

# Issues and Challenges of Born Global Entrepreneurs:

## Information & Communication Technology (ICT) Exporters in Sri Lanka

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**Abstract**— There has been a growing interest in early and rapidly internationalizing firms, known as ‘Born Globals’, in place of a novel phenomenon in International Entrepreneurship (IE) domain. Despite extensive research, the BG phenomenon is still under explained and hence, theory and practice are still developing. Therefore, the main aim of this study is to investigate the nature, characteristics, performance, issues and challenges of BGs in the context of Sri Lanka with special reference to Information and Communication Technology (ICT) exporters, who exhibit those characteristics of born globals. The study uses the descriptive approach and the sample includes ICT exporters in Sri Lanka. The findings of the study reveal that the main challenges and the issues, facing by ICT exporters in Sri Lanka are; the structural composition of the ICT industry, lack of skillful human resources, heavy dependency on US & Europe markets, costly infrastructure facilities & its poor condition and lack of global image as an IT destination.

**Keywords**- born globals; information & communication technology industry; Sri Lanka

### I. BORN GLOBALS: THE OVERVIEW

With several favorable changes and developments in international trade & business and emerging concepts like ‘global village’, ‘borderless world’, a growing number of firms seems to be operated internationally since early 1990s. As a result of this, recently, the emergence of early and rapidly internationalization firms has become extremely significant in international businesses and international entrepreneurship research studies [7; 10; 12; 13]. These firms operate internationally from its inception or soon after the inception, gain their competitive advantage from the use of their resources and the sale of their output in distant and multiple countries [10]. Scholars use different terminologies to define these firms as ‘born global’, ‘born global start-ups’, ‘international new ventures’, ‘instant exporters’, ‘high-technology start-ups’. In line with the majority, this study too uses the term ‘Born Globals (BG)’. Unlike conventionally internationalized firms, BGs do not follow a slow and gradual process of internationalization but cater to the global market from their inception or soon after the inception. Hence, they adopt a very rapid growth process [11]. However, BGs too are entrepreneurial in nature but are very unique and different from domestically-based SMEs or

conventional internationalizing firms [2: 11]. Hence, there are significant differences between BGs and traditional SMEs.

In summary and following [13], the main characteristics of BGs consist of, First, the most distinguish feature of BGs is that their origin is international and hence operate in multiple countries in order to gain the competitive advantages from the use of resources such as people, materials, methods, time, capital, information etc. and to sale the output. These firms, therefore, follow a proactive international strategy from their beginning. Thus, the size of the firm is immaterial, but the age of the firm since their first international operation is with the concern. Second, they do not much rely on foreign direct investment i.e. they do not essentially own foreign assets. Third, these firms, follow rapid and early internationalization process rather than incremental internationalization process and hence, are with hybrid structures. Fourth, majority of BGs are technology-oriented entrepreneurs in nature with a narrow customer base.

### II. RESEARCH RATIONALE

There has been a growing interest in early and rapidly internationalizing firms as a novel phenomenon in International Entrepreneurship (IE) domain [7: 14: 17]. Despite extensive research, the BG phenomenon is still under explained [7: 8: 10: 17] and hence, theory and practice are still developing [9]. Thus, no comprehensive theory could be found in explaining the nature, emergence, the internationalization process, behavior and other related concepts of those early and rapidly internationalizing firms i.e. BGs. One reason for this is that BGs are a novel phenomenon and a strain of internationalized firms, but are against to the traditional internationalized firms and do not follow the slow and gradual process of internationalization. Thus, conventional theories of internationalization do not adequately describe the nature, emergence, the process of internationalization of those BGs [13: 15]. Secondly, international entrepreneurship, rather BGs are a novel and very young field of research in entrepreneurship and not more than two and half decades old. Hence, BG phenomenon are still under addressed and some of the research areas are not even touched yet. Thus, theory and practices are still evolving. Under this ground, the main aim of this study is to contribute to improve the extant literature in order to provide a comprehensive

understanding of this novel phenomenon of BGs in the IE field. Therefore, the main objective of this study is to investigate the nature, characteristics, performance, issues and challenges of BGs in the context of Sri Lanka with special reference to Information and Communication Technology (ICT) exporters, who exhibit those characteristics of BGs and are entrepreneurial in nature.

### III. ICT INDUSTRY AS A PROMISING SERVICES EXPORT SECTOR IN SRI LANKA

Over the past one to two decades, Sri Lanka has been increasingly recognized as an emerging outsourcing destination in providing products, services and functions in Information Technology (IT) and Information Technology Enable Services (ITES) in Asia. The favorable factors for the country in promoting as an IT destination consist of increasing availability of highly skilled professionals, comparative cost effectiveness, recognition for the quality services and infrastructure facilities and the locational advantages of the country in terms of time-difference. Thus, ICT industry in Sri Lanka has been recognized as a promising services export sector, having a greater potential growth and a greater possibility of expanding the market share. Hence, both Central Bank of Sri Lanka and Export Development Board (EDB) have identified the ICT sector as one out of seven key sectors, contributing more than 3.3% to the total export. The strategic plan for 2011 – 2015, published by the EDB, has identified seven key product sectors – Apparel, Tea, Rubber & rubber based products, Diamonds gems & jewelry, ICT/BPO/KPO, Food & other beverages and Spices & allied products – of which the contribution to the total exports is more than 3%, out of which ICT/BPO is the only sector, representing services sector. As well, by 2015 EDB targets a one billion turnover in ICT industry with more 300% growth from 2009 to 2015, having an annual constant growth rate of 26%. According to those road maps, it is evident that ICT industry in Sri Lanka has a greater potential growth with a larger market share, high global demand for the services, and one of the emerging sectors in developing countries. Thus, export entrepreneurs who operate in services sector can gain the competitive advantages in the global market by recognizing opportunities. But those ICT export entrepreneurs in Sri Lanka are performing well as expected and far below the expected growth rates (will discuss in detail later). Further, the industry growth is gradually declining since 2011. Thus, the main research question of this study is, “Why are ICT export entrepreneurs in Sri Lanka poorly performing, while their global rivals are remarkably performing?” and “What challenges and issues are they facing in this regard?”.

### IV. RESEARCH METHOD

As per the nature of the study, both qualitative and quantitative methods have been performed, using descriptive approach. Thus, the study used less complex and common statistical tools for its qualitative data analysis such as frequencies, growth rates, descriptive statistics, and percentages. Sources of data consisted of both primary and secondary data and two samples were used. The sample 1, for primary data collection, consisted of 25 CEO of ICT export firms and data were collected through face-to-face interviews. The sample was selected, using the convenient sampling methods, but presenting

all large, medium and small firms in the industry. These interviews were, mainly, held to identify the current challenges and the issues facing by the ICT exporters in Sri Lanka. The sample 2, depends on secondary data, consisted of 175 ICT exporters, who participated for the ICT Export Value Survey, 2010, conducted by the Export Development Board (EDB) in Sri Lanka. For this purpose, EDB has used a well-structured questionnaire and the sample was selected using stratified purposive random sampling method. In addition, the study has conducted a survey on all the web-sites of the ICT firms, registered at the EDB. These data were mainly used to analyze the industry profile, current performance and to identify the main barriers of ICT exporters.

### V. DATA ANALYSIS AND FINDINGS

#### A. ICT Industry Profile

The ICT industry in Sri Lanka is still at its nascent stage which was established one and half decades ago. Hence, more than 75% of the firms entered the industry within last 10 to 12 years as shown in figure 1. Presently, it consists of a large number of small, medium and large size firms. Notably, over 60% of firms in the industry are small whereas only 18% are large firms and the rest are medium-sized firms (figure 2). Further, it can be noted that, more than 60% of these firms are fully owned Sri Lankan firms, whereas the rest 40% were established either through the Foreign Direct Investments (FDI), accounting for nearly 10% or joint ventures, accounting for nearly 29%. However, more than 63% of the firms have located their head offices in Sri Lanka and for the rest Sri Lanka serves as a developing Centre, a branch or a subsidiary to a company located over-seas. These firms offer a wide range of services mainly including software development, IT consultancy services, IT supportive services and IT enabled services for both voice and data processing. However, the majority of them, accounting for 80%, offer software development services.

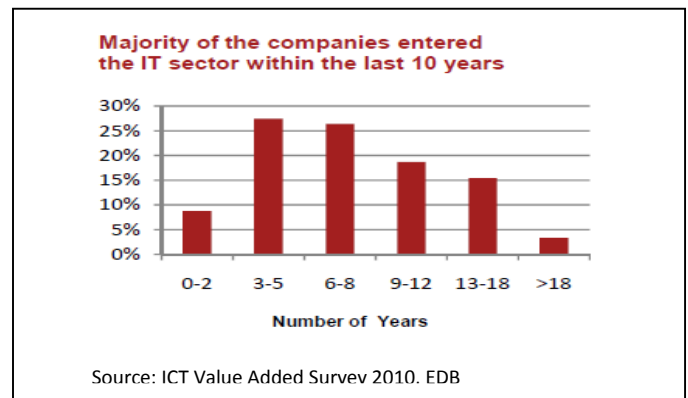


Figure 1. Age of the ICT firms

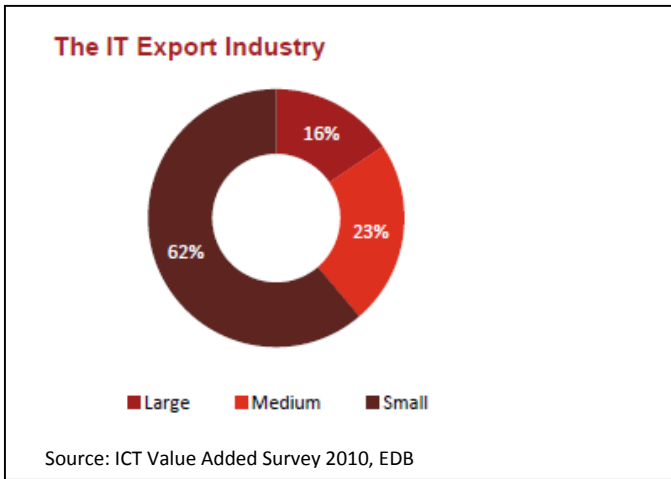


Figure 2. The composition of the ICT export industry in Sri Lanka

### B. ICT Industry Performance

The ICT industry in Sri Lanka is one of the rapidly growing economic sectors and it is mainly due to its high value addition over other sectors in the economy. During the period 2007 to 2012, the ICT export revenue in USD has remarkably increased with a moderate growth rate. Soon after the civil war, the industry has recorded a significant growth for 2011 and 2012 (Figure 3). But for 2013, there was a dramatic decline in export revenue followed by a negative growth rate. Further, making a high risk, the growth of the industry entirely depends on the few large companies. As figure 4 shows, these large firms, accounting only for 18%, have contributed 76% to the total export revenue in 2010, whereas the majority – small firms, representing more than 62%, have contributed nearly 5% to the total export revenue in 2010.

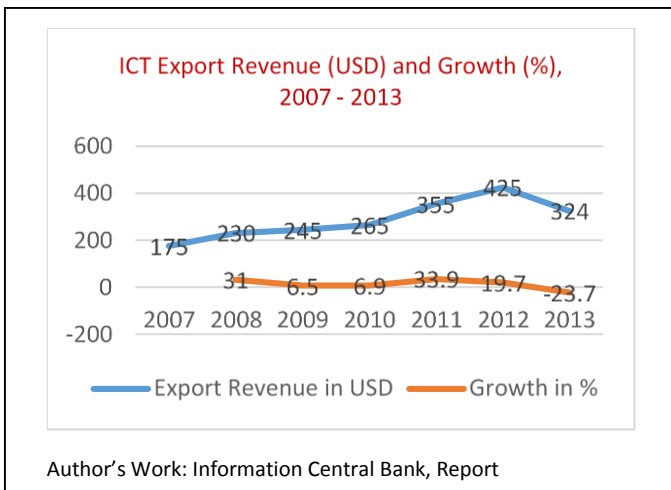


Figure 3. ICT Export Revenue (USD) and Growth (%), 2007-2013

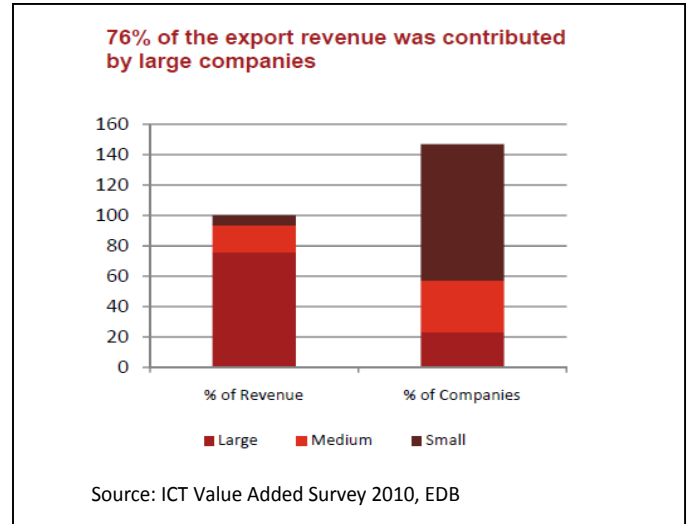


Figure 4. Percentage of revenue & percentage of number of companies by the size of the firm

The most valuable and the key contributor to the ICT industry is its human resources. Thus, their knowledge, skills, capabilities and experiences are most essential for the growth and the survival of this industry. Thus, the industry mainly depends on the quality of the work force rather than the quantity. However, the present workforce of the industry exceeds 10,000 employees and the majority of them i.e. more than 65% are attached to the large firms. The industry recorded a 24% of growth in its workforce in 2010 compared to 2009 as shown in figure 6. Further, the most essential qualification needed for those who are seeking employments in this industry is a degree or a professional qualification in IT or a relevant qualification in the field, which is a very unique feature of this industry. Presently, out of the total workforce of the industry, nearly 90% of the senior managers hold a degree and/or professional qualification in IT with an average of 8 years of experience. It is 83% for technical staff and 80% for quality assurance and supportive staff with an average of 3-4 years of experience.

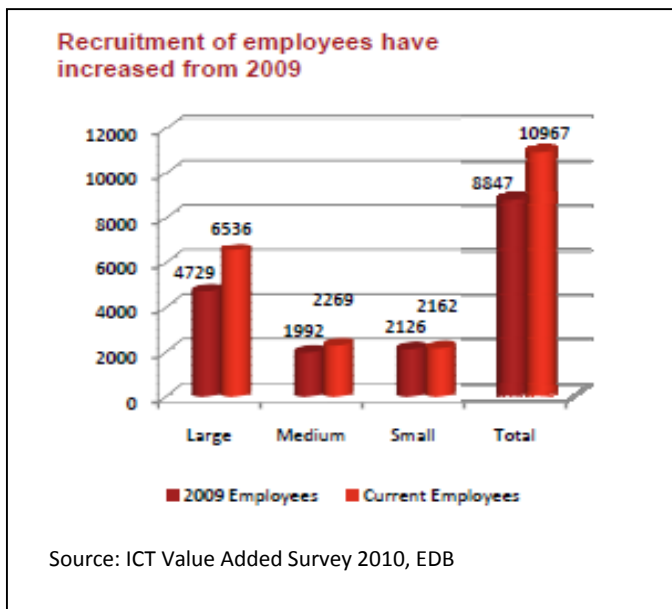
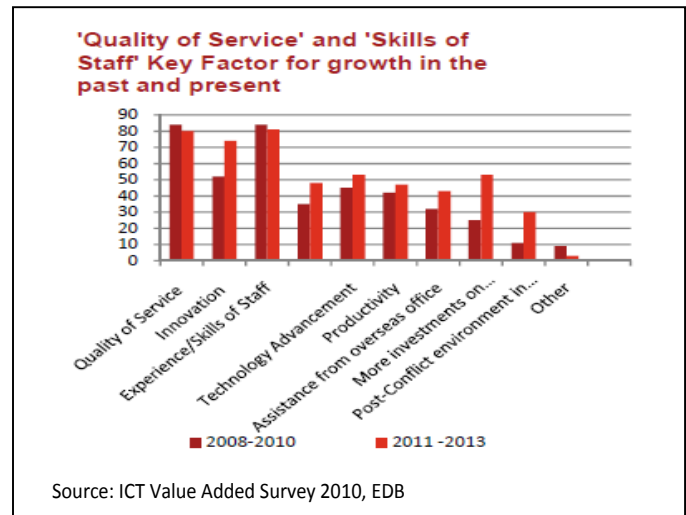


Figure 5. The comparison of number of employees between 2009 and 2010 by the size of the firm

Unlike many of other industries, the cost structure of the ICT industry mainly consists of employee costs and more than 62% of costs are expensed for human resources and 10.6%, the second highest cost component, is for international marketing [16].

#### VI. FUTURE OF THE ICT INDUSTRY: OPPORTUNITIES, ISSUES & CHALLENGES

The born global firms, around the world, have a greater potential in international market from many aspects. Similarly, the firms in the ICT industry too have a greater potential as this industry is showing a significant boom over the past few years in terms of many aspects such as increasing revenue; continues growth; market, workforce and the industry expansion; quality and quantity improvements; etc. As per figure 7, the most influencing factors for the growth of industry mainly depends on three determinants of: (a). Quality of service/product (b). Skills/experience of human resources and (c). Innovation, research & development. Moreover, technological advancements, productivity, opportunity availability, formal – informal networks, assistance from overseas head office/other, more investments on business developments and present peaceful & healthy economic environment of the country are the other important factors affecting the rapid growth of the industry. Early attractiveness of the industry depended on the cost effectiveness but now it is moving towards the quality of services/product and the innovation, research & development.



The most critical issue pertaining to the ICT industry in Sri Lanka is that its structural composition. As discussed above, this industry comprises of a large number of small firms, i.e. more than 60%, but they contribute only 5% to the total export revenue of the industry. But a few of large firms, representing only 18% of the industry, contribute more than 75% to the total export revenue. Thus, the entry or exist of a large firm may severely affect the survival and the growth of the industry. Even if those large firms are the key determinant of the industry growth at global level, on the other hand, they are a threat to small firms in the industry from the local industrial point of view.

Next challenge of the industry is its human resource and its skills and capabilities. Even if the industry has identified the skills/capabilities of human resources as one of the most essential factors for the growth of the industry at the same time recruiting the skillful, experienced and knowledgeable human resources is the most difficult challenge facing by the industry today. It is because, still Sri Lanka is not at the position of producing the IT graduates and IT professionals who can meet the expectations of the global ICT industry. As per the views of the CEOs included in the sample, availability of these graduates/professionals are limited with the number and their skills and capabilities are not up to the global ICT standards. Further, as the majority of human resources is lacking with the required industrial experiences the employers have to invest more on human resources training and development programs. But most of those programs are 'on-job trainings'. However, providing those training & development opportunities for the staff is not a big challenge for the large companies in the industry. As per those CEOs, it is extremely a challenge for the small, fully owned Sri Lankan firms to provide the required trainings & developments for their human resources, even at least at the level of 'on-job training'. This may lead some of the small firms to exist from the industry. Thus, recruiting skillful and capable human resources is the most difficult challenge the industry is facing today. According to both CEOs included in the sample and [16], investing more on innovation, research & development is very critical for the future growth of the industry.

Thus, increasing the focus on innovation, research & development has been favorably affecting the ICT industry in Sri Lanka in terms of attracting potential clients, developing new products/services, improving the quality of services/products and ultimately the industry growth and the expansion. Even if this is possible for the large firms in the industry for the small firms, representing more than 60%, continuous investments on innovation, research & development is a big challenge. Because, those firms are still at their nascent stage and doing struggles first to survive in the industry and then for the growth. Thus the ICT industry in Sri Lanka still not at the position to continuously carry out innovation, research & development activities mainly, due to insufficient investments for the industry with a large number of small firms.

Another issue the industry is facing today is its heavy dependency on three main markets. Even if the industry has clients from all parts of the world, it heavily depends on three main markets of US, Europe and South Asia. Over past years, the economy of US and Europe shows a continuous slow down and as a result of this they tend to follow a strict international business policies, especially in terms of imports. On the other hand, these two markets are critically affected by the global economic crisis. If the ICT industry in Sri Lanka continues to depend heavily on the two markets only it may unfavorably affect the industry growth. Thus, the future of the industry is at its own risk. In addition, the global competition worsens this situation further. Compare to global IT giants such as India, US, Europe and the emerging markets such as Eastern Europe and South America still Sri Lanka is at its nascent stage. Thus, the competition of those rivals slow down the future growth of industry. Further, the industry faces several difficulties to access the new markets. According to views of the CEOs of the sample, many of the firms find clients mainly through their formal and informal networks and yet, Sri Lanka did not build up an image widely around the world as an IT destination. As well, the availability of access to new market and client sources such as international IT fairs, conferences, events and programs are limited for the small firms in the industry.

Availability and poor condition of infrastructure facilities and high communication cost are also one of the main issues the ICT industry is facing today. As per the nature of the industry, it mainly depends on the technology and the internet. But the firms have to bear a significantly high communication cost with slow internet connection. This is the major complain produced by all of the CEOs of the sample as this poor condition of communication facilities slows down their day-to-day operations and as well their productivity. Another complain over this is lack of quality spaces for their offices at reasonable prices as many of the firms are situated in Colombo city or suburbs. Overall, at present majority of the firms are not satisfied with the available infrastructure facilities and its quantity, quality and cost.

## VII. CONCLUSION AND RECOMMENDATIONS

The ICT sector in Sri Lanka comprises a number of unique features, making it as an interesting economic sector to be studied as it is still a young, dynamic, potential and promising sector in the economy of Sri Lanka with its competitive advantage. First, the ICT sector, from its beginning, has been

catering to the international market. Thus, more than 95% of those firms in the industry are born global firms – are the firms engage in international activities from its inception. Second, ownership of the sector seems more complex as it comprises domestic Sri Lankan firms that been resourced, set up and operated by Sri Lankan entrepreneurs, firms operated as subsidiaries of leading Sri Lankan companies, firms operated as development centers or subsidiaries of leading internationally operated foreign companies, firms operated under the ownership of migrant Sri Lankans who are now citizens of service providing countries and firms operating as partnerships with collaboration of service providing countries or as foreign direct investments. Third, organizational structure of firms are very simple and all employees are highly educated and CEO/Founder/owner manager / other managers are well occupied with the industry qualifications. Fourth, maintaining the quality of the services/products is the key competitive driver of the survival of the industry rather than cost effectiveness. Hence, ownership of a quality certification has become a necessity for entry into the export market. The IT export companies in Sri Lanka mainly possess with the quality certifications of CMMI Level 3, CMMI Level2, ISO 9001-2000, ISMM/ISO 27001, ISO 9000, ISO 9001-2008 and over 70% companies are having these quality certifications [16]. Fifth is the greater potential for the industry growth internationally and its competitive advantage to the country. Sixth, the value addition to the sector is almost 100%, which is a very strong characteristic of this industry for its potential growth. Along with the above favorable unique features, the potential for the growth of the ICT industry is promised due to the following strengths,

- Continuous development in IT Education.
- Availability of the sufficient infrastructure in the country as an ICT services provider.
- South Asian reputation globally for IT skills.
- ICT is one of the most sought after professions among the young generation in Sri Lanka.
- High education level of the Sri Lankan younger population.
- Cultural adaptability to western countries.
- Established business practices in Sri Lanka.
- Continuous improvement in IT literacy and English language proficiency.

However, the potential growth of the industry is disturb due to the following weaknesses and threats,

- Lack of specific software and skill full staff.
- Lack of required capital.
- Costly infrastructure compared to rivals.
- Not known as an IT service provider internationally.
- Lack of comprehensive studies on strengths and weaknesses compared to global demand.
- Lack of statistics.

Not even at the expected growth rate, estimated by EDB, the ICT industry reported a rapid and continuous growth till 2011. But since 2012, it shows a significant drop in the industry. Thus, the respective authorities, especially the Sri Lankan government, should take immediate and necessary actions to recover the above discussed issues and challenges, facing by the ICT

industry today. First, the industry needs the government and institutional supports at various levels in promoting the ICT industry globally and making an international image for Sri Lanka as IT destination. The Sri Lankan government, EDB, Board of Investment and other key industrial institutions and organizations should play a vital role in this regard, especially organizing international trade fairs, seminar, events, conferences etc., as well encouraging and providing opportunities for the small firms in the industry to participate on those said events and programs. Further, these respective authorities can do international promotional campaigns, seeking opportunities and new markets through formal and informal networks, arranging trade agreements etc.

Second, the IT education and English language proficiency of the country should be improved in order to meet the global ICT industry expectations. Thus, the Sri Lankan government has a big role in improving and promoting IT education and English language proficiency in the country among the youth in terms of setting necessary education policies, revising and improving the current structure and curricular, setting and maintaining quality assurance, proving training and internship opportunities locally and internationally etc. collaborating with other respective bodies. However, in the long-run, the ICT industry can keep positive hopes for their potential employees as the Sri Lankan government has already taken several steps to increase and to make the IT education popular among the youth. For example; the government has already taken necessary steps in order to increase the number of IT graduates, to increase the availability of IT degrees, diploma and other courses in the country, to improve the quality certification in the industry, to increase IT usage and literacy among school students, to provide the IT physical facilities, to provide necessary training and development programs for IT teachers with the collaboration of the industry etc. Thus, at the end of 2015, Sri Lanka expects to achieve 75% of IT literacy rate which was 32% in 2011 and to train 50,000 teachers to meet this target [1]. Further, as this report [1] highlights, Sri Lanka produces nearly 400,000 English-speaking, IT-literate individuals each year.

Third, is to improve the necessary infrastructure facilities, especially communication facilities at reasonable rates. And as well, to provide both monetary and non-monetary supports for small firms, at least, during their initial stage. Forth, is to encourage and promote innovations, research & development activities in the country. For this purpose, the government should increase its budget allocation on innovation, research & development. These funds should be granted for both industry people and for the universities in order to improve the innovation, research & development of the ICT industry through a proper mechanism. As well, private sector people and foreign investors too should be encouraged to investment more on innovation, research & development. The current peaceful and the healthy economic environment could be used as a strategy to encourage those investors. In addition, they could be provided with some attractive monetary and non-monetary concessions.

#### VIII. FUTURE RESEARCH DIRECTIONS

This paper basically discussed the nature, emergence, characteristics and challenges & issues of born globals in the Sri Lankan context with special reference to ICT export

entrepreneurs. Thus, the scope of the study is very limited. Future researchers, therefore, could investigate the same as comparative studies or over several industries.

Earlier studies of born internationals (BGs) mainly focused on its emergence and the process of their early internationalization and widely studied. More recent attention in the field has been deviating from its emergence and the process of internationalization towards several other novel phenomenon of BGs such as performance of BGs, entrepreneurial orientation, international entrepreneurial culture etc. Many of those areas are yet either under addressed or unaddressed. Thus, future researchers have more and more research areas to investigate on BGs.

#### ACKNOWLEDGMENT

We wish to express our sincere gratitude to the owner managers of the selected ICT export firms in Sri Lanka who represent the sample of the study for giving us their valuable time and support to make this effort a reality. Further, we would like to extend our sincere thanks to Export Development Board of Sri Lanka, in particularly, Ms. Rupika Swarnapali, Assistant Director/Export Services sector for her valuable support provided throughout this effort. Finally, we would like to thank all those who gave us their time, corporation and invaluable insights during this study.

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