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Article

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E-Business Career Opportunities and Implications for Fresh University Graduates in Pakistan

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ABSTRACT

Economic crises and reduction in employment rate has pushed fresh graduates of developing countries into e-business adoption. The current study attempts to determine the factors that motivate the fresh graduates towards e-business adoption in Pakistan. The research model comprises of intention to start up a business, professional attraction, self-reliance, network support, online information availability, and awareness of technology as independent variables, with e-business adoption as dependent variable. Data was collected from 200 fresh graduates using a self-administered questionnaire and was analyzed through correlation and regression analysis using SPSS 23.0. The results indicate that all independent variables except network support had a positive influence on adoption of e-business technology on fresh graduates. At the end, certain implications of the study and limitations are discussed.

KEYWORDS

career opportunities, Covid-19, Developing countries, e-business, implications, motivational factors, Pakistan, Trends, university graduates

INTRODUCTION

In each country, the young people are facing formidable ultimatums related to finance and economy. Huge decrease in Gross Domestic Product (GDP) in many European and Asian countries is the worst for the slum. Due to this deplorable situation of the economy, there is only a decline in the creation of new jobs, there has also been a decrease in existing jobs (Manohar *et al*., 2014). So as an aftermath, for recent graduates, the rate of unemployment has increased due to a decrease in employment rates. The consequences of economic crises and job losses are pushing fresh graduates from different disciplines into e-business trends. Adoption of such systems allows fresh graduates to gain greater access to the globe, communicate with potential customers and suppliers, and information exchange.

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The advent of information technology in the mid-nineties provided every person who was wishing to expand and transform business processes with a great opportunity (Apăvăloaie, 2014). However, the initial enthusiasm did not take long to be converted into doubt because most people were unaware of the utilities and processes of the system. Now, people are depending more on facilities provided by the internet and internet technologies are increasing (Snieska *et al.,* 2015). So, in youth, e-business activities are becoming popular. e-business applications provide opportunities to improve data exchange, facilitate business processes and consequently reduce costs (Papadourakis, 2010, Zhu, Zaho, & Bush, 2020).

e-business plays an important role in the creation of employment opportunities. In a developing country like Pakistan, the need for such system has been increased due to insufficient job opportunities to fresh graduates of multiple disciplines, particularly after Covid-19 eruption. An increase in unemployment led to an inclination towards e-business. WTO (2001) claims that distribution of business information and sale have been revolutionized by the internet. Covid-19 has increased the need to transform traditional business to e-business (Naab & Bans-Akutey, 2021). Regardless of the fact, there are many hindrances in developing countries, which seriously obstruct e-business growth, even then it has the potential to provide many opportunities (Alyoubi, 2015). Recent research shows that despite technological advancement, most individuals hesitate to start e-business practice due to different factors. The purpose of the present study is to explore those motivational factors which influence e-business adaptation or can influence fresh business graduates towards e-business.

This paper has been organized as follows: next (second) section provides literature review (intention to set up a business, professional attraction, networking and support, online information availability, self-reliance, awareness of technology) and its relationship with e-business adoption. Based on literature, the hypotheses of study are developed, and theoretical framework is proposed. The third section outlines the research methodology, while the fourth section consists of results and findings of the study. The fifth section comprises the discussion, conclusion, future research directions and the implications of the study.

LITERATURE REVIEW

e-business adoption is a situation where one is ready to accept technological innovation. Ang (2015) stated that the constant use of the internet has attracted many individuals and enterprises to try out e-business to serve their customers better. In recent years, the IT driven factors pushing graduates toward business have increased, which has resulted in the development of this sector. This has provided fresh graduates with a new landscape to start their work online. Ensari and Karabay (2014) also claim that people are fully aware of the potential of e-business applications, and they normally tend to gain knowledge of its practices. However, advancement in e-business has created many opportunities for fresh graduates. Fillis et al. *(*2003) enlightened that few institutions still favor implementing old business techniques due to various requirements associated with normal transactions and e-transactions. In addition to this, policy makers argue that business education can also result in a continuous increase entrepreneurial intentions among graduates. Thus, this research investigates the adoption of e-business by the fresh unemployed graduates. Researchers have also stated some factors responsible for the adoption of E-Business. According to Janom and Zakariya (2008), main factors include trust concerning information security, technical knowledge and skills, awareness of the set of laws, correct mindset, attitude of owners, and organizing all relevant resources. Recent studies have shown that multiple factors play very crucial roles in pushing fresh graduates to e-business. Those motivational factors have been discussed as under:

Intention to Set-Up a Business and E-Business Adoption

Entrepreneurial intention is also considered to be the first step in new business formation as it leads to further progress in the career (Meoli, Fini, Sobrero, & Wiklund, 2020). The creation of new

ventures by fresh graduates, as their preferred career choice is an extremely divided and multifaceted procedure (Yorke, 2004; Liñán, Ceresia, & Bernal, 2018; Tomy & Pardede, 2020). Since the number of universities and fresh graduates are ever increasing, it has been seen that graduates envision their degree as a compulsory measure to launch into an e-business career. Start-ups are an important engine for economic growth (Millman *et al.,* 2009; Susilo, 2020). In this study, E-business adoption is being studied in relation to the application as being one of the characteristics of new business intention (Apăvăloaie, 2014). The main goal of these graduates is to start a new business. Therefore, based on all this, it is hypothesized that:

H1: Intention to set-up a business positively impacts e-business adoption among fresh graduates of Pakistan.

Professional Attraction and E-Business Adoption

McGrath and MacMillan (2000) discovered that many flexible alternatives in business could be the result of professional attraction towards e-business. Toukabri and Ettis (2021) have similar findings also. They also suggested that without sufficient attraction, it is difficult to take advantage of the opportunities of an e-business setup. Maditinos *et. al*. (2014) described that individuals with technical and leadership skills are more attracted towards e-business adoption. They further argued that business knowledge enhances the capabilities to run a separate business set-up. The study there hypothesized that:

H2: Professional attraction positively impacts e-business adoption among fresh graduates of Pakistan.

Networking Support and E-Business Adoption

Hellman and Puri (2002) claimed that networking makes it very easy to access finance and makes the acquisition of benefit and success from e-business adoption very simple. At the same time, network support, that family, friends, and colleagues provide, acts as an impetus to take a new start. Through networking, the decision by collaboration becomes feasible. Organizations are allowed for actions to lessen the operational outlay and the knowledge is utilized by the people. In the beginning, the networks of businessman and businessman himself cannot be sounder (Johannisson, 2000), the networks belonging to businessmen and the networks of the beginning time unite after some time (Lechner *et al.,* 2006; Bell H. & Bell R., 2016). It also may increase beneficiaries and consequently business opportunities. It is also known that networking makes it easier to gather finances and workforce to make the business prosper (Besser & Miller, 2011; Hellman & Puri, 2002). In addition, networking makes organizational operation easy, it allows people to make collective decisions, shrink expenditures and get information easily (Bordonaba-Juste, 2012; Wu *et al.,* 2003). Initially, it is almost impossible to separate the adopters of e-business and networking (Gómez, Salazar, & Vargas, 2022), but eventually both are same (Lechner *et al.,* 2006). When business relationships start contributing to the achievement of social goals, contacts become capital (Ang, 2015). New social ties are crucial to reinforce the start up's development, which can only be developed by the already existing reputation that results from working in an environment for too long and consequently by expanding the existing social networks (Lee *et al.,* 2001).
    Based on this fact, the study hypothesized that:

H3: Networking support positively affects e-business adoption among fresh graduates of Pakistan.

Online Information Availability and E-Business Adoption

Moreland (2006) makes it clear that new opportunities of employability and e-business enhancement related information availability in e-business adoption acts as a competitive advantage. He also makes it clear that abilities, information, and the individual traits that can help someone gain success in a field also include their ability to take advantage of themselves first and foremost and then of the employees, the economy, and the society. For advocacy of IT, the main elements are knowledge of benefits related to IT as previously people were not aware of benefits of IT (Feizollahi *et al.,* 2014; Millman *et al.,* 2009). IT has helped in redesigning the many basics of business activities. e-business systems are one of the many applications of IT in business activities (Chong *et al.,* 2014). Studies have also shown that at the initial level of e-business adoption, many benefits can be earned as it increases their ability to view information on a wider level and it improves external and internal communication (Brzozowska and Bubel, 2015). So, for the purpose of e-business, know-how related to IT is very vital. On the above discussion, it is hypothesized that:

H4: Online information availability positively impacts e-business adoption among fresh graduates of Pakistan.

Self-Reliance and E-Business Adoption

Grabowski et al. (2001) shows that as the level of education and occupation attainment are increased and elevated, an environment of self-sufficiency and reliance emerges and would increase earnings and their stability during early adulthood. Since the late 80s, self-reliance has been seen surfacing against the milieu of reorganization of economy (Fonchingong & Fonjong, 2002). In the modern world, this habit of self-reliance is mandatory for survival. This enables people to look within themselves and for local efforts and resources (Zabelina, Tsiring, & Chestyunina, 2018). In this difficult situation, fresh graduates came forth to make use of self-reliance strategy and took responsibility for the e-business formation. It is believed that individuals and organizations linked via networking can gather information from the already existing sources and make sure that their future is promising through the development of skills and capabilities (Apăvăloaie, 2014). In the early 70s, self-reliance surfaced as a phrase and gained quite some popularity even though the term was not fully explained. Self-reliance is a method, in which resurgence is developed through local attempts, domination is dealt with dependence on one's own self, and the individuals and others are positioned in the same prospect. It utilizes the local aspects, raw materials, local creativeness, and capital to emerge as the strongest of ideas. Self-reliance is not just a skill; it is a way of life (Brzozowska & Bubel, 2015). Therefore, it is hypothesized that:

H5: Self-reliance positively impacts e-business adoption among fresh graduates of Pakistan.

Awareness of Technology and E-Business Adoption

According to Papadourakis (2006), awareness of the new and latest technology is extremely important for exploring new horizons in business. It was further claimed by Čiarnienė and Stankevičiūtė (2015) that awareness of the latest technology enables one to compete in the business world as times progress and helps in attaining profitability. The technological changes and its involvement in businesses and impact on businesses are appreciated in everyday practices of an organization (Benitez, Chen, Teo, & Ajamieh, 2018). So, it is hypothesized that:

H6: Awareness of technology positively impacts e-business adoption among fresh graduates of Pakistan.

Therefore, this study aims at providing fresh graduates of Pakistan with a framework of e-business to explore its potential. This paper examines the various e-business adoption factors so that fresh graduates can see how the people, who are now making use of this new system of doing business, perceive the whole idea. Figure 1 shows that the independent variables including intentions to set-up a business, professional attraction, networking support, self-independency, self-reliance, awareness of technology, and online information availability may affect the dependent variable adoption of e-business among fresh graduates of Pakistan.

Theoretical Framework

METHODOLOGY

The study employs quantitative approach to identify, comprehend, and classify factors affecting e-business adoption in Pakistan. The data is collected through primary sources. Surveys are used as primary sources; and articles, publications, books, research studies, and websites are used as secondary resources.

The research study targeted six universities in the Punjab province. Out of the six, 3 were public and 3 were private universities. The research study targeted 400 fresh graduates from six universities. The sampling technique used in this research is a purposeful sampling as only those fresh graduates were targeted who were looking for employment. Questionnaires were distributed among 400 students. Among 400 students, only 320 students showed their willingness to participate in the survey with 80% response rate. While 250 students responded to the questionnaire. At the end, the research could find only 200 valid responses after excluding questionnaires with missing values (80% of the filled questionnaires).

The study adopted the self-administered questionnaire as a tool for data collection and it is further segregated into two parts. The first part of the questionnaire targeted the demographic of the participants. For that purpose, the nominal scale was adopted. The scale was based on the 5-point Likert scale where scale 1 is used for representation in least favor and 5 is to show the extreme favor of the statements. The intention to create new business, professional attraction, and networking support were measured by adopting scale from Linan *et al.* (2008). Self-reliance was measured using scale by Triandis *et al.* (1985). For awareness of technology, scale was adopted from Al-Somali, Gholami,

Figure 1. Research model
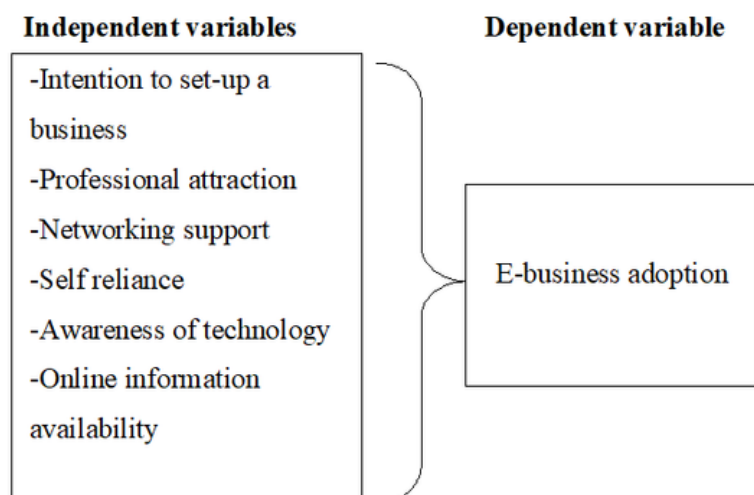
and Clegg (2009). For online information availability, scale developed by Rosnafisah *et al.* (2010), and for e-business adoption, scale developed by Shih and Fang (2004) were used. The scales have already been tested in different contexts. Questionnaire is attached in appendix A.

The dataset totaling 200 is then coded and SPSS software is run on the data after which statistical analysis is conducted in three phases. After data entry and verification process, descriptive statistics technique has been used to describe the demographics of the respondents, including mean, standard deviation, and variance. Descriptive statistics of continuous variables have also been used to measure mean, standard deviation, and variance. Tests of normality have also been applied using Skewness and Kurtosis values. In addition, the questionnaire reliability is tested through computing coefficient alpha. The final step involved the regression test of hypotheses. Pearson's Correlation Analysis is conducted for this purpose to determine the strength and direction of the relationship between variables, and they show the strength and relationship among variables.

FINDINGS OF THE STUDY

The accumulated data was analyzed, and findings are discussed below:

Demographics

Table 1 indicates the demographic profile of respondents who were fresh graduates. The information is presented in %. It signifies the information relevant to gender that 61% male responded as compared to 39 females' responses.

There were 24 (12%) respondents whose age is below 20, 112 (56%) respondents whose age lie between 26-35 and 64 (32%) respondents who are 25 and above. In other words, the age group 21-25 had higher representation than other age groups among total 200 respondents. Moreover, the findings of respondents' qualifications indicate that participants who hold a master's degree were greater in number (N= 107) 53.5% as compared to Bachelors (N= 64) 32% and with other qualification (N= 29) 14.5%. Discussion of the discipline trend, from the graduates are more attracting towards e-business adoption is quite interesting. It was found that 32% of students appeal towards e-business from business and management as compared to 37.5% students from IT field. While only 5.5% graduates are attracted toward e-business from medical, 16.5% from engineering and 8.5% from other disciplines.

Table 1. Demographic profile

		Frequency	Percent
Gender	Male	122	61.00
	Female	78	39.00
Age (in years)	Below 20	24	12.00
	21-25	112	56.00
	25 & above	64	32.00
Education	Bachelors	64	32.00
	Masters	107	53.50
Disciplines	Business	64	32.00
	IT	75	37.50
	Engineering	33	16.50
	Medical	15	05.50
	Others	13	08.50

Data Normality and Descriptive Statistics

Data Normality

Data normality has been checked through the Kurtosis and Skewness test. It is a basic assumption of regression analysis. Data is considered normal if the values of Kurtosis and Skewness lie between +/-2 (Hopkins and Weeks, 1990). Table 2 signifies the data normality; the values of all constructs are within the different recommended ranges of Kurtosis and Skewness. Thus, analysis showed no Skewness and Kurtosis was present in the data and it was normal.

Moreover, Table 4.2 shows that mean score of all constructs except professional attraction and network support is greater than 3 or above average which indicates that average fresh graduates respond positively or agree with the statements positively.

Reliability

The reliability of the scale was checked through Cronbach alpha coefficient by using SPSS. The alpha coefficient should be greater than 0.70 which signifies the internal consistency among the items (Hair *et al.*, 2007). As the above table signifies that alpha value ranges from 0.852 to 0.753, which indicates that all constructs are highly reliable and have consistent responses. The dependent variable e-business adoption proved to be the most reliable factor with $\alpha=.852$, followed by predictor variables, online availability of information ($\alpha=.846$), network support ($\alpha=.834$), self-reliance ($\alpha=.0.821$), professional attraction ($\alpha=.804$) and intention to set up a business ($\alpha=.786$). The reliability analysis showed that the Cronbach alpha value for all variables lay within acceptable range (table 3).

Pearson's Coefficient of Correlation Matrix

Pearson correlation was employed to check the strength of relationship between independent variables i.e., intention to set up business, professional attraction, network support, self- reliance, awareness of technology, online information availability and dependent variable i.e., adoption of e-business. A correlation matrix is shown in Table 4. From the table, we came to know that all the predictor variables had positive and significant association with dependent variables. A positive association exists between intention to start up a business and adoption of e business having ($r= 0.314$, $p < 0.05$). It shows that an individual who is willing to initiate his business currently or soon is more likely to do e- business. Moreover, professional attraction also holds a positive association with adoption of e-business ($r= 0.362$, $p < 0.01$). Network support, self-reliance and awareness with technology are positively correlated with adoption of e-business ($r= .394$, $p < 0.01$), ($r=.438$, $p < 0.01$) and ($r=.527$, $p < 0.01$) respectively. The independent variable which had the highest association with adoption of e-business is the availability of online information ($r=.625$, $p<0.001$).

Table 2. Normality of data

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Intention to set-up a Business	3.977	.415	-.055	.069	.041	.035
Professional Attraction	2.086	.462	.147	.069	.106	.035
Network Support	2.478	.649	.112	.069	-.173	.035
Self-reliance	4.324	.690	-.149	.069	-.074	.035
Awareness of Technology	4.045	.476	-.109	.069	-.174	.035
Online Information Availability	4.467	.565	-.170	.069	-.011	.035
e-business Adoption	4.056	.534	.146	.069	.101	.035

Table 3. Reliability analysis

Scale	Cronbach alpha coefficient	Items
Intention to set-up a Business	0.786	5
Professional Attraction	0.804	4
Network Support	0.834	3
Self-reliance	0.821	3
Awareness of Technology	0.753	4
Online Information Availability	0.846	2
e-business Adoption	0.852	4

Regression Analysis and Hypotheses Testing

The basic assumption of data normality was satisfied before performing regression analysis. A regression test was performed to test the developed postulated statements and took a decision either to accept or reject the tentative statements. Table 5 signifies the findings of regression. The adjusted R^2 showed that the proportion of variance i.e., 31.1% in adoption of e-business is explained by predictor variables. The value of F= 95.825 indicates the overall significance of the model with p< 0.05.

Hypotheses Testing

The regression Table 5 indicates that intention to start up a business has a positive influence on adoption of e-business among fresh graduates with (β=23.3%, $p < 0.001$), so we accept H1. Professional attraction also positively influences the adoption of e-business technology, with a (β= 13.7%, $p < 0.05$), so we accept H2. Whereas network support has insignificant influence on adoption of e-business, so we reject H3. Moreover, self-reliance, awareness of technology and the availability of online information have a significant positive influence on adoption of e-business technology among fresh graduates (β= 18.4%, $p < 0.05$), (β=28.9%, $p < 0.001$) and (β=30.3%, $p < 0.001$). Therefore, we accept H4, H5 and H6.

DISCUSSION AND CONCLUSION

Nowadays, the adoption of e-business is growing rapidly to reach the big target audience. There are some factors that drive people to go for e-business. In current study, the purpose was to find out

Table 4. Correlation analysis

	1	2	3	4	5	6	7
Business Intention (1)	1						
Professional Attraction (2)	.278**	1					
Network support (3)	.264*	.417**	1				
Self - reliance (4)	.221*	.436**	.415**	1			
Awareness of Technology (5)	.612**	.618**	.755**	.730**	1		
Online Information Availability (6)	0.313*	.432**	.430**	.284*	.475**	1	
e-business Adoption (7)	0.314*	.362**	.394**	.438*	.527**	.625***	1

*p<0.05, ** p<0.01, *** p<0.001

Table 5. Regression analysis

Variables	Std. Error	Beta value	t-value	P
Intention to set-up a Business	0.057	0.233***	4.087	0.000
Professional Attraction	0.068	0.137*	2.014	0.034
Network Support	0.098	0.057	0.581	0.321
Self-reliance	0.062	0.184*	2.967	0.001
Awareness of Technology	0.051	0.289***	5.666	0.000
Online Information Availability	0.047	0.303***	6.446	0.000

N=200, Adjusted R Square = 0.311, Durbin-Watson= 1.959, F = 95.825, Overall Model Significance < 0.05

the factors that motivate fresh graduates of Pakistan towards adoption of E- business technology or exploit the e-business opportunities. To achieve the desired objective, the study gathered the data from fresh graduates based on purposive sampling. The data was collected through a self-administered questionnaire. The postulated hypotheses were tested through regression analysis. The findings reveal that all predictor variables positively influence the adoption of online business except network support. This finding is contrary from previous research because Pakistani fresh graduates perceived differently. They felt that their social network did not motivate or de-motivate them towards the adoption of e-business and other factors play a crucial role in making up one's mind either to go for e-business or not.

The risky element of unemployment can be looked upon and dealt with efficiently by the fresh graduates who gain higher business education. Studies have shown that fresh graduates possess the required skills to compete with uncertainty and ambiguity as compared to others (Snieska *et al.,* 2015). Therefore, they are attracted towards e-business adoption. Those fresh graduates who are interested in self-employment and want to create opportunities for themselves are aware of the availability of information online (Apăvăloaie, 2014; Papadourakis, 2010). For the polishing of business skills and intentions, college and university teaching are great, and these can only be experienced when one has a level of personal independence. Such adoption of e-business technology allows independence and is appreciated by fresh graduates in the market (Brzozowska & Bubel, 2015; Wu *et al.,* 2003). This is quite a helpful skill these days because the economic crisis at hand reduced funding of companies for new job opportunities and employment and so self-reliance that resulted from such a skill proves to be of great value. Hence, if they are not supported by their network friends, it may not affect their e-business intentions. Over time, it has been proved that traditional ways are no longer profitable to find new opportunities and e-business might reduce the unemployment rate too in such developing countries.

The results should be interesting for entrepreneurs in different fields as graduates from multiple areas are interested in adopting an e-business approach. It may also be of interest for other stakeholders, including universities specifically, to embed entrepreneurship courses into the curriculum and to promote an entrepreneurial culture among students. It appears that worldwide entrepreneurial thoughts have shaped e-entrepreneurship among developing nations also. It is suggested to increase entrepreneurship education among students to enhance their knowledge, skills, and awareness. It will also contribute to divide the extra burden of unemployment and economic growth in Pakistan.

Limitations and Future Research Directions

The current study has some limitations as well. The first limitation that had to be faced was the sample size. The sample size was small, and data was not collected from all the provinces of Pakistan due to financial and time constraints. The finding of the study is not generalized to the entire population. A larger sample size would have allowed a more generalized result and could have different findings. Another limitation is linked with the research tool. The study used self-administered survey questionnaire;

while, a triangulation of several tools, where more qualitative and investigational tools may employ to provide authentic explanation of the phenomena under investigation. The study at present shows the keen interest of fresh graduates in being independent and hence their consequent interest in e-business and its adoption. However, this leads to another question that is still to be answered.

Implications

Further studies will hopefully cater to the wide variety of e-business opportunities that a fresh graduate can investigate without investing a lot. This study, however, will help fresh graduates and academicians to explore the different ways of polishing their e-business skills, so that it becomes easier for them to compete with the global market environment.

This study will be helpful for academic institutions to develop their scheme of studies according to the market needs. The students should be equipped with advanced technology and moderns e-business tools. In this way, they will be able to contribute to the gig economy. Further, the aim of study should be to become an entrepreneur rather than an employee.

Competing Interests and Funding Statements

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