GLOBAL E-COMMERCE: A PORTAL BRIDGING THE WORLD MARKETS

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ABSTRACT

This essay examines the importance of e-commerce in the global economy. It introduces the special issue on global e-commerce by providing a guide to the six papers contained in the special isse, and it offers the guest editors perspectives on the growing trends in global e-commerce as well as potential challenges and opportunities that multinationals practicing e-commerce on a gobal scale face. The essay notes the dire need for a scholastic framework within which the several facets of global e-commerce are organized and addressed. Contributions from each of the papers of this issue are also indicated

Keywords: global e-commerce, web localization, culture and web, internet.

1. Introduction

Global e-commerce is expanding rapidly and several trillion dollars are being exchanged annually over the web. The global online population is also increasing substantially and by 2013, Wigder et al., [2009] of Forrester Research predict that there will be 2.2 billion Internet users worldwide and Asia will be the biggest global growth engine. Another interesting trend in global Internet usage is that almost 72.4 percent of these users are now non-English speaking [Internet World Stats, 2009]. So, besides English other languages like Chinese, Spanish, Japanese and French now have significant online usage. By 2010 U.S. retail e-commerce will be about $182.5 billion [Grau, 2008a]. On the other hand, European B2C e-commerce is expected to reach almost $234 billion by 2010 [Grau, 2006].According to e-marketer estimates by 2010 the British market share will fall to 44.5% as France and Germany ramp up their online sales. Asia will also see significant growth in B2C e-commerce with a 23.3 percent annual growth rate and eventually reaching almost $168.7 billion in 2011 [Grau, 2008b]. Japan and South Korea currently lead the B2C e-commerce sales in Asia but by 2011 they will be overtaken by China and India [Grau, 2008b]. From these numbers it is clear that e-commerce is now a truly global phenomenon. Thus web is increasingly becoming a diverse global marketplace with global business opportunities.

To take advantage of the full potential of global e-commerce, companies need to tap into global markets and consider expanding online not only in developed countries but also in the emerging economies of China, Brazil, India and others. Companies may proactively exploit global e-business opportunities and take advantage of the full potential of e-commerce, or may adopt a defensive approach to new global competition threatening their business. Domestic businesses will increasingly feel pressure of global competition as e-business will offer companies a platform to compete on global basis. However, for many companies global e-commerce is still a challenge. Several

companies cite following reasons for avoiding taking the full plunge in global e-commerce [Singh and Pereira, 2005; Yunker, 2005]:
- Lack of skills for successful web localization efforts
- Lack of knowledge and application of tools to achieve web localization
- Geo-political and regulatory uncertainties.
- Lack of understanding relating cultural customization of international websites
- Dearth of professionally trained workforce to handle web localization efforts.

Our purpose for this special issue of *Journal of E-Commerce Research* is to examine the state of the current research on e-commerce in the global arena. This issue contains papers that examine global e-commerce from different conceptual perspectives, offering insights that will only develop and advance our understanding of global-ecommerce, both as a phenomenon on a macro-level and as organizational practices on a micro-level. Along the way we hope that new directions and inquisitive priorities will be developed for our readers.

Our essay is organized in this way: the next section briefly sheds light on the growing global-ecommerce and the utilization of the web among multinational organizations to capture worldwide opportunities and to develop worldwide capabilities. In this section, we emphasize the need for research to catch pace with the growing phenomena of global ecommerce. The section that follows provides a guide to the papers in this issue highlighting the contribution of each of these papers. Our summary comments close the essay.

2.   Global E-Commerce: A Research Agenda

There is a need for guiding frameworks, best practices, perspectives and theories that can help companies and governments better leverage the potential of global e-commerce. This special issue is an attempt to broaden our understanding of issues relating web localization, role of culture in e-commerce, global online privacy and security concerns and global development and diffusion of e-commerce.

Traditionally globalization has been equated to operating with resolute constancy across the world, selling the same thing in the same way everywhere. But on the web, for a firm to successfully sell worldwide, it has to adapt its web site linguistically, culturally, and in all other ways accessible to the global consumers. To successfully localize a web site, factors such as language, encoding, programming, graphic design, layout and spatial orientation, culture, customs, color preferences, icons, symbols, currency, number format, measurements, date/time and other address fields should be considered in the web site design [Singh & Boughton, 2005; Brandel, 2007; Cyr & Trevor-Smith, 2004]. The country-environment also has a significant impact on how e-business activities are carried out, how opportunities are leveraged, and how hurdles are overcome. For example, governments have been active in controlling and shaping the business environment and protecting national industries. With the emergence of e-commerce, however, governments are facing some new challenges such as being involved in the free flow of information, national security, digital divide, convergence of media, content, communication technology, issues of the Internet and national sovereignty, regulating business conduct internationally over the web, and tax issues. Similarly, the legal environment also affects the conduct of international e-business. Most of the laws related to contracts, advertising, copyrights, domain names, information dissemination, etc. are nationally governed. Thus, companies need to check the local laws of the country before setting a web site. Also, companies need to analyze the tax structure and subsidies available to them (for example, Value added tax for different goods differ across EU countries), exchange rate fluctuations, tariffs and customs, purchasing power parity of the country, internet penetration rates, telecommunications and logistics infrastructure, and impact of regional economic agreements on trade and e-commerce, etc.

During the past 10 years, an entire industry has grown around helping companies design localized multilingual web sites and software applications for different cultures [Cyr & Lew, 2003]. The localization industry also helps companies navigate the international e-environment by providing advice related to legal, logistical and other international issues. The localization industry is estimated at $8.8 billion; it is expected to reach $12 billion in 2010 [DePalma & Beninatto, 2006]. However, a review of the academic literature located only a few studies that have attempted to provide a comprehensive analysis of web site localization efforts [Cyr & Lew, 2003; Singh & Boughton, 2005; Singh & Pereira, 2005; Cyr 2008; Cyr & Trevor-Smith, 2004; Tixier, 2005]. Hence, we note that while global e-commerce constitutes a growing area that deserves attention from both practitioners and scholars, it is evident that the field is still a young realm that we hope to continue drawing attention from several conceptual perspectives. It is through a continuous and growing research that we believe best global e-commerce practices will surface for multinational firms to adopt.

3. A Guide to the Papers

Papers retained in this special issue broadly deal with the issue of global ecommerce and extend the literature toward better understanding of e-commerce as a global phenomenon. This special issue enriches the e-commerce literature by interpreting global e-commerce from an interdisciplinary perspective and by incorporating theories from economics, management, international business, marketing, information systems and entrepreneurship. As the readers explore this special issue they will gain insights into strategic issues related to localizing international websites, importance of culturally adapting international websites, influence of culture on online purchasing, how culture may impact privacy and security perceptions of global online consumers, and explanations relating development and diffusion of global e-commerce using information ecology perspective, economic institutional theory and entrepreneurship theory.

The first paper by Singh, Alhorr and Kim places localization-standardization debate, in international e-business as a primary theme for further exploration. This thought piece delves into strategic implications for global e-commerce strategies. The paper applies the concept of "adaptive strategies" to e-commerce practices in the global arena to address the localization-standardization paradigm, which continues to be a healthy debate. Bringing two areas of research together, the global e-commerce and institutional theory perspectives of organizational change and adaptation, adds a new dimension to the literature of global e-commerce, and conforms with institutional theorists that organizations are adaptive systems attempting to match the complexities of their environments [Meyer and Rowan, 1977]. Thus, the paper by Singh, Alhorr and Kim offers new insights in this important field by exploring the impact of external environment for strategic e-commerce decisions in global settings.

The second paper by Vyncke and Brengman adds to this debate by offering a comprehensive review of studies investigating the impact of cultural congruency of international websites on their effectiveness. The study explores whether companies really need to create culturally congruent websites in order to effectively reach different target countries. In other words: Are culturally adapted websites indeed more successful in attracting and retaining surfers and transforming visitors into buyers? Are culturally congruent websites more effective in inducing trust, evoking positives attitudes towards the websites, generating purchase intentions, etc.? The authors looked into 12 years of research related to web localization issues, starting at the beginning of 1998 and ending at the end of 2009, and used this extensive analysis to explore the research questions. Their review of the literature suggests mixed findings, with most of the reviewed studies showing empirical support for the positive impact of cultural congruency, while other studies show weak or missing effects. This clearly suggests that more research is needed to explore conditions and generalizations of cultural congruency effects.

The third paper by Van Slyke, Lou, Belanger and Sridhar uses innovation adoption theory in combination with literature on culture and information technology to examine the question of whether culture influences consumers' intentions to purchase goods or services online. The authors surveyed almost 413 consumers in seven countries, India, Hong Kong, China, Brazil, Malaysia, the Netherlands, and the United States. Overall, the results provide strong support for the research model, and for the notion of culture impacting e-commerce use intentions both directly and indirectly through beliefs. Further the authors found that innovation adoption framework is useful, even outside of a North American context. Their model explained a large portion of the variance in intentions, even though over two-thirds of our sample came from outside the United States. In sum this study adds to the growing body of literature on impact of culture on e-commerce and establishes that culture does, in fact, have a significant impact on consumers' intentions' to purchase goods and services online.

The fourth paper by Gupta, Iyer and Weisskirch investigates the issue that culture of a particular country may influence the privacy concerns of its citizens and hence influence Internet use and online shopping behavior. The paper shows how global companies that better understand the differences in consumer intention and practices towards protecting privacy and security and consumers' willingness to disclose information are then likely to be poised for e-commerce growth by utilizing that information. Based on data from a large scale study of US and Indian consumers, the paper explores how organizations looking to expand e-commerce in different cultural contexts can formulate appropriate strategies and policies to collect personal information from consumers to provide customized services. In comparing the two countries with distinct cultural and ICT profile, the study found that Indian consumers are more willing to share sensitive information online than the U.S. counterparts. Also, consumers from India were less likely to be engaging in protective behaviors compared to consumers in the U.S. The study's findings can help marketers in terms of localizing their privacy and secuirty policies to effectively conduct global e-commerce.

The fifth paper by Zhu and Thatcher deals with the development of global ecommerce from an information ecology perspective. The authors conduct cross-country analysis showing evidence for national information ecology exerting influences on a country's e-commerce adoption at different stages of e-commerce development. The study utilizes secondary datasets from the World Economic Forum's Global Information Technology Reports and the

Economist Intelligence Unit's Global E-readiness Rankings. The study shows that at the infant stage of e-commerce, the supportive government policy and compatible culture value are powerful facilitators for e-commerce diffusion around the world. As e-commerce becomes more prevalent, e-commerce diffusion tends to be more business-driven and demands more legal certainties and protections. The study presents evidence that national information ecology, which is shaped by various institutional environment factors, exert influences on a country's e-commerce diffusion at various stages of e-commerce development. Their research findings have important managerial and policy implications for global e-commerce development.

Finally, the sixth paper by Martinez and Williams offers insights into the development of e-commerce across countries, based on competing theories, namely economic institutional theory and entrepreneurship theory. The 80 country sample utilized suggests strong support for the institutional argument and weak support for the entrepreneurship view. Their analysis corroborates the institutional view that, *ceteris paribus*, the strength and integrity of the formal legal, political, and socio-economic institutions of a country exert a positive influence on its access to and use of the technologies that support e-commerce. An important policy implication from this paper is that through purposeful legislation, that allows private investment to flourish, governments can foster the adoption of technologies that lay the foundation for economic prosperity through e-commerce.

4. Summary and Conclusion

We have tried to highlight the recent advances in global-ecommerce in both research and practice. Through the papers in this issue, we have tried to layout an organizing framework for global-ecommerce research. It is fair to note that there is still a dearth of guiding frameworks that can help managers improve their web localization efforts to take advantage of global e-commerce and that is partly attributed to the fact that international e-business and localization of web sites has only started to grow in the past decade and it is still a relatively new field of investigation.

With future studies, books and academic or professional training, it is highly probable that a bridging of the knowledge gap in this new field of localization will occur. Few university programs today provide training in global e-commerce and web localization issues. Some universities that offer program in web localization include the localization certification program (California State University Chico) software-localization and programming (University of Limerick, Ireland), translation technology and business at the graduate level (Monterey Institute of International Studies, and Kent State University, U.S.), executive online certificate in web globalization management (Saint Louis University) and courses in localization (Austin Community College, U.S.) Thus it seems that not only we need to further develop the emerging area of global e-commerce from research perspective but also develop new courses offering some training to best leverage and adapt to the dynamics of global e-business. The goal of this special issue is limited to encouraging scholarship in under-explored areas such as web globalization strategies, global online marketing issues, web site localization and global diffusion of e-commerce since their contributions and participation are key to the long-run survival and development of the field.

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