

## **RISK MANAGEMENT OF COVID-19 IN TERTIARY INSTITUTIONS OF LEARNING**

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### **ABSTRACT**

The outbreak of covid-19 in China and the speed at which it is spreading across the globe from 2019 to 2020 has had a devastating consequence in tertiary institutions of learning. Majority of the tertiary institutions of learning have made so much contribution to the emerging risk management in the area of infection of students and staff, health workers and medical rescue teams, and the total shift of learning from usual classroom through physical and face-to-face lectures to virtual or online lectures in addressing the challenge broad by the pandemic covid-19. The paper is aimed at assessing the risk management of covid-19 in tertiary institutions of learning, and how they should respond to the emerging risk, challenges and prospects in future. The study also, seek to assess the risk and challenges of covid-19, reassessing tertiary institutions of learning risk landscape, managing the risk, effective use of technology, impact of covid-19, responses and future preparation. The ability of tertiary institutions of learning and the government to manage the risks of Covid-19 now and in future is useful for various parties including students, parents, lecturers, support staffs, management team, investors, governments and other stakeholders. The study recommends that higher institutions of learning should embrace both the virtual and classroom learning now in the future in case of any pandemic.

**Keywords:** Covid-19, Risk management, Tertiary Institutions of learning, Virtual learning, Classroom learning

## 1. INTRODUCTION

Tertiary institutions of learning are facing significant challenges due to coronavirus just like any other sector in the world. Kelly (2020) assert that in the educational sector, almost all the universities and colleges in the world had weakness academic disruption. Statistic have shown that over 1.5 billion students and youths all over the world are affected by closure of schools and universities as a result of covid-19 outbreak (International Association of Universities, 2020). The closure of universities and colleges all over the globe was made in the middle of March, and students were sent home. But as for some universities in the developed world with well-developed information technology in their campuses, learning or lectures were shifted online. This virtual learning is expected to continue to the end of the semester or even beyond. For other universities and colleges without or with inadequate information technology tools, and cannot commence virtual and online teaching model immediately will be expected to remain closed until 2021 (Kelly, 2020), when they have acquired all the necessary information technological tools and are ready, or rather device some other means with safety measures, or wait until the covid-19 is put under control.

The pandemic coronavirus was responsible for causing the immediate change in the mode of operations in tertiary institutions of learning. This sudden change in the mode of operation has increases or changes the risk profile of the institutions upside down and forced them to change the method of learning from campuses based to distance learning, and to task the risk assurance teams to look at new risks and ways to remedy them (Lim, 2020). Thus, Kelly, (2020) stated that a lot of universities and colleges could likely face strategic risk emerging due to covid-19. For instance, for some old institutions established in 90s or 20<sup>th</sup> centuries that depend on classroom teaching on campuses, may find it difficult to adopt to online teaching. But as for those institutions that came up, or will come up newly in this 21<sup>st</sup> century who are assessing the risk of switch to virtual learning due to the coming of Covid-19, may not have difficulty, if they have acquired all the necessary technological tools. The Question is will classroom teaching on campus going to be necessary during or after the coronavirus pandemic? Or will there be mixture of the both virtual learning and classroom now and the future?

Ironically, the first thing that come to mind immediately Covid-19 stated to spread faster across the globe was, "how can the tertiary institutions of learning help" since they are not medical doctors and nurses, as such they aren't going to assist on the front lines. Be as it may, the tertiary institutions of learning have a unique way to assist in responding and managing the emerging risk from crises. Therefore, university most have to learn and adjust faster to the present unexpected challenges and risk. The ability of these tertiary institutions of learning to manage the risks of Covid-19 is useful for various parties including students, parents, lecturers, support staffs, management team of the higher institution of learning, investors and governments.

The aim of this paper is to reflect on risk management of covid-19 in tertiary institutions of learning and its preparation for the future. The study considered and discuss issues like, risks and challenges of covid-19 in tertiary institutions of learning, re-examining risk landscape in tertiary institutions of learning, risk management, effective use of technology to manage risk, effect of covid-19 and preparation for post covid-19 in tertiary institutions of learning.

## 2. LITERATURE REVIEW

The literature review for this paper is centered on the following:

### 2.1 RISKS AND CHALLENGES OF COVID-19

Every crisis comes with challenges and risk as such, covid-19 is not an exception. The challenges and risk faced by tertiary institutions of learning in the face of covid-19 as opined by Winthrop (2020) are:

**Distance learning will reinforce teaching and learning that everyone knows they do not work well:** Almost all tertiary institutions of learning in many countries of the world are shifting from classroom to distance learning approaches through the use of technology (virtual learning or online) or

physical packaging of materials to students. There is risks attached to the new approaches to learning and can be very solitary and didactic, when you are telling the students to stay at home and watch videos, click through presentations, or read documents. Sanz, Sainz and Capilla (2020) opined that the most difficult and worst form of learning is to stay at home alone and listen, most especially to those who are left behind and finds it difficult to understand. These may be the nature and kind of lectures the students will received when institution of learning are closed. Exams will be written online and lazy and unserious students may likely not be the ones to write the exams, since lecturers cannot monitor the process. Thus, the schools cannot be sure whether the student who enrolled is the one taking the lectures and writing the exams.

**Educators will be overwhelmed and unsupported to do their job well:** The pandemic caught everyone unaware, the staff had no prior knowledge of their school closure and transferring lectures from physical contact to virtual or online learning (UNESCO, 2020). According to Winthrop (2020), the sudden change was challenging for all the staff, most especially as concern the sorting of materials, filtering through all the resources to find those that are of standard, and can fit into the new approaches. Just like any other persons, lecturers are also feeling the new world order as fathers, aunties, mothers, uncles, trying all possible best to also manage themselves, take care of their families and search for new method to use in ensuring that learning is not stop.

**Protection and safety of students:** The protection and safety of children may be difficult to safeguard. Tertiary institutions of learning already have some measures taken for the security of their students against predators, such as pedophiles to enable them have access to their students. Thus, once any higher institutions of learning or university switch to virtual learning where students can take lectures at home, it is difficult for the school to safeguard them against predators. So people have to be careful and mindful about the design of virtual or online learning they are using so that bad people do not corrupt their wards.

**Closure of school will widen the equity gaps:** For sometimes now there had been great improvement in the number of students having access to digital devices and internet connectivity, which has facilitated the quick movement to virtual learning possible. But the issue is that not every student has access to electronic devices and connectivity to internet at home. These categories of students are required to have access to learning materials too. Thus, the institutions of learning are required to make learning resources available and accessible on different means possible where every student can have access in the possible way it will reach them.

**It is difficult to get buy-in later for goods use of ed-tech students:** Students who uses ed-tech during covid-19 will have a poor experience because it is a new and improve approach to learning. Additionally, with the isolation due to the pandemic, students will also be unhappy and mentally affected health wise in trying to adopt to the new normal. Initially, student test score will be terribly impacted when they tried the ed-tech. Therefore, looking at these risk and challenges it is important for tertiary educations to identify and know what works and what does not works.

## 2.2. RE-EXAMINING THE TERTIARY INSTITUTION OF LEARNING RISK LANDSCAPE

The main aim of tertiary institutions of learning remain the same despite the effect of covid-19: Preserving academic integrity, servicing students, achieving financial and budgetary goals and complying with state and federal regulations. The only thing that has changed for the tertiary institutions of learning is the mode of operation from the usual instruction in the classroom to a large scale distance learning. Thus, the way and manner tertiary institutions risks assessment should be carried out looks radically different (International Association of Universities, 2020; Lim, 2020). Most especially in the following aspects:

**Security:** Staff and students make use of their time on online communication. This increases privacy risk in terms of transmitting confidential intellectual property around the internet, and protecting personally identified information. The ICT infrastructure of tertiary institutions are prompt to potential

risks of cybersecurity vulnerabilities and attacks as off-campus and VPNs become the order of the day. Up recent, students have been target by covid-19 cybersecurity scams, with hackers sending fake email messages from campus administration accounts.

**Liquidity:** Staying in campus assist students to save money in some ways, such as lower utility bills, no much spending on sporting events. Thus, time tested budget projection has become obsolete, invariably, the quest and need for fiscal responsibilities is increasing and growing bigger for the tertiary institution of learning in the face of reduce school fees they may face..

**Academic integrity:**How can the institutions be sure that student enrolled or admitted is the actual person who do assignments and write test online? And the type of test and assignments have to be critical and be put into consideration.

**Student life:** In the traditional campus settings, bullying, mental health and sexual harassment has some regulatory compliance and litigation risks for any school that refused to consider them seriously. Such problems exist even in the online world, thus, representative bodies and institutions must have to look for new ways to resolve those issues or problems.This shows that immediately an institution implement new procedures and strategies for risk management in response to coronavirus, the institution risk profile would have been change automatically.

### 2.3 MANAGING THE RISK OF COVID-19

Risk management is the designing, selecting and implementing strategies to reduce the adverse effects related to risk (Colins, Florin &Burkler, 2020). Tertiary institutions of learning encapsulates almost all the risk problems coronavirus can offer. Thus, Collins, Florin and Burkler (2020) assert that the management of tertiary institutions of learning decision taking after careful assessment are instrumental in arriving at the extent of harm the risk will cause. Kelly (2020) identified some few basic procedure for the audit teams to cope in the trouble period. These are:

**Risk assessment triangle:** Coronavirus has changed institutional risk profiles to the extent that professional in risk management can hardly maintain the paste of change. This call for the tertiary institutions of learning to spin out or find another way risk is to be handle daily (Djalante, Shaw &Dewit, 2020). Therefore, audit teams in the tertiary institutions of learning needs to prioritize as a matter of urgency which categories of risk will require re-examination at the moment and which ones can be shifted further and which ones can wait.

**Remember your enemy and understand your allies:** As tertiary institutions of learning came out with new control procedures and policies, lecturers and other staff in the institutions are definitely going to grumble. Some will feel these new steps that are coming up are unnecessary and intrusive in nature because they may not see or consider the risk the management of the institutions are worried about even though it is due to unforeseen circumstances like the pandemic covid-19.The audit team must put at the back of their mind that coronavirus is the enemy of tertiary institutions of learning. Therefore business of the institutions is an allies that must have to function, and cannot be alienated. To come up and successfully implement the remediation plans and compensating controls without encountering much resistance, audit teams need deft interpersonal skills, collaboration, communication skill, and appreciation to enable the institutions of learning to achieve their goals.

**Monitor and repeat:** In real terms, whenever tertiary institutions of learning implements new strategies for managing risk, and strategies and processes in response to pandemic, the tertiary institutions of learning risk profile may have definitely changed automatically. For instance, government may have change closure dates for tertiary institutions of learning, or rather approved emergency funds to tackle unforeseen risks and emergencies. Note that the situations of coronavirus risk and its management will change from time to time. So it is mandatory to monitor the level or extend of the state of risks, analyze the data, examine and reexamine every situation all over again and again.

### 2.4 EFFECTIVE USE OF TECHNOGY TO MANAGE RISK

Effective use of modern technology is required to manage the risk of Covid-19 in tertiary education system. These could be possible with the deployment and use of information technology which enable people to work remotely, and students receives lectures at different location and at the same time performing their work as a team is very important and necessary in this period of pandemic Covid-19 (Wang, et al. 2020). Thus, all the normal issues about technology capabilities are relevant and applicable in this era of coronavirus as stated by Kelly (2020) and Wang et al. (2020). These are:

**Use of a single, trusted source of data:** This is essential, most especially, given the vast number of lecturers and students who will be having lectures from home or different location from each other. Thus, the need for a single, trusted source of data in one platform is safer, due to the risk of version control issue or data inaccuracy and completeness which may be high.

**Collaboration and communication equipment:** Coronavirus have separated and keeps lecturers and students apart from each other, across time zone, out of normal classroom lectures, office usual, without an easy avenue to have lectures and work together spontaneously as it was before. Therefore, collaboration, functional and friendly communication gargets are required to change and recovered from the loss of face-to-face interpersonal relationship experienced during lectures in campus and at work in tertiary institutions of learning before coronavirus.

**Procedure to monitor remediation work and flag steps to achieve it:** This is the tendency that many more risk of tasks will arise when lecturers, supporting staff and students have lectures or worked remotely. It is essential for institutions to device means and ways to track tasks assign to lecturers and supporting staff together with automated notifications and workflows remediation effectively and functional. At the same time, lecturers should also device means to track task given to the students

**Strong documentation and testing mechanism:** With the coming of many new risks as a result of Covid-19, improvised process and procedures for emergency controls, testing and documenting all those things will become very important and essential in tertiary institution of learning. Since lectures and students must literally stay away from each other, coronavirus have task our ability to work together to prevent infection or contact with the disease. There are some new risks challenges that coronavirus came with, which could be prior new risk or totally new that shows in a new dimension, of which, tertiary institutions of learning just like any other sectors are experiencing similar challenges. In this new world order, audit teams, must have to push their capabilities and talents a little bit further, to almost every aspect of the institutions, from assessment of risk , to remediation plans, to testing and documentation, collaboration, ingenuity and much of perseverance must have to be put in place. Above all, better use and application of modern technological equipment will be the driving force for success in the new era.

## 2.5 EFFECT OF COVID-19 ON TERTIARY INSTITUTIONS OF LEARNING

The estimated and real effects of covid-19 on tertiary institutions of learning most especially as concerns different actors or stakeholders according to UNESCO (2020) and Sanz, Sainz and Capilla (2020), are as follows:

**Students:** The closure of institutions due to covid-19 means temporary stoppage of classroom lectures and all other activity most especially for the undergraduates in some countries without a clear view and idea of how long the stoppage will last, the effect on their day to day life, cost to incurred and other financial burdens as well as on the continuation of their studies in particular. The students will feel the effect on how to personally adjust to daily life, financial cost and burdens, as a result of replacement of face-to-face classes to online lectures and international mobility.

**Faculty:** Although, the effect is mostly focus on students, the study cannot deny the fact that lecturers and other supporting staff also suffers significantly the effect in their work and professionally. For instance, not every tertiary institutions of learning have in place a continuing strategies for learning activity to be perform with the advent of covid-19. Thus, part-time, temporary, contract and visiting lecturers may be terminated. In some countries, full-time lecturing in universities is not common and

majority of the lecturer operate on part-time basis. The stoppage of face-to-face lecturing serves as a threat to the staff on contract and temporary appointments.

Alternatively, the management and the contract staff can negotiate for temporary suspension, but if the situation persist and continue, the suspension could be long. And if the use of virtual technology is put in place, the return to face-to-face or classroom lectures could be risk and difficult. Another effect is that lecturers will continue to lecture using virtual equipment for some universities that have the equipment, because virtual learning has been going on hand in hand with the classroom lecturing in Europe, some part of Asia and America. But in majority of the African and Latin American universities, virtual learning is none existence. Thus, use of virtual learning are sources of greater uncertainty, which will result in a set of different effects on the system of their universities. This is because most of the universities do not have internet service and some basic connectivity and the technology to guarantee continuation of learning in this pandemic.

Majority of the students in the rural areas in most African countries like Nigeria, Niger, Chad and Latin America and the Caribbean like; Argentina, Colombia, Peru, Bolivia are face with worse connectivity conditions than in their homes in the cities close to the campus where they study (UNESCO, 2020). In countries where the institutions do not have virtual learning technology, it will take a longer time and cost for such institutions to return and start learning if the problem persist. This means most of the staff who are not information technology compliance may need to be train. Thus, the demand for quick transformation of tertiary institutions of learning needs the incorporation of technology to be able to survive in this period of covid-19 and in the future.

**Non-Academic staff:** The non-academic staff in administration and other support services may be at risk most especially when their tasks are no longer considered critical to the continuity of learning. For instance, employees who works in the canteens, dining rooms, cleaning services are not part of the critical category unlike workers connected to computer and technical support services. However, what will detect the tone in terms of employment and social protection are the measures instituted by government in most cases. The non-academic staff are the most vulnerable in tertiary institutions of learning when it comes to possible jobs cut. Most especially in the face of obvious decrease in students' enrollment and cancellation and reduction of fees. The tertiary institution of learning will face possibly financial stringency or shortage as well as inability to pay non-academic staff. Hence, cut in staff salaries and entitlements will be the order of the day and possible termination of employment of redundant staff.

**Tertiary institutions of learning:** It is now evident that there is temporary stoppage of classroom lectures in tertiary institutions of learning across the globe. This has disrupted their proper functioning. The effects of the disruption depends largely on their ability to sustain themselves financially and remain active and functional in their academic activities rather than a change in training or teaching modalities. To continue teaching courses in virtual way as notice in some institutions across the globe as a result of transfer from classroom to virtual education system has not been so easy. Most especially, for those institutions that do not have enough technological equipment for virtual education system.

For the institutions that have enough technology and technical infrastructures for virtual courses, it will take them sometime to provide the technical and technological requirement to support all courses in the institution for all the students. In addition, most public and private institutions depends on school fees paid by the students to operate, particularly, the private institutions. For instance, tertiary institutions of learning in Chile, Colombia and most public schools in Mexico that depends solely on school fees from the students will find it difficult to operate. As there may not be enough cash flows as a result of financial difficulty. Financial survival in the case of private universities and some self-financing public universities who has been closed for more than a quarter will worsen. If the problem persist, most especially when they cannot guarantee continuing training in virtual mode, they would have to suspend collection of fees and possibly close their universities.

**The system:** Tertiary institutions of learning all over the world have reacted and acted in the same way with the advent of covid-19. They have continued their academic activities using virtual learning modalities that do not need class room or face-to-face lectures (Wang, et al., 2020; Higher Education Bureau of Macau, 2020). But some tertiary institutions of learning in Africa, South America and some part of Asia have stopped, due to inadequacy or lack of virtual learning facilities. If the problem of covid-19 persist, the effect on the system will be many. The issues can only be address when tertiary institutions look at the demand and supply side and also consider the increase in challenges for governance of the institutions.

## 2.6 PREPARATION FOR POST-COVID-19

There are five things to do to prepare for post-covid-19 in tertiary institutions of learning. No one can deny the fact that covid-19 pandemic has fasten and dramatically changes all aspect of human life all over the world. In business sector, education, healthcare and politics. One thing is certain that this covid-19 will change the life and the way people behave in all facet of life for years or decades to come. Is your business or institutions prepared for the five biggest macro trends that is about to unfold (Egan, 2020).

**Rise in improved websites and digital tools:** These revolution in information technology using new digital tools are assisting tertiary institutions of learning to remain afloat during the covid-19 disease outbreak. This will be a micro trend that become more important most especially at the time social distances is becoming a common practice. This practice may possibly continue for other potential outbreaks in future. It is pertinent to note that, when coronaviruses started many tertiary institutions of learning and businesses that sales non-essential goods together with retail shops, hair salons, offices, warehouses and factories had their office and shops and schools closed. This is because they do not have the technological equipment to survive with the closure of their physical location. That means tertiary institutions of learning must have to be ready to make a leap into the digital world in other to reach out to their students or customers. Thus, for tertiary institutions of learning to survive and thrive, they most have to improve their websites and digital tools to serve their students better. For instance, tertiary institutions of learning that never used e-learning before most have to adopt it now, use advanced product configurations, chatbots and mobile applications which are currently in greater demand in this new decades' of technological revolution.

**Cybersecurity concern takes center stage:** With the surge in lecturers and students lecturing remotely through visual devices due to pandemic coronavirus, there are many more data breaches and cyberattacks. The effect of data breach and cyberattack are something tertiary institutions of learning are being or will be forced to tackle squarely. But as for some tertiary institutions of learning, cyber security is not a new thing, most especially with the Californian's Consumer Privacy Act, EU's General Data Protection Regulation and other privacy laws. The major causes of potential breach are lecturers and students using third party tools, unsecured infrastructures, together with data storage and access practice that violate privacy laws. For instance, there has been an upsurge or increase in oversea cyberattacks in this period of coronavirus, such as brute force attacks, denial service attacks and attempted hacks (Ega, 2020). Thus, Aljawarneh (2019) champion the need for keeping websites and web servers updated and secured as quickly as possible when using virtual learning. Therefore, tertiary institutions of learning are currently forced to invest heavily in information technology that will be accessible remotely, scalable and secured, due to the onslaught of new data security and privacy regulations.

**Virtual meetings:** There has been tremendous surge in virtual meetings in tertiary institutions of learning immediately after the discovery of coronavirus. This is expected to continue for now and years to come despite the fact that it cannot substitute face-to-face meetings and handshake totally. The virtual meeting may be applicable to many aspect of institutions life but not to the traditional institutions of learning (Yen et al. 2018). For instance, there will be virtual meeting with your project supervisors, lecturers, therapist, doctors, legal practitioners, bankers for consultation. And this will increase cost and saves time for parties or individuals involved. Although, the trend in virtual meeting is not new, it has

been in place even before the advent of coronavirus. The event will be amplified as we continue in this new decade. Tertiary institutions of learning most have to be prepared for this trend and go beyond having virtual meetings, space and software's, to include tutorials videos, digital business cards and brochures and improve websites information. These will be mandatory and necessary as tertiary institutions of learning find it difficult to have physical lectures and classes and delivered materials to 'students' hand to hand.

**Increase control in expenditures:** Covid-19 has brought sudden institutional and businesses closed all over the universe, as such, they have to keep searching for ways to have absolute control over their expenditure. The tertiary institutions of learning will be requesting or insisting on short term contract periods, emergency clauses and provisions in agreements using temporary staff or agencies, have easily scalable workforce in trying to reduce or cut down expenditure. Thus, presently, tertiary institutions of learning are showing interest in lowering expenditure, not because of covid-19 but as practice they will like to continue in future. Tertiary institutions of learning most have an answers to their students and stakeholders on how to save, reduce contracts terms or protect their institutions from catastrophes and disasters in future.

**Even more remote workers:** The four trends above are going to come with a shift or move to remote lectures and work by tertiary institutions. Tertiary institutions of learning that are forced to close their institutions offices and schools are realizing that they cannot work efficiently, effective and economically without remote lectures and work, as it is required now and in future. Increasing needs for remote lectures and work means increasing needs for the four points mentioned above. The trend has been in existence long ago, but the coming of covid-19 outbreak has amplified it in this new decades.

### 3. METHOD

For the purpose of this research, the paper is aimed at assessing the risk management of covid-19 in tertiary institutions of learning, and how they should respond to the emerging risk, challenges and prospects in future.. The researchers used the documentary research design in this study. Secondary data were collected or obtained from the journals, books, internet sources, and newspapers, magazines, United Nation reports and UNESCO reports that are needed for this research.

### 4. CONCLUSION

The study shows that classroom lectures through physical contact may no longer be relevant. The only thing that will be relevant in 2020 and beyond is only the trends for virtual learning. Thus, making decisions to position tertiary institutions of learning for these changes from face-to-face lectures to virtual devices will ensure that tertiary institutions of learning are in the forefront and set for the new remote and digital technological revolution. The paper is summarized as follows; introduction, the risks and challenges of covid-19 in tertiary institutions of learning, re-examining risk landscape in tertiary institutions of learning, risk management of covid-19, effective use of technology to manage risk, effect of covid-19 and preparation for post covid-19 in tertiary institutions of learning. The ability of these tertiary institutions of learning and the government as a whole to manage the risks of Covid-19 is useful for various parties including students, parents, lecturers, support staffs, management team of the higher institution of learning itself, investors and governments. The study recommends that higher institutions of learning should embrace both the virtual and Classroom learning now in the future in case of any pandemic.

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