An Analysis of Success Factors of Digital Entrepreneurs in Western Province, Sri Lanka

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ABSTRACT
Digital technologies have altered the nature of uncertainty in entrepreneurial processes. Although some of the online startups in Sri Lanka have strived, many have failed within a few years of inception. Little research has been carried out regarding opportunities, challenges, and critical success factors of digital entrepreneurship. This research aimed to identify the critical success factors that determine the successful implementation of digital business. Based on the literature review, competency in digital business strategy, IT business process integration, and relationship competency were identified as antecedents of E-business success. Quantitative research methods were used, and data were collected by using a questionnaire. A randomly selected sample of 120 digital entrepreneurs in Western Province, Sri Lanka were analyzed using the Partial Least Squares Structured Equation Modeling. Findings reveal a significant positive relationship between competency in digital business strategy, IT business process integration, and relationship competency and e-business success. Based on the results, the study recommends actions entrepreneurs and governments can undertake to succeed in digital business.

Keywords: Digital Business Strategy, Digital Entrepreneurship, e-Business Success
INTRODUCTION

Advancement and availability of the internet has made taking entrepreneurial risks less expensive and easily accessible rather than visiting a brick-and-mortar store, the options for internet entrepreneurs are growing from social media to Ecommerce stores to crowdfunding sites, which makes this an era for internet startups. (Zaheer et al., 2018).

Understanding the nature and causes of uncertainty that underpin entrepreneurial efforts as well as how entrepreneurial activities take shape in the face of such uncertainty has been a major focus of entrepreneurship study (Satalkina & Steiner, 2020). Uncertainty “is a conceptual cornerstone for most conceptions of the entrepreneur” (McMullen & Shepherd, 2006). In recent years, new digital technologies have been incorporated into various aspects of innovation and entrepreneurship, such as mobile computing, cloud computing, social media, and data analytics, which have changed the nature of the inherent uncertainty in entrepreneurial processes and outcomes as well as the methods for dealing with it. This has prompted a number of crucial research concerns on digital entrepreneurship at the relationship of digital technologies and entrepreneurship, which demand careful examination of digital technologies and their distinctive qualities in influencing entrepreneurial endeavors.

Therefore, in terms of both the process and the outcome of the entrepreneurial opportunity, digital technologies play an increasingly important role. Drawing specifically on Davidsson's (2015) paradigm for entrepreneurial potential, digital artifacts and platforms contribute to the creation of new venture ideas (outcomes), whilst digital infrastructure works as an external facilitator (supporting the process).

Digital platforms, like SugarCRM, Open SYNC, etc., allow groups of players to create shared value. Modern digital infrastructure such as crowdfunding platforms like Kickstarter, and digital Collectives—groups of entities with similar interests—can undertake entrepreneurial endeavors with the help of makerspaces (like Instructables), work execution forums (like GitHub), and specialized social media (like Open Stack). Importantly, potential entrepreneurs join and leave these platforms based on their unique objectives, drives, resources, limitations, and contributions. Their participation and contributions are frequently unpredictable and novel. This makes the
traditional dimensions of risk taking, innovativeness and proactiveness to be revisited and analyzed in the digital era.

Digitalization is presently the most significant factor in entrepreneurship and innovation, according to Berger et al. Digital technologies change the inherent unpredictability of business processes and results in this way. Digital companies, according to von Briel et al. (2021), are built on concepts with digital artifacts at their heart. According to Fossen et al., highly trained workers and ICT professionals who are dealing with disruptive digitalization processes are more likely to become digital entrepreneurs.

The objective of Ammirato et al. (2019) was to categorize the various types of digital entrepreneurs. Following their analysis, they came to the conclusion that there are three different categories of digital entrepreneurs: “very young emerging,” “focused emerging,” and “seasoned in business.” According to Cavallo et al. (2019), the growth of digital entrepreneurship is mostly dependent on outside financial sources. According to these academics, access to external investment fosters the expansion of emerging digital businesses. Sahut et al., (2021) argue that companies with higher degrees of entrepreneurial orientation leverage dynamic marketing capabilities more effectively and thus perform better.

Digital entrepreneur is a person who owns and runs a business through the internet and makes money through initiative and risks (Devasaran, 2017). E-commerce in Sri Lanka has seen a rapid growth over the last years with a large percentage of people making purchases online (Derana Entertainment (Pvt) Ltd, 2020). Sri Lanka’s E-commerce business is projected to hit USD 400 million by 2022 (Daily News, 2018). Sharma and Rautela (2021) note that digitalization was considered as a main strategy in Covid-19 crisis for SMEs in South Asia. SMEs have witnessed a drastic change in the technological environment, but few SMEs embraced digitalization to reach out to larger consumer groups (Perera et al., 2011). In times of social distancing due to Covid-19, such digitalization was compulsory and those who were ready and capable for a quick digital transformation grabbed the advantage (Bloombergquint.com, 2020). With the arrival of the COVID-19 pandemic, SMEs, acknowledged the significance of digital transformation and implementing digital knowledge management (Valk & Planojevic, 2021).
Limited amount of research is available on success factors of digital entrepreneurs. Al-Fadhli (2011) carried out research on Critical Success Factors influencing E-Commerce in Kuwait. He found that e-Commerce readiness in Kuwait is below global standard, by assessing technological, legal and environmental contexts. Malaysian Ecommerce entrepreneur success factors were discussed by Firdause et al. (2017). Factors for success as an online entrepreneur in Thailand was done with 180 online entrepreneurs and the study concluded that success factors associated with the success of an online entrepreneur were government support, networking, risk-taking propensity, reliability, after sales service, brand image, product quality, product price, advertising on social media, and capabilities of staff and employee (Phonthanukitithaworn et al., 2019).

However, despite its contemporary importance, recent entrepreneurship research has largely ignored the part that digital technology play in entrepreneurial endeavors. Many authors argue that there is little consensus on digital entrepreneurship’s purpose, nature, and boundaries. Zhao & Collier (2016) argue that research does not always synchronize and reflect with practice of many different country contexts.

With the availability and easy access to internet, many internet startups boomed in Sri Lanka, according to the (Sri Lanka Top Startups, n.d.) there are top 284 internet startups in Sri Lanka which is topped by a classified website Ikman.lk and followed by Roar Media which is a digital media platform, lankaproperty.com a property classified website, wasi.lk online ecommerce website, Auto Lanka an automobile e-magazine. Business models of these top internet entrepreneurships are focused on buying and selling (Wasi.lk, Mydeals.lk, Takas.lk, Mystore.lk, Big Deals, Labai.lk), classified websites where they earn revenue from classified ads and listings such as ikman.lk, Lanka property Web. Pickme.lk is a taxi hailing app and Pay Here is an online payment gateway provider which helps people to send and receive money globally. Although some of the online startups in Sri Lanka have strived many startups are prone to failures and most of the other startups have failed within few years of inception. This leads to a research question on what are the factors that affect the success or failures of online entrepreneurs and the whole online entrepreneurship market in Sri Lanka. There are few studies carried out to assess the critical factors that affect the Online Entrepreneurs in Sri Lanka. Therefore, the broader research question that this research attempt to discuss is:
What are the factors that affect the success or failures of Online Entrepreneurs in Sri Lanka?

Following are the objectives that this research will focus on

- To identify current situation of online entrepreneurship in Sri Lanka
- Identify the factors that affect the success of online entrepreneurs in Sri Lanka
- Recommendations and suggestions on growth of Online Entrepreneurs in Sri Lanka

This research will help digital entrepreneurs to identify the barriers which diminish their growth so they can implement contingency plans and sustain in the industry. This study will give a guideline to policy makers to make correct policy decisions which will not hinder the growth of online entrepreneurs in Sri Lanka. Since Sri Lanka is in an economical struggle due to the Covid-19, the growth of the Online Entrepreneurship industry will directly help to uplift the economy in Sri Lanka as they can contribute immensely on bringing foreign remittance to Sri Lanka.

LITERATURE REVIEW

A study by Jamil and Ahmad (2009), in Bangladesh states that flexible workforce, all time availability of service, attractive and user-friendly website and interface, rapid delivery of service, fast and integrated business processes are some of the critical success factors for online businesses. Study done in Bangladesh on critical success factors show that there are three main factors that influence the success of the online businesses namely, maintaining relationship with customers, business experience of the Entrepreneur and government assistance (Sadat, 2019). Furthermore, a study was carried out in Thailand to find the critical success factors of Ecommerce entrepreneurs and it has concluded that entrepreneurial characteristics (locus on control, achievement orientation, and networking), e service business factors (reliability, responsiveness, ease of use and self-service), and government support are the main 3 success factors that affect the success of the Ecommerce entrepreneurs in Thailand (Sebora et al., 2009).
Success of e-business and digital entrepreneurship depends on two main aspects. First, the company’s ability to envision the strategic potential of new digital technology in its marketplace. Understanding of digital business concepts and strengths and weaknesses of the own organization in e business domain is critical for this. Secondly, the ability to construe and use strategic planning process effectively which is needed to develop a digital business strategy (Elia et al., 2020). This dimension describes how digital business will be put into action in the long run. Therefore, the following hypothesis can be formed.

**H1: Competency in digital business strategy and strategic planning is positively associated with e-business success**

IT-business process integration and systems was found to be a major success factor in past digital entrepreneurship research (Standing & Mattsson, 2018). A company’s ability to realize potential benefits of new technology was affected by its ability to coordinate business processes that leveraged its potential. Past researchers argue that adoption of digital business heavily altered internal processes and procedures. Competencies in IT-business process integration can be stated as “the ability to integrate IT and business knowledge to devise new business processes.” The competency to manage IT in general and competency in systems and infrastructure were the two dimensions of IT business process integration as per Bharadwaj et al. (2000).

**H2: Competency in IT business process integration is positively associated with e-business success**

Extant literature highlights the importance of networking (social capital) for SMEs (Pinho & Prange, 2015). The social capital plays a key role in acquiring business resources such as hiring competent employees, introduction of customers and suppliers, obtaining of intellectual resources and finance. Social networks both formal and informal are likely to amplify the effects of human capital (i.e., knowledge, experience etc.). According to scholars, networks contribute to indirect learning in organizations (Apaydin et al., 2020). The potential to develop networks are known as relationship competency. In the era of digital business domain and network economy, relationship competency includes sourcing and alignment. Sourcing and alignment competencies enable digital companies to take advantage of digital business opportunities and develop key business partnerships. Therefore, it
was hypothesized:

**H3: Relationship competency is positively associated with e-business success**

![Conceptual Framework of the Research](image)

**Figure 1: Conceptual Framework of the Research**

**METHODOLOGY**

The population of this study consists of the online startups of Sri Lanka. Based on latest statistics of population details provided it is evident there is a total of 280 online startups and businesses in Sri Lanka. However, due to resource limitations such as accessibility and time, a sample would be selected that represents the entire population. A sample of 137 respondents was chosen. The number of responses to the questionnaire distributed was 120. A structured non-disguised questionnaire was developed to test the conceptual framework. All structured questions were measured on a five (5) point Likert scale similar to the original scale (except Amit and Zott whose original had 7-points).

The e-business success was measured using Amit and Zott (2012) reflective measurement model. The e-business success scale had three main dimensions which are e-efficiency, e-business lock in and e-business novelty. E-business lock in indicated the how costly it is for the customers to replace...
the current company/product whereas e-business novelty indicated how innovative and pioneering the company is when it comes to digital business. All other indicators were derived from Eikebrokk and Olsen (2007).

Although the scales are selected based on priori basis, before the actual distribution of questionnaires, a pilot study was conducted to determine the understanding of the items. Ten (10) digital entrepreneurs were selected based on convenience basis for this pilot study. This was to ensure that the items in the questionnaire will be understood by the targeted group. No major revisions to the questionnaire were done after pilot study.

RESULTS AND DISCUSSION

A majority of online entrepreneurs in Sri Lanka, comprising of 51%, have 3 to 5 years of experience in the field. This is a fair level of experience. Only 27% have more than 5 years of experience in the field. Only a minority of 22% of online entrepreneurs have less than 3 years’ experience in their relevant field. Hence, it can be said that most employers and digital entrepreneurs in Sri Lanka have substantial experience.

A majority of online business earned a turnover between LKR 16 million to LKR 250 million, comprising 40% of the selected sample. Only 23% earns the lowest, even that between 0 to LKR 15 million. The results of this sample also indicate that most of the online business in Sri Lanka take place in or use Facebook as their primary platform to conduct business activities, as there is a percentage 49. Affiliate marketing is the second largest form of online business in Sri Lanka with 23% of Sri Lankan businesses. The least used forms are freelancing and classified. Most online businesses operating in Sri Lanka are small in terms of the number of employees as 41% of the online businesses employ between 0 to 50 employees only.

Table 1 below summarizes the reliability test of all measures after factor analysis has been done (Hair et al., 2014). As shown, the Cronbach alphas of the measures were all comfortably above the lower limit of acceptability that is $\alpha \geq .7$. 

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The histogram plots were scrutinized, and they indicate that although the data is not normal, there is no serious violation of the assumption of normal distribution. Multicollinearity was tested for IVs by observing VIF values for all Independent Variables. All VIF values are less than 5. Table 2 indicates the main evaluation criteria used for the measurement model to verify validity of the results.

**Table 2: Criteria for Evaluating the Measurement Model**

<table>
<thead>
<tr>
<th>Properties</th>
<th>Measure</th>
<th>Rule of Thumb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convergent validity</td>
<td>Average variance extracted (AVE)</td>
<td>AVE values of each construct should be greater than 0.5 Henseler et al. (2009).</td>
</tr>
<tr>
<td>Discriminant validity</td>
<td>Fornell–Larcker criterion</td>
<td>AVE of each latent variable should be higher than squared correlations with all other latent variables Henseler et al. (2009).</td>
</tr>
<tr>
<td></td>
<td>Heterotrait–monotrait (HTMT) ratio</td>
<td>HTMT values for the construct should be less than 0.85 Kline (2011) and HTMT ratio should be significantly below 1 Henseler, Ringle and Sarstedt (2015).</td>
</tr>
</tbody>
</table>

Minimum factor component loadings of 0.50 or higher are normally considered significant for outer measurement model. All the indicators of the outer measurement model of this research fulfilled this criterion of minimum 0.5 (Hair et al., 2014). So, the convergent and discriminant validity checks were conducted without removing any indicators of the measurement model.

Fornell and Larcker (1981) stated that if Average Variance Extracted (AVE) is greater than 0.5 that is a necessary and sufficient condition for convergent validity of the instrument. As seen from Table 3, all AVEs are above 0.5 for the constructs.

**Table 3: AVE for the Constructs**

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
</tr>
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<tbody>
<tr>
<td>EBS</td>
<td>0.5857</td>
</tr>
<tr>
<td>DB</td>
<td>0.6066</td>
</tr>
<tr>
<td>IT</td>
<td>0.7087</td>
</tr>
<tr>
<td>RC</td>
<td>0.8390</td>
</tr>
</tbody>
</table>

HTMT values close to 1 indicate a lack of discriminant validity. If HTMT values are less than 0.85, discriminant validity is established (Kline, 2011). All constructs reported an HTMT value below the threshold value of
0.85. The number of bootstrap samples was set to 500 to run the SMARTPLS program.

Table 4: Summary of Structural Model Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>Path Coefficient</th>
<th>Standard Error</th>
<th>t statistics</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>DB&gt;EBS</td>
<td>0.286</td>
<td>0.067</td>
<td>4.232</td>
<td>Significant</td>
</tr>
<tr>
<td>H2</td>
<td>IT&gt;EBS</td>
<td>0.263</td>
<td>0.069</td>
<td>3.982</td>
<td>Significant</td>
</tr>
<tr>
<td>H3</td>
<td>RC&gt;EBS</td>
<td>0.130</td>
<td>0.055</td>
<td>2.528</td>
<td>Significant</td>
</tr>
</tbody>
</table>

R² is also called the coefficient of determination because it assesses the proportion (which is converted to percentage by multiplying by 100) of the variance of the endogenous construct that can be explained by its predictor constructs (Hair et al., 2014). Falk and Miller (1992) suggest 0.10 as a threshold to identify a minimum level of prediction that can be practical significance.

Competency in Digital Business Strategy, Competency in IT business process integration and Relationship Competencies explain 34% of the variance of e-business success. This is of a moderate significance in explaining the success of e-business. The analysis showed that all three competencies are important for digital business capability and success in digital organizations.

The way new company ventures are created of and established in the modern world is significantly impacted by digital technology. According to the resource-based view (RBV) (Barney, 1991), the ability to control resources that are valuable, rare, unique, and particular to the firm gives these business models a competitive edge. The digital organizations, most of the time do not acquire or possess physical assets that match above criteria. A digital platform's network of (different) players, their interactions with one another, and the interchange of information among them are its most important (intangible) assets. These resources produce an advantageous competitive position that is difficult to match (van Alstyne et al., 2016). One of the key advantages of digital business models, according to Yoo et al. (2002), is transaction speed and efficiency provided by ICT, which result in a large decrease in search and transaction costs.
In research by Sebora et al., (2009), the success of an e-commerce enterprise was correlated with founders' achievement orientation, strategic planning capability and locus of control, as well as their attention on the quality and usability of their e-services. They found that the founder vision and his prior experience at strategic level management play a key role in success. As per Ghabakhloo and Iranmanesh (2020), Smaller enterprises must have specific capabilities such as change management and/or digitalization strategic planning capability to reach digital and cyber success and maturity. Developing a strategy in digital business took more time and was connected to implementation compared to brick and motor organizations. They emphasized having a broad, "big picture" vision and a solution for customers' requirements instead of developing a formal business strategy (Zaheer et al., 2018). The outcome of this research matches these previous research findings with respect to competencies in digital business. It highlights the importance of strategic focus, vision and forte in strategic planning process (ideally supported by his/her previous strategic management level experience).

Organizations need to understand how improving their IT capacity may help them create and leverage value (Namhisan, 2017). Successfully managing a digital business is not always about specialized IT knowledge or competencies. General IT management play a critical role in success. This research finding demonstrates that a set of generic IS abilities, enabled by a number of technologies, and may forecast the success of e-business.

According to the Industry 4.0 scenario, future SMEs must reach the highest degree of digitization, which includes vertically integrating every industrial function at the plant level and horizontally integrating for data and information exchange with partners and clients (Mittal et al., 2020). Digital business presents new avenues of conducting business, where electronic networks of companies make e-business an inter-organizational activity. The performance of the inter-organizational alliance and capability of the partners to create value in such networks would thus depend on their relationship competency. Digital entrepreneurs need to develop their relationship competencies. Starting to network and accumulating significant social capital is another way to ensure the early success of a digital start-up. The most important network partners are those that the entrepreneur has built up over the course of their career (Spiegel et al., 2016). Findings of this research reinforce such previous research.
Digital entrepreneurs as well as SMEs willing to digitalize their operations must understand which competencies have the best chance of improving the IS competence. Engaging in competence networks and encouraging industry associations to launch initiatives to improve member firms' e-business proficiency are both very relevant. Any SME considering digital transformation should perform some kind of pre-assessment of their digitalization readiness to see whether they have the skills and resources required to build critical capabilities like IDT maturity. Because immature digitalization decisions in the hypercompetitive business climate may be fatal to any firm, the digitalization readiness pre-assessment is crucial to SMEs' survival in the Industry 4.0 age.

CONCLUSION

The purpose of this research was to identify the critical success factors (CSFs) that determine the successful implementation of digital business. Based on the literature review, competency in digital business strategy, competency in IT business process integration and relationship competency were identified as antecedents of E-business success. The quantitative research methods were used and data were collected by using a questionnaire. E-business success was measured using reflective indicators on e-efficiency, e-business lock in and e-business novelty. A randomly selected sample of 120 digital entrepreneurs in Western Province, Sri Lanka was analyzed using Partial Least Squares Structured Equation Modeling (PLS-SEM) method. Most employers and digital entrepreneurs in Sri Lanka have substantial prior experience. The results of this sample indicated that most of the online business in Sri Lanka take place use Facebook (49%) as their primary platform to conduct business activities. It found that there is a significant positive relationship between competency in digital business strategy, competency in IT business process integration and relationship competency and e business success. These variables explained 34% of the variation of the e-business success.

Future studies should identify innovation ecosystem and identify actors/organizations that could mold digital entrepreneurship. Further research can study other countries’ contexts - for example, developed vs. emerging economies - to identify a country’s impact in shaping digital entrepreneurship. Future research may examine outside variables that may affect the development of digital start-ups, such as economic and technological drivers.
REFERENCES


