

# Impact of the Internet on Nepalese Business Environment

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## Abstract

This study examines the impact of the internet on Nepalese business environment. Business performance is the dependent variable. The selected independent variables are privacy, responsiveness, decision quality, reliability and efficiency. The primary source of data is used to assess the opinions of the respondents regarding the impact of the internet on business performance. The study is based on primary data with 122 respondents. To achieve the purpose of the study, structured questionnaire is prepared. The correlation coefficients and regression models are estimated to test the significance and importance of internet on business performance in the context of Nepal.

The study showed that privacy has a positive impact on business performance indicating that use of secure networks enhance performance of business enterprises. Likewise, reliability has a positive impact on business performance. This implies that higher the level of reliability internet offers, higher would be the performance of business enterprises. Similarly, responsiveness has a positive impact on business performance. It indicates that the responsiveness provided by the internet leads to better business performance. Moreover, efficiency has a positive impact on business performance indicating that higher the level of efficiency of the internet, higher would be the business performance. Likewise, decision quality has a positive impact on business performance which indicates that better decision quality leads to better business performance.

*Keywords:* privacy, reliability, responsiveness, decision quality, efficiency, business performance

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## 1. Introduction

Current business models have been significantly influenced by globalization, dynamic digitalization, information and knowledge competition, and dissemination. In addition, the present technological era has led to great investment in data processing computerization in different activities, industries, and sectors. In essence, technological progressions are linked with the use of technological methods and applications, and eventually, these have led to several changes in business processes (Lutfi 2022). In other words, using IT and IS has ultimately brought on several opportunities and benefits

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to all business types. Alshirah *et al.* (2021) stated that there is an urgent need among financial firms to enhance their service levels to meet their objectives in light of regulation, monitoring, cost reduction, procurement of materials, controlling inventory, and using their meager resources.

Internet adoption enables new opportunities for enterprises in terms of international trade. With the rapid advancements in the domain and the continuous reduction in international trade barriers, the world is converging into one globalized economy. This opens up new and vibrant opportunities for Small and Medium Enterprises (SMEs) boosted by their abilities to join in regional and international trade agreements (Brakel and Mutula, 2006). With the continuous upgrading and optimization of mobile terminal equipment such as smartphones, traditional e-commerce platforms are no longer satisfied with the needs of the contemporary market, so mobile e-commerce has emerged. Mobile e-commerce integrates more advanced mobile network communication technologies on the basis of traditional e-commerce. Its real-time transaction behavior is more efficient, convenient, and safe. It is not only compatible with traditional e-commerce models but also increases support for mobile device users (Hong *et al.*, 2019). Businesses need to understand the factors that determine the quality in e-commerce to be able to achieve customer satisfaction and reduce perceived risk through improved quality (Lin, 2003). The rapid delivery of goods can improve customer satisfaction with e-commerce logistics, enhance customer loyalty to e-commerce companies, and promote the development of e-commerce companies (Kassim and Abdullah, 2010).

The use of the internet as a shopping and purchasing medium has seen unprecedented growth. The global electronic market to dramatically impact commerce (Limayem *et al.*, 2000). The internet can be used to reduce the “exchange friction” that exists both within and between organizations, and business marketers can better deliver value to their customers. The web is fundamentally changing and will continue to change, business-to-business marketing thought and practice (Sharma *et al.*, 2001). Bayo-Moriones and Lera-López (2007) contended that the proper usage of Internet-based ICTs can improve business competitiveness by enabling the SMEs to equally compete with the larger firms by leveling the playing field. With the advances of cloud computing and Internet-of-things technologies and the huge business opportunities these technologies can provide, a mindset shift is required with respect to how to create and capture value and drive the development of new business models (Whitmore *et al.*, 2015). Our focus was on small businesses

because resource scarcity compels them to work closely with others (for example, customers, suppliers, and partner firms) to achieve business goals (Forrest, 1990). Many companies surfaced with a business model focused on exploiting the benefits of the Internet to deliver superior value to customers. Companies, such as Google and Skype, have enjoyed exponential growth in record time (Werbach, 2005). Internet technology holds the potential to fundamentally change banks and the banking industry. An extreme view speculates that the Internet will destroy old models of how bank services are developed and delivered (DeYoung, 2001).

According to Butler and Peppard (1998), selling in cyberspace is very different from selling in physical markets, and it requires a critical understanding of consumer behavior and how new technologies challenge the traditional assumptions underlying conventional theories and models. Park and Kim (2003) found that the quality of the user interface affects the customer satisfaction directly, since it provides physical evidence of the service provider's competence as well as facilitating effortless use of the service. Bharadwaj *et al.* (1999) argued that use of technology can get better information about their customer needs and wants.

Perceive the rapid development of information technology, including the Internet has mostly aided such aspects as capturing information about present and future customers or streamlining the communication processes as a result of the utilization of electronic mail (Freeman *et al.*, 2007). Internet, on the other hand, is one of the most integral component of ICT industry. The Internet, especially the e-commerce related approaches, have been progressively adapted by economies, resulting in an internationally connected economic system (Gibbs and Kraemer, 2004). The source of long-sustained competitive advantage is the management of the overall set of relations between the firm and its environment, because these relations are developed through the "pattern of exchanges" in which the firm is involved, the firm's competitive advantage is the management of the firm's information-processing system (Glazer, 1991).

It is only by looking through the lens of various known theories and models of strategy that the potential impact of electronic commerce and Internet technology on strategy formulation and evaluation can be rigorously assessed on multiple levels (Kauffman and Walden, 2001). The internet cannot significantly affect the productivity and productivity growth of Irish manufacturing firms, unless it is used in relevant specific application scenarios, such as firms' advanced internet communication applications in

services. Internet technology applications require the bearing of substantial costs by firms, especially in the short run (Haller and Lyons, 2015). Internet of Things (IoT) applications have radically changed our lives, bringing immense value to the activities of both individuals and companies. Nowadays, billions of everyday objects are equipped with advanced sensors, wireless networks, and innovative computing capabilities. This profusion has given rise to wearable's, smart home applications, advanced health care systems, "smart cities" and industrial automation (Chen and Ji, 2016).

The internet has transformed the way business is performed. E-commerce is the business model where transactions and interactions of information and data are primarily conducted between businesses and between customers (Lin *et al.*, 2016). It uses electronic means in order to complete those processes more effectively and efficiently across the spectrum of a business. Social media has changed the business model dramatically in the last ten years. Rather than depending on traditional techniques, consumers are increasingly turning to e-commerce to find information about various items and services (Schivinski and Dabrowski, 2016). People's need for interpersonal contacts has been reflected in the emergence of social media. Social activities have been integrated into the virtual realm of the web through e-commerce networking sites. Real-time messaging allows people to share information and make online social connections. This tendency indicates that e-commerce is an important aspect of organizations' online marketing strategies (Marriott *et al.*, 2017).

Today the internet is playing a crucial role in our modern living such as online shopping, online entertainment, online booking and etc. (Abro *et al.*, 2009). Moreover, with the decreasing cost and ever more powerful user-friendly micro-computers and standard software packages, today the benefits are accessible even to the smallest businesses. It has allowed small businesses to compete effectively and efficiently in both domestic and international markets (Thong *et al.*, 1996). Employee performance is vital to any organization as it is a form of measurement of a company's success. There are various methods or approaches to enhance employee performance and one of them is through innovation. Innovation activities improve the administrative process, increase efficiencies and make work management more effective (Benner and Tushman, 2002). Hence, empirical evidence in the developing world lags behind theoretical development. There have been calls for research on developing country-based enterprises' e-commerce strategies (Moodley and Morris, 2004).

Along with rapidly increasing internet users. Almost all tourists are seeking information, and facilities and making travel plans through the internet. E-commerce has significantly changed the business model and found a different way to attract final customers of the tourism industry (Tsai *et al.*, 2005). Weiller *et al.* (2015) suggested business model innovation helps companies overcome barriers to consumer adoption and enable value creation and value capture. Sheth JN *et al.* (2000) suggested that businesses are undergoing a paradigmatic shift toward customer-centric marketing. Barua and Mukhopadhyay (2000) stated that as firms move into deeper stages of e-business transformation, the key determinant of e-business value shifts from monetary spending to higher dimensions of organizational capabilities.

According to Deighton (1996), the Internet is a facilitator of market-oriented strategies, enabling interactive sales activities and customized product offerings, in the context of business-to-business marketing. Blattberg and Deighton (1993) concluded that the Internet may drive marketing to a new paradigm, where differentiated products would be sold to differentiated markets. Moreover, Rayport (1995) stated that the virtual world of the Internet has permitted business-to-business organizations not only to manage information but also to create new value for customers by serving a broader set of their needs. Armstrong and Hagel (1995) noted that marketers will then (when they will be fully exploiting virtual markets such as the market that can be developed through the Internet) need to wrestle with micro-segmentation not just at the level of the individual customer, but at the level of the individual customer at specific points in time. Narver and Slater (1990) asserted that the indirect effects of the use of the Internet on sales performance and efficiency through its interactive use by the sales force favour the adoption of customer-oriented product strategies. According to Blattberg (1991), the age of addressability, in which the enhanced capabilities of improved and interactive communication, imply new marketing opportunities and trends, such as database marketing, micro-marketing, and integration of marketing activities.

According to Glazer (1991), information-intensive environments (i.e., the Internet) lead to the dissolution of the boundaries between the marketing and other divisions, thus arousing the possibility that the traditional notion of marketing as a distinct functional area within the firm will be rendered obsolete. Porter (1996) argued that particular emphasis is placed on articulating how the desirable characteristics of the Internet as a value delivery channel can be maximized. Further, Hui (2014) suggested that in the

new dynamic and connected world, a business model innovation becomes necessary, which also requires a mind-set shift in how to create and capture value. Neely (2008) stated that the consequences that most traditional product-based companies are facing in their servitization efforts, and the challenges in mind-set shift required in several aspects, including marketing (from transactional to relational marketing), sales (from selling physical products to selling service contracts, and capability), and customers (from taking the ownership of physical products to purchasing services). Westerlund *et al.* (2014) suggested that business model design in the dynamic, networked, and more comprehensive ecosystem context instead of emphasizing an individual company's self-centered objectives. Zhu *et al.* (2004) showed that the IT investment has a positive contribution to firm performance, as evidenced by the significant path loadings from IT spending to e-business value. Salem and Nor (2020) stated that perceived usefulness, risk taking propensity, perceived behavioral control and perceived lack of alternatives significantly influenced consumers' intention to adopt e-commerce. Perceived risk of online shopping constitutes a major factor that deters sales, and that creating situations where trust is stronger than perceived risk is imperative to increasing sales (Vos *et al.*, 2014).

In the context of Nepal, the adaptation of internet by small business organization is still low. There are still many factors which are resisting the adaptation of internet. In the same context, Joshi (2019) examined the factors affecting business performance towards online shopping in Kathmandu Valley. The study revealed that perceived security and online payment process are positively correlated to business performance. It indicates that higher the level of perceived security and online payment process, higher would be the business performance. Trust and perceived security of social media networking play important role in consumer purchase decision (Aryal, 2012). The popularity of online shopping among Nepalese customers has increased with the cost-reduction of technology-based goods, the cost of internet services and easy access to the internet. At the same time, the convenient modes of payments, user-friendly and interactive shopping apps are further paving a pathway to unprecedented growth in the online shopping companies (Vaidya, 2019).

The above discussion shows that the empirical evidences vary greatly across the studies on the impact of the internet on business environment. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such evidence using more recent data exists in

Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The major objective of the study is to examine the impact of the internet on Nepalese business environment. More specifically, it examines the relationship of privacy, responsiveness, decision quality, reliability and efficiency with the business performance on Nepalese business environment.

The remainder of this study is organized as follows. Section two describes the sample, data, and methodology. Section three presents the empirical results and final section draws the conclusion.

## 2. Methodological aspects

The study is based on the primary data which were collected from 122 respondents through questionnaire. The study employed convenience sampling method. The respondents' views were collected on privacy, reliability, responsiveness, decision quality, efficiency and the level of businesses performance. This study is based on descriptive as well as causal comparative research designs.

### *The model*

The model used in this study assumes that business performance depends upon use of internet. The dependent variable selected for the study is business performance. Similarly, the selected independent variables are privacy, reliability, responsiveness, decision quality, and efficiency. Therefore, the model takes the following form:

$$BP = \beta_0 + \beta_1 P + \beta_2 RA + \beta_3 RP + \beta_4 E + \beta_5 DQ + \mathcal{E}$$

Where,

$\beta_0$  = Intercept of the dependent variable

$\beta_1, \beta_2, \beta_3, \beta_4$  and  $\beta_5$  = Coefficient of the variables

BP = Business performance

P = Privacy

RA = Reliability

RP = Responsiveness

E = Efficiency

DQ = Decision quality

Business performance was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly

disagree and 5 for strongly agree. There are 5 items and sample items include “Internet aids in gathering information from vendors and providing it to clients of businesses”, “Internet use will boost corporate productivity” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ( $\alpha = 0.740$ ).

Privacy was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “The Internet offers my business information privacy”, “I am confident in the business online privacy system” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ( $\alpha = 0.940$ ).

Reliability was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “I always use the internet to research things”, “Information on the internet is trustworthy” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ( $\alpha = 0.754$ ).

Responsiveness was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “I can easily handle issues I have with a company online”, “The online system for processing complaints is superb” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ( $\alpha = 0.819$ ).

Decision quality was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “I utilize internet data to make all business-related decisions”, “Making the appropriate selection is aided by regularly updated information” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ( $\alpha = 0.813$ ).

Efficiency was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly agree and 5 for strongly disagree. There are 5 items and sample items include “Information obtained online is useful to businesses”, “Internet enhances corporate efficiency and speed of operations” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ( $\alpha = 0.754$ ).

The following section describes the independent variables used in this study along with the hypothesis formulation.



### *Privacy*

Information security refers to the degree to which the customer believes the site is safe from intrusion and personal information is protected. It involves physical safety and the guarantee that the record showing banking activities and security of account information are not shared (Yang and Fang, 2004). Momeni *et al.* (2013) found information security has a significant effect on user satisfaction on the internet. Moreover, this satisfaction has a significant effect on loyalty to the bank and willingness to continue relations with e-banking services. However, the information posted on public or semi-public user profiles can lead to such risks as identity theft, sexual exploitation, online stalking, and cyber harassment (Gross and Acquisti, 2005). This highly publicized event highlights the sensitive nature of privacy concerns in social network websites (SNWs). The posting of personal and private information on SNW opens up a user to public scrutiny, possibly creating permanent records that can affect the user negatively in the future (Rosenblum, 2007). Security is another essential determinant in the decision of consumers to use Internet banking. Security is defined as freedom from danger, risk, or doubt (Zafar *et al.*, 2011). Likewise, Akinyele and Olorunleke (2010) investigated the technology and service quality in banking industry in Nigeria. The study concluded that secured service is the most important dimension of e-banking. Based on it, this study develops the following hypothesis:

H<sub>1</sub>: There is a positive relationship between privacy and business performance.

### *Responsiveness*

Responsiveness belongs to the quality and speed of the companies for their products based on customer interest. Also, it determines the quality to provide customer service and communication which affects trust, loyalty, satisfaction high profitability, and sailing of many products (Meehan and Wright, 2012). Jun and Cai (2001) proved that responsiveness has a positive effect on customer satisfaction. Cooil *et al.* (2006) suggested that an increase in responsiveness through internet banking can increase the level of customer satisfaction. Similarly, Philipos (2013) analyzed the customer satisfaction and electronic banking service on some selected banks in Ethiopia. The study revealed that there is a positive and significant relationship of responsiveness and privacy with customer satisfaction. Narver *et al.* (2004) confirmed a positive relationship between a proactive market orientation and innovation orientation. However, in contrast to there is a positive, yet a weaker relationship also for a responsive market orientation, our study found no evidence of a significant relationship between a responsive market orientation and the

degree of novelty. Based on it, this study develops the following hypothesis:

H<sub>2</sub>: There is a positive relationship between responsiveness and business performance.

### *Decision quality*

Information systems in companies have evolved over the years and moved from being a system in which transactions are recorded to being a system that supports decisions made by businesses at various levels (Tariq *et al.*, 2022). AlTaweel and Al-Hawary (2021) confirmed that use of relational databases (RDBMS) can support internal business decisions such as inventory management, pricing decisions, discovering the most valuable customers, identifying lost products, etc. Dean and Sharfman (1996) found that performance is influenced by the factor (i.e. internet) that may mask the effect of the decision process. There is a positive relation between types and quality of the product provided through the online shopping with customer requirement or needs. Its man's trust appears when realize what make the customer happy. Build bridges of trust with customers will be a good factor to get success and high profitability (Srivastava and Rakshit, 2017). Based on it, this study develops the following hypothesis:

H<sub>3</sub>: There is a positive relationship between decision quality and business performance.

### *Efficiency*

Efficiency can be defined as the performance of internet banking based on some elements like up-to-date information, response time, download time, complete product information, tutorial demonstration, and help function. It is the ability of the customers to get a website, find their desired product and information associated with it, and check out with minimal of effort (Nochai, 2013). Sakhaei *et al.* (2014) proved that efficiency is positively related to education system regarding business. Lewis (2001) stated that e-commerce gives the possibility to present easier company products and services on the international market, shorten the manufacturing cycle, improve the spread of information, create new informational products and new placement channels, etc. The Internet has been characterized as a tool for facilitating sales force efforts, thus leading to higher levels of sales productivity and efficiency (Samli *et al.*, 1997). Baršauskas stated that the e-commerce adoption in business has a positive impact on business efficiency in several areas. The quantitative and qualitative analysis of e-commerce impact on business efficiency shows that the main cost positions, which directly depend on e-commerce adoption

and use, and experience quite big changes, are average cost of inventory management, the cost of the materials ordering process, and the cost of labour. Chacar and Vissa (2005) stated that improved governance of business groups may be needed to ensure that management is indeed doing what is best for shareholders and that minority shareholders' rights are protected. Based on it, this study develops the following hypothesis:

H<sub>4</sub>: There is a positive relationship between efficiency and business performance.

### *Reliability*

Reliability means honoring commitments in areas such as billing accuracy, proper record maintenance, and delivering the service within the acceptable time limit. It also refers to the correct technical functioning of self-service technology and the accuracy of service delivery. It concerns the technical functioning of the site and whether the information that is provided is accurate from the online perspective (Zeithaml *et al.*, 2000). Reliability is the excellence of being reliable by the customer. Reliability issue is very important for customers because it's a measurement of effect level of components on the system reliability (Durmaz, 2017). Kheng *et al.* (2010) concluded that reliability has a positive relation with business performance. Lee and Choi (2003) developed and validated a model that includes seven knowledge management (KM) enablers as being positively related to a firm's knowledge creation processes which, in turn, are positively related to the firm's innovations and its overall performance. Cunningham and Tynan (1993) sustains that electronic technologies (i.e., the Internet) should be seen as a key part of the corporate strategies of business. Al-Alwan *et al.* (2022) suggested that investing in information technology allows companies to provide data with accuracy, reliability, and high quality, as well as improve the qualifications of their employees. Based on it, this study develops the following hypothesis:

H<sub>5</sub>: There is a positive relationship between reliability and business performance.

## **3. Results and discussion**

### *Correlation analysis*

On analysis of data, correlation analysis has been undertaken first and for this purpose, Kendall's Tau correlation coefficients along with means and standard deviations have been computed, and the results are presented in Table 1.

Table 1

**Kendall's Tau correlation coefficients matrix**

This table presents Kendall's Tau coefficients between dependent and independent variables. The correlation coefficients are based on 122 observations. The dependent variable is BP (Business performance). The independent variables are P (Privacy), RA (Reliability), RP (Responsiveness), DQ (Decision quality), and E (Efficiency).

Variables	Mean	S.D.	BP	P	RA	RP	DQ	E
BP	4.06	0.66	1					
P	4.01	0.70	0.507**	1				
RA	3.96	0.66	0.465**	0.577**	1			
RP	4.05	0.63	0.596**	0.619**	0.525**	1		
DQ	4.03	0.66	0.581**	0.621**	0.547**	0.638**	1	
E	4.03	0.66	0.669**	0.512**	0.512**	0.616**	0.536**	1

Note: The asterisk signs (\*\*) and (\*) indicate that the results are significant at one percent and five percent levels respectively.

Table 1 indicates that privacy is positively correlated to the business performance indicating that use of secure networks enhance performance of business enterprises. Likewise, reliability is positively correlated to business performance. This implies that higher the level of reliability internet offers, higher would be the performance of business enterprises. Similarly, responsiveness is positively correlated to the business performance. It indicates that the responsiveness provided by the internet leads to better business performance. Moreover, efficiency is also positively related to the business performance indicating that higher the level of efficiency of the internet, higher would be the business performance. Likewise, decision quality is positively correlated to the business performance which indicates that better decision quality leads to better business performance.

*Regression analysis*

Having analyzed the Kendall's Tau correlation coefficients matrix, the regression analysis has been carried out and the results are presented in Table 2. More specifically, it presents the regression results of privacy, reliability, responsiveness, decision quality, and efficiency on business performance in Nepal.

Table 2

**Estimated regression results of privacy, reliability, responsiveness, decision quality, and efficiency on business performance**

The results are based on 122 observations using linear regression model. The model is  $BP = \beta_0 + \beta_1 P + \beta_2 RA + \beta_3 RP + \beta_4 E + \beta_5 DQ$  + where the dependent variable is BP (Business performance). The independent variables are P (Privacy), RA (Reliability), RP (Responsiveness), DQ (Decision quality), and E (Efficiency).

Models	Intercepts	Regression coefficients of					Adj. R_bar2	SEE	F-value
		P	RA	RP	DQ	E			
1	1.599 (5.990)**	0.615 (9.374)**					0.418	0.502	87.865
2	1.642 (5.754)**		0.611 (8.603)**				0.376	0.519	74.016
3	0.796 (3.182)**			0.807 (13.212)**			0.589	0.421	174.558
4	1.096 (4.433)**				0.737 (12.168)**		0.549	0.442	148.057
5	0.965 (4.123)**					0.769 (13.412)**	0.596	0.418	179.870
6	1.058 (3.756)**	0.410 (5.210)**	0.344 (4.172)**				0.488	0.471	58.642
7	0.568 (2.189)*	0.162 (2.022)*	0.110 (1.344)	0.596 (6.105)**			0.608	0.412	63.435
8	0.520 (2.043)*	0.087 (1.042)	0.075 (0.931)	0.445 (3.963)**	0.272 (2.547)*		0.625	0.403	51.412
9	0.343 (1.451)	0.00 (0.05)	0.019 (0.255)	0.247 (2.225)*	0.255 (2.605)**	0.401 (4.811)**	0.685	0.369	53.544

Notes:

- i. Figures in parenthesis are t-values.
- ii. The asterisk signs (\*\*) and (\*) indicate that the results are significant at 1 percent and 5 percent levels respectively.
- iii. Business performance is dependent variable.

The regression results shows that the beta coefficients for privacy are positive with the business performance. It indicates that privacy has a positive impact on business performance. This finding is consistent with the findings of Momeni *et al.* (2013). Likewise, the beta coefficients for reliability are positive with business performance. It indicates that reliability has a positive impact on business performance. . This finding is similar to the findings of Kheng *et al.* (2010). In addition, the beta coefficients for responsiveness are positive with business performance. It indicates that responsiveness has a positive impact on business performance. This finding supports the findings of Jun and Cai (2001). Further, the beta coefficients for decision quality are positive with business performance. It indicates that decision quality has a positive impact on business performance. This finding is consistent with the findings of Tariq *et al.* (2022). Likewise, the beta coefficients for efficiency are positive with business performance. It indicates that efficiency has a positive impact on business performance. This finding is similar to the findings of Sakhaei *et al.* (2014).

#### 4. Summary and conclusion

Organizational performance is crucial to the success of any organization as it is its most valuable asset. There are both internal and external factors that affect the performance of the organization. Internet of Things (IOT) applications have radically changed our lives, bringing immense value to the activities of both individuals and companies. Nowadays, billions of everyday

objects are equipped with advanced sensors, wireless networks, and innovative computing capabilities. This profusion has given rise to wearable's, smart home applications, advanced health care systems, "smart cities" and industrial automation (Chen and Ji, 2016). The internet cannot significantly affect the productivity and productivity growth of Irish manufacturing firms, unless it is used in relevant specific application scenarios, such as firms' advanced internet communication applications in services. Internet technology applications require the bearing of substantial costs by firms, especially in the short run (Haller and Lyons, 2015).

This study attempts to examine the impact of internet in Nepalese business environment. The study is based on primary data with 122 observations.

The study showed that privacy, reliability, responsiveness, efficiency, and decision quality have a positive impact on business performance. Thus, the study concluded that privacy, reliability, responsiveness, efficiency, and decision quality offered by the internet enhance business performance in the context of Nepalese business environment. The study also concludes that responsiveness followed by efficiency of the internet are the most influencing factor that explains the changes in the performance of business houses in Nepal.

## References

- Abro, Q. M., N. A. Memon, and P. I. S. Rashdi, 2009. Strategic factors for enhancing the innovativeness of the nanotechnology firms. *International Journal of Business Innovation and Research* 3(6), 596-609.
- Akinyele, S. T., and K. Olorunleke, 2010. Technology and service quality in the banking industry: An empirical study of various factors in electronic banking services. *International Business Management* 4(4), 209-221.
- Al-Alwan, M., S. Al-Nawafah, H. Al-Shorman, F. Khrisat, F. Alathamneh, and S. Al-Hawary, 2022. The effect of big data on decision quality: Evidence from telecommunication industry. *International Journal of Data and Network Science* 6(3), 693-702.
- Aryal, S. B., 2012. A case study of Facebook marketing approaches of two Nepalese companies. *Advances in Economics and Business Management* 3(6), 591-596.
- Baršauskas, P., T. Šarapovas, and A. Cvilikas, 2008. The evaluation of e-commerce impact on business efficiency. *Baltic Journal of Management* 3(1), 71-91.
- Bayo-Moriones, A., and F. Lera-López, 2007. A firm-level analysis of determinants of ICT adoption in Spain. *Journal of Technovation* 27(7), 352-366.
- Benner, M. J., and M. Tushman, 2002. Process management and technological

- innovation: A longitudinal study of the photography and paint industries. *Journal of Administrative Science Quarterly* 47(4), 676-707.
- Bharadwaj, A. S., S. G. Bharadwaj, and B. R. Konsynski, 1999. Information technology effects on firm performance as measured by Tobin's Q. *Journal of Management Science* 45(7), 1008-1024.
- Blattberg, R. C., and J. Deighton, 1991. Interactive marketing: Exploiting the age of addressability. *Sloan Management Review* 33(1), 5-15.
- Butler, P., and J. Peppard, 1998. Consumer purchasing on the internet: Processes and prospects. *European Management Journal* 16(5), 600-610.
- Chacar, A., and B. Vissa, 2005. Are emerging economies less efficient? Performance persistence and the impact of business group affiliation. *Strategic Management Journal* 26(10), 933-946.
- Cooil, B., T. L. Keiningham, L. Aksoy, and M. Hsu, 2006. A longitudinal analysis of customer satisfaction and share of wallet: Investigating the moderating effect of customer characteristics. *Journal of Marketing* 70(4), 67-83.
- Cunningham, C., and C. Tynan, 1993. Electronic trading, inter-organizational systems and the nature of buyer-seller relationships: The need for a network perspective. *International Journal of Information Management* 13(1), 3-28.
- Day, G. S., 1994. The capabilities of market-driven organizations. *Journal of Marketing* 58(4), 37-52.
- Dean Jr, J. W., and M. P. Sharfman, 1996. Does decision process matter? A study of strategic decision-making effectiveness. *Academy of Management Journal* 39(2), 368-392.
- DeYoung, R., 2001. The financial performance of pure play Internet banks. *Economic Perspectives-Federal Reserve Bank of Chicago* 25(1), 60-73.
- Durmaz, O., 2017. Investigation of the motivation parameters in health care establishments. *International Journal of Social Sciences and Educational Studies* 3(4), 44-53.
- Forrest, J. E., 1990. Strategic alliances and the small technology-based firm. *Journal of Small Business Management* 28(3), 37.
- Gibbs, J. L., and K. L. Kraemer, 2004. A cross-country investigation of the determinants of scope of e-commerce use: An institutional approach. *Electronic Markets* 14(2), 124-137.
- Glazer, R., 1991. Marketing in an information-intensive environment: strategic implications of knowledge as an asset. *Journal of Marketing* 55(4), 1-19.
- Hong, W., C. Zheng, L. Wu, and X. Pu, 2019. Analyzing the relationship between consumer satisfaction and fresh e-commerce logistics service using text mining techniques. *Sustainability* 11(13), 3570-3576.

- Joshi, P., 2019. A study on customer satisfaction towards online shopping in Kathmandu Valley. *Nepalese Journal of Economics* 3(2), 14-21.
- Jun, M., and S. Cai, 2001. The key determinants of Internet banking service quality: A content analysis. *International Journal of Bank Marketing* 19(7), 279-291.
- Kassim, N., and N. A. Abdullah, 2010. The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: A cross cultural analysis. *Asia Pacific Journal of Marketing and Logistics* 22(3), 351-371.
- Kauffman, R. J., and E. A. Walden, 2001. Economics and electronic commerce: Survey and directions for research. *International Journal of Electronic Commerce* 5(4), 5-116.
- Khanal, B., 2015. Impact of service quality dimensions on customer satisfaction and customer loyalty in Nepalese commercial banks. *Nepalese Journal of Business* 2(1), 41-52.
- Kheng, L. L., O. Mahamad, and T. Ramayah, 2010. The impact of service quality on customer loyalty: A study of banks in Penang, Malaysia. *International Journal of Marketing Studies* 2(2), 57-66.
- Lee, H., and B. Choi, 2003. Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. *Journal of Management Information Systems* 20(1), 179-228.
- Lewis, I., 2001. Logistics and electronic commerce: An inter-organizational systems perspective. *Transportation Journal* 40(4), 5- 9.
- Lin, C. C., 2003. A critical appraisal of customer satisfaction and e-commerce. *Managerial Auditing Journal* 18(3), 202-212.
- Lin, Y., J. Luo, S. Cai, S. Ma, and K. Rong, 2016. Exploring the service quality in the e-commerce context: A triadic view. *Industrial Management and Data Systems* 11(3), 388-415.
- Marriott, H. R., M. D. Williams, and Y. K. Dwivedi, 2017. What do we know about consumer m-shopping behaviour? *International Journal of Retail and Distribution Management* 45(6), 568-586.
- Meehan, J., and G. H. Wright, 2012. The origins of power in buyer–seller relationships. *Industrial Marketing Management* 41(4), 669-679.
- Momeni, M., B. Kheiry, and M. Dashtipour, 2013. Analysis the effects of electronic banking on customer satisfaction and loyalty. *Interdisciplinary Journal of Contemporary Research in Business* 4(12), 230-241.
- Narver, J. C., and S. F. Slater, 1990. The effect of a market orientation on business profitability. *Journal of Marketing* 54(4), 20-35.
- Narver, J. C., S. F. Slater, and D. L. MacLachlan, 2004. Responsive and proactive



- market orientation and new-product success. *Journal of Product Innovation Management* 21(5), 334-347.
- Neely, A., 2008. Exploring the financial consequences of the servitization of manufacturing. *Operations Management Research* 1(2), 103-118.
- Nochai, R., and T. Nochai, 2013. The impact of internet banking service on customer satisfaction in Thailand: A case study in Bangkok. *International Journal of Humanities and Management Science* 1(1), 101-105.
- Park, C. H., and Y. G. Kim, 2003. Identifying key factors affecting consumer purchase behavior in an online shopping context. *International Journal of Retail and Distribution Management* 31(1), 16-29.
- Philipos, B., 2013. Customer satisfaction and electronic banking service on some selected banks in Ethiopia. *International Journal of Research in Computer Application and Management* 3(6), 133-138.
- Rayport, J. F., and J. J. Sviokla, 1995. Exploiting the virtual value chain. *Harvard Business Review* 73(6), 75-85.
- Sakhaei, S. F., A. J. Afshari, and E. Esmaili, 2014. The impact of service quality on customer satisfaction in Internet banking. *Journal of Mathematics and Computer Science* 9(1), 33-40.
- Salem, M. A., and K. M. Nor, 2020. The effect of COVID-19 on consumer behavior in Saudi Arabia: Switching from brick-and-mortar stores to e-commerce. *International Journal of Scientific and Technology Research* 9(7), 15-28.
- Samli, A. C., J. R. Wills, and P. Herbig, 1997. The information superhighway goes international: Implications for industrial sales transactions. *Industrial Marketing Management* 26(1), 51-58.
- Schivinski, B., and D. Dabrowski, 2016. The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications* 22(2), 189-214.
- Sharma, A., R. Krishnan, and D. Grewal, 2001. Value creation in markets: A critical area of focus for business-to-business markets. *Industrial Marketing Management* 30(4), 391-402.
- Sheth, J. N., R. S. Sisodia, and A. Sharma, 2000. The antecedents and consequences of customer-centric marketing. *Journal of the Academy of Marketing Science* 28(1), 55-66.
- Srivastava, P. R., and A. Rakshit, 2017. Assessment, implication, and analysis of online consumer reviews: a literature review. *Pacific Asia Journal of the Association for Information Systems* 9(2), 43-74.
- Tariq, E., M. Alshurideh, I. Akour, and S. Al-Hawary, 2022. The effect of digital

- marketing capabilities on organizational ambidexterity of the information technology sector. *International Journal of Data and Network Science* 6(2), 401-408.
- Thong, J. Y., C. S. Yap, and K. S. Raman, 1996. Top management support, external expertise and information systems implementation in small businesses. *Information Systems Research* 7(2), 248-267.
- Vaidya, R., 2019. Online shopping in Nepal: Preferences and problems. *Journal of Nepalese Business Studies* 12(1), 71-86.
- Vos, A., C. Marinagi, P. Trivellas, N. Eberhagen, C. Skourlas, and G. Giannakopoulos (2014). Risk reduction strategies in online shopping: E-trust perspective. *Procedia-Social and Behavioral Sciences* 147(3), 418-423.
- Weiller, C., T. Shang, A. Neely, and Y. Shi, 2015. Competing and co-existing business models for EV: lessons from international case studies. *International Journal of Automotive Technology and Management* 15(2), 126-148.
- Westerlund, M., S. Leminen, and M. Rajahonka, 2014. Designing business models for the internet of things. *Technology Innovation Management Review* 4(7), 5-14.
- Whitmore, A., A. Agarwal, and L. Da Xu, 2015. The internet of things: A survey of topics and trends. *Information Systems Frontiers* 17(2), 261-274.
- Yang, Z., and X. Fang, 2004. Online service quality dimensions and their relationships with satisfaction: A content analysis of customer reviews of securities brokerage services. *International Journal of Service Industry Management* 15(3), 302-326.
- Zafar, M., A. Zaheer, and K. Rehman, 2011. Impact of online service quality on customer satisfaction in banking sector of Pakistan. *African Journal of Business Management* 5(30), 11786-11793.
- Zeithaml, V. A., A. Parasuraman, and A. Malhotra, 2002. Service quality delivery through web sites: a critical review of extant knowledge. *Journal of the Academy of Marketing Science* 30(4), 362-375.
- Zhu, K., K. L. Kraemer, and J. Dedrick, 2004. Information technology payoff in e-business environments: An international perspective on value creation of e-business in the financial services industry. *Journal of Management Information Systems* 21(1), 17-54.