Preface

During the second year of publication, the *International Journal of Strategic Information Technology and Applications (IJSITA)* continued to fulfill its mission to “advance the field of information systems through publication of high quality research and practitioner articles on the development and use of strategic information technology.” With articles from authors from all over the world, the second Volume built on the international focus of the first with a wide variety of current topics including reports on research using a range of qualitative and quantitative empirical methodologies, findings from a variety of organizational settings, innovative solutions, emerging trends, and significant developments in strategic information technology and its application.

This preface begins with brief descriptions of the content of specific articles and journal issues. The articles are arranged by issue in order of their appearance. The descriptions of individual issues is followed by a discussion of the current and future state of strategic information technology and applications categorized and divided into subsections on important categories.

Each subsection describes the current state with examples from journal articles from 2011 and concludes with a brief discussion of the future of strategic information technology and applications in that category.

**STRATEGIC APPLICATION OF INFORMATION TECHNOLOGY: A DIVERSITY OF TECHNOLOGIES AND ISSUES**

Reflecting the diversity of information technologies and related issues that are fundamental to strategic application of information systems, Volume II begins with an issue covering a variety of technologies and perspectives. The discussion focuses on very different but important information technology issues from alignment of technology and business strategy to organizational transformation through information technology. Information Systems roles, social media development, and use of Open Source Software (OSS) are also covered. A discussion of each of the issue article follows.

The first article in the issue sets the stage for the issue and volume with a description of how information technology is changing fundamental business infrastructures and the way people conduct work. In *Redefining Information Technology in the 21st Century*, three Montclair State University professors describe current trends and impacts in five facets of transformation through Information Technology. The facets discussed are: Internet-working and Telecommunications, New Features with Emerging Trends, Security and Disaster Recovery, Power of Computing, and Green IT, In their article Xing, Peterson, and Wang cover the present trends in each area along with their impacts. The article provides a terrific introduction to the year and introduces facets likely to continue well into the future.
Shawyun’s article, *Strategic Market and Customer Driven IS/IT Planning Model*, builds on the themes, change and transformation, with a fresh approach to strategic business and information technology alignment to achieve organization performance. Teay Shawyun of King Saud University, Saudi Arabia contends that the internal IS/IT approach may not address the both the needs of an organization’s internal and external customers. Shawyun’s article presents a market based push-pull framework comprised of the push strategy of an organization or what it wants to offer for a specific price matched with the pull strategy of the market, which is what is demanded with the prices the market is willing to pay. Once the market pull and firm push strategy is established, the alignment of the IT is based on serving and satisfying both internal and external customers’ needs and requirements through the organization’s value proposition. IT is discussed as the main enabler for creating and delivering value.

Fundamental information technology roles are often key in successful transformations through strategic information technologies and application. Gordon Hunter of University of Lethbridge, Canada describes a case study conducted to examine the fundamental information technology management roles. In his article, *The Duality of Information Technology Roles: A Case Study*, Hunter presents findings from interviews and the qualitative approach, Narrative Inquiry, to record interpretations of the roles of Chief Technology Officer (CTO) and Chief Information Officer (CIO) in a financial organization’s senior management team. Hunter reports that the findings suggest that the presence of these roles in top management teams has many benefits. When these roles were present in the senior management of the organization studied, teams were more collaborative and more proactive in planning. In addition, decision making efficiency and effectiveness is higher when the availability of technical resources is considered immediately along with the effect on business processes. Increases in both the efficiency and effectiveness of decision making are reflected as resulting changes have the needed technical support and have been developed with consideration of impacts on business processes.

In their article in the first issue *A Systematic Approach to Evaluating Open Source Software*, Ahmad and LaPlante describe a systematic methodology for determining if Open Source Software (OSS) is compatible with the needs of the organization employing it. This article builds on the initial article by presenting and validating the methodology through testing its effectiveness in a technology management company in the United Arab Emirates. The authors describe that while OSS has become a viable alternative for growing numbers of organizations, there are still many challenges involved in selecting the software that best matches the requirements and given problem. With numerous choices in OSS, no generally accepted evaluation criteria have existed. To enable selection of the appropriate OSS, Ahmad of American University of Sharjah, UAE and LaPlante of Pennsylvania State University propose a methodology for assessing candidate OSS for fitness of purpose using both functional and non-functional factors along with set of criteria for selection. The authors use the proposed set of criteria in an improved solution using the well-developed Analytical Hierarchy Process. To validate the model, the authors apply it at a technology management company and show how use of their methodology resulted in an improved decision.

Finally, organizations are increasingly using social media as part of their strategy to connect with customers. Global online communities offer opportunities for socialization, entertainment, access to company content, and readily available support. To enable the development of successful social media in global organizations, Dill, Calongne, Howard and Beazley present results of a survey examining national culture for an international scuba diving organization. Their article uses Geert Hofstede’s research to examine cultural dimensions, Hofstede’s Individualism and Collectivist dimensions, and
their impact on user preferences, habits and behavior in an online social community. The results indicated that there are significant differences between countries and age groups. The article concludes with an analysis of the collected data, recommendations for interface design, and recommendations for further research.

STRATEGIC TECHNOLOGIES AND INNOVATION: CHALLENGES AND DETERMINANTS OF CREATIVITY, JUSTIFICATION, DESIGN, AND ADOPTION

Nowhere is the range of coverage represented by the journal more apparent than in issue two of the second volume. While the issue concerns a variety of topics of strategic importance for organizations, the strategic implications of citizen journalism and the evaluation of scientific merit are also covered. The issue begins with an article showing the importance of individuals communicating via smart phones and other networked technology to people, organizations, nations, and global communities. Other topics include strategic information technologies and applications for enterprises, educational institutions, libraries, governments, communities, societies, and citizen journalists. In each article, the strategic importance, power, and implications of information and communication technologies is apparent as each describes changes that impact organizations, knowledge, and even, world events.

First, the effect of technology on journalism is explored in the study described in Citizen Journalism: How Technology Transforms Journalism Business through Citizen-Reporters in Nigeria which reports a study of citizen journalists in Nigeria. During the last few years advances in technologies have enabled non-journalists to record and transmit images and information on ubiquitous communication networks using social media such as Facebook, Youtube, and Twitter. Not only can these technologies be used to notify emergency responders of critical needs for their services and reporters to cover events, their enormous power has been shown during revolts and revolutions throughout the Middle East. Aborisade, Howard, Beasley, and Livingood describe the power of technology to transform communication channels, media sources, events, the fundamental nature of journalism, and even nations. While citizen journalism has not yet ended repression in Nigeria, the Nigerian citizen-reporters, their roles, and the impacts on Nigeria’s political struggle, free press, and free speech are a potential force for change. The article reports information collected on the technology, media modalities (blogs, online news, social media and online discussion groups), their roles, the impacts, audience characteristics, and the mechanics of news reporting and distribution.

The issues then changes focus to three articles focusing on competitive strategies and their potential to increase market share. In Capability Development of Customers: A Globally Viable Business Strategy for the Coming Age, Sharma, Madan, and Seth of India demonstrate organizational application of a capability concept to customers as a way to expand the business and market share. The concept of capability is described as using technology to uplift people’s lives and provide opportunities for sustainable development through effective usage of communication and information technology led business development. The authors describe examples from around the world and explore the applicability of ‘capability’ development as a “globally viable business strategy.” To empirically validate its application in organizations, the authors examine capability development in the microfinance area in India.
Singh and Naveem, also of India, then describe Business Intelligence (BI) applications and BI vendor market share strategies in *Critical Analysis of Expansion Strategies of SAP, IBM, Oracle and Microsoft in the area of Business Intelligence*. Due to the emergence of BI as a profitable and high growth area, pure play vendors along with big application and infrastructure vendors are competing with a variety of strategies to increase their market shares. The article reviews the history of the BI industry which became significant in 2002 and includes a discussion of the growth strategies and the underlying dynamics as demonstrated by the growth strategies of four vendors: SAP, IBM, Oracle and Microsoft. The article concludes with a discussion of customer reactions to the new BI paradigm, impact of the acquisition on BI market and a concluding remark on the acquisition of pure play vendors by big four.

Effective and efficient business processes are key to successful operations for many organizations competing in the 21st century marketplace, Kock of Texas A&M presents surprising and important surprising findings on the representational techniques used in business process redesign in his article, *Representation Type Preferences in Operational Business Process Redesign: A Quasi-Experimental Field Investigation*. Kock discusses the findings from a quasi-experimental field study focusing on the use of two different representations of business processes by process redesign groups in four different US organizations. The types used were: 1. representation activity flow (or workflow) view of business processes and 2. communication flow view. The results suggests that the group members perceived that communication flow-oriented representations of business processes to be more useful than the more commonly used activity flow-oriented representations including application of process redesign guidelines, identification of opportunities for process improvement, visualization of process changes, and development of generic information technology solutions to implement new business processes. Kock presents the important implications for managers and researchers stemming from these results.

The issue concludes with an article presenting a new strategy for evaluating scientific research. The very advance of knowledge is predicated on having accurate methods for assessing research. Traditionally, peer review as done in this journal, has been a large part of how research is evaluated. At the university level, three popular indices have been traditionally used to evaluate an institution’s scientific research level. In their article, *Studies on Utilizing the Three Famous International Index Systems to Evaluate Scientific Research Level of Higher Learning Institutions*, four authors representing major universities in China tackle the issues. Specifically, Liu, Huang, Qian, and Huang, all of major universities in China, discuss the deficiencies in the current indices: Science Citation Index (SCI), Index to Scientific & Technical Proceeding (ISTP), and The Engineering Index (EI). As an alternative, they use comprehensive factor analysis to estimate efficiency, research level, fund exploitation, and other aspects in the widely accepted indices. The authors argue that because these methods do not properly evaluate the efficiencies of the universities and are not scientific enough, the authors using a comprehensive factor analysis method to understand the variable relationships in the aforementioned indices.

**STRATEGIC INFORMATION TECHNOLOGY: A RANGE OF APPLICATIONS AND IMPACTS**

Challenges in the creation, adoption, and use of strategic technologies along with solutions and information to enable technological innovation and success are the focus of the third issue. Included
are articles focusing on research and conceptual frameworks aimed at increasing the understanding of the process from creativity to adoption of a variety of information technologies and what leads to innovation. The many facets of the challenges facing organizations seeking to maximize effective use of technology are covered in the articles which make up this issue.

First, the importance of creativity is emphasized by McNair, Howard, Guzman, and Watkins in an article presenting results that suggest use of an inexpensive and easily implemented tutorial may enhance individual creativity. As discussed in the article, creativity and innovation are increasingly critical to organizational survival in the 21st century. The authors argue that educational institutions and other organization would benefit from incorporation of methods to help individuals reach their full creative potential. Based on the findings, the authors recommend organizations may benefit from trails of similar tutorials along with further research testing of the effectiveness a simple and low cost tutorial which seems to have the potential to enhance creativity.

In the global marketplace of the 21st century, firm creativity and innovation are essential. The next article, Information Technology Capability, Knowledge Assets and Firm Innovation: A Theoretical Framework for Conceptualizing the Role of Information Technology in Firm Innovation, shows how IT capability can be indirectly linked with firm innovation by characterizing the mediating role of knowledge networks, knowledge assets and knowledge capabilities. Datta of Illinois State University characterizes firm innovation as innovation development and commercialization. Based on detailed and extensive reviews of literature on entrepreneurship and innovative strategy, Datta posits propositions linking knowledge networks, knowledge assets and knowledge capabilities with firm capabilities and develops a framework to guide research on Information Technology Capability.

Cheon-Pyo of Fairmont State University in the United States and South Korea’s Hee-Kwan Eun of Namseoul University discuss the challenges of cost justifying Radio Frequency Identification (RFID) in the article, Finding the Role of Time Lags in Radio Frequency Identification Investment. Given the potential to significantly alter the way business is conducted along with the growing popularity of RFID, organizations must develop accurate ways to access the benefits of the delays. Time lags or delays in the payback due to the time after RFID investment to realize RFID benefits can make can be a deterrent to choosing the technology according to Cheon-Pyo and Hee-Kwan Eun. These time lags can be the function of potential of RFID to significantly alter the way business is conducted and are determined by a firm’s IT capability and IT type. The authors describes a conceptual framework designed to increase understanding of time lags in RFID pay-offs. The article discusses how expected time lags of RFID can be modified by the level of IT capability of a firm with the shorter time lags associated with stronger IT capability.

Alkibsi of Lebanese University in Yemen and Lind of Trident University in the United States describe findings from their quantitative correlational descriptive research study focused on determining the relationship between technology-based banking service (TBBS) quality dimensions and behavioral intentions towards TBBS, and customer satisfaction in Yemen. Evidence that the seven service quality dimensions described by Lin and Hsieh (2006) are significantly related to behavioral intentions towards TBBS, and customer satisfaction, functionality, enjoyment, security, assurance, design, convenience, and customization is reinforced in this study. Based on the results of the study, Alkibsi and Lind recommend that bank leaders use TBBS to focus on customization and enhancement of customers’ experience.
STRATEGY AND APPLICATIONS: ADOPTION, USE, AND EFFECTS OF TECHNOLOGICAL INNOVATIONS

The fourth issue of the journal’s second volume once again presents a variety of articles. In this issue, the articles explore areas of technology acceptance, adoption, use, and effects on technical issues related to efficient and effective technological implementation. Jackson, Howard, and LaPlante begin the issue by providing a theoretical model to extend the Model of Acceptance of Technology in the Household (MATH) model for studying household technology use. Barcus, Howard and Laplante describe a study designed to improve understanding of household technology use, specifically personal computer use. As described in the article, while much is known about workplace technology acceptance and household technology adoption, less is known about household technology use. Studies have found the determinants of household use of technology are very different from the determinants of either technology acceptance in the workplace or household adoption. With the proliferation of personal computers in households, it becomes more important to understand household personal computer use. The article presents an extension of the MATH model and another behavior model based on a Decomposed Theory of Planned Behavior along with an exploratory study on household personal computer use.

Drnevich of University of Alabama, Brush of Purdue University, and Luckock of Raytheon Professional Services LLC tackle the important topic, outsourcing. In Process and Structural Implications for IT-Enabled Outsourcing, an article, Drnevich, Brush, and Luckock review the existing research focusing on the benefits from and effects of decisions using IT to facilitate outsourcing arrangements which involve the firm’s strategic core firm resources and asset-specific capabilities. Drnevich, Brush, and Luckock found that the process and structural implications relating to IT facilitation of these decisions are largely unexamined. To fill this gap, Drnevich, et al. present three distinct approaches to using IT to enable business process outsourcing (BPO). They also categorizes the approaches based on the timing of the outsourcing vendor’s ownership of the activity along with when and where the transformation of the activity occurs. The proposals are described along with the implications on a number in real-world case examples.

Seale and Hargiss propose an architecture to support autonomous mobile agents, which conduct intrusion prevention activities on a heterogeneous network. The article, A Proposed Architecture for Autonomous Mobile Agent Intrusion Prevention and Malware Defense in Heterogeneous Networks, describes how dividing the duties performed by the agents helps eliminates single points of failures, This is done by making sure that the agents are able to stay distributed throughout the network architecture. The architecture’s distributed nature eliminates reduces the workload on network clients and duplication of effort. The virtual machine interfaces are able to aid in the maintenance of connection. Issues related to trust and integrity are described and protection from attacks.

Continuing to develop a methodology introduced in an article in the first volume of the journal, Dan Ciulin of E-I-A Lausanne in Switzerland described four methods for converting analog signals. In this issue, he extends these in the article, A Nearly One-to-One Method to Convert Analog Signals into a Small Volume of Data: Second Part. He shows how the method is strategic in that it is both cost effective and saves organizational resources because of the high sensitivity of parameters in the coding/decoding procedure. The resource savings include storage space, bandwidth required for transmitting channels, and energy consumed for transmission. The benefits are particularly true for higher compression factors and large numbers of use parameters.
CONCLUSIONS ON THE CURRENT AND FUTURE STATE OF STRATEGIC INFORMATION TECHNOLOGY AND APPLICATIONS: WHERE ARE WE AND WHERE ARE WE GOING NEXT?

The articles and issues represent the current state of strategic information technology and its applications. The first issue article by Xing, Peterson, and Wang, set the stage for the Volume contents and also provided a way to categorize the present situation plus forecast future areas of development. In their article, *Redefining Information Technology in the 21st Century*, Xing et al. described five facets of transformation through Information Technology. The facets discussed are: Internet-working and Telecommunications, Power of Computing, Green IT, Security and Disaster Recovery, and New Features with Emerging Trends. The following discussion uses a slightly modified version of these facets to describe the journal contents and current state of strategic information technology and applications.

**Internet, Telecommunications, and Power of Computing**

As the articles describe, the Internet and Telecommunications along with the Power of Computing are enabling capabilities which are the subject of many of the journal’s articles during 2011. These are included as one area as many of the Internet applications rely on computer power, and much of the power of computing results from network connections through telecommunications and the Internet. Below, a few of the key articles detailing important developments to illustrate the current state of the areas and is followed by a discussion of possible future developments.

In the area of customer relations and empowerment, Intranets, Extranets, and the Internet are powerful venues for applications linking computers, mobile devices, and other technologies. Strategic applications of the Internet and other information technologies in organizations continue to allow organizations to better target current and perspective customers to increase market share, enable customers to receive 24/7 information and support, result in better product planning and development, lead to personalization and customization, allow pricing options, and produce greater responsiveness throughout customer processes. Thus, technology can be applied to increase both the organizations ability to attract and retain customers by enabling organizations to be more responsive to customer needs.

Another article focused on customer needs is by Teay Shawyun of King Saud University, Saudi Arabia. Shawyun describes how use of a new IS/IT approach can enable organizations to better access the needs of internal and external customers. Similarly, Alkibsi and Lind show how technology-based banking service (TBBS) can be used to increase customer satisfaction, functionality, enjoyment, security, assurance, design, convenience, and customization. As described by McNair, Howard, Guzman, and Watkins, the Internet and other technologies can be used by individuals and organizations to provide information and training on creativity to empower individuals to be more creative individually or as members of innovative communities and organizations.

Dill, Calongne, Howard, and Beazley describe how organizations are increasingly using social media as part of their strategy to connect with customers. Using social media, customers also become more engaged and empowered. Another form of individual empowerment is citizen journalism and the use of social media along with handheld technologies networked together enables citizens to broadcast live information to report on emergencies, critical situations, and current events. As reflected by events in the Middle East and discussed by Aborisade et al., instant communications by individuals and sending of graphic images can have powerful impacts on government actions.
As shown in this section, the Internet and telecommunications linked to computing technologies and other smart devices can have immense power in a variety of areas. Certainly, organizations and individuals will continue to take advantage of the power to improve performance and expand opportunities. In the future, innovative applications are likely to expand options even more and provide opportunities beyond what is imagined today.

**Green Information Technology and Social Justice Applications**

A number of the articles in the volume include content covering topics in the realm of green information technology and social justice. While many articles included discussions on resource savings and other items related to Green IT, only one covered these in depth. In the article, *A Nearly One-to-One Method to Convert Analog Signals into a Small Volume of Data: Second Part: 2-D Signals and More*, Ciulin describes a method that conserves both resources and energy. Other articles also cover resource efficiencies, a key aspect of Green IT.

In the area of social justice, two articles focused on the ability of technology to change lives in disadvantaged communities. As described by in the article, *Citizen Journalism: How Technology Transforms Journalism Business through Citizen-Reporters in Nigeria*, mobile technologies and networks provide avenues for people to broadcast information on state sponsored violence and repression. Aborisade, Howard, Beasley, and Livingood describe the power of citizen journalists and the changes in the Middle East over the past few years. These technologies reduce state control over media and allow individuals to transmit information and images that would have been censored without mobile devices and the Internet. Broadcasting images and information can thus empower people in totalitarian societies other abusive situations. During national disasters, emergency events, and international situations, it becomes extremely evident that technology has the power to transform the lives of individuals and communities.

The power to change lives is also evident in the article, *Capability Development of Customers: A Globally Viable Business Strategy for the Coming Age*, by Sharma, Madan, and Seth. They discuss the concept of capability and using technology to uplift people’s standard of living. The article describes how technology can provide opportunities for sustainable development which they describe as a “globally viable business strategy.” Again, technology can be transformative, providing an avenue for enabling social justice when applied to suffering communities.

Jackson, Howard, and LaPlante’s article on household use of computing also has social justice applications. Household use of computers clearly influences children to learn computing skills. Given the disparity in skill levels between socioeconomic groups, understanding the determinants of household computer use may be useful in reducing digital inequality.

Currently, both Green IT and social justice are significant areas which can be expected to have even more international focus in the future. The topic of Green IT could have been considered under emerging trends as the topic is “hot.” While there is not as much hype surrounding social justice applications, they are at least equally important. Both seemed destined to be popular areas for years to come, and future volumes will reflect this.
Security, Emergency Preparedness, and Disaster Recovery

Securing data, planning for emergencies, and recovering lost resources are becoming increasingly important as reports of growing security threats and a wide variety of natural disasters frequently fill the news broadcasts. A number of articles in this issue address the security issues. Murray Turoff’s compelling article, Strategic Considerations for Emergency Preparedness and Management: An Editorial Essay, covered emergency preparedness and disaster recovery and introduced the journal in the inaugural issue in Volume I. While that is not an area covered extensively in any of the articles in this volume, several articles mention disaster planning and recovery within discussions of other topics.

In the area of security, only one article, A Proposed Architecture for Autonomous Mobile Agent Intrusion Prevention and Malware Defense in Heterogeneous Networks, by Seale and Hargiss focused solely on security. In their article, they propose an architecture designed to support autonomous mobile agents which perform intrusion prevention activities on a heterogeneous network and explain how a distributed architecture can eliminate duplication of effort and reduce the workload on network clients. Trust and integrity issues are also discussed.

Many other articles mention security including an article on mobile service by Ho, who discusses the role of security in determining mobile service choices for youth in Hong Kong. Similarly, in their study of technology-based banking service (TBBS) Alkibi and Lind found that security was a determinant of behavioral intentions towards TBBS, and customer satisfaction in Yemen. These articles highlight the need for service providers to build security into their offerings.

Based on current trends, the need for security, emergency preparedness, and disaster recovery can also be expected to continue to increase into the future. The September 11th terror attack, numerous earthquakes, tsunamis, plus other natural and manmade disasters have resulted in millions of dollars in data recovery and lost business. Due to the growing concerns, future journal volumes will include more extensive coverage of these issues.

New Features, Technologies, Applications, Emerging Trends, and Innovation

Innovative technologies, applications and trends are the focus of a number of articles in the journal. Matching technological selections and investments with firm needs is essential for organizations to take advantage of innovative features, technologies, and trends. Two of the articles provide information to help remove the obstacles to organizational adoption of key technological developments. In addition, other articles provide information to increase strategic use of these technologies in organizations.

First, the article by Ahmad and LaPlante describes a systematic methodology for organizations to take advantage of the rapidly expanding offerings of Open Source Software (OSS) with their presentation and validation of a method for ensuring compatibility with the needs of the organization employing it. With OSS becoming a viable alternative for more organizations, an obstacle to its use has been the challenges of selecting the appropriate offering. Their article provides organizations with a validated method for selecting OSS to match their needs and given problem.

An obstacle the adoption of another emerging technology, Radio Frequency Identification (RFID), has been the investment time lag or time required to recoup the initial investment. With RFID becoming an important technology which can increase productivity by changing the way work and conduct along with providing a variety of new capabilities, deterrents to investment are counterproductive. RFID
enables faster, more efficient and accurate inventories, package tracking and logistical capabilities, theft prevention, and many other current and future applications including faster checkout lines, saving customers and businesses hours of labor. In fact, Wal-Mart requests that suppliers include RFID in the products supplied to the huge retailer. Because the applications involve fundamental process changes, investment takes time to recoup. The framework developed by Cheun-Hee-Kwan in the article, *Finding the Role of Time Lags in Radio Frequency Identification Investment*, explains the time lags for recouping investments and provides possibilities for reducing the delays in recouping costs. Better understanding the time lags by decision makers along with methods of their reduction could potentially increase investments of this powerful emerging technology and the related applications.

Mobile technologies represent an emerging trend that can only be expected to continue into the future. Using Roger’s Innovation Diffusion Theory (IDT), Ho’s article reported results from survey research on Hong Kong youth and provided information on what factors are significant in their adoption of third generation (3G) mobile service. The research findings are useful in determining how to design and market mobile technologies. Ho found that observability and complexity appear to be determinants of 3G mobile service adoption for experienced users, while subjective norms and perceived security appear to be determinants of adoption for both experienced and inexperienced users.

Another emerging trend has been the use of social media by organizations to attract, service, study, and retain customers. However, successful use of social media requires understanding customer needs. With globalization, it is important to understand the needs of customers from countries around the world. Global online communities offer opportunities for attracting, understanding, targeting, retaining and servicing through socialization, entertainment, access to company content, and readily available support. Dill, Calongne, Howard, and Beazley present results of a survey examining the needs of customers from around the globe in their study of the impacts of national culture on preferences in an international online community. Understanding the cultural needs of international customers can enable organizations to build online communities and use social media to better match their current and potential customer needs and desires.

Singh and Nayeem discuss customer reactions and vendor offerings of another new technological application, Business Intelligence (BI). Their article describes the emerging trend and history of the BI industry which became noticeable in 2002 and growth strategies of the major four vendors: SAP, IBM, Oracle, and Microsoft. In so doing, the article provides readers with a better understanding of the BI paradigm and importance of this emerging trend.

Outsourcing is a controversial but critical trend for organizations competing in the 21st century economy. Drnevich, Brush, and Luckock review the existing outsourcing research and present three approaches for organizations to use IT to enable business process outsourcing (BPO). The framework incorporates information on the timing of the outsourcing vendor’s activity ownership plus when and where the activity transformation is provided with real-world case examples to illustrate the implications. Increased understanding of the approaches and vendor relationships is key to enabling organizations to better utilize this important trend.

Finally, with innovation and creativity essential to competing in the global marketplace, ensuring that IT capability is linked to firm innovation is key. Datta describes the indirect link of these through the mediators: role of knowledge networks, knowledge assets and knowledge capabilities. Datta’s research shows the need for research on Information technology capability. His detailed reviews of the existing literature on entrepreneurship and innovative strategy were used to develop a framework to
enable understanding of the linkages. Datta’s framework and propositions linking knowledge networks, knowledge assets, and knowledge capabilities with firm capabilities can be a guide for future research on Information Technology Capability.

It is expected that these emerging trends and technologies will continue well into the future along with new technologies and innovations not yet created. If this volume is any indication, the variety of technologies will be enormous and their application will be even more varied. It is impossible to predict which emerging trends and technologies will be most influential and separate hype from reality. However, the ones covered in this issue seem destined to retain their strategic significance.

CONCLUSION

Reviewing the 2011 contents of the *International Journal of Strategic Information Technology and Applications*, it is clear that strategic IT and their application are extremely varied and important to many facets of organizational, individual, and societal life. Accurate prediction of the future is impossible. However, the range, variety, and importance in our lives can only be expected to increase in the future. The articles in the 2011 volume presents a wonderful cross section and good sample of the strategic technologies and applications existing today and provide clues into what is to come. As technology proliferates and becomes pervasive, the strategic importance will be magnified.

*Caroline Howard*
*HC Consulting, USA*

ENDNOTES

1 see the *Journal of Strategic Information Technology and Applications* (IJISITA), 1(1), 1-7. doi:10.4018/jsita.2010101501