

Enhancing IT Graduates' Employability Skills for Surviving in New Normal: Perspective of IT Professionals

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Abstract: This research focused on how Information Technology (IT) Higher Education Institutes (HEIs) contribute to equip IT graduate employability, from the perspective of IT industry experts in Sri Lanka. The research further identifies the mismatches between IT HEIs' contributions to equip IT graduate employability and the industry demands after COVID 19 in Sri Lanka. Thirteen semi structured interviews were conducted via zoom platform with the industry experts representing major IT companies in Sri Lanka. The interview protocol was designed to get the expert opinion about the contribution which HEIs can make to equip future graduates with necessary employability skills in general and specifically in the new normal. According to key findings of the study, providing opportunities for industrial experience, sharing technical and practical knowledge, up-to-date syllabus, firm foundation of knowledge, trainings on online platforms and tools, developing soft skills and remote working skills of graduates such as trustworthiness, minimum supervision, stress management, self-driven, attitude, team spirit, ability to take challenges and responsibilities were identified as the areas in which HEIs could contribute towards creating smart IT graduates with a digital presence ready to be employed in new normal. The outcome of this study will strengthen HEIs with necessary requirements to upgrade their IT education quality and quantity wise as then graduates can meet industry expectations for better employability.

Keywords: *COVID-19, Higher Education Institutions, IT Graduate Employability, IT professionals*

Introduction

Higher education institutions (HEI) play a leading role in shaping the individuals into career ready graduates equipped with the right set of skills. Therefore, the HEIs should ensure that the curriculum is in line with the industry demands. HEIs contribute to the economy by creating new knowledge and producing graduates with necessary capabilities that add value to the overall economy and

society at large. Knowledge and skills are key drivers of the growth in advanced 'knowledge economies. Since Sri Lanka is still considered as a third-world country, HEIs has a significant role to equip graduates with required employability skills. A significant gap between the knowledge and the skills expected from the industry and the skills and knowledge developed through the existing curricula offered by these institutes is observed.

The main purpose of this study is to identify how IT HEIs can contribute to equip IT graduates' employability from the perspectives of IT industry experts in Sri Lanka and secondly to identify differences regarding IT HEIs contributions to equip IT graduate employability in post pandemic in Sri Lanka.

This study provides two significant contributions, first is to strengthen HEIs with necessary requirements to upgrade their ICT education quality and quantity wise where graduates can meet industry expectations, the second is to provide an insight on how IT HEIs can contribute to address the changed requirements of the industry with the impact of COVID 19.

Literature Review

Researchers have conducted a systematic literature search on studies published from 2015 to 2021, focusing on IT graduate employability and the HEIs contributions to equip graduates with necessary employability skills. As primary sources, many reputed electronic databases such as Wiley Online Library, Taylor and Francis Online, Science Direct, JSTOR, Web of Science, IEEE (Institute of Electrical and Electronics Engineers) and Google Scholar were referred. The search terms used for this study were Employability skills OR Career development skills AND Higher education contribution OR College education contribution OR University education contribution AND IT graduates OR ICT graduates and COVID 19 OR corona virus.

The researchers of this study found a total of 249 articles. Initially, titles and the abstracts were thoroughly examined and discarded if the article is not relevant for the scope of the study, duplication of an existing publication, not carrying sufficient information, and if there is any limitation to view the full text of the article. Next, all the publications were filtered repeatedly and thereafter discarded due to poor H index rankings and not being available in the Australian Business Deans Councils (ABDC) list of quality journals. Finally, 98 publications were shortlisted for the study to build a comprehensive literature synthesis.

IT Graduate Employability and the Role of Higher Education

Graduate employability is defined as “a set of achievements skills, understandings, and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations” (Yorke, 2006, p. 8). Moreover, employability has been defined as the “the continuous fulfilling, acquiring or creating of work through the optimal use of competencies” (Van der Heijde and Van der Heijden 2006). According to literature technical, personal, and interpersonal skills are deemed to influence employability specific to IT and allied sectors (Sehgal and Nasim 2018). Technical skills are very important for IT professionals (Rahmat, et al. 2012; Misraa and Khuranab 2017). As part of technical skills technology management skills are concerned with the effective deployment of IT to achieve the business objectives (Sehgal and Nasim

2017; Sehgal and Nasim 2018). In the context of the IT following types of personal and interpersonal skills are investigated in the previous studies: communication skills, problem solving and critical thinking skills, creativity skills, teamwork, and interpersonal skills (Aasheim, et al. 2009; Aasheim, et al. 2012; Bailey and Mitchell, 2016; McMurtry, et al. 2008; Singh and Singh, 2008; Wickramasinghe and Perera, 2010; Tesch, et al. 2008; Fang, et al. 2016; Rosenberg, et al. 2012). Aforesaid studies highlighted numerous soft and hard skills, however the implications systematically declared that it would like for the alignment between industry demands and education system. Earlier triangulation studies in IT have pointed repeatedly the inequalities between industry and HEIs. This research is inspired by the fact that most Sri Lankan IT graduates lack knowledge and skills relevant to the IT sector job roles (Ambepitiya, 2016; ICTA in Sri Lanka, 2018; Patabendige, 2014; Senarath and Wijesiri, 2016; Singam, 2017). This is due to several reasons which include weaknesses in how IT graduates are educated and trained, and the curriculum is not up to date hence not effectively contribute to develop skills and qualities in graduates that are highly required by the industry. The studies have revealed the mismatch between what the IT HEIs generate and the IT industries actual needs; moreover, there are no interventions by stakeholders to minimize this deviation in Sri Lanka (ICTA in Sri Lanka, 2018). Further, according to the survey carried out by the ICTA in Sri Lanka (2018), even though many graduates enter the IT industry each year, the quality of graduates in terms of skills

remains below the expectations of the industry. As observed by the researcher through anecdotal evidence, Sri Lankan IT graduates are short of skills highly needed by the industry. Comparatively less attention has been given. It concerns a lot of analyses that exploring graduate employability in the IT industry in a country. Literature has extensively studied graduate employability within western countries, current study is giving particular attention to the Sri Lankan IT industry (Ambepitiya, 2016; ICTA in Sri Lanka, 2018; Patabendige, 2014; Senarath and Wijesiri, 2016; Singam, 2017).

IT Graduate Employability and the Role of Higher Education during COVID-19 Pandemic

Education is one sector severely affected by the pandemic across the globe due to the sudden closure of HEIs and the shift of mode of delivery from physical (classroom-based) to virtual platforms. About 102 countries around the world have shut down educational institutions temporarily to mitigate the spread of the virus, affecting 900 million children and youth (Doidge and Doyle 2020). As a result of the pandemic, most of the young adults' experience fear, uncertainty, and anxiety about the future. Therefore, this will be a starting point to develop and take initiatives for HEIs to groom graduates to post pandemic work conditions (Parola, 2020).

According to scholars this is a remarkable revolution in the higher education sector with the digital

transformation, especially in Asia (Mok and Montgomery 2021). HEIs ought to additionally acknowledge the potential changes brought by COVID-19 by shifting to various e-learning opportunities. There is also a need to improve the staff and volunteers' skills in the online engagement of various stakeholders.

Methodology & Research Design

The researchers have deployed the qualitative research approach since there is no proper existing database of IT professionals in Sri Lanka to directly engage with a quantitative study. The population of the study is IT professionals in the Sri Lankan IT

industry and the study sample comprise of participants who hold senior positions in the Sri Lankan IT industry. The purposive sampling method was adopted in this study to identify and collect data from information rich sources related to the phenomenon being studied (Parahoo 1997) with the aim of understanding the opinion of IT professionals' opinion on how HEIs could contribute to equip employability skills through their experience. Thirteen (13) semi structured interviews were conducted via zoom virtual platform (Table I). All respondents represented major IT companies in Sri Lanka. During the interview, experts were questioned about the contribution of HEIs to equip future graduates with necessary skills in general and specifically after COVID 19.

Table I: Sample Profile

Participant	Job Role	Experiences in the IT Industry (Number of Years)
01	Senior Manager (Cloud Engineering)	13
02	Manager (Cloud Services)	13
03	Tech Lead	10
04	Senior Data Engineer	10
05	Tech Lead	13
06	Head of Quality Engineering	15
07	Senior Manager (Site reliability engineering)	14
08	Head of Managed Services	16
09	Senior Manager (Cloud Engineering)	21
10	Chief Engineering Officer	23
11	Manager (Software Development)	11
12	Manager (Site Reliability Engineering)	18
13	Director (Software Engineering)	16

To analyze gathered data, thematic analysis was used to understand a set of experiences, thoughts, or behaviors across a data set (Braun and Clarke 2012). The most widely accepted framework for conducting thematic analysis was used for this study which consists with six steps: familiarizing yourself with the data, generating initial codes, searching for themes, reviewing themes, defining, and naming themes and producing the

report (Kargio and Varpio 2020). As the first step, researchers conducted interviews, and transcribed gathered responses verbatim. Thereafter, codes were assigned to data. Initially, 79 codes were identified and among these, researchers further identified their associated extracts and generated the 24 initial themes (Table II). Further, reviewing 6 themes were identified for objective 01 and 07 themes were identified for objective 02.

Table II: Identified Themes and Codes

Initial Themes		Code Frequency in initial themes
		<i>code identified in specific question</i>
1. Higher Education institutes Contribution	Provide industrial experience	22
	Technical + practical knowledge	8
	Individual projects	4
	Up to date syllabus	4
	Workshops	4
	Solid foundation	2
	Awareness sessions	1
	Train online platforms and tools	2
2. Covid-19 impact on HEIs Contribution	Develop soft skills	9
	Online skills should be developed, digital presence	29
	Work individually	4
	Trustworthiness	5
	Minimum supervision	2
	Confidence	1
	Accountability	2
3. Graduate Development Perspectives for the HEIs (Post Covid)	Stress management	1
	Self-driven	1
	Attitude	5
	Team spirit	11
	Take Challenges	4
	Responsibility	2
	Smart worker	2
3. Graduate Development Perspectives for the HEIs (Post Covid)	Knowledgeable	4
	Updated syllabus	20

Analysis & Results

Objective 01: Identify How IT HEIs Can Contribute to Equip IT Graduate Employability Skills from the Perspectives of IT Industry Experts in Sri Lanka

HEIs play a significant role in shaping individuals to suit the field of employment. A person who enters a HEI as a student and leaves as a qualified professional in search of a job to start their career. It is the responsibility of HEIs to prepare their students and enable them to adapt to the desired requirements before leaving their institute.

Provide industrial experience through internships

The results of the study identified the most important aspect that HEIs should pay attention on providing practical and technical knowledge before directing undergraduates to the job market. According to participant 01 *“For students to have hands-on experience in an IT company during the last six months or for a similar duration is one such essential thing.”*. Participant 03 too stated *“a key thing that the higher education institutes can or should do is to prepare students for the industry, at least target them so that they can get an internship.”* Participant 05 and 08 too mentioned *“A key thing that the higher education institutes can or should do is prepare the students for the industry through internships.”*

Individual projects

Few experts suggest, allocating individual projects for undergraduates rather than group projects would help them to obtain vast knowledge with a holistic view of the project. Many respondents highlighted the importance of assigning individual projects to graduates which offer them various benefits. Participant 04 mentioned *“Assign individual projects, small projects for undergraduates/new entrants to the IT industry, so then the students will know, how they can apply the knowledge they received from lecturers or textbooks into practical ways”*. Participant 01 said that unlike group assignments, an individual project is a good method to eliminate free riders. Participant 09 said *“For the final year project individual project is the best it enables to identify the strengths and weaknesses of the student very clearly”*

Awareness sessions

Some of the experts commented that students are not aware about the new developments in the IT industry. One participant said *“Everyone thinks to be a software engineer, network engineers or the QA engineers after completing the degree. Students don’t know what the site reliability engineer is doing, what is Cloud engineering, who are the operation support people, or what are the latest developments in the industry. It is good if we can conduct workshops with the company and enable students to get a wider practical exposure to educate them about the other departments too”*. The following narrative from another participant too confirmed the previous comment *“It’s*

not just merely being a developer or a QA, there are so much of options out there.” Another participant stated that awareness sessions can be conducted to students where they can obtain real-life experience about the office environment, especially for first year students.

Updating the syllabus

Curriculum updates were identified as another important feature since IT field constantly update with technological advancements. Most experts believe that by updating the syllabus of the degree programmes in HEIs, will lead to the creating a graduate with up-to-date knowledge ready for an employment. Majority of the participants responded that the curriculum in many universities is outdated. One participant said *“The major thing is keeping up to date with the industry. Every six months the syllabus needs to be updated. Lecturers should work closely with the industry technical specialists to update the current content because the technologies are changing rapidly.* One participant highlighted the importance of seeking assistance of industry experts for curriculum development, stating *“HEI strategy should align with the industry needs. After three to five years, it will not be typical software engineers those who will be coding but there will be many opportunities coming up”.*

Develop communication skills

All the participants highlighted the importance of soft skills. Majority stated that graduates should possess strong and clear communication skills.

“I think that is one of the major skills which people especially IT professionals’ lack, not only presentational skills but also, providing accurate and clear communication”.

Objective 02: Identify Differences Regarding IT HEI Contributions to Equip IT Graduate Employability After COVID 19 In Sri Lanka

COVID-19 impact on higher educational contributions

According to the findings of this study, graduates should be ready to adapt to remote working concept, as their responsibilities, type of work and procedures would be different from working in a physical office environment. The primary solution to ensure smooth flow of operations during the pandemic, is to remotely perform the relevant job role. The measures taken to contain the spread of the pandemic such as imposing travel restrictions and social distancing, has popularized the concept of working from home than earlier. Accordingly, knowledge and skills of fresh graduates must align with requirements of new normal. Some participants emphasized that there is a trend in favour of remote working among companies during the post-pandemic circumstances also. Participant 02 and 12 stated that *“I see it like that even in future, now most of the people have got used to the comfort zone of working at home, so I don’t think even companies are willing to cancel this new policy immediately. It’s easier for the company as well”.*

Expectations on IT graduate attributes to tackle the requirements of new normal

Currently, the industry is expecting new requirements in addition to the previous, while some existing expectations has been replaced with the new normal. This point is well proven when analyzing the interview responses in depth. The following codes have been derived in relation to the changes in expectations on IT graduate attributes with the impact of COVID 19 pandemic.

Self-driven

Most experts are of the opinion that a person who qualifies for a job must be self-driven. It was pointed out that an individual should be able to perform his duties successfully in the company without the intervention of another employee. This study also identified the importance of being a responsible team worker. Findings reveal the challenges when working together as a group, and that the result of a collective endeavor is to be a greater focus on individuals who can adapt to these conditions as an organization.

New graduates must work independently within this new normal situation, often from the beginning of their career. The idea clearly defined in the study, with insights of how to prepare new graduates for similar situations. This is confirmed by the 4th participant, "*You should be able to deliver what you have been assigned, so you should be able to manage yourselves, be self-driven because you don't have a team now. You have a team, but it's virtual. You should*

be able to be honest to drive yourself according to the concerns and tasks". Similarly, 9th participant mentioned that "*how to learn by yourself, would be a key skill to have for these graduates*". The 12th participant also provided insights for the same area stating that, "*they should have the understanding there is no one to monitor, therefore self-monitoring is a must*". Finally, the 13th participant also commented conforming the idea as follow "*They should be self-organized, self-managed, self-driven, and independent*". Therefore, HEIs are required to take necessary actions to inculcate self-driven and correct attitude among graduates.

Trustworthiness

Trustworthiness is one of the basic requirements that an organization expects from their employees, especially in novel working context where employees have more flexibility than in a conventional work setting. Heads of companies expect employees to be trustworthy when performing duties as they were before the pandemic situation. Therefore, trustworthiness is a key requirement that all organizations expect in a novel work environment driven by pandemic circumstances. As per the 2nd participant "*If you are assigned a certain task, a certain pay is allocated to you based on a certain period. But companies give so much flexibility to employees right now, as you don't have to be in the seat every time and people go out one or two hours. They come back to the seat again but, there are certain number of hours so you should be true to your work life and carry out that work, make sure you work a*

certain number of hours as required by the employer". The 4th participant also pointed out similarly *"....one soft skill is honesty, especially in the IT industry. No company is monitoring your work logs and the time that you have been active; so, they just trust employee on the task assigned"*. Further, 5th, 11th and 12th respondents mentioned, trustworthiness is an essential attribute of graduates when they are moving to the industry as professionals, especially under the distance-working platform.

Stress management

The study identified that stress management is an essential part of individual's mental health in the post pandemic. Sudden and unforeseen changes in the work environment and interruptions in remote working lead to increase stress than usual. Failure to manage stresses can have a detrimental effect on employment. According to the 11th participant, there is a high possibility of suffering from stress when working from home, *"With this COVID situation, people tend to move to a work from home environment. Therefore, in that case there should be extra burden on employees and kind of stress building among people who are working alone, only connecting through calls and meetings."*

Facing challenges as a team

The novel pandemic has created a massive challenge for every industry across the globe. Therefore, to face any kind of crisis in future, graduates needed to be groomed with the skill of accepting challenges with appropriate team spirit. The 13th participant

emphasized that *"we already have faced these challenges. We will be facing much more challenges in the future because as an organization we are not encouraging co-located team concepts and we are mostly looking at hybrid patterns..."* Similarly, the same respondent mentioned, *"we have to enhance the efficiency of team working when we are working from remote locations especially with teams physically scattered on various locations unlike in a typical office environment where employees work together."*

Based on the 1st participant, the importance of learning collaborative tools to encourage the team spirit while taking challenges in this way *"now companies expect you to come to office like two days and for the rest of the days you have to learn to use collaboration tools, maybe like Microsoft Teams, Zoom or any other chat mechanisms or there are a lot of tools to do the code sharing of these kinds of tools, how to use those tools and to collaborate."* Moreover, the 13th respondent highlighted the same concern *"as higher education institutes, we need more engagements, and we need to look at what exactly the challenges the industry is facing. Sometimes, you might not be aware of the current challenges of immediate managers or teams, issues are different for various leadership levels. The problem domain issues are different so that customizations for the curriculum would need certain adjustments, amendments based on the current set-up and current challenges."*

Work with minimum supervision

Experts were of the view that, employees are more likely to work alone in this environment with minimum supervision. In the viewpoint of the 5th participant, *“They should be able to work with minimum supervision. That is highly expected these days because we cannot baby-sit, people must understand things by their own...”* and the 12th participant confirmed same, *“when you are working from home no one is there to monitor closely, it depends on how you are communicating, how you interact with the others”*.

Develop communication skills

The development of soft skills is a great support for modern day job requirements that have changed when compared to 10-15 years before. Most of the IT functions in globalization are carried out through remote technology. *“Now the student doesn’t have the opportunity to present themselves in a meeting room, in front of a panel, use of a white board. All confined into one stream where they must convince the panel just remotely”* (7th respondent).

Table III: Comparison of HEIs contribution to equip IT graduates pre and the post pandemic condition

Expected Contributions from HEIs	Before the Pandemic	After the Pandemic
Provide industrial experience	✓	✓
Technical and Practical Knowledge	✓	✓
Assessing through individual projects	✓	
Up to date syllabus	✓	✓
Solid Knowledge foundation	✓	✓
Awareness sessions	✓	
Train online platforms and tools		✓
Develop communication skills	✓	✓
Remote working skills		✓
Trustworthiness		✓
Enhance the ability to work with minimum supervision		✓
Stress management		✓

Expected Contributions from HEIs	Before the Pandemic	After the Pandemic
Self-driven		✓
Attitude	✓	✓
Team spirit	✓	✓
Ability to take challenges		✓
Responsibility		✓
Smart worker		✓
Digital presence		✓

Discussion & Conclusion

The primary expectation of organizations is to get the maximum potential of employees or the fullest contribution to the success of organization's goals. As mentioned earlier, this study identifies professional qualifications of the job seeker to be recognized through a combination of hard and soft skills.

Frequently, graduates are released to work environment upon completion of their studies, mostly with academic knowledge only. It is a question of whether any technical experience was provided to them during the study period, indicating that students have received sufficient knowledge to effectively perform the job duties and responsibilities. According to the study, all higher education institutes should be responsible to provide industrial experience through an internship, the similar importance emphasized by one of the previous studies conducted in European context,

providing practicums and internships are vital to assure an employment opportunity for the fresh graduates (Samo Pavlin, 2014). Another study conducted based on Malaysian and Chinese universities revealed that engagement in internships and training leading to stimulate a student's imagination on employment right after the graduation (Teng, Ma, Pahlevansharif, & Turner, 2019). Japanese universities are incorporated internships to the curriculum as a part of career education or career support. In the Australian labour market, internships have become increasingly competitive, therefore, fresh graduates must compete with experienced graduates. As a result, Australian universities also concerned with internships of undergraduates for supporting high youth employment rates (Saito & Pham, 2020). Hence, to equip the graduates, internships for providing practical exposure to align with job market expectations is more vital for the Sri Lankan HEIs too. Especially, technical, and practical skills are more vital for prospective

electronic technology education graduates (Chukwuedo & Ogbuanya, 2020). Above explanation reaffirms the significance of providing internships and hands on experience for graduates.

Another crucial point identified from the present study is, students should be motivated to carryout individual projects during the study period. Since it is widely believed that, when in group projects, graduates would lose the opportunity to individually acquire comprehensive knowledge about the overall project. However, group projects give an opportunity to share their knowledge as a group while improving teamwork skills. In contrast, individual projects will help them to gather end-to-end knowledge about the subject or field and get hands on exposure about the holistic picture of the project. The same idea confirmed with a recent study held in Nigerian context for improving graduates' problem-based learning outcomes (Okolie, Nwajiuba, Ehiobuche, Igu, & Ajoke, 2020).

The present study identified that a job-seeking graduate in the field of information technology should be a person with a great deal of knowledge, since information technology is a field that is constantly updating. Providing education with a solid knowledge foundation to their students can lead to more knowledgeable graduates who will get more opportunities when applying for a job. Universities are not able to teach everything, however, HEIs can update students on how the industry operates and evolves. As per the results of this study, HEIs can have scenario-based teaching incorporated into their degree programs that can set

a strong knowledge foundation for students. If the students have a firm/solid foundation of knowledge, then they are in a better position to adopt to any situation which they may face when they enter the job market.

Further, the current study identified that HEIs can enhance student knowledge through organizing workshops and seminars. Sometimes, there are subject areas in which students are unable to gain real hand experience through their internships or through the lectures delivered in classroom-based learning and by self-learning. In such situations, the best option is to arrange workshops and seminars with industry experts for undergraduates to have the required exposure. Similarly, the recent study conducted in the Nigerian context, where they highlighted significant effects of perceived support of practical skills-based training sessions on the acquisition of practical skills for undergraduates (Chukwuedo & Ogbuanya, 2020).

Moreover, the HEIs should ensure that their IT graduates are well versed in the field of work with the correct knowledge. It is imperative that the syllabus of HEIs should be up to date. This is confirmed with a Malaysian study, updated syllabuses are expected to prepare students for better employment (Teng, Ma, Pahlevansharif, & Turner, 2019). Industry experts conclude that, when comparing private HEIs with government universities in Sri Lanka, private HEIs are ahead in the updated syllabus.

In the face of globalization, the entire business operations across global offices function as a single entity. In this situation, IT companies also maintain communication with many countries worldwide using English as a common language. The ability to effectively articulate in English is essential and confirmed in this study, especially as the IT sector firms operate in global teams connecting various geographical locations as well as allowing teams to operate without interruptions during the pandemic, through virtual collaboration platforms. Hence, interpersonal communication has become an integral part of working (Succi & Canovi, 2019). The results of this study suggested that effective communication would be a top asset which most of the IT companies require; the same idea was generated in one of the studies conducted in 2010 in the Sri Lankan context related to the computer science in Sri Lanka (Wickramasinghe & Perera, 2010).

Another valuable concept derived from the interview discussions is the importance of digital presence to successfully handle new job context in distance working. Since there are no any physical interactions among peers, superiors, and subordinates. The digital presence emphasizes how the employees appear on the virtual platform and according to the findings of the present study digital presence is supported by the proper use of e-mail conversations and group communication platforms. According to Mok and Montgomery (2021) possessing required communication skills by job-seeking graduate is even more important for survival in the post

COVID context. Therefore, HEIs should help to increase the communication skills of their students.

The outbreak of COVID 19 has had a direct impact on majority of the industries across the globe. This impact has forced the businesses to make sudden changes to the work environment, job roles and responsibilities without any test runs to ensure survival. However, there are very few studies conducted across the world to explore on these changes. A study conducted in a Malaysian public university to investigate the issue of graduate employability in the post COVID context is limited to the graduates' perspective (Kamaruddin, Ahmad, Husain, & Hamid, 2020).

Current study confirmed that business organizations were pushed to pay special attention to employees' ability to adapt with new job context when selecting new graduates for employment. Many organizations around the world are now paying more attention to the concept of a "safe workplace environment". As a result, employers had to balance both the employee safety as well as business survival. Therefore, they motivate their employees to work from home which is a popular, safe, and feasible option. In similar disasters or pandemic of this magnitude, job seekers should be prepared for this situation in the future (Mok & Montgomery, 2021). Employees should be able to develop required characteristics to survive in their jobs. This requirement can be addressed by the HEIs easily through the exposure provided to graduates with the relevant distance learning skills. However, this pandemic situation may

pose a threat for practical sessions to be successful, hence, HEIs can use hybrid method, thereby giving more value for them in practical learning while maintaining the quality of the higher education (Clabaugh, Duque, & Fields, 2021).

This study identified several factors that organizations expect when recruiting a new employee. These factors play a crucial role in determining whether the recruitment process is successful or not. Self-driven, attitude and the ability to take up challenges and responsibilities are the most required by organizations, i.e., or expected from candidates. Every organization expects its employees to contribute to the development of the organization by managing their responsibilities individually and collectively as a team. Also, this study suggested fresh graduates will have much potential if they are knowledgeable, updated, and can perform smartly.

Further, the present study suggested conducting counseling workshops on stress management as a solution to give more insights to enhance the abilities of each graduate student, to cope up with the stress in the working environment. This is critical, when fresh graduates are working from home, as they have to find solutions by themselves with several distractions at home. However, prior to the pandemic, employees had a chance to build direct relationships with co-workers, which led to manage work related stress. Since this is associated with employee's mental health, excess levels of stress will lead to burnout and finally quitting of jobs. But if graduates are knowledgeable on

this ahead of the situation, have prepared in advance and focused on dealing stress, they will be successful in the new work environment (Dyki, Singorahardjo, & Cotronei-Baird, 2020).

Therefore, HEIs need to pay their attention on building extraordinarily strong soft skills among graduates; hence, soft skills play a key role in the new normal than earlier (Liesa-Orús *et al.* 2020; Succi and Canovi 2019). According to the results of the experts' views, it was highlighted that self-driven, right attitude, team spirit, the mindset of accepting challenges and the ability to take up responsibility are more important for developing graduates in the post COVID condition. In this backdrop, HEIs can develop necessary assessment methods to enhance these capabilities among graduates. Dyki *et al.* (2020) also studied about how to prepare students with employability skills for the unknown future by determining the assessment practices during COVID 19.

HEIs can decide effective evaluation methods to empower undergraduates' skills. As per the opinions of IT professionals, majority highlighted individual assessments are ideal to avoid free riders and assist graduates to sharpen their real abilities to improve at individual level. At the same time, graduates can be assigned to carry out group tasks to build the team spirit and collaborative thinking which are necessary to effectively perform their duties in an organization. Hence, there should be a fine blend of assessment components with the updated knowledge along with the practical

exposure to equip graduate students while enhancing readiness for future employments especially in the new normal.

IT professionals suggested that the HEIs needed to update their syllabus at least every six months due to the continuous change in technology. Moreover, revising of curriculum will facilitate graduates to obtain up-to-date knowledge in par with the industry demands. The curriculum needs to be comprehensive and include all the solid knowledge areas with necessary technical skills by providing graduates with appropriate practical exposure through internship opportunities, industrial trainings, industry-based workshops, and awareness sessions. Further, industry expert consultations to update the syllabus adds a real value to the curriculum as graduates able to target employment opportunities once they graduate. Finally, IT industry expects a smart worker with appropriate attributes such as trustworthiness, accountability, and confidence to work under minimal supervision in a remote environment as well as onsite.

Research Implications & Future Research

This research makes a valuable contribution for higher education institutes in shaping a graduate ready to join the job market and embark on a career under the new hybrid work conditions in the new normal brought about by the pandemic circumstances. This study is feasible by addressing the

significant gap in the perceptions of workplace readiness among IT professionals. The findings suggest providing internships during the period of study and assigning individual projects to assess the students will groom a graduate to be up to date on modern technologies and skills demanded in the IT industry. In addition, these mechanisms can boost employee self-confidence and efficacy to take up challenges independently and be accountable on their job role in the employer organization.

Further, the research findings shed light on the potential challenges that the IT employees in the new normal would face. These include high stress level due to lack of human interactions in a typical office environment, facing future crisis with team spirit and working with minimum supervision. The IT educators and policymakers could benefit from these findings in developing strategies taking steps to develop qualities that lead to post-graduate success, thereby equipping fresh graduates on knowledge and skills that the employers seek for. Future researchers can incorporate views from educators and graduates from the IT sector using a quantitative approach based on the insights drawn from this study along with IT professionals.

Acknowledgment

This research is funded by Faculty of Graduate Studies and Research, Sri Lanka Institute of Information Technology, Research Grant Number: FGSR/RG/SBS/2021/02.

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