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Exploiting Opportunities in the New Normal Context of University Education: A One Year Retrospection

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Authors' contributions

This work was carried out in collaboration among all authors. Author CJ designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. Author CK managed the literature searches. Author YH managed the literature searches and wrote the final manuscript in publishable format. All authors read and approved the final manuscript."

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ABSTRACT

With all teaching and learning activities online and academic staff having to capacitate themselves in navigating the crisis of Covid 19, this article reflects on how the Sri Lankan universities dealt with pandemic scenario while exploring domestic experience over a period of one year commencing March 2020. A literature survey was carried out to gain an understanding of the existing debates surrounding the topic of challenges and opportunities availed in the crisis. 100 invitee academics representing each university participated in a questionnaire survey administered via Google forms and data were analyzed using descriptive statistics in order to gauge the perception among the academics towards the discharge of the university functions and the opportunities exploitable under new normal context. Human Resource Management departments and Learning Management Systems have functioned well despite the crisis persisting so long. In addition, the respondents were satisfied with the data protection measures initiated to address any possible loss of data. A few respondents disagreed with the claim that utilizing IT services had functioned well

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and that the transition to digital teaching was accomplished without difficulties. There is a higher possibility to revisit and amend existing curriculums and teaching and learning methods, pursuit on course accreditation and validation with professional entities, preparing study packs, materials, toolkits, academic audit and appraisal, review on student feedbacks and making necessary pedagogical and other reforms as appropriate. Regardless of chronic issues such as digital inequality, universities have demonstrated that they can accomplish tasks and retain their legitimacy efficiently. This suggests that Covid 19 has been reasonably responded using adaptive management. All with aspirations to achieve professional excellence mediated by current events and its agility, the article offers some of the key challenges that inevitably emerged. The findings highlight that the Covid 19 has brought about a number of opportunities for which a greater reliance on collegial decision-making between academics and their counterparts, the students are crucial.

Keywords: COVID-19; online deliveries; digital platforms; challenges; opportunities.

1. INTRODUCTION

At least 50% of the world's students both in school and higher education – 890 million in 114 countries – have been affected due to Covid 19 [1]. Forecasts predict anywhere from a 15% to 25% decline in enrolment [2]. A central feature of the crisis is the urgency in managing it [3]. On the same vein, it is important to identify viable solutions [4]. COVID-19 crisis induced major changes in governance [5]. It gives enough lessons on how to manage knowledge-intensive organizations such as universities [6]. In Sri Lanka, there are 15 Universities, governed by the University Grants Commission [7]. These universities are situated in 9 Provinces and 11 districts Island wide. In March 2020, the UGC introduced national guidelines on COVID-19 with a view to restore academic affairs. To achieve this, the UGC urged a responsible conduct and compliance such as hand-washing, respiratory etiquette and physical distancing. All universities were anticipated to apply the online concept of education. Thus, a survey was administered among academics representing at least two in each university and the perceptions were mapped to generate a discussion about navigating the crisis in higher education. Finally, this paper describes how hands on experience will apply in future similar circumstances while comprehending what the 'new normal' will essentially mean for tertiary institutions in Sri Lanka and globally.

2. RESEARCH AIMS AND OBJECTIVES

The overall aim of this study is to demystify various traits and insights related to academic functions when carried out under new normal circumstances and to inform practice for the future. The research has several objectives; (1) gauge the perception among the academics on the readiness for new normal delivery of academic functions, (2) highlight some of the key challenges that inevitably emerged and, (3) the approaches to be taken in order to be resilient in long run.

3. LITERATURE SURVEY

Universities are knowledge-intensive organizations [8]. The changing landscape requires efficiency in terms of knowledge management (KM) [9]. Universities exert considerable societal and economic impact [10]. Thus, universities need to be transformed their structures to be more efficient [11]. On the other hand, academics can be viewed as "hybrid" professionals [12]. Academics need an adaptive and flexible attitude during a crisis [3]. A crisis impinges upon both the exploitation of existing knowledge and the exploration of new alternatives [13]. In response, many governments including the Government of Sri Lanka promoted continued provision of educational services online [14].

3.1 Challenges Faced in Covid 19

There was a sense of urgency and purpose, with the goal that no student or staff member should be left behind. Communication had to be informative, repeated and, at the same time, pastoral. As noted by Gray et al. [15], practice requires ongoing reflection and re-evaluation to take account of changing approaches and perspectives. Menon and Castrillon [16] argue for 'an aggressive disruption of current thinking, existing methods and processes, if higher education and universities are to achieve real change to the way in which teaching and learning pedagogies are framed. Lederman [17] justly

stated that due to the COVID-19 crisis teachers and students both find themselves in the situation where they felt compelled to embrace the digital academic experience. However, digital transformation is not a new concept anymore as it has been attached to higher education institutions for some years [18]. Stakeholders of teaching-learning process should take cognizance on the possibilities of applying the digital transformation [19,20]. Further this transformation has paved the way for integration of sustainable management to be adept with the modifications enforced as an outcome of new technological advancements [21]. According to Hiltz and Turoff [22], revolutionary changes could even be seen in the contemporary transformation in terms of the teaching-learning process in the higher education.

Successful online teaching boosts an efficient teaching-learning process [23,24], because it has proved that effective online learning is an outcome of cautious design and planning of instruction [25]. This 'migration' process rejuvenated the rejection of the contemporary online education experience during this pandemic as effective online education but rather as emergency remote teaching [23,24,26]. Tam and El-Azar [27] advocated that "resilience must be built into our educational systems" and also indicated three trends that would be seen in future transformations viz. increasing educational innovations, emboldened public-private educational partnership and digital divide gap. Badat [28] argues for caution in respect of how we engage with the 4IR, noting that tertiary institutions should not use the pandemic to initiate changes. Williamson et al. [29] rightfully assert that 'the need remains for critical reflection on the planetary pivot to digitally mediated remote and distance education.

It is understood that remote teaching was to remain student-centered. While online education would have been the readily available solution, it has widened inequalities in access to education. Those residing in rural areas did not have access to the facilities and infrastructure necessary for online learning. Wu et al. [30] refers to the success of the transition to online teaching and learning being predicated on 'organizational agility'.

3.2 Opportunities Availed in Covid 19

Crisis can lead either to a negative or positive outcome [31]. Crisis events were often thought of as a negative phenomenon that creates a damage and threatens their existence [32]. Additionally, the crisis can originate panic, fear and wrong decision making if it is not managed well, for these reasons organizations ought to diminish the negative impact of the crisis and exploit the opportunities emerged from the crisis [33,34]. Therefore, leaders should focus on the brighter side of the crisis, identifying organization's weaknesses at the onset, and create new strategies to convert the crisis negative impact into competitive advantage, and help sustain in the market [35]. Crisis management is known as fashioned to battle crises, precisely the major actions taken to decrease the actual harm inflicted by the crisis [36-38]. According to Baubion [39] the process of managing the crisis has 3 substantial phases: preparedness before crisis, response to limit damages during the crisis and feedback after the crisis. From a different perspective, crisis management requires more time and resources than initially perceived, and the reaction of the organization towards the crisis determines the rout of recovery and organizational future performance [38]. Crisis management is by nature a fragmented, complex, and disjointed area and a growing number of cases and problems do not fit into the traditionally functional structure of polities [40]. Hence, majority of crises develop because leaders within the organization fail to recognize emerging issues at early stage, and subsequently establish an effective action plan to tackle the crisis [41].

As such, Covid 19 represents an opportunity to rethink education [42]. Thinking about more innovative ways to deliver an education is driven by students, that is more oriented toward purpose and meaning, and that is more global [43,44]. Same as drawbacks regarding online education from various perspectives, there are multiple opportunities created by the COVID-19 pandemic for tertiary education. Online platforms such as Google Classroom, Zoom, virtual learning environment and social media as well as various group forums like Telegram, Messenger, WhatsApp and WeChat have been used in tertiary education due to the pandemic. These platforms are able to facilitate additional resources and coaching to the learners [45]. In addition, there are multiple opportunities for sharing knowledge with others while staying at homes [46]. As Sintema [47] stated, working from home mode has been put in place as the needed action to minimize the transmission of the pandemic even in tertiary educational institutions. Further, [48] highlighted that the

Covid 19 pandemic had given an opportunity to lead the way for introducing digital teaching and learning process.

E-learning applications have been playing a vital part during the pandemic, facilitating students engage in tertiary education during the closure of their institutions [49]. Further, online learning gives more freedom for differently abled students to take part in lectures in the virtual environment, requiring limited movement [50]. The best practices for online home-education are yet to be explored [51]. A study carried out among 120 university students to examine the attitudes of students towards online learning showed that they were really positive on online learning [52]. Adulkareem, M et al. [53] emphasized that online test is one of the widespread methods of higher education as an effective tool during the outbreak. In order to avoid the disturbances of teaching-learning process, institutions around the world provided online courses (e.g., distance education, video education, open education) [54]. The pandemic compelled tertiary educational institutions to switch their programs into online delivery mode overnight. This led administrators to adopt to this unexpected change as soon as possible [55]. Education administrators are urging staff to support and share know-how and digital infrastructures for teaching online in the quarantined and locked down areas [56]. Thus, tertiary educational institutions in affected areas have been able to do their best to continue operations. Even though, there is a disagreement on teaching-learning process and the implications for education equity [57].

"Virtual identity will be unfettered by physical attributes such as gender, race, or disabilities [58].,The demand for adaptive learning and teaching settings, digital learning innovations, and pedagogically sound teaching and learning designs has risen in the face of the COVID-19, and tertiary educational institutions investing in integrating more learning designers and instructional design experts will be better placed in their strategic trials to design or redesign programmes [59]. As such, utilizing technology can positively enable a more inclusive access to lectures and discussion session materials from their residents. Using online modes can arguably support more equitable opportunities. This paper is to explore this vacuum created by Covid 19 which already lapsed one year since its official declaration as a pandemic.

4. RESEARCH METHODOLOGY

A literature survey was carried out to gain an understanding of the existing research and debates surrounding the topic of challenges and opportunities availed in the new normal context of university education. A questionnaire survey with a total of 15 structured questions (based upon the variables identified in the literature survey) with Likert-scale answers ranging from 1 to 5 (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree) was administered among 100 invitee academics via Google forms. Google link was sent out via individual emails to invitees found to be conveniently available as respondents. Data were analyzed using a descriptive statistical method in order to gauge the perception among the academics towards the discharge of the university functions and the opportunities exploitable under new normal context. Standard deviation (SD) was calculated to see whether there is any average deviation from the mean in the observed data and how accurately the mean represents sample data. In addition, there was one key open ended question regarding the solutions in navigating the crisis from a contextual perspective.

5. RESULTS AND DISCUSSION

Only 78 had effectively responded within the one month period given for response. Interestingly, the average responses were slightly more negative than those of the majority (Table 1), which gives a general notion on how central the majority's position has been polarized within the university system regarding crisis management. Table 1 gives the mean and standard deviation values against the perception of the respondents towards the satisfactory discharge of 20 university functions during the period of one year commencing March 2020. Standard Deviation (SD) is to show how spread out the responses are they concentrated around the mean, or scattered far and wide? It is found that COVID-19 pandemic has had a considerable impact upon almost every function of the university, though it is evident that, a couple of functions have been managed effectively at Sri Lankan universities.

The respondents agreed with the contention that their universities' management systems (Mean 4.5) and transformation of teaching into digital platforms (Mean 4.0) were soothingly well over

Table 1. Perception towards the discharge of university functions

Discharge of University Functions	Mean	Standard deviation	Rank
Human Resource Management functions were well undertaken in digital form	4.5	2.1	1
Boards and committees summoned	4.0	0	2
Transformation of teaching into digital platforms enabled without much difficulties	4.0	1.15	2
Learning management system functions	4.0	1.5	2
Data protection means activated	4.0	3.0	2
Examinations conducted online satisfactorily	3.0	1.5	6
Summative and formative assessments continued	3.0	1.5	6
Measures to catch up delays in semester completion taken	3.0	1.5	6
Research continued despite the closure of universities	3.0	2.5	6
Final year project works and dissertations had no interruption	2.0	0.5	10
IT services maintained relatively at ease	2.0	1.75	10
External collaborative activities continued	2.0	2.5	10
External collaborative activities continued	2.0	2.5	10
E libraries functioned	2.0	3.0	10
There is no delay in admitting new intakes to the university	1.0	0	15
Work based training had no interruption	1.0	0	15
Internal auditing functions uninterrupted	1.0	0	15
Laboratory experiments and practical continued	1.0	1.5	15
University administrative functions had no interruption	1.0	1.5	15
University administrative functions had no interruption	1.0	1.5	15
Staff development functions continued without difficulty	1.0	2.0	15

Table 2. Perception towards opportunities exploitable under new normal context

Opportunities exploitable under new normal context	Mean	Standard Deviation	Rank
Revisiting and amending existing curriculums	5.5	1.0	1
Emerging new teaching methods, tools and formats	5.0	1	1
Training on IT and web-based applications including teaching and learning digital platforms	5.0	2.0	1
New initiatives on internal staff development	4.0	0	4
Conducting online lectures, training and workshops	4.0	0	4
Thorough review on student feedbacks and making necessary pedagogical and other reforms as appropriate	4.0	1.0	4
Redefining academic audit and appraisal	4.0	1.5	4
Preparing study packs, materials, toolkits etc.	4.0	2.5	4
Pursuit on course accreditation, validation etc. with professional entities	4.0	3.0	4
Drafting innovative modules	3.0	1.0	10
Upgrading learning management system	3.0	1.5	10
Discussion forums via webinars and other means	3.0	1.5	10
Expanding e-book depository system	3.0	1.75	10
Promoting instructional mode of education such as narrowcasting	2.0	0	16
Revamping policies, protocols and guidelines to address the new normal issues and trends	2.0	0.5	16
Archiving records	2.0	1.0	16
More internationalization	2.0	1.0	16
Increase graduate pool in distant courses	2.0	1.25	16
Undertaking research	2.0	1.5	16
Clearing up academic and admin related backlogs	2.0	1.5	16

Opportunities exploitable under new normal context	Mean	Standard Deviation	Rank
Conducting faculty boards, academic councils, senate and other committees online	2.0	2.5	10
Working on industrial collaborations	2.0	3.0	10
Attending data protection means	1.0	0	23
More attention on social corporate responsibility actions and other community programs	1.0	0.5	23
Revisiting work-based training approaches	1.0	1.5	23
Maintenance of equipment, tools and toolkits	1.0	2.0	23

the year under consideration (March 2020 to March 2021). The Standard Deviation of 1.15 shows that the individual responses, on average, were a little over 1 point away from the mean, in the utilization of digital platforms. Human resource management departments have functioned well despite the crisis persisting so long. In addition, they were satisfied with the data protection measures initiated to address any possible loss of data. Learning Management System (LMS) related services provided by each university's administration (Mean 4.0) and e-mode discussions, committees and boards have been functioning very well. A few respondents disagreed with the claim that day today management utilizing IT services had functioned well (SD 1.75), and that the transition to digital teaching was accomplished without difficulties during the period (SD 1.15). More critical responses were received regarding the extent to which student admission (Mean 1.0), Staff development (Mean 1.0), Work based training (Mean 1.0), Research (Mean 3.8) and Collaborative activities (Mean 3.3) continued during the period. All accepted the fact the internal auditing functions and board of surveys had no avail in the circumstances. Some of the universities were unable to continue their research because their laboratories had been closed. External collaborations were interrupted, but soon resumed in digital form.

Table 2 offers a narrative on how academics perceived Covid 19 as a source of opportunity in the best interest of their universities. It is clear the pandemic has generated a number of opportunities, which if exploited properly, would ease out the impact generated by the crisis itself.

Table 2 shows that revisiting and amending existing curriculum (Mean 5.5) and training on IT and web-based applications including teaching and learning digital platforms (Mean 5.0) were mostly expected by the respondents under the new normal situation. The Standard Deviation of 2 reflects that the individual responses, on average, were over 2 points off the mean, training on IT and web-based applications. There is a higher possibility to revisit and amend existing curriculum under the new normal situation. Further, as per the respondents' view, emerging new teaching methods, tools and formats have a chance under the prevailing situation. In addition to those opportunities such as pursuit on course accreditation, validation etc. with professional entities, preparing study packs, materials, toolkits, redefining academic audit & appraisal, review on student feedbacks and making necessary pedagogical and other reforms as appropriate, new initiatives on internal staff development, and conducting online lectures, training and workshops are having good opportunities to exploit during the period. As per the presentation of table 2, A few respondents think that there are few opportunities to have industrial collaborations (SD 3), and difficult to conduct faculty boards, academic councils, senate and other committees online (SD 2.5). It was noted that responses were responses critical under the new normal context related to the opportunities: attending data protection means, attention on social corporate responsibility actions and other community programs, revisiting work-based training approaches and maintenance of equipment, tools & toolkits (Mean 1.0). Further, all the participants are with the idea of no opportunities to attending data protection means.

It was found that the impossibility to access research infrastructure has put a strain on non-COVID-19 related research. Many researchers are unable to collect data or carry out other activities which are crucial for their work. Also, this has often delayed projects that are dependent on external funding. The responses mostly were aligned closely so that there was a concordance in terms of opinion. The key difficulty, according to the academics, was the digital transformation that inevitably arises an onslaught of questions, leaving much room for digital inequality. Regardless of primary

operational functions' continuity, many academics faced similar challenges in relation to crisis management, including: (1) a massive increase in emails (2) an uneven impact on workload (i.e., key personnel were overloaded); (3) lack of information on academics' performance (4) adaptation to the new online formats, and (5) the stress of overlooking important information. Nevertheless, the pandemic also positively impacted crisis management, which, to an extent, offset some of the challenges. It is clear that (1) online tools and the ability to work functioned better than expected (2) meetings were shorter and more efficient; (3) people were more punctual and better prepared for meetings; (4) delegation was easier and decision-making was faster; (5) some academics had more time for undertaking research and, (6) almost everyone had a time to clear up backlogs.

While the preceding account is true for almost every university, one of the key areas respondents spent time on commenting upon is the speed of transition to online teaching which requires the sequential processes to be collapsed into one strategic maneuver. In this regard, the university IT arms has a pivotal role in stimulating the use of academic teaching, learning and assessment technologies at the university. With the strategy to recover the academic year, it was suggested that, the staff members can methodically review learning modules to check for online readiness using the markers as follows: (a) a structure students can easily follow, (b) a learning guide, (c) evidence of engagement in online activities, (d) presence of assignments and, (e) presence of online assessments.

6. CONCLUSION

All tertiary institutions started implementing measures to ensure continuity of studies while the social isolation mandate is being met. Various mechanisms were put in place to manage the quarantine curfew and lockdown from time to time. Work home plans at department level was designed and implemented to ensure that both the students and academic staff continue to engage in learning and teaching activities online, to the extent where possible. It had no avail to review the crisis in close scrutiny given the exceptionality of the circumstances involved. The overarching objective remained the completion of the semester lectures and subsequent examinations. Regardless of the chronic challenge of digital inequality, academics accept the fact that the universities could accomplish tasks and retain their legitimacy efficiently. This suggests that they respond to Covid 19 using adaptive management. However, this was based on the extent to which individual academics' activities and collegial ad-hoc coordination were coupled loosely. However, the situation at hand has shown that organizational fluidity is needed, especially during a crisis. Respondents are in total agreement that crisis management necessitate greater reliance on collegial decision-making by individual academics and other education authorities, as well as on their counterparts, ie students. Unless the students being the key stakeholders of the universities, take an equal burden, collegial approaches may even fail. From a knowledge management perspective, it is a question of balancing vertical and horizontal knowledge flows, as well as developing structures and practices that support the needed collaboration. Thus, it is important to determine the kind of adaptive practices that are needed to keep universities operational in times of crisis.

7. RESEARCH IMPLICATIONS

To effectively respond to the threat of the pandemic, universities need to reassess its strengths to gear for readiness towards online learning. Aside from the academic implications, this paper presents policy implications that can strengthen the health management systems in the university. This article can also serve as reference for future studies relative to the effects of COVID-19 to the performance of the educational system, as a whole. On the other hand, there remains numerous gaps in the scientific community as to the impact of COVID-19 to higher education. Future studies should evaluate the impact of the COVID-19 pandemic to the educational system and gather scientific evidences on how the educational institutions can effectively respond to another future virus outbreak. In this context, this research contributes to a future research agenda on how to develop an equitable teaching and learning strategy in order to adapt to a post Covid world, providing a better and more just future for students.

8. RESEARCH LIMITATIONS

The outcome of this research is merely on the academic's perspective and no students involved. On the other hand, evidence of the impact on the operational capacity of the Sri Lankan universities was only partly observable,

as it is not yet fully known. Most institutions are managing to survive by practicing social distancing, but based on the responses from academics, it was evident that management was not fully aware of how its staff members were performing. It is too early to review the pandemic impact at universities in full scale until the effects have been fully ceased. The gravity of the current disruptions is accidental and the structural, systemic and long-term seismic shifts are yet to be gauged. However, it is possible to map the actions taken and determine how universities coped and how they felt about it. In a nutshell, education is a public good, and equality and social justice must drive educational reforms. Differential redistribution must define equity approaches to address the seemingly intractable divides in the Sri Lankan society.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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