

RESEARCH ARTICLE

SUSTAINABLE STRATEGIC MANAGEMENT FOR ONLINE PLATFORMS IN HIGHER EDUCATION: PRACTICES AND CHALLENGES

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ABSTRACT

Purpose: This study aimed to identify the practices and challenges in sustainable strategic management in higher education on online platforms. **Theoretical framework:** Higher education through online platforms has become one of the crucial challenges of the twenty-first century with digital transformation in a digital era and the Covid-19 pandemic. For better implementation of online platforms for online higher education, universities created Sustainable Strategic Management (SSM) practices and adopted strategic planning accordingly. **Design:** The qualitative research is designed per the research objectives and questions. Thematic analysis is used to analyse collected data through interviews. **Findings:** The study finds that SSM practices are blended with SDGs to offer the best higher education for students. Furthermore, strategic management of these platforms is challenging even though they are collaborative and assertive tools for higher education. Understanding the needs and expectations of the stakeholders and implementing strategies for the effective operation of the online platform is the need of the hour. **Research, Practical and Social implications:** After analysing practices and challenges, the researcher recommends strategies and compilation with sustainability concepts for effective SSMs for online platforms in higher education. **Originality/value:** This study highlights that to derive SSM, higher education institutes must blend SDGs with strategic planning. Further, it reiterates that all steps for quality higher education through online platforms will contribute to sustainable economic growth in the country.

KEYWORDS

Sustainable Strategic Management, Online Platforms, Higher Education, Sustainable Development Goals, Thematic analysis

1. INTRODUCTION

1.1 Background

Education is key to sustainable development in any country. However, there are several categories of the education system in Sri Lanka. Higher education, often known as university education, is most frequently found in universities or other institutions that give degrees. In addition, those educational institutions provide additional support to the economy to grow in many ways. There is no doubt that the higher education industry has a significant impact on the economy. Innovation gains commercial value via its interaction with business, and academic training and learning development offer people and organisations the capabilities they need to thrive in a knowledge-based economy. Though with Sustainable strategic management (SSM) practices, higher education through online platforms will be more practicable and effective in this decade. The SSM is a key in each successful deriving organisation (Shou et al., 2019). Analysis, formulation, and implementation of company plans that are economically viable, socially responsible, and in harmony with the cycles of nature are all part of SSM. Thus, SSM practices are applicable in higher education as well. In higher education, there should be a proper analysis of students and the nature of the study. Higher education institutes should formulate and implement several plans to achieve a successful, economically viable, socially responsible education system.

The COVID-19 pandemic has badly disrupted the Sri Lankan educational ecology. Students have been confined to their homes for the past year

because of lockdowns and travel restrictions. Due to COVID-19, the regular learning rhythm has been significantly disrupted, causing psychological problems for both children and parents. However, many institutions created innovations to cater to this issue and continued online education. Also, many higher education institutions implemented many SSM practices in online education. Yet there are many challenges faced by many higher education institutions (Noori, 2022).

Higher education institutions have been forced to innovate quickly, rethink, and pivot due to the COVID-19 pandemic. Before 2020, the higher education industry in the world started to concentrate intensely on developing sustainable institutions and implementing the Sustainable Development Goals (SDGs). The SDGs, sometimes called the Global Goals, were enacted by the United Nations (UN) in 2015 as a global call to action to eradicate poverty, safeguard the environment, and guarantee that by the year 2030, peace and prosperity will be achieved and experienced by everyone. There are a few main SDGs attached to higher education. These are quality education, decent work, economic growth, industry, innovation and infrastructure, responsible consumption, and production. Most higher education institutions failed to adopt online platforms for higher education, and the challenges can be discussed based on SDG blended with strategic management (SM) practices.

1.2 Problem Statement

The constant planning, monitoring, analysis, and assessment of all requirements that a company requires to accomplish its goals and

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objectives is known as strategic management (SM). Organisations will have to re-evaluate their success methods regularly because of changes in the business environment. The Developing duties and roles for lecturers and employees in the higher education sector in SM maximises efficiency and quality (Takacs, et al., 2022). Another element of competitive advantage is providing students with the most excellent education system possible. However, given the numerous difficulties highlighted in a real-world setting, the higher education sector cannot inspire the faculty and students. In addition, a control system is necessary. This control system provides management with information on staff performance in e-learning platforms and comments on personnel and institution motivational incentives. However, most institutes are not implementing such feedback forums. Therefore, there is a failure to identify existing issues and challenges regarding digital platforms in higher education.

Most higher education institutions adopted internet tools to offer lectures, particularly considering the Covid-19 pandemic. The majority of institutions in that time frame had problems with performance expectations (Coman et al., 2020). Social influence, effort expectations, and service quality are the aspects that significantly impact students' "intention to use" e-learning to further their education. Additionally, it was found that 53.4 per cent of students had used e-learning for the first time, and 65.6% of students had access to technology through mobile phones. This was mostly because of the limitations put in place during the Covid-19 pandemic. In these circumstances, the SM process assists businesses in taking stock of their current condition, developing strategies, implementing them, and evaluating the management techniques' success (Perera and Abeysekera, 2022). However, higher education adopted digital platforms. Nevertheless, there are several problems with the current procedures as well. Additionally, the SDGs should address e-learning to analyse the SSM. Therefore, issues concerning SDGs are examined to develop SSM in the future.

1.3 Research Objectives

This research mainly aims to identify the practices and challenges in sustainable strategic management in higher education on online platforms. However, the main objective is derived into sub-objectives as follows.

- I. To identify the concept of sustainable strategic management.
- II. To identify the significance of sustainable strategic management for online platforms in higher education.
- III. To investigate the current Sustainable strategic management practices for online platforms in the higher education system.
- IV. To explore the current Sustainable strategic management challenges for online platforms in the higher education system.

1.4 Research Questions

- I. What is sustainable strategic management?
- II. How is sustainable strategic management necessary in the higher education system on online platforms?
- III. What are the current Sustainable Strategic Management practices in the higher education system on online platforms?
- IV. What are the current Sustainable Strategic Management challenges in the higher education system in online platforms?

2. LITERATURE REVIEW

2.1 Definition of Sustainable Strategic Management

Management is the process of organising people's efforts to achieve goals and objectives through the effective and efficient use of resources. To achieve desired goals, management entails planning, organising, staffing, leading, and controlling (Kaehler and Grundei, 2019). The higher education system also needs proper management to achieve quality education. Because given the limited resources available to the higher education institute, strategy is crucial. To give a good starting point for higher education instruction in strategic management, should clarify the ideas of strategy, strategic planning, strategic thinking, and strategic management as well as the significance of SM (Athapaththu, 2016). Several SM practices can adopt in higher education. The right foundation is provided by strategic management and planning for creating any educational complex's road map to accomplishment in universities (Amolia and Aghashahi, 2016). Especially in online education. The human

resources of any educational complex, which ultimately enable online education, are generally the most significant strategic management determinant of success.

Thus, SM concepts that are practicing must be adhere to the sustainability as the global goals are inlying with sustainability goals. Therefore, the education systems also focus on sustainability (Donath et al., 2020). Higher education is ideally situated to take the lead in achieving sustainable development. However, given that universities and colleges are now perceived as contributing to the sustainability challenge, this catalyst potential needs to be grounded. This is a recurring theme in the literature: sustainability challenges the prevailing ideas, structures, and dominant practices in higher education. This situation is one that universities and colleges must deal with if they are to make a significant contribution to sustainability (Tilbury, 2011). Therefore, SM should link with sustainability concepts.

The SM planning must contain sustainability concerns at the university level. For example, the SM approach centred on university green marketing helped to advance sustainable growth in higher education institutes. The use of green marketing, which is defined as a set of all the techniques that involve a predominant mode and are aimed at reducing the negative impact or promoting a positive influence on the relationship between the institution and the environment, is one of the decisions that contribute to the consolidation process of a more sustainable university and the development of the green university (Fuchs, et al., 2020).

There is significance of SSM for online platforms in higher education. SM higher education also includes strategic planning, strategic thinking, and management. However, it should be sustainable, as discussed above. Online higher education can be more successful than following SM by inlying with the triple bottom line, which means SDGs. Thus, digital platforms are evolving as the world steps into a digital era. Also, the education system transformed into digital platforms. In such a context application of SSM is significant.

Building on the emerging "mainstream" literature on "generic" digital platforms describes how a variety of multinational digital platform companies have emerged that address sustainability issues and highlight their potential for quickening multi-sector transitions across geographies based on academic training (Kolk and Ciullib, 2020). The article discusses contentious platforms and focuses on global digital platforms with a sustainability-oriented approach that directly addresses social and environmental challenges by fostering new connections between people and organisations. It can influence sustainability transitions in one's home and host nation and recognise cross-border links and replication. Also, distance learning has become more significant in this digital era due to Covid-19 and technological advancements. Quality and equal education for all students is impossible without proper SM planning. However, SSM universities should implement sustainability as a concept.

2.2 Sustainable Development Goals for Online Platforms in Higher Education

The sustainable development goals (SDGs), which the United Nations unveiled in 2015, were created to ensure that all academics and students could gain the knowledge and skills necessary to advance sustainable development. When it comes to educating students about sustainability and sustainable development, higher education plays a crucial role. Universities can have a significant impact on a nation's ability to advance socially and economically, as well as safeguard the environment and deal with the complex problems that beset society. Universities play a crucial role in society as active members, not just as a place for exchanging knowledge (Stukalo and Lytvyn, 2021). Therefore, higher education institutes should accommodate the sustainability strategies in the education sector.

2.3 SDGs in Online Education.

One of the most disparate domains and fields of knowledge is said to be involved in the complex and interdisciplinary field of sustainability. A sustainable development that identifies the necessary adjustments and advancements for communities, industry and the different stakeholders involved is required due to the countless socio-environmental concerns that exist today.

In response, UNESCO is launching several measures, including the global monitoring of national and localised school closures, to promote global cooperation and guarantee that education never stops.

To safeguard children's welfare and guarantee their access to ongoing education, UNESCO established the COVID-19 Global Education Coalition

in March 2020. This multi-sector partnership brings together the UN family, civil society organisations, media, and IT partners to develop and implement creative solutions. During this moment of abrupt and unprecedented educational disruption, they work together to assist nations in addressing content and connectivity gaps and facilitating inclusive learning opportunities for children and youth (UNESCO, 2020). However, rarely deliberated sustainable consumption behaviour, decent work, innovation in the education industry (Pu and Jiang, 2021). But those SDGs are also closely interconnected with online education in universities and are practising these practices at an average level.

2.4 The Current Sustainable Strategic Management Practices for Online Platforms in Higher Education

This recent topic was highlighted by many scholars based on many interdisciplinary practices in online education in universities. The digital transformation and Covid-19 pandemic resulted in the development of online education, and many universities adopted SSM in their planning process. In 2020 with the Covid-19 pandemic, most of the universities started to move on their education process via online platforms (YingYau et al., 2022). In that, universities tried to offer the best online platforms with high-quality infrastructures for students in the learning process.

Many scholars pointed out SSM practices for online platforms in higher education. When planning the education system online, universities planned to shift into online teaching mode and implement specific infrastructures to offer quality education. By integrating cutting-edge information technology tools and software into the online environment, such as wiki and Ask Online (a user-friendly online tutoring environment), faculty are given the ability to create compelling presentations using voice animations. This increases interaction and communication between faculty and students as well as between students. Many online students consequently form deep bonds, which might lead to improved career networking prospects in the future. Most examinations tend to be conducted online, and to standardise the examinations, universities implement many software and check for plagiarism (Alam and Asimiran, 2021). In addition, the practical session became more competitive, and the flipped classrooms and shared screens helped to enhance the success of education (Yasmin, 2022). In addition, universities and government-initiated programs on behalf of students offer internet packages in collaboration with internet providers. Teachers are essential, regardless of the available technology or learning method. Pre-service and ongoing teacher training that is regular and efficient is essential. Support for the creation of pedagogical and digital tools to facilitate effective instruction both in-person and remotely (Gutentag et al., 2022). However, there are several challenges attached to online education platforms.

2.5 The current Sustainable Strategic Management Challenges in the Higher Education System

The SSM practices in online education should be socially, economically, and environmentally responsible. Since the study aims to analyse the SSM for online platforms in higher education, some SDGs also plug into the discussion. Because most educational institution seeks to achieve SDGs as a challenge. In addition, as per the literature, many challenges are highlighted in online higher education.

As the UN creates 17 goals, quality education is also included in creating a sustainable world. Presently, online education has become a trending area in higher education. However, the quality of education must be preserved with the SM plantings, as universities are also considered important in deriving sustainable development at the national and international levels (Wooldridge et al., 2019). In quality education, the UN designed a few targets that can be incorporated into online higher education. Some students do not have devices to access lecture materials and e-books, which amounts to inadequate learning outcomes. According to the data, most responders (70 per cent) are prepared to choose online classes to handle the curriculum during this epidemic (T.Muthuprasad et al., 2021). Poor technical skills of lecturers and students significantly lead to failure to derive quality education. Also, the teacher training can be related to targets highlighted by the UN in deriving quality education. However, teacher training has also become a challenge with the global crisis. Especially disregarding social inequalities and economic disparities, higher education should offer to all university students online (Siuk et al., 2018).

There must be decent work for all and economic growth in the country. Online education should support deriving economic growth. Nevertheless, there are many challenges attached to SSM in online education. Especially the management and the staff should be more responsible for strategic planning and overcoming those challenges. One of the issues is having

adequate technical knowledge and competence. The studies also showed that the COVID-19 pandemic significantly affected the standard of education and pupils' mental health. The most common student techniques included resource management and utilisation, help-seeking, improving technical aptitude, time management, and learning environment control. Discussion is had regarding the implications for future research, policy, and instructional practice (Barrot et al., 2021).

The online education model can enhance traditional education rather than replace it by giving students and teachers a more complex learning environment. In addition, a blended educational model that combines the greatest online and offline learning strategies can provide stakeholders with the best possible experience. Therefore, the need for industry, innovation, and infrastructure is essential. To offer sustainable and resilient infrastructure, universities must implement technical support and support for developing domestic technology. However, most challenges are never lasting with globalisation and digital transformations.

3. DATA AND METHODOLOGY

To investigate the research questions and objectives derived in this study, the researchers explore practices and challenges in SSM for online platforms in higher education. Based on that, researchers reviewed current practices in higher education institutions and how sustainability concepts can be used to overcome challenges faced in online platforms in education in a comprehensive way. In addition, narratives are referred to in the discussion to explain the practices and challenges more. The appropriate analytical tool is underlined in this chapter to derive whether there are practices and challenges related to SSM for online platforms in higher education.

This chapter can be conveyed in three sections. Those are data sources, research approaches, and analytical tools. The data section will explain the accumulation of data while elaborating on the research design and the method used to gather data. Then the research approach used throughout this research will be elaborated in the second part. The last section confers the assessing tools and techniques of collected data. That will be the base of the in-depth analysis of this study. Moreover, the analytical model refers to estimating and interpreting the findings and to reach proposed objectives.

3.1 Data

The collected data may deviate based on various features. Descriptive statistics can summarise and describe the collected data in a systematic order. The data relating to SSM for online platforms in higher education were gathered through interviews conducted with the lecturers and management in the higher education institutes. In addition, a few visits to certain education institutes are also one way of gathering necessary data to evaluate SSM for online platforms in higher education. In addition, there are no ethical issues where there are no hindrances, and they are not shared with others and are only used for research purposes. The validity of the data can be assured since the data was gathered through lecturers and management of the education institute, and practical applicability was measured through visits to a specific institution.

In addition to the data collection process, the following types of information were gathered: (1) observation and research journals and (2) semi-structured interviews. TA is in line with these data-gathering strategies that aim to provide experiences, meanings, and occurrences via oral interviews and textual data (journal entries) produced by persons going through them. To view and evaluate the printed data, researchers utilised conventional tools, including pens, highlighters, and post-it notes, even though the data were electronically preserved in the Excel document (Maher et al., 2018).

3.2 Research Approach

Exploratory research is carried out in the circumstances like this, where there is little knowledge about the phenomenon. The study aims to produce fresh ideas that can clarify a subject and guide future research design. This study analyses SSM for online platforms in higher education and investigates practices and challenges. A qualitative study was the most suitable method for addressing the initial research issues. In-depth subject exploration is made possible by the flexibility of qualitative methods like document analysis, observation, and interviewing. These techniques are well-adapted to address the open-ended questions that define exploratory research (Desley, 2010). However, this study is based on qualitative research. Through the thematic analysis (TA), the researcher aimed to

identify the challenges and practices as the main objective of this study.

3.3 Analytical Tool

This study concludes that TA is a thorough procedure that enables researchers to establish a wide range of connections between the data and the developing topics of the study (Ibrahim, 2012). The most suitable method for any study that aims to find employ interpretations is thought to be thematic analysis. It adds a systematic component to data analysis. It enables the researcher to link a frequency analysis of a topic to a content study of the entire text. This will add precision and complexity and strengthen the overall significance of the research. Qualitative research necessitates comprehending and gathering many elements and facts. Also, the TA referred to investigating current practices and challenges in online higher education platforms based on sustainability concepts. TA provides the ability to see the possibilities of any topic more broadly.

4. RESULTS AND DISCUSSION

4.1 Sustainable Strategic Management in Higher Education: Practices

Certain practices were identified according to collected data and literature searched. After analysing those data, the scholar categorised the data set into themes and codes. The themes and codes are mentioned in Table 1, and the common narratives are derived to explain the reliability of the research. Thus, there are common practices identified. The overall study was derived from four leading practices. The codes are gathered through the interviewed data.

The transformation of traditional learning and teaching methods can be radically experienced post-Covid-19 pandemic. Though higher education institutes somehow attended to manage to continue the higher education system by implementing online platforms. Four themes are designed to analyse the current practices of e-learning in higher education.

Firstly, the teaching modes in online platforms are different from traditional teaching modes. However, as per the interviews, the digitalisation of teaching modes is presented. As quoted from the interviewees' comments, *We can conduct all these lectures and practical sessions in online mode*, common narratives exemplify the change in teaching mode. The physical teaching mode changed into live online classes and many online teaching equipment. Most of the online platforms consist of online whiteboards and flipped classrooms. Through that, lecturers can conduct successful teachings. In addition, pre-recorded video lectures have become more popular in e-learning. Examples of

narratives *lecture content should be automatically recorded and uploaded to the repository*, show the evolution of teaching modes in online platforms in higher education (Lapitan Jr et al., 2021).

Secondly, the evolution criteria should consider offering the best online study environment in higher education. Several evaluation methods are followed by higher education institutes while conducting online lectures. The common narratives: *We are organising quizzes and examinations and Some lecturers practice doing quizzes*, exemplify that after practical teaching modes, higher education institutes tend to evaluate the practices through online exams and quizzes. Students' diligence in finishing and turning in their projects has increased because of this approach, and they have positively complimented their online quiz learning experience (Galizzi, 2010). Assignments are vital in deriving the success factor of online platforms in higher education. A common narrative, *Lecturers are taking assignments as softcopies*, describes the current practice in higher education. In addition, open discussions in the class are referred to as one of the evaluation modes where lecturers and students have an open discussion concerning shared study materials. However, these evaluation methods are essential to measuring the current practices of higher education when engaging in online education.

Thirdly, the available infrastructures are essential in online education. The universities create strategic plans to accommodate online education. In such a situation, electronic devices, communication applications, and internet accessibility, the interviewee has stated, *We are using Zoom as well as other video conferencing applications and software for conducting the lectures online*. In addition, LMS and VLE systems are designed to bring the best possible learning outcomes through online education. That means universities somehow planned to create valuable online learning facilities for students. In addition to the evaluation criteria mentioned above, the evaluation can be continued by investigating student engagement. Through research and presentations, lecturers can make students actively participate in online education.

However, these e-learning practices cannot be successfully implemented without SM planning (Akyel et al., 2012). Throughout the interviews, the common narratives quoted, *We have participated because Our top Administrative People purely do strategic planning and Eventually, the strategic management plan would work by making the research findings interconnected with their implementations as the university functions as an affix body*. That means these practices are solely based on SM to achieve successful e-learning platforms in higher education. Though there are practices in such a way, those practices must be sustainable and adhere to the current realities.

Table 1: Themes and Codes for Practices

T	C	Common Narratives and Literature
Teaching modes	Live Online Classes Presentations Online whiteboard Flipped classroom	We can conduct all these lectures and practical sessions online mode
	Pre-Recorded Video Lectures	Lecture content should be automatically recorded and uploaded to the repository
Evaluation criteria's	Online examinations	We are organising quizzes and examinations
	Assignments	Lecturers are taking assignments as softcopies.
	Online questionnaires and viva sessions	Some lecturers practice doing quizzes
	Open discussions in the class	Discuss these issues; the university has academic wardens, senior student counsellors, and proctors.
Available infrastructures	Electronic devices, Communication applications, and Internet accessibility	We are using Zoom as well as other video conferencing applications and software for conducting the lectures online
	Learning Management System (LMS)	Students must be instructed to create their accounts in LMS.
	Virtual learning environment	VLE, Moodle, and everything was there in the university systems
Student engagement	Research	But in the research paper, we are checking plagiarism as a mandatory
	Online presentations	Next, some changes have been brought to assignments, term tests, and presentations.

Notes: T means themes, and C means codes, Authors' compilation based on collected data

4.2 Sustainable Strategic Management in Higher Education: Challenges

As per the interviews conducted by the scholars, specific challenges are identified in online education in universities. Thus, those challenges are analysed based on the SDGs related to higher education. Because every SDG is not complying with online education in universities. Four main SDGs are referred to as themes, and codes are designed based on interviews conducted with lecturers and management in higher education institutes.

The UN designs targets to derive quality education in universities. Those targets are incorporated into the analysis based on the challenges stated in the interview. A common narrative: *"The good effect was seen in the learning management system. But not every student had access to it, especially in XYZ, DEF and QRS Universities of Sri Lanka"*. Though there is a practice of LMS, as discussed in Table 1, there is no equal access to technical and higher education. In such circumstances, doubted how it became SSM practice in higher education. It is crucial to remove obstacles to technology adoption and skill development in higher education and give children and people the chance to study throughout their lives. Under

current international accords, tertiary education should gradually become free.

In addition, when accessing quality education, universities face the challenge of the inadequacy of learning outcomes. Especially in information technology lessons, most practical sessions should add. However, the online education system has become more complex. The common narrative. *We are going through how to conduct all these practical sessions; the only challenge is there*, exemplifies the challenge. The staff must be aware of the technology to handle students on online platforms and deliver quality education in online education.

Nevertheless, most university lecturers comment on the poor technical skills of staff. Especially, lecturers who are lecturing outside the IT departments struggle to accommodate technology to deliver lectures in a quality way. The common narrative is *One lecturer can tell that he did not know how to set up the online exam paper through VLE*, an example that explains the challenges in online education. For that, adequate training must be organised by the management. However, there is no adequate training for staff due to many issues. It is essential to consider delivering quality higher education by the universities, whether online or in physical mode. Because quality education pursues a quality life for all (Anon., n.d.)

Table 2: Themes and Codes for Challenges

T	C	Common Narratives
Goal 4. Quality education	Equal access to technical and higher education	The sound effect was seen in the learning management system. However, not every student had access to it, especially at XYZ, DEF, and QRS Universities of Sri Lanka.
	Inadequacy of learning outcomes	We are going through how to conduct all these practical sessions; the only challenge is there.
	Poor technical skills	One lecturer could tell he did not know how to set up the online exam paper through VLE.
	Lack of teacher training	Other lecturers sometimes struggle in conducting, setting up all these technical pieces of stuff, and doing lectures
Goal 8. Decent work and economic growth	Lack of development-oriented policies in authorities	The major problem is based on the change in government policies. It will affect the entire or even the parts of the university's strategic plan.
	Inefficiency in consumption	And another thing is that Learn is provided for free for university students for zoom but in peak hours, the changes to US servers so that there is some cost applied
	No productive employment	However, non-academics have come through the politician's decision. So, we are unable to do anything as they are political appointments.
	Financial support for students	And sometimes, when zoom is not very convenient or busy, then lecturers use some other methods and it is charging data charges to the students
Goal 9. Industry, innovation, and infrastructure	Lack of sustainable and resilient infrastructure	Some students do not even have laptops, and we cannot request them to do these practical
	Inadequacy of technical support	As far as I know, that is an issue for the effective function. Otherwise, as technical staff, for instance: that technical manager who was assigned externally and not a permanent employee for the university.
	Inability to afford access to the internet	Even if we record a video, upload it, and ask them to study, there is no free charge
	Lack of innovations	Another thing is that outsiders will also enter the lectures. Because the students may pass this link, some outsiders will come and laugh and shout throughout the lecture time. That type of misuse will also happen.
Goal 12. Responsible consumption and production	Creating support for the development of domestic technology	Sometimes they do not have smartphones, or they do not have a laptop. Even if they do not have enough income to pay for their data. Still, we are clueless and helpless.
	Less concentration on environmentally sound management	No narratives included
	Lack of encouragement for wasteful consumption	No narratives included
	Poor strategic planning	They may have told discussion and can invite outside people to get their exposure, but stakeholder collaboration is low.
	Promoting future	One is that we are unable to send the students on an internship

Notes: T means themes, and C means codes, Authors' compilation based on collected data

The lack of development-oriented policies in authorities is one of the challenges online higher education faces. The administration initiates most universities' process of development. In addition, government universities are subjected to policies implemented by the University Grant Commission. Therefore, most of the lecturers who require development cannot achieve it. The lectures' narratives reflect how government policies impact development: *The major problem is based on the change of government policies. It will affect the entire or even the parts of the strategic plan of the university.* Therefore, many universities are reluctant to implement development projects which need the online education system. Inefficiency in consumption is another challenge. SSM practices must consider sustainable concepts, and universities must efficiently consume available resources when delivering lectures. That means that for universities, it is a challenging point when delivering lectures. Otherwise, the inefficiency causes additional costs. The common narrative: *And another thing is that the Learn is provided for free for university students for zoom, but in peak hours, the changes to US servers, so that there is some cost applied,* can refer to this.

One of the challenging things in online education is the inability to afford access to the internet. Another challenging point in SSM practices in online education is the lack of productive employment which means lecturers. Most government university lecturers are getting an appointment through political influence. Therefore, decent work will abuse. The common narrative stated in table 2 reflects the comments of lecturers on their staff and how it impacts quality education. Though the practices exist, those practices should be sustainable. Most university students struggle to afford digital devices and internet packages for online education. That will be a challenging situation where universities are also struggling to provide financial assistance for students other than suggesting loan schemes. Therefore, for sustainable economic growth in a country, maintaining a quality education is not sufficient. Authorities should consider whether students can afford those changes (Anon., n.d.).

Industry, innovation, and infrastructure are not only added to the organisation but also higher education. Without innovations and infrastructures, online education will not be a success. However, as per table 2, the common narratives imply that there are challenging natures as no innovations occurred to handle the online platforms successfully. In addition, the lack of sustainable infrastructures is a challenge, as infrastructures are essential in online education. The common narrative: *As far as I know, that is an issue for the effective function. Otherwise, as technical staff, for instance: that technical manager who was assigned externally and not a permanent employee for the university,* explains that the inadequacy of technical support remains a challenge in online education in universities. Therefore, there must be technical support as staff or students may face any technical difficulties during the lectures that must assist by the technical supporter. The internet is a resource for online learning for both lecturers and students. Not only from lecturers' perspectives but universities should also be concerned with student perspectives. For those issues, the university can implement a plan. *Even if we record a video and upload and ask them to study, there is not free of charge,* therefore, to maintain sustainability, there must be productivity. Without the internet, online education will not be productive. In addition, the lack of innovations and creating support for developing domestic technology became challenging for universities. Because of the lack of innovations, universities will face many issues, including a decrease in quality. The common narrative stated in Table 2 is an excellent example of the consequences of a lack of innovation (Anon., n.d.).

Responsible consumption and production are also derived from education. Because, as universities, it is important to practice responsible consumption. Since they have many students, they must maintain continuous work using current resources. It is a challenging task. In addition, universities must think about the future. Poor strategic planning will not lead to responsible consumption. In addition, with online education, universities are unable to send students for internships which leads to future production in a sustainable way (Anon., n.d.).

Online platforms are an assertive communication and collaboration tool for higher education institutions. Strategic management of these platforms, however, can be challenging. It is essential to understand the needs and expectations of the stakeholders and implement strategies for the effective operation of the online platform, as depicted in table 1. Moreover, it would help if you were prepared for unexpected circumstances and had a contingency plan. As table 2 indicates, there is a lot to be improved. The success of the online platform depends on the quality of the content that is available on the platform. Therefore, the institution must select its online platform carefully and provide high-quality content for the online platform.

5. RECOMMENDATIONS AND CONCLUSION

Digital platforms have become a trending form of delivering teachings for students at every level without barring any global locations. As per the research objectives and the questions, the analysis conducted and investigated the practices and challenges in SSM for online platforms in higher education. Through that, the researcher can suggest a few suggestions to derive SSM practices that should be implemented in online platforms in higher education. Many universities have a strategic plan, so they allocate time, finance, and commitment to deliver the best education through online platforms.

To offer quality education, universities can adopt strategic plans to offer equal access to technical and higher education for all students. Although there are faults on students' part because of signal issues or lack of infrastructure, universities should upload recorded materials to their own LMS system or adopt a hybrid learning system by adhering to health regulations. Efficient sessions can conduct through a hybrid learning system. That will overcome the inadequacy of learning outcomes. Introducing subjects like project management and online workshops on technology innovations and advancement will enhance technical skills, and lecturers can also gain knowledge. However, that will be a miracle with a lack of development-oriented policies in authorities. Therefore, universities must follow flexible policies to develop online platforms as the need for higher education.

In addition, lecturers can accommodate online platforms for many students' inefficiency in consumption by enhancing the technology's capacity. For example, some universities are reluctant to improve zoom capacity, and some students fail to attend lectures. In addition, student loan schemes and scholarships will help students accommodate technologies needed for online education. Planning for financial support for students is also part of SSM planning. The innovations should implement, and research will impact overcoming existing challenges in online platforms used in higher education. Eventually, the strategic management plan would work by making the research findings interconnected with their implementations as the university functions as an affix body. Some requirements include an annual report, final account, and strategic plan. But some universities present strategic planning only for updating, not for the university's advancement. Therefore, there must be aware of effective strategic planning. Educators and students should recommend regular faculty improvement. They suggested lowering the cognitive load and raising the level of interaction during online instruction. The university can offer advice on how to begin online case-based learning. Some people also thought that after the COVID-19 pandemic was under control, there should be revision sessions in addition to teaching. They recommended investing in premium software and other proctoring tools to improve quality and catch plagiarism and cheating. In addition, as SSM follows SDGs, universities must concern triple bottom line. It is always better to implement environmentally sound management and encourage wasteful consumption.

In addition, universities can implement effective strategies like mixed bottom-up and top-down management models to enhance online education infrastructure. Adopting specific programs to enhance available resources' efficiency and continuous monitoring and communication can derive the best SSM practices in e-learning.

Per the analysed data, there are various practices practised by universities. However, to derive SSM, universities must blend SDGs with strategic planning. However, all these steps for quality higher education through online platforms will contribute to sustainable economic growth in the country.

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