

# THE IMPACT OF INFORMATION TECHNOLOGY IN ENHANCING COMPETITIVE CAPABILITY OF YOUNG ENTREPRENEURS

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## ABSTRACT

*The role of new Information Technology (IT) in driving the global economy is widely recognised. Information Technology plays an important part in accelerating growth, eradicating poverty and promoting sustainable development in developing and transition economy countries and in facilitating their beneficial integration into the global economy. It has been recognised that Information technology facilitates access to markets, access to commercial information, and access to new processing technologies and knowledge (UNCTAD, 2018). At this moment, entrepreneurs globally, have said that access to information, especially market information, is their first priority in accelerating the growth of their businesses. However, access to such information by young entrepreneurs has not been without constraints. The purpose of this study was to analyse the role of IT in supporting young entrepreneurs in Vietnam.*

**Keywords:** Young Entrepreneurs, Information Technology (IT), Market Information

## INTRODUCTION

Governments worldwide recognise the importance of small businesses and their contribution to economic growth, social cohesion, employment, regional and local development. As globalisation and technological change reduce the importance of economies of scale in many activities, the potential contribution of smaller firms is enhanced. However, many of the traditional problems facing small businesses - lack of financing, difficulties in exploiting technology, constrained managerial capabilities, low productivity, and regulatory burdens - become more acute in a globalised environment.

Policymakers around the world have initiated a variety of policies to foster entrepreneurship in their countries (Park & Bae, 2004). Encouraging entrepreneurship is also high on the agenda of governments in developing countries like Vietnam. This is because entrepreneurs are being viewed as "the catalysts of growth, marrying capital, innovation and skills". The imperative role of entrepreneurship stands out at the present time of innovative change, and a means to fostering a climate to help the dynamism in firm creation. This is particularly in emerging and developing economies, where conditions for entrepreneurship are generally still insufficient.

On the other hand, Information Technology (IT) is also playing an important role in economic and social development. Researchers on Information Technology have found that without incorporating IT in development plans, there is little chance for countries or regions to develop (Taggart & Hafkin, 2001). For example, the studies have shown that the prosperity of the US economy during the 1990s was based on the value creation of start-ups such as in the Information and Communication Technology (ICT) sectors in Silicon Valley (Saxenian, 1994).

It is believed that Information technology facilitate access to markets, commercial information, and new processing technologies and knowledge (UNCTAD, 2002). Young entrepreneurs globally have said that access to information, especially market information, is their first priority in accelerating the growth of their businesses. The major information needs

of small businesses in developing countries are for information about supply (obtaining inputs), demand (new and existing customers), finance (business management and obtaining additional finance), the environment in which they are doing business, and skills (Hafkin & Taggart, 2001). It is assumed that, information Technology could work well for young entrepreneurs (who in many developing countries account for majority of owners of small, medium and micro enterprises), as it allows them to save time and costs while trying to reach out existing and new customers.

## Theoretical Background

Entrepreneurship, as originally conceived by Schumpeter (1934), is crucial to economic development. Fula-Lai Yu (1997) argued that, in order to explain economic development in a country, it requires a dynamic theory, which centres on some human agency, *i.e.*, theory of entrepreneurship.

Throughout the theoretical history of entrepreneurship, scholars from multiple disciplines in the social sciences have struggled with a diverse set of interpretations and definitions to conceptualise this concept of entrepreneurship. But, presently there is no single definition of entrepreneurship that is accepted by all economists or that is applicable in every economy.

According to Schumpeter, an entrepreneur is an economic agent who performs the service of innovating, of introducing changes that radically change the framework of the economic system. Entrepreneurs are people who innovate; this includes the introduction of a new product, introduction of new method of production, the opening of new market, the utilization of some new source of supply for raw material or intermediate good and the carrying out the new organisation of any industry (Schumpeter, 1934). Schumpeter regarded an entrepreneur as the prime mover in economic development, and his/her function is to innovate by doing new things or things that are already being done, in new combinations (1934). He continued saying that an entrepreneur is a person who wants to educate consumers and teach them to want new or different things.

Bart (1983) regarded an entrepreneur as person who independently owns and operates business with less than 100 employees or less than \$1,000,000 gross receipt per year, while, Gartner (1985) looks at entrepreneurship as creation of new businesses.

According to Greve & Salaff (2003) an entrepreneur is the one who owns, launches, manages, and assumes the risks of an economic venture.

Basing on the definition of entrepreneurship by Schumpeter, very few new businesses have the potential to integrate Schumpeterian theory of creation-destruction, especially in developing countries. Bygrave (1996) came with a broader definition of entrepreneurship than Schumpeter's; this definition includes everyone who starts a new business. He defined an entrepreneur as the person, who perceives an opportunity and creates an organization to pursue it, and entrepreneurship as the process, which involves all functions, activities, and actions associated with perceiving opportunities and creating organisations to pursue them (1996).

In this study, the definition by Bygrave (1996) is adopted, *i.e.*, we have defined entrepreneur as the one who perceives an opportunity and decides to pursue it. By using this definition, we regard company who exploiting IT opportunities in newly IT industry in Vietnam as young entrepreneurs.

Over the last decade, the importance of the entrepreneur as the driver of economic growth has received increasing attention. According to Leibenstein (1995) there are two simultaneous steps in the process of economic development: economic growth and market transformation. In order for a country to increase its per capita income, it must have a "shift from less productive to more productive techniques per worker". This shift is the process of market transformation, and it can be manifested in the creation of new goods, new skills, and

new markets. IN this respect, entrepreneurship is the driving force behind both growth and transformation. Without entrepreneurs there would be no new innovation or creative imitation in the marketplace; hence, the transformation to new production methods and goods in the country would not take place. As entrepreneurs transform the market, they not only provide new goods and services to the domestic market, but also provide a new source of employment to the economy (Praag, 1995). Therefore, entrepreneurship is a necessary ingredient in the process of economic development; it both serves as the catalyst for market transformation and provides new opportunities for economic growth, employment, and increased per capita income.

Kirzner (1973) recognized also the role of entrepreneurship in economic development. He argues that without entrepreneurship, that is, without alertness to the new possibility, the long-term benefits in a country might remain untapped. He continues arguing that, alertness to profit opportunities by entrepreneurs is the central principle of entrepreneurship. Entrepreneurs by responding to profit opportunities; they transform opportunities into wealth, which benefit the whole society.

There is evidence that fast-growing regions usually have high rates of enterprise start-up. According to Reynolds, et al., (1994), they found that high business birth rates precede increased regional growth.

There also is another piece of growing evidence that, there is a significant causal relationship between entrepreneurship, economic growth and poverty reduction. By fostering the development of Small, Micro And Medium-Sized Enterprises (SMMEs) to help people employ themselves and others, this will offer the best hope for breaking the poverty shackles in many developing countries and disadvantaged communities. SMMEs account for over 95% of enterprises and 60%-70% of employment and generate a large share of new jobs in OECD economies

According to Alistair Nolan, the entrepreneurial activities can impact positively on local economies in different ways; first is the creation of employment, for owner-managers and employees, and the consequent increases in tax revenue and incomes, with subsequent income multiplier effects for the surrounding community as small and micro enterprises are more likely to employ local people. Enterprise development will also create indirect employment effects over time as workforce skills rise with periods in self-employment. Second, entrepreneurial activities improve local provision of services, such as retail facilities. Apart from the enhanced availability of such services - the scarcity of which characterises many distressed communities - increased local services supply can help retain incomes in the locality.

## RESEARCH METHODOLOGY

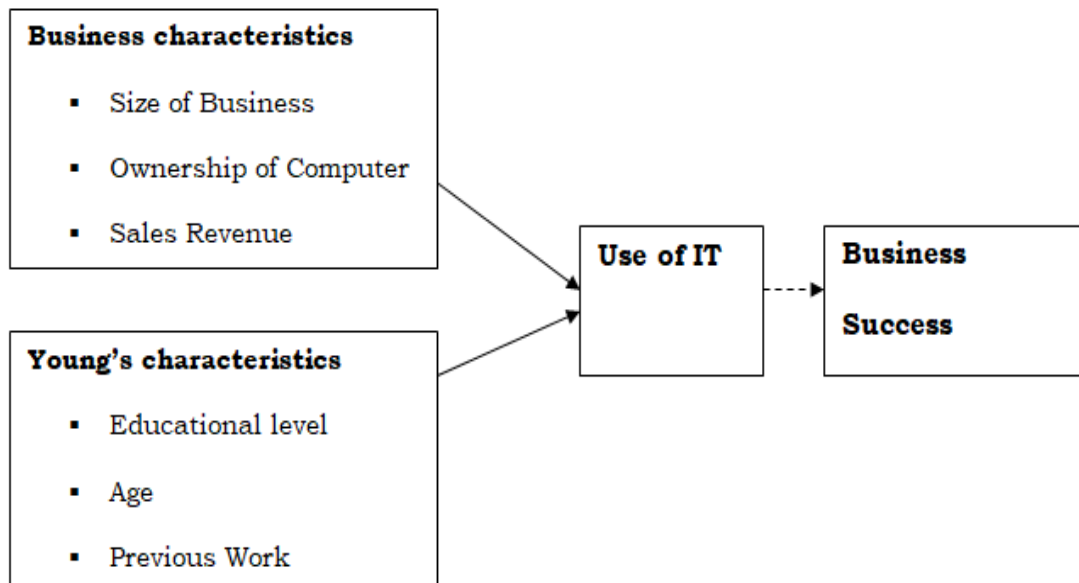
In order to achieve objectives of this study, interview method was employed. The method was chosen because it allows empirical inquiry of the phenomenon studied. By using this method, young entrepreneurs were allowed to express themselves freely, the extent of using IT and its impact on their businesses. Other secondary sources were also visited, like Tanzanian ICT policy document.

The sample size for this study was 25 young entrepreneurs, and data collection method used was mainly personal interview. Since personal interviews are very costly, therefore it was not easy to have a large sample. These young entrepreneurs were selected by using convenience-sampling method. This method was used because it was not easy to get the list of all young entrepreneurs through municipality council office.

However, the researcher is aware of the likelihood of the sample selected being unrepresentative of the young entrepreneurs to be quite high, since all population elements were not given equal chance of being selected.

For the purpose of statistical analysis, researcher has developed conceptual framework (see figure 1) based on the studies on the use of information technology in small businesses. It

is assumed that the use of IT is affected by both business characteristics and Owner's characteristics. For the purpose of this study, the researcher has identified business characteristics as size of the business, ownership of personal computer, and financial position of business and owner's characteristics as educational level, Age, and work experience).



**FIGURE 1**  
**CONCEPTUAL FRAMEWORK**

## RESEARCH RESULTS

In this study, it has been assumed that the use of IT by young entrepreneurs is influenced by size of their businesses, their financial positions, their education level, previous experience, and their age. And it was assumed that, the use of IT has a positive effect on business performance.

For the purpose of testing relationship between these variables, Pearson correlation coefficient has been used. The results are shown in the table below (the full correlation coefficients matrix is shown in the appendix: (table 1) :

<b>Independent Variables</b>	<b>Mean</b>	<b>Std deviation</b>	<b>Coefficient (r)</b>
Size of Organisation	1.28	0.542	0.342
Sales revenue	3.38	0.957	0.432
Ownership of Computer	0.36	0.49	0.784*
Educational Level	2.48	0.77	0.313
Age	2.40	0.866	-0.236
Previous experience	0.64	0.49	0.369

\* Correlation is significant at the 0.01 level (2-tailed).

From the table above, correlation coefficients between independent variables and dependent variable (usage of IT) are shown. The data shows, there is a positive relationship between and usage of IT and all other variables except one variable which is age. These correlation coefficients provide directional support for the predicted relationship in the hypotheses. Positive correlation coefficients show that independent variables exert a positive effect on dependent variable. Taking an example of sales revenue, this shows that, "the higher the sales of the business, the more likely the young entrepreneur to use IT services". With a

negative relationship, it shows that the variable has a negative effect on the dependent variable. In the table above, there is a negative relationship between the age of an entrepreneur with usage of IT services, *i.e.*, the older the person the less likely to use IT services. Although correlation coefficients support predicted relationships, but there is no strong relationship between independent variables and dependent variable, except one variable (ownership of personal computer), which is significant.

Examinations of the correlation coefficients reveal that there exists an inter-correlation among independent. There is a strong relationship between education level and previous experience ( $r=0.808$ ,  $p=0.001$ ), between the size of business (measured by number of employees) and sales revenue ( $r=0.60$ ,  $p=0.014$ ), and between ownership of computer and education level ( $r=0.406$ ,  $p=0.05$ ). This inter-relationship effect can affect the combined effects on dependent variable.

The relationships between independent variables and dependent variable can also be tested by using multiple regression to find combined effects of these independent variables. But it is necessary to establish if multi-collinearity would cause any problem in the model. According to Hair, et al., (1979), variables to qualify for multi-collinearity should have correlation coefficient of 0.8 or above. Looking at the table of coefficient correlations (see appendix: table 1), there is high correlation coefficient between previous experience and education level, otherwise collinearity among the independent variables is sufficiently low. Multi-collinearity effects, can also be checked by using variance inflation factors (VIF) for the independent variables. According to Tan & Teo (2000), if VIFs for independent variables are greater than ten, then multi-collinearity could unduly influence the results of regression analysis. For all independent variables in this study, the VIFs are less than four ruling out this possibility. The individual independent variables were regressed on the dependent variable (Use of IT); the results are shown in the table below:

<b>LINEAR MULTIPLE REGRESSION ANALYSIS PREDICTING USE OF IT</b>			
<b>Independent Variable</b>	<b>B</b>	<b>t-value</b>	<b>p-value</b>
(Constant)	1.974	2.644	0.027
Education level	-0.479	-1.463	0.177
Size of the business	0.052	0.128	0.901
Monthly sales	0.207	0.948	0.368
Previous Experience	0.513	1.246	0.244
Ownership of PC	1.569	4.862	0.001
Age (in years)	-0.190	-0.907	0.388
$R^2=0.818$ ; $R^2$ (adj)=0. 696; Std error=0.533;			

It is clear from the table above that the hypotheses proposed are supported, except H3 is not supported. It was expected that the relationship between educational level and usage of IT to be positive related, but the data shows that there is a negative relationship; this may be due to slightly higher proportion of young who had higher education, but do not using IT services. The only variable, which is significant at  $p=0.001$ , is ownership of a computer. This shows that, young entrepreneurs who owns computer are more likely to use computer frequently than those who have to access IT services in the internet café.

The  $R^2$  statistic (which is the percentage of total response variation explained by the independent variables) suggests that the regression model is valid and significant at  $p<0.006$ . The model has  $R^2$  of 81.8%, and  $R^2$  (adj)=0.696. The  $R^2$  of 81.8% shows that the variation in the Use of IT services is explained by the independent variables (Education level, Size of Business, Monthly sales, previous experience and age of an entrepreneur).

Although almost all independent variables seem to be not significant, but when individual variables were regressed on the dependent variable, the results were significant, except two variables (age and education). The results for simple regression analysis are summarized in the table 3:

<b>Independent Variable</b>	<b>B</b>	<b>t-value</b>	<b>p-value</b>
Education level	0.480	1.583	0.127
Size of the business	0.744	1.743	0.095*
Monthly sales	0.459	2.359	0.028**
Previous Experience	0.889	1.904	0.07*
Ownership of PC	1.889	6.056	0.000***
Age (in years)	-0,322	-1.167	0.255
*significant at 10%; **Significant at 5%; *** significant at 1%			

## CONCLUSION AND RECOMMENDATIONS

The study has revealed that, young entrepreneurs in Vietnam are also using this new technology to improve their businesses. Most of them are using email and Internet services. Email services are used to communicate mostly with business partners and friends. Internet services are also being used to search for product related information. The study has further shown that young, who are running garment related businesses, are searching for new designs for young clothes through the Internet.

With regard to the effects of using IT; statistical testing of the data has shown that the relationship between the use of IT and business performance is insignificant. However, young entrepreneurs covered under the study have acknowledged the fact by using IT services they have been able to increase their sales and the consequent profits. It was also acknowledged that business operations have been quit efficient as communication with business partners and customers has been conveniently and considerably very easily and efficient.

The major problems, which were mentioned in this study, were lack of knowledge and skills and financial resources. To enhance young entrepreneur's capacity to become full members of the new economy, the following aspects are relevant:

The government can promote business and entrepreneurial prospects for young in the information economy by offering financial capital and micro finance to young entrepreneurs in order for them to exploit fully IT opportunities.

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