, some authors (Miller, et al. 2006, Smith and Bond, 1998) prefer alternative frameworks like Schwartz's (1994) because of it's more recent nature, we use Hofstede's framework in this study because it is widely known and used amongst both academics and practitioners and because Schwartz achieved a refinement of Hofstede's work, rather than a contradiction (Miller, et al. 2006).

Hofstede also asserts that tendencies in national culture are replicated in organizations through the behaviour and practices of individuals (Hofstede, 1980). The insights provided by Hofstede's framework could therefore also be valuable on a organizational level.

In his study, Hofstede measured the score of over 74 countries on these five dimensions. An overview of the scores per country is provided as appendix A.

Culture and IT

(National) Culture influences the way IT is perceived or used. Several authors found proof of this in their studies. Table 2 provides an overview of some studies in this field.

Authors	Main findings
Straub (1994)	The author studied the effect of culture on IT diffusion of email and fax in Japan and the
	United States. His findings suggested why there are differences in email usage and choice
	among knowledge worker in different cultures.
Livonen, Sonnenwald,	The authors studied Finnish and American college students that collaborated in a common
Parma, & Poole-Kober	course using electronic discussion groups. Findings of the study show that cultural attitudes
(1998)	toward technology may influence people's beliefs and use of the technology.
Leidner, Carlsson, Elam,	This study examined whether cultural differences influence perceptions of the relationship
& Corrales (1999)	between Executive Information Systems (EIS) use and decision-making outcomes. The
	authors compared the responses from in Mexico, Sweden, and the United States. The study
	found significant differences, predicted by cultural factors, in the impact of EIS use on
	management decision-making.
Hofstede (2000)	The paper investigates the specific attributes of countries that influence ICT adoption speed.
	Findings show that cultural variables (individualism and uncertainty avoidance) can be used
	to predict the ease and speed of changes. Cultures of high uncertainty avoidance are slow of
	adopting new technologies.
Veiga, Flovd & Dechant	This study discussed the effects of national culture on the acceptance of IT, using the
(2001)	Technology Acceptance Model (TAM). The authors compared acceptance in Japan and the
()	United States and the findings suggest that Hofstede's dimensions of cultural differences
	play distinct roles in influencing the acceptance
Png Tan & Wee (2001)	This study compared the adoption of frame relay between the United States and Ianan The
1 ng, 1 un & Wee (2001)	findings suggest that uncertainty avoidance one of Hofstede's dimensions affected the
	adoption decision of companies differently in the two countries
Birgelen Ruyter Jong &	The authors compared ICT use in after-sales service-and-support operations in Sweden
Wtzels (2002)	Belgium France Spain Austria Iraland Netherlands United Kingdom Norway and the
W (2002)	US The findings suggest that cultural characteristics will partly determine the design of
	effective after-sales service contact modes
Sørnes Stenhens Sætre	The authors studied how workers in Norway and the United States use information and
& Prowning (2004)	communication technology (ICT) Their findings show that ICT use reflects Hefstede's
& Blowning (2004)	findings for DDI and IIAI but that it descript reflect cultural differences for IDV and MAS
Weeste P- ver	This study investigates if notional sulture adds to the symbolic of differences in adaption.
$\frac{1}{2}$ wants $\frac{1}{2}$ want	This study investigates in haronal culture adds to the explanation of differences in adoption of impossible for firms operating in different countries. The outhers performed a large
Everdingen (2003)	of innovations for finns operating in different countries. The authors performed a large-
	scale empirical study in 10 European countries concerning the adoption of Emerprise
	Resource Planning (ERP) software by medium-sized companies. Key finding is that
	variables describing national cultural highly significantly explain variance in adoption
	decisions in addition to the traditional micro and meso variables.
Miller, Batenburg and	This study investigates the adoption rates of ERP systems from fourteen European countries.
van de Wijngaert (2006)	The study explores if a national cultural framework could be used to explain the differences.
	The framework used was Schwartz's seven national cultural value types. After controlling
	for industry and size, it was found that conservatism has a negative relationship while
	autonomy, egalitarian commitment, and harmony have a positive relationship with the
	adoption of ERP systems.
Batenburg (2007)	The author explored country differences in adoption of electronic procurement. Analyses are

Table 1. Summary of Comparative Studies of cultural impacts on ICT practices.

	conducted on 3475 organizations from seven different European countries. The study								
	concludes that there indeed are country differences with respect to e-procurement adoption,								
	and that firms from countries with a low uncertainty avoidance such as Germany and the UH								
	are the early adopters of e-procurement, while countries that are less reluctant to change								
	such as Spain and France have lower adoption rates.								
Van Decrean (2007)	The author studied cultural differences in websites in Germany and the United States, using								
	Hofstede's framework. His findings suggest a reflection of national cultures in the websites								
	of international companies.								

All of these studies show a certain impact of national cultures in the perception and use of IT. Given these findings it can be expected that culture also influences the alignment of IT and business. This influence however is not reflected in any studies on BIA so far.

It can be argued that not only culture affects the use and perception of IT, but also IT affects culture. Several authors also found indications for this (Tan et al, 1998; Straub, Keil & Brenner, 1997). For the purpose of this paper, this relationship is however discarded.

Business & IT Alignment

Despite of the apparent importance of aligning IT and business, the majority of publications are rather vague in terms of how to define or practice alignment (Maes et al. 2000). A first question seems to be how to define the word 'alignment'. Other expressions used in this context are 'fit' (Venkatraman, 1989), 'harmony' (Luftman et al. 1993), 'integration' (Weill and Broadbent 1998), 'linkage' (Henderson and Venkatraman 1993), 'bridge' (Ciborra 1997) or 'fusion' (Smaczny 2001). A second question is whether IT aligns to business or business to IT? Or both? Wieringa et al. (2005) define BIA as 'the problem of matching IT services with the requirements of the business', identifying business as leading. This logical, but also traditional, approach is opposed by Poels (2006) who states that BIA implies a 'mutual influence' between business and IT. Another question is whether BIA is a 'state' or level that can be achieved or a 'process' to get to a certain (higher?) state. The concept of BIA as a 'state' is further developed by Luftman (2000), who assesses the BIA maturity level of organizations. Also Reich and Benbasat (1996) 'measure' a degree or level of BIA. The process approach to BIA can be found in the methodologies of IT planning developed in the '70s and '80s (IBM Corporation 1981, Martin 1982). Also Weill and Broadbent (1998) support the process view when they state 'Alignment is a journey, not an event'.

In this jungle of questions and opinions, Business & IT Alignment delivers well over a million Google hits, Chan (2002) distinguishes two prevailing conceptualizations of the alignment problem. The first one focuses on planning and objectives integration and views alignment as the degree to which the business mission, objectives and plans are supported by the ICT



Figure 2. The 'Strategic Alignment Model'.

mission, objectives and plans. This view can be found with Reich and Benbasat (1996), Kearns and Lederer (2004) and Hirschheim and Sabherwal (2001). A more holistic conceptualization of BIA can be found with Henderson and Venkatraman (1993). Their widespread framework of alignment, known as the Strategic Alignment Model, describes BIA along two dimensions (Figure 2). The dimension of strategic fit differentiates between external focus, directed towards the business environment, and internal focus, directed towards administrative structures. The other dimension of functional integration separates business and IT. Altogether, the model defines four domains that have been harmonized in order to achieve alignment. Each of these domains has its constituent components: scope, competencies, governance, infrastructure, processes and skills. Henderson and Venkatraman pay extensive attention to the different approaches of achieving this alignment. In the model this can be visualized by starting the process of alignment from any one of the four domains. Maes et al. (2000) refine the Strategic Alignment Model by identifying three, instead of two, columns: business, information/communication and technology column, and three, instead of two, rows: strategy, structure and operations.

In our study we define BIA as:

Business & IT Alignment is the degree to which the IT applications, infrastructure and organization, the business strategy and processes enables and shapes, as well as the process to realize this.

In this definition, BIA can express both a 'state', the degree of alignment, as a 'process', the activities or methodology to reach a certain state of alignment. The definition also implies that BIA covers not just the alignment process aimed at developing, selecting or enhancing IT applications and infrastructure, but also the agreements regarding the management and maintenance of application and infrastructure services. In the Strategic Alignment Model this is shown in the different levels of alignment. The strategic level covers the alignment between business strategy and IT strategy, whereas the operational level covers the alignment between business processes & organization and IT infrastructure & organization.

In the definition 'business' is defined by business processes and business strategy and 'IT' is defined as IT applications, infrastructure and organization. This view finds support in the methodologies of IT planning. The question whether IT aligns to business or the other way around is answered as 'enables and shapes'. This indicates a two-way alignment.

Business & IT Alignment maturity



Figure 3. Enablers and inhibitors of Business & IT Alignment.

The message of BIA is logical and undisputed. IT should support the business and this will be more successful if the IT resources are developed and organized with the business strategy and processes in mind. If this message is so clear, how can the results from the Simnet surveys be explained?

This paradox is explored by Luftman and Brier (1999). In their studies of BIA they found that enablers and inhibitors of alignment, as shown in Figure 3, seem to be different ends of the same variable. The ability of aligning IT to business needs is therefore a result of the relative 'position' on the variables. What is striking about the variables of BIA Luftman and Brier found that they are more relational than technical or organizational. This is consistent with other researchers who added social elements of alignment to the formal methodological elements (Keen 1991, Reich and Benbasat 2000, Chan 2002). BIA therefore seems to be a state resulting more from the relation between IT executives and business executives than from a methodological analysis of business strategy. This relationship position is determined as a maturity level, with the BIA maturity resulting from the mean maturity on all variables.

Based on the components of the strategic alignment model (Figure 2) and the enablers and inhibitors of BIA (Figure 3), Luftman developed his Business & IT Alignment Maturity model. In this model six criteria are used to determine the maturity of the alignment of IT and business (Luftman, 2000). These six criteria are:

Communications Maturity

How well does the technical and business staff understand each other? Do they connect easily and frequently? Does the company communicate effectively with consultants, vendors and partners? Does it disseminate organizational learning internally?

• Value Measurement Maturity

How well does the company measure its own performance and the value of its projects? After projects are completed, do they evaluate what went right and what went wrong? Do they improve the internal processes so that the next project will be better?

- Governance Maturity Do the projects that are undertaken flow from an understanding of the business strategy? Do they support that strategy?
- Partnership Maturity To what extend have business and IT departments forged true partnerships based on mutual trust and sharing risks and rewards?
- Scope & Architecture Maturity To what extend has technology evolved to become more than just business support? How has it helped the business to grow, compete and profit?
- Skills Maturity

Does the staff have the skills needed to be effective? How well does the technical staff understand business drivers and speak the language of the business? How well does the business staff understand relevant technology concepts?

In the concept of BIA maturity, the level of maturity indicates an organization's capability to align IT to business needs. As in many maturity models, Luftman's BIA maturity assessments involves five levels of maturity:

- 1. Initial / Ad Hoc Process
- 2. Committed Process
- 3. Established Focused Process
- 4. Improved / Managed Process
- 5. Optimized Process

The impact of culture on Business & IT Alignment

In a reaction on his most recent report on the maturity of BIA in organizations (Luftman, 2007), Luftman acknowledges the fact that international companies and international activities are included in the study. The potential influence of national cultures on BIA maturity however is not analyzed in Luftman's report. Given the impact of national cultures on the use and perception of IT found in earlier studies, it can be expected that cultures could also influence the perception of BIA maturity on the different variables of Luftman's assessment model. For example an expected relationship can be that countries with a higher uncertainty avoidance score place more emphasis on governance of IT, resulting in a higher score on governance maturity and value transparency. Another expected relationship is that power distance in a national culture is likely to influence communication within an organization. For an expectation of the direction of this influence however, it may be required to consider the individual sub-variables that make up the communication score in Luftman's assessment.

As a first conceptual exercise, the potential effects of Hofstede's dimensions of culture on Luftman's variables of BIA maturity are mapped in table 2 This exercise of course has all the limitations of a conceptual mapping, but it provides a structure and basis for the formulation of hypothesis that can be empirically tested.

Table 2. The potential effect of Hofstede's dimensions of culture on Luftman's variables of BIA maturity.



Figure 4. Business & IT Alignment Maturity criteria.

	Business & IT Alignment maturity criteria							
	Communications maturity	Value measurement maturity	Governance maturity	Partnership maturity	Scope & Architecture maturity	Skills maturity		
Power Distance Index	A lower PDI score can be expected to result in a higher Communications maturity because of more intensive and less formalized communication	A high PDI score can be expected to create a higher need for value transparency and therefore a high Value measurement maturity	A high PDI score can be expected to create a higher need for governance and therefore a high Governance maturity	A lower PDI score can be expected to result in a higher Partnership maturity because of more intensive, less formalized and richer communication		A low PDI score is stimulating entrepreneurship and initiative in lower organisational levels and can therefore be expected to result in a high Skills maturity		
Individualism vs. collectivism	A low IND culture can be expected to result in a higher Communications maturity because of more intense and less formalized communication	A high IND culture can be expected to result in a high Value measurement maturity because of its appreciation of individual performance	A high IND culture can be expected to result in a high Governance maturity because of its appreciation of individual performance	A low IND culture can be expected to result in a higher Partnership maturity because of its appreciation for the collective goals and interests		A high IND culture can be expected to result in a high Skills maturity because of its appreciation of individual skill development		
Masculinity vs. femininity	A less MAS culture can be expected to result in a higher Communications maturity because of more intense and less formalised communication	A high MAS culture can be expected to score high on Value measurement maturity because of its focus on performance and measurement	A high MAS culture can be expected to score high on Governance maturity because of its focus on performance and measurement	A less MAS culture can be expected to result in a higher Partnership maturity because of less formalised and richer communication		A less MAS culture can be expected to result in a higher Skills maturity because of a more diverse skill development		

Uncertainty Avoidance Index	A high UAI culture can be expected to score low on Communications maturity because of its tendency towards certainty which does not stimulate informal communication	A high UAI culture can be expected to score high on Value measurement maturity because of its tendency to create certainty	A high UAI culture can be expected to score high on Governance maturity because of its tendency to create certainty		A high UAI culture can be expected to score high on Architecture maturity because of its tendency to create certainty and security, amd the slower rate of adoption of new technologies found by Png et al. (2001)	Based on the findings of Livonen et al. (1998) it can be expected that a high UAI decreases the pace of individual learning and will result in a lower Skills maturity		
Long Term Orientation vs. Short Term Orientation		A low LTO culture can be expected to score high on Value measurement maturity because of its focus on short term performance		A high LTO culture can be expected to score high on Partnership maturity because of its appreciation for the long term collective goals and interests	A high LTO culture can be expected to score high on Architecture maturity because of the long term character of these assets	A high LTO culture can be expected to score high on Skills maturity because of the long term character of skills development		
	Communications maturity	Value measurement maturity	Governance maturity	Partnership maturity	Scope & Architecture maturity	Skills maturity		
	Business & IT Alignment maturity criteria							

Based on this conceptual mapping, it can be expected that:

- Cultural aspects in general are likely to have an impact on the different variables of BIA maturity assessment.
- The effect of cultural dimensions on BIA maturity scores is not straightforward, the cultural dimensions most likely influence the variables of BIA maturity in different directions.
- Cultural aspects are likely to have the most impact on variables that strongly involve social interaction, therefore the variable 'Scope & Architecture maturity' is expected to be least influenced by cultural aspects.

Concluding remarks, limitations and further research

The conceptual analysis of the potential influence of national cultures on BIA maturity provides indications that this influence is indeed more than likely and that its influence is complex. The limitations of this analysis of course being that it is based on literature research and conceptual mapping. Given these limitations further empirical work needs to be done to test this conclusion. It is our intention to find suitable organizations to perform this research. At this moment a first empirical testing of the expected impact of national cultures considering BIA maturity assessments of financial institutions in Belgium and the Netherlands is in progress.

Pending further empirical testing however it should be taken into consideration that published studies on the alignment of business and IT discard this potential factor of influence. This influence is assumed to be of substantial impact especially in European studies, but also studies that consider organizations based in the United States may be biased by cultural differences between regional cultures within the United States.

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Country	PDI	IDV	MAS	UAI	LTO	Country	PDI	IDV	MAS	UAI	LTO
	Distance Index	Individualism	Masculinity	Avoidance Index	Long-Term Orientation		Distance Index	Individualism	Masculinity	Avoidance Index	Long-Term Orientation
Arab World **	80	38	52	68		Luxembourg *	40	60	50	70	
Argentina	49	46	56	86		Malaysia	104	26	50	36	
Australia	36	90	61	51	31	Malta *	56	59	47	96	
Austria	11	55	79	70		Mexico	81	30	69	82	
Austria	11	55	79	70		Morocco *	70	46	53	68	
Bangladesh *	80	20	55	60	40	Netherlands	38	80	14	53	44
Belgium	65	75	54	94		New Zealand	22	79	58	49	30
Brazil	69	38	49	76	65	Norway	31	69	8	50	20
Bulgaria *	70	30	40	85		Pakistan	55	14	50	70	0
Canada	39	80	52	48	23	Panama	95	11	44	86	
Chile	63	23	28	86		Peru	64	16	42	87	
China *	80	20	66	30	118	Philippines	94	32	64	44	19
Colombia	67	13	64	80		Poland *	68	60	64	93	32
Costa Rica	35	15	21	86		Portugal	63	27	31	104	
Czech Republic *	57	58	57	74	13	Romania *	90	30	42	90	
Denmark	18	74	16	23		Russia *	93	39	36	95	
East Africa **	64	27	41	52	25	Singapore	74	20	48	8	48
Ecuador	78	8	63	67		Slovakia *	104	52	110	51	38
El Salvador	66	19	40	94		South Africa	49	65	63	49	
Estonia *	40	60	30	60		South Korea	60	18	39	85	75
Finland	33	63	26	59		Spain	57	51	42	86	
France	68	71	43	86		Surinam *	85	47	37	92	
Germany	35	67	66	65	31	Sweden	31	71	5	29	33
Greece	60	35	57	112		Switzerland	34	68	70	58	
Guatemala	95	6	37	101		Taiwan	58	17	45	69	87
Hong Kong	68	25	57	29	96	Thailand	64	20	34	64	56
Hungary *	46	80	88	82	50	Trinidad *	47	16	58	55	
India	77	48	56	40	61	Turkey	66	37	45	85	
Indonesia	78	14	46	48		United Kingdom	35	89	66	35	25
Iran	58	41	43	59		United States	40	91	62	46	29
Ireland	28	70	68	35		Uruguay	61	36	38	100	
Israel	13	54	47	81		Venezuela	81	12	73	76	
Italy	50	76	70	75		Vietnam *	70	20	40	30	80
Jamaica	45	39	68	13		West Africa	77	20	46	54	16
Japan	54	46	95	92	80						
* Estimated values											

Appendix A: Scores of nations on Hofstede's five dimensions of culture

** Regional estimated values:

'Arab World' = Egypt, Iraq, Kuwait, Lebanon, Libya, Saudi Arabia, United Arab Emirates

'East Africa' = Ethiopia, Kenya, Tanzania, Zambia

'West Africa' = Ghana, Nigeria, Sierra Leone

Source: http://www.geert-hofstede.com/hofstede_dimensions.php on February 28th, 2008.