

Strategic Planning in British Higher Education Institutions: Qualitative Analysis

Zurabi Shamugia¹

Received: 05/07/2020

Online Published: 10/10/2020

Accepted: 05/09/2020

Abstract

This thesis project examined and evaluated the strategic management for sustainable development in order to deal with the environmental challenges within the British Higher Education. By employing interpretivism philosophy, this study used qualitative methods to measure the effectiveness of strategic management for sustainable development and coping with the external environmental challenges. Using convenience, snowball, and referrals the university staff in five different universities of the UK were approached. Total 22 one-on-one face-to-face interviews were conducted with the employees working in the top management. It is followed by 12 focus group interviews with professionals, consultants, and strategic partners of the universities. It is found that economic, social, and environmental dimensions are most frequently considered for sustainable development of the British Higher Education Institutions. Furthermore, competitiveness, organisational objectives and survival are major themes emerged from this thesis. Corporate strategy including stability and growth are used frequently to deal with the environmental challenges. It is also found that differentiation, focus, and overall cost leadership strategies are effectively used by the UK higher education institutions. Equally important is operational strategy and higher flexibility in operational strategy enables universities to deal with environmental challenges.

Panel discussion confirmed, student engagement and relationship with all the stakeholders are vital for the UK institutions to ensure it remain sustainable in the competitive market. Furthermore, there is higher uncertainty at the moment now in the higher education market of the UK because of various factors such as limited job market and career opportunities, new legislation, student loan, student engagement and Brexit.

Based on the findings, the OITGA strategic framework is proposed to these universities.

Keywords: Higher Education Institutions (HEIs), Strategic Management, Sustainable Development, Types of strategies

JEL Classification: L25, L29, M11, M19

1. Introduction

According to Watson (2005), the need for understanding and managing strategic directions and decisions of educational institutions has significantly increased from the institutional perspective. The strategic decisions have not only impact on academy's historical image but a vital contribution to the society and economy (Watson, 2005). Thus, there is a linkage between institutions and the academics and the strategic functioning with the society as well as economy (Thomas, 1996; Watson, 2005). In improving the outlook of the communities and vast majority of the people in the societies, the educational institution has a pivotal role (Thomas, 1996). These institutions prosper through effectively managing strategies (Watson, 2005). It is important to define strategy within the higher education.

¹ Doctor of Business Administration (DBA), UWS London - University of the West Scotland – London, UK; zurabishamugia@gmail.com



Figure 1: UK HEI Stakeholders (Osborne, 2020).

“Strategy is associated with how the activities of the organization are selected to be consistent with its objectives and purposes” (Buckland, 2009; cited from Ahmed et al. 2015). Within the higher education, the management of the strategy is possibly the highly essential factor academic institutions do, facilitating the entire set of its fundamental operations and activities related to teaching, research as well as broader economic, community and social assistance that to be attained in optimal level (Ahmed et al., 2015). In the context of Higher education, managing strategy contains a comprehensive knowledge and details related to the strengths and weaknesses of the academic institution, while enabling them in making rationale and appropriate choices for future operations (Abdul-Kadir, 2012). Within the context of strategic management, the long history related to planning is evident in the higher education institutions, irrespective of the being an independent institution or state-owned institution (Ahmed et al., 2015). Within the higher education institutions, the senior management are aware of the horizon of planning including the allocations of funds within the year (Abdul-Kadir, 2012). Hence, this leads to the stage where it is essential to understand the evaluation of strategies.

The recent changes in the legislations and their impact on the higher education institutions along with the emergence of BREXIT situation is less explored, thus, there is need for examining the strategies for managing for state-owned universities in the UK.

According to Swain (2018), fund changes and Brexit are two vital challenges for the British higher education institutions. On the other hand, Deloitte report identified seven issues posing challenges to higher education, namely, (a) finding appropriate strategy for effective functioning within the global market, (b) implementing flexible strategy to attract students within the intense competitive market, (c) escalation in the expenditure and shifting funding, (d) strategic approach to cater the needs and demands of new technologies in the situation of increase in digital spending, (e) aligning the industry, strategy and students to maintain balance in market, (f) ensuring research remain sustainable, and (g) strategizing to attract and retain best talent (Deloitte, 2015; Grove, 2015).

1.2 Aim

The research aim of this project is *“to examine and evaluate patterns and regulations of British Higher Education regarding the management of strategies to deal with the environmental challenges”*.

It is theory-building, exploratory research to present British higher institutions as organisational entities, exploring their structures, value chain and management practices to explore environmental factors affecting the performance, competitiveness and approaches in long-term.

1.3 Significance

This project contributes to new knowledge by expanding the available limited knowledge. The study also is beneficial in assisting the higher education institutions with environmental changes while offering the strategic plan to improve the overall performance in order to meet with the environmental changes. The study mainly analyses strategic planning processes of the universities' coordination in planning and integrating employees towards a common goal.

Previously, there has been little evidence regarding the impact of environmental issues on the strategies of the UK's Higher Education sector. The study is beneficial in understanding the identification of a concept and framework of strategic management that considers the nature and environment of UK universities. Moreover, the study also expands the knowledge by supporting and enriching the existing theories of strategic management in UK higher education. Particularly, in the situation of Brexit, there is higher uncertainty and therefore the existing strategic management further benefits from this primary investigation. In addition to that, this study is effective in providing the useful knowledge on factors that have an impact on the future international success of UK state-owned universities. Moreover, the study is beneficial in identifying strength and weaknesses while creating opportunities and developing to cope up with the threats for the UK universities. The previous studies have been descriptive and largely used secondary sources to understand the strategies within the higher education institutions while this study expands the scope by commencing primary investigation to understand the state-owned universities' process of strategic management, that includes; formulation, implementation and monitoring of the strategy.

2. Literature Review

The ideology of the British Higher Education is based on the principles such as absolute commitment for the maximization of the social and economic values of all the institutions for the betterment of students, businesses, communities and civil societies via transformation of knowledge, teaching, research, free idea exchange and pursuit for exploring truth (Universities UK Report, 2018). In order to improve the global outlook, the universities of the UK have formed strategic international partners across the world to support and collaborate for international exchange so that social cohesion and quality of life improves for wider communities and inequality challenges are tackled through expanded educational opportunities (Universities UK Report, 2018). In addition to that, promote a freedom for making decisions and adopting strategies in partnering with reputed organisations so that the needs of communities and students are fulfilled through a belief that diversity remains a strength of the UK universities mission that facilitates the UK higher education in creating positive impact (Universities UK, Report, 2018). "Strategy models can be developed based on wide variety of different strategy definitions. These models are used by organizations for developing, implementing, and maintaining their strategy for achieving their goals and objectives." (Hassanien, 2017). "Most universities are to survive in the troubled years" (Kottler & Murphy, 1981). "Certainly, strategic plans are important to academic institutions. Colleges and universities invest a tremendous amount of time and effort (holding many meetings with various constituent groups on and off campus to gain input) -- and sometimes also money (for consultants) -- in their strategic plans. Once finished, there is great fanfare and publicity, often around the plan's creative name and new, bold priorities. Plans appear in highly visible places on websites. Institutions hold retreats, often over many days, to talk about plan implementation and progress" (Eckel & Trower, 2019).

Recently, the study of Ahmed et al., (2015) provided an overview regarding the strategy's management in the Higher Education Institutions in the UK, but the study is largely descriptive in nature. Hence, there is no conclusive evidence regarding the study commenced that primarily focused on formulation and implementation of strategy and the state-owned universities' ability to

respond to environmental changes. In addition to that, the study of Abdul-Kadir (2012) has not considered the public institutions while the work of Watson (2000) Ahmed et al., (2015) has provided the overview by mixing public and private institutions. Thus, there is no evidence from purely public (state-owned) higher education institutions. Furthermore, the previous studies have largely been qualitative while there is need to extend the dimension by including the quantitative aspect. In addition to that, previous studies have used secondary approach while there are limited evidences regarding the use of interviews with the management and survey report from the students to have the perspective of different stakeholders, rather than relying on one perspective. Widening participation and Fair access are government policy objectives that aim to improve under-representation and provide equality of opportunity for people who stand to benefit from exposure to higher education at a national level especially in the most selective institutions regarding admission. It covers not only young adults from low-income upbringings but all those from groups under-represented in higher education such as disabled students, ethnic minorities, and part-time and mature students. Hence, this leads to another important question about to what degree is the funding and independence of the HEIs in the UK.

Table 1: Summary of strategic planning model

Strategic planning model	Advantages	Limitations	Relevance to the presented study	References
The Curriculum-Centered Strategic Planning Model	Flexible in design Easy to implement	Does not offer comprehensive details More idealistic than realistic	Offers a platform to investigate the research variables	Dolence (2004)
Basic Strategic Planning (BSP) Model	Straightforward and direct. Provide strategic approach to achieve long and short-term goals.	Combination of different so nothing new of own. Not too specific for certain type of strategy.	Provide a foundation to examine the existing strategic models at the UK universities	Bush (2016), Hinton (2012), Zechlin (2008)
Issue-based strategic planning	Focused on goal-based strategic planning. Consider various factors.	More reactive than proactive.	Facilitated in understanding the hidden embedded themes and issues related to strategic planning.	Bush (2016)
Scenario strategic planning model	Take scenarios into consideration. Comprehensive	Time consuming and more appropriate for long-term planning.	Assisted in understanding the long-term strategic planning and the changing scenario affecting the operations and strategies of the UK universities.	Cohen (2016), Hinton (2012).

According to de Wit & Hunter (2015), strategic planning is often a vital tool for a more logical and well-organized approach to bringing about the needed changes for greater internationalization in institutional direction and daily operations.

Strategic Management has been explained in several different manners based on conceptual underpinning. Strategic management prepares people to project themselves into the future. This reflects that from the European perspective the conception has largely focused on the learning and

development of the organisation. Exploring from the perspective of attaining and retaining competitive edge, Barney (2002) goes one step further than simply defining strategic management by stating that it “is an inherently integrative activity in a firm— forcing managers to bring the skills and expertise of different business functions together to conceive of and implement a strategy” (p. xiii). It can be attributed that Barney has considered the strategic management as strategy shaping the management, where organisation’s theory is the lens for defining strategy whether emergent or deliberate action to ensure the organisation compete in a successful manner so that it can gain competitive edge on others through following its underline mission. The two major assumptions of Barney (2002) about the strategic management is that, “(a) superior strategy, effectively implemented, results in superior firm performance and (b) superior strategy is informed by understanding of the structure of supply and demand in a firm’s industry and of the value of the resources at the firm’s command” (p. 10).

Higher education structure in the United Kingdom is very complicated and entirely different from the structures of the rest of the world (Rothblatt, 2012). With a multitude of institutions that offer a wide range of qualifications in numerous fields, kick-starting your study planning process may seem overwhelming or even scary (Rothblatt, 2012). However, here is a breakdown of the complexities. HEIs are driven to engage in a strategic planning process by an assortment of energies (Brown and Carasso, 2013). These include changing student demographics, increasing demand for higher education concurrent with a decline in government funding, and a need to compete with the emerging models of higher education while keeping the essence of a traditional comprehensive university.

Numerous challenges go a mile in ensuring the implementation of strategic planning in universities and colleges (UK Universities Report, 2018). Some among these limitations impact the external and internal environments of the institutions, and they include; reduction in quality, increase in cost, demographic makeup shifts, and intense competitions (UK Universities Report, 2018). There is a notable reduction in the quantity of government funding that facilitates efficient running of public institutions (Goldman and Salem, 2015; UK Universities Report, 2018). The state’s budget on HEIs is plummeting annually whereas the going costs per student in higher education are rising (Goldman and Salem, 2015). Also, there is a higher demand for higher education.

HEIs need to provide education that will allow graduates to participate in a diverse society committed to democratic values fully. Changes in the educational needs unmet by the existing system of higher education, have prompted the emergence of for-profit, also convenience, universities that have adapted to the needs of the consumer-driven market (Richardson et al., 2017). In this case, the student is the client thus they offer target specific functions at the convenience of the student.

2.7 Theoretical Framework and research hypothesis

From the literature at hand, the present thesis has formed the theoretical framework for the research. On the left side are the determinants of supply chain management (independent variables) whereas on the right side are attributes of the overall performances of the organisation (dependent variables).

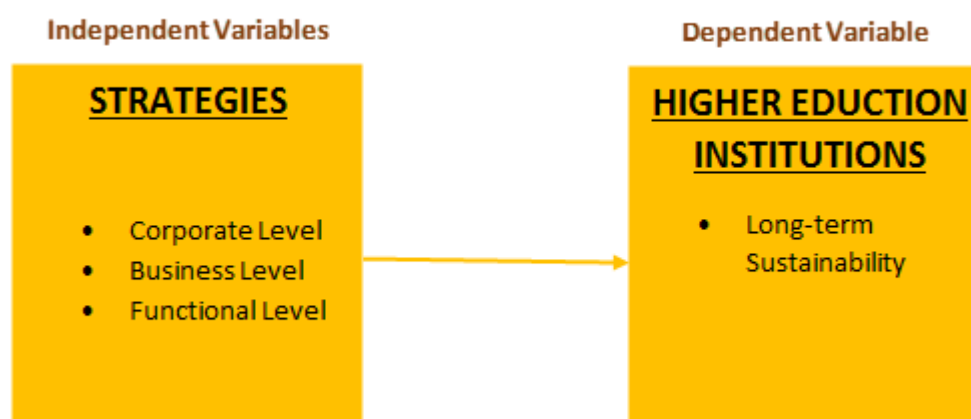


Figure 2: Conceptual framework

According to Ahmed et al., (2015), within the institutions, the strategic management process comprises of three strategies namely, corporate, business, and operational level strategy. These are incorporated to achieve the organisational objectives and develop sustainable competitive advantage in the competitive environment (Ahmed et al., 2015; Chakravarthy & Henderson, 2007; Schermerhorn, 2012). These are used in the means-and-ends fashion by the institutions (Ahmed et al., 2015).

Corporate Level Strategy:

Koch (2000) stated that in general aggregate terms, it is a capturing and a myth. On the other hand, Johnson & Scholes (1993) explained that the large-scale resources allocation decisions to attain the corporate objectives are developed at the top level of the organisation, which is regarded as corporate level strategy. Ahmed et al., (2015) stated that two types of strategies are pursued by higher education institutions at a corporate level such as, stability strategy and growth strategy. For maintaining stable and smooth movements, the institutions adapt stability strategy at top level (Ahmed et al., 2015). This type of strategy is mostly evident in the smaller and older universities due to their skills and capabilities related to management are stronger than their competitors (Ahmed et al., 2015). On the other hand, growth strategy is organisational growth strategy's another modification that includes, joint ventures, strategic alliance and mergers so that there is strategic collaboration and partnership to explore the area of common interest, which enables greater opportunities to develop and grow without increasing the expenditure budget on the resources emerging essential while operating alone (Ahmed et al., 2015; Schermerhorn, 2012).

Business Level Strategy:

Kettunen (2003) has stated that business level strategies in the higher education is usually of three types, including, 'overall cost leadership strategy', 'differentiation' and 'focus' respectively. Overall cost leadership strategy in the higher education institutions operating within the market-led environment. Within the higher education institutions, differentiations are regarded to repute and stand as a brand in the market through strategic plans while 'focus' oriented strategy is to ensure the operations are customer-led in the higher education market (Kettunen, 2003). Ahmed et al., (2015) the business level strategy in the higher education shapes and channelize the wide range of activities' scope to cater and satisfy the needs of students and other stakeholders in broader manner. Niche is a well-defined area of operation where the business strategy agrees upon the objectives of divisions (Andrews, 1971). Furthermore, the strategic business objectives are attained through effective adoption of policies, which are formulated through business level strategies (Ahmed et al., 2015). In the broader context, these business-related strategies deal with

various ways in which business units strengthen their positioning to compete in specific markets (Burnes, 2014). Different types of business level strategies are examined in the higher education through Ansoff Matrix (Ahmed et al., 2015; Kettunen, 2003).

Functional/Operational Level Strategy:

Sanden (2014) argued that operational level strategies are the organisation's implemented action plan for resource allocation in the production of services or goods. This strategy is vital business component for support and execute the corporate level strategy of the organisation (Ahmed et al., 2015). In the education sector, the operational efficiency is attained through executives involved in operations such as human resources, information technology, bills, and systems (Sanden, 2014). The study of Ahmed et al., (2015) briefly accounted that operational level strategies are vital in improving the sustainable development and approaches in higher education institutions. On the other hand, the work of Watson (2000) showed that the execution of operations in the higher education sector has only limited role in sustainable development. Nevertheless, the study of Abdul-Kadir (2012) found that corporate and business level strategies are attained because of the effective operational efficiency at lower level.

According to Chakravarthy & Henderson (2007), the divisional level strategy is implemented through developing a flexible and feasible action programmes by the departments under operational level strategy. At operational level, the main concern is related to the contribution of different interlinked departments within the institutions such as, HRS, IT, finance, marketing, research, teaching, etc (Ahmed et al., 2015). The competitiveness of the institution would be determined through the relative contribution of these different departments (Ahmed et al., 2015). Thus, the institutions' days-to-day activities to be managed in swift operations remain the focus of this strategy. Schermerhorn (2012) stated decisions made and the activities incurred at operational level determine the success of the business level strategies.

Sustainability:

On the other hand, sustainability is defined as, "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987; cited from Tascioglu, 2015). On the other hand, in the context of education, Chalmers (2007) defined it as, "the ongoing ability of the project in meeting its own goals". Global responsibility, integration, inter-and-intra-generational equity, precaution, and participation are the fundamental principles of sustainability (Hugé et al., 2011). Within the UK higher education, the strategic planning sustainability is frequently found as a set of activities that does not require any further financial investment for continuation (Browne, 2010). The drastic change in the UK higher education's financial climate, it is the top priority of all higher education institutions to ensure the activities remain sustainable (Browne, 2010). On the other hand, Grove & Pugh (2017) argued that human resources and human investment are equally important for maintaining sustainable development in the higher education sector of the UK. Furthermore, the risk mitigation and value creation opportunities result from the strategic planning sustainability in the business sector. Within the higher education institutions, the value creation opportunities are progressively visible, meanwhile universities seek for ways to enhance financial strength in changing policy landscape and global market.

3. Research Methodology

It is a set pattern followed by researcher to investigate research problem (Mackenzie & Knipe, 2006; Haque, Sher & Urbaski, 2020; Haque, Yamoah, & Sroka, 2020; Kot et al. 2020). In this research, qualitative methods are explored to have deeper insight rather than only limit to mathematical objectivity (Faizan and Haque, 2019; Gusakov et al. 2020). Cross-sectional design is used in research that completes in less than a year (Faizan and Haque, 2019; Haque, Nair and

Kucukaltan, 2019; Ślusarczyk & Haque, 2019). This research has taken cross-sectional research design because the research completes within one year and the participants only participate once in this research.

The selection of research instruments depends on the nature and type of research (Hussain et al. 2019). Interviews are commonly used in the qualitative research while quantitative research often opt for using of survey questionnaire (Haque, Aston and Kozlovski, 2018; Haque et al. 2019; Imran et al. 2018; Javed et al. 2019). In the context of present study, interviews and panel discussions are used as research instruments. The instruments are self-administered and constructed from the literature at hand. Using network and connections, the participants are gathered for this study.

Sample size is a subset of the population (Haque et al. 2020). However, there is no agreement in the social sciences about the exact size of the sample for studies as it vary in the context of economies, sectors and businesses especially in the quantitative studies. In qualitative studies, saturation points determine the sample size sufficiency (Haque et al. 2018). In this study, the sample size of 22 participants in the interview and 12 experts. Hence total 34 respondents, which is acceptable in social science research.

The work of Haque et al. (2018) revealed that the adoption of non-probability sampling techniques could be used by making proper considerations to avoid biases through having fair representation of sub-sets of the sample. In this study, different techniques of non-probability sampling technique are combined to determine sample size. Purposive, snowball and convenience sampling techniques are types of non-probability sampling techniques (Sekaran and Bougie, 2012), which are used in the present study. Using Urbański and Haque (2020) approach of ensuring the fair representation, the biases are avoided. Hence, it is preferred because the resources are limited, and the attempt was made to ensure data collection procedure remains cost-effective (Ślusarczyk and Haque, 2019). The file was imported and open in NVIVO while the data was already organized through questions. Before having auto code in-depth analysis auto coding, the frequency was run to get a feel regarding what is said by the respondents. Thus, participants were asked about their views to generate the frequency query to have exact number of respondents establishing auto-coded responses. This enabled in attaining the list of most frequently used words, number of times it has incurred along with the relative frequency. This helped in established the standout words used by the respondents. These words were automatically code these references through node creation. The responses were also viewed visually through 'tree map' and 'Tag Cloud' for seeing the visual aspect of most predominantly used words.

4. Results, Finding and Discussions

Table 2: Description of data collection and analysis process from target audience

Target group	Sample size	Sampling technique	Data collection instrument	Data analysis model
University Staff, administrators, operational heads, Deans	Twenty-two	Convenience, snowball, referrals.	One-on-one open-ended questionnaire	Thematic Analysis
Educational (academic) professionals, Consultants, Strategic partners, Top management board members	Twelve	Convenience, snowball, referrals.	Open-ended questions	Qualitative discussions

Assessing and measuring sustainable development in the higher education

Participant 1: *“In this institution, most commonly we used different models to assess the sustainable development. It is basically the use of mental approach where operations are carried out to measure the impact in long and short run”.*

Participant 7: *“Like we look at several dimensions when we are measuring the sustainable development of our institution. Like, social, environmental, and economy are the important*

dimensions. How we are doing in these dimensions enable us in measuring the sustainable development”.

Participant 12: “Well, there is a process, it is like a continuous cycle where we cannot relax after doing certain things. We have to be on our toes all the time. The target is always to sustain to develop and develop to sustain. There are different indicators that helps us in measuring sustainable development. The university doesn't exist in vacuum. It is in the society and it is affecting as well as affected by the society. By society I mean the social norms comes in play. Also, there is a need for running these institutions a support, funding etc if you understand what I mean. Profit is equally important and economic capabilities enable the institution in maintaining sustainable development”.

Participant 21: *“Most commonly, we use the economic, social and environmental criteria for ensuring the organisation is effectively sustaining growth. The more institution appears to have its long-term sustainable growth and development when there are higher positive impacts on the economy, environment and society as a whole”.*

Considering the responses from the participants in all different institutions, it has been confirmed that all institutions consider economy, social and environmental dimensions for measuring the sustainable development of their respective institutions. Therefore, the findings of this study are aligned with the earlier studies of Hart (2000), Lozano (2008), Scott & Gough (2003), and Waas et al., (2011). Interestingly, all these different theories considered different models to establish the sustainable development through social, environmental, and economic dimension. While metaphors including social, environmental, and economic attributes are considered by work of Scott & Gough (2003) and nested circle found at least two of the three dimensions to be interlinked that helps in attaining sustainable development. Thus, all the models are effectively visible in the education sector of the UK for sustainable development. One of the reasons for the effective visibility could be attributed to the type of institutions. Since, all the participating institutions are public universities, therefore, they are more drawn towards the social and environmental aspects in the operating dynamics. Nevertheless, the above question only explained the details about measuring the sustainable development within the higher education system yet the magnitude of types of strategies affecting the process of sustainable development in the long-term is still not clear. Thus, there were further probing questions were asked.



Figure 3: Interview findings – graphical presentation

Level of strategies for strategic management facilitating institutions

Participant 1: “There are three types of strategies namely, operational, business and corporate level of strategy. They are effectively all important as they work like tires to make the cart (flow of operations) moving in right direction”.

Participant 8: *“To me, most important strategy is at corporate level, which defines and directs the institution to move in specific direction. It is important for strategic management because it gives the stability to the operations and functionalities at all level. Then, comes the business level strategy, which is more about competing with others in the market. It is more helping towards the sustenance while operational strategies involve daily tasks to ensure routine activities are performed. The overall, all three combined help in attaining competitive advantage in the market if all is supporting one another”.*

Participant 14: “Corporate level strategy is most important. If the policy at top level is not comprehensive or there is any lacking in it, the entire strategic process will be badly affected. The sustainable development is likely to be achieved through strategic management of corporate level policies”.

Participant 18: *“You can’t say which one is more or lesser important. All are equally important in their own domains. They help the organisation in prospering and achieving its targets. So, it is very hard to pick one. Corporate, business, and functional strategies are important for the growth and sustainability of operations and institution”.*

Participant 20: *“To be able to cope up with the trends in the competitive environment, the strategic management process is essential. Now, this include all types of strategies at all level, irrespective of their scope. It could be for shorter time and could go for years and years”.*

Above responses from five different institutions revealed that all types of strategies namely corporate, business, and operational strategies are part of the strategic management process. Hence, in this regard, the present findings support the earlier notion of Ahmed et al., (2015). However, there is difference of opinion between different institution regarding the assistance of these types of strategies towards the institutions. Nonetheless, some institutions confirmed the notion proposed by Ahmed et al., (2015) that the strategic management process containing all three types of strategies are effective in achieving organisational objectives. Furthermore, the argument of Schermerhorn (2012) is also confirmed that types of strategies are essential in the sustainable development and growth in the long and short run. Lastly, the work of Chakravarthy & Henderson (2007) is also supported that the competitive advantage is attained through the effective and efficient deployment of these distinctive strategies. The reason for confirming the earlier work could be largely due to the nature of business and industry. There is also traces of volatile environment and higher uncertainty due to the situation of BREXIT.



Figure 4: Interview findings – graphical presentation

Table 3: Representation of the themes driven from strategic management process in the UK education sector

Serial No:	Participant No:	Theme
Institution A	1	Sustainable development
Institution A	2	Sustainable development
Institution A	3	Competitiveness
Institution A	4	Competitiveness
Institution A	5	Survival
Institution B	6	Competitiveness
Institution B	7	Sustainable development
Institution B	8	Competitiveness
Institution B	9	Survival
Institution B	10	Sustainable development
Institution C	11	Organisational objectives
Institution C	12	Sustainable development
Institution C	13	Survival
Institution C	14	Sustainable development
Institution D	15	Organisational objectives
Institution D	16	Organisational objectives
Institution D	17	Organisational objectives
Institution D	18	Sustainable development
Institution E	19	Competitiveness
Institution E	20	Competitiveness
Institution E	21	Survival
Institution E	22	Sustainable development
Total	22	

Majority of the institutions considered sustainable development (37 percent) as the most widely used aspect that is emerged from the strategic management process. Competitiveness is the second attribute mostly viewed as it constitutes 27 percent while organisational objectives and survival emerged as 18 percent. Nevertheless, all four attributes are confirmed to be resulting from the effective development and usage of strategies at all level, reflecting the strategic management process efficiency. Thus, this study confirmed the earlier work of Ahmed et al., (2015), Chakravarthy & Henderson (2007), and Schermerhorn (2012) that all types of strategies operating at different levels of the management helps the organisations in sustaining development, competitiveness and attaining organisational objectives.

Types of visible corporate level strategy in the education institutions

Participant 3: *“Stability and growth development are the integral parts of the corporate strategy. This is a public funded institution, so our management team focuses more on the growth”.*

Participant 6: *“Stability is the most important type of corporate strategy because it helps in the smooth flow of operations”.*

Participant 11: *“Strategic planning sustainability is the major part of the corporate strategy. The focus of this institution largely remains on the stability. However, it doesn’t mean that corporate level strategy is absolutely something achieving in the hindsight. It’s something that is meant to be long term and requires to be achieved in long run than short-term”.*

Participant 21: *“Sustainability is part of the strategy. We have strategic collaboration with other institution”.*

From the above findings, it is evident that within the education institutions, the corporate level strategies are very pivotal because it helps the institution in growth as well as stability. Therefore, the resources allocation on large scale are utilised to ensure corporate objectives are attained in the longer run. The growth as well as stability to sustain operational efficiency in longer run is possible

through corporate strategy. Furthermore, both types of corporate strategy, namely, growth strategy and stability strategy are found in higher education institutions, which means that this study support the earlier findings of Ahmed et al., (2015) in the higher education sector. There is also a confirmation of the notion that flow of operations are more stable and smoother when the institutions opt for stability strategy. During this study, state universities were included and both stability and growth strategies are found to be used in the higher education institutions in the UK. Thus, in this regard, this study partially differs with the work of Ahmed et al., (2015) because as per that study, the stability strategy is common in the older and traditional/state universities while in this study, state/traditional/older universities are found to be using growth strategy also.

Hence, this is a contradictory as well as different finding. The reason for this could be attributed to the BREXIT uncertainty that has forced the higher education institutions to opt for growth strategy by focusing on the existing trends in the UK education market.

There is also evidence of growth strategy through strategic collaboration, joint ventures, and mergers, that are commonly found in this study among the higher education institutions as part of the corporate strategy. Thus, this study supports the work of Ahmed et al., (2015), Child (2001) and Schermerhorn (2012) because the strategic partnership help in the growth of the business as more opportunities could be attained in collaboration rather than operating along.

Table 4: Type of corporate strategy in the UK education sector

Serial No:	Participant No:	Theme
Institution A	1	Stability strategy
Institution A	2	Growth strategy
Institution A	3	Growth strategy
Institution A	4	Stability strategy
Institution A	5	Growth strategy
Institution B	6	Stability strategy
Institution B	7	Stability strategy
Institution B	8	Growth strategy
Institution B	9	Growth strategy
Institution B	10	Stability strategy
Institution C	11	Growth strategy
Institution C	12	Growth strategy
Institution C	13	Stability strategy
Institution C	14	Stability strategy
Institution D	15	Stability strategy
Institution D	16	Stability strategy
Institution D	17	Stability strategy
Institution D	18	Stability strategy
Institution E	19	Growth strategy
Institution E	20	Stability strategy
Institution E	21	Growth strategy
Institution E	22	Growth strategy
Total	22	

It is evident from the findings that stability strategy is more widely used by the higher education institutions in the UK as it formed 55 percent in comparison to the growth strategy, which formed 45 percent. While exploring these attributes, the interview findings revealed that often the corporate strategy is developed while keeping the situational demands and risk factors in the environment. In the present study, growth strategy of strategic collaboration hinted towards sharing risk while stability strategy was mainly to ensure competitive edge in the market. Thus, strategic planning sustainability is to be attained through both types of corporate strategy. Therefore, the findings are aligned with the work of Harman & Harman (2008) and Locke (2007). There is no

clear evidence of mergers to larger extent, but the participants did mention of it being one of the strategies that could be considered in future. Therefore, partially, the findings support the argument of Ahmed et al., (2015). The respondents confirmed that social, environmental, and economic stability is attained through the corporate level strategies, thus, the study supports the notion of Ahmed et al., (2015), Grove & Pugh (2017), Kettunen (2003), and Waas et al., (2011)



Figure 5: Interview findings – graphical presentation

Table 5: Type of business level strategy in the UK education sector

Serial No:	Participant No:	Theme
Institution A	1	Cost leadership
Institution A	2	Differentiation
Institution A	3	Cost leadership
Institution A	4	Differentiation
Institution A	5	Differentiation
Institution B	6	Cost leadership
Institution B	7	Diversification
Institution B	8	Cost leadership
Institution B	9	Cost leadership
Institution B	10	Diversification
Institution C	11	Differentiation
Institution C	12	Diversification
Institution C	13	Diversification
Institution C	14	Cost leadership
Institution D	15	Cost leadership
Institution D	16	Differentiation
Institution D	17	Differentiation
Institution D	18	Differentiation
Institution E	19	Cost leadership
Institution E	20	Cost leadership
Institution E	21	Differentiation
Institution E	22	Cost leadership
Total	22	

The generated coded themes emerged that majority of the participants (46 percent) consider cost leadership as the most widely used business level strategy. Secondly, most considered strategy is differentiation (36 percent) while there is a fraction of evidence to support diversification (18 percent). Hence, there are clear evidence that in the UK higher education most used is overall cost leadership strategy, followed by differentiation and diversification (focus). It is evident that these

business strategies enable the institutions to compete in the intense competitive environment. The UK institutions are customer-driven and focuses on the provision of services to the students so that the top-quality services confirm that more and more students are attracted. Having said that, the top-quality services are delivered while ensuring the scale of economies are attained by the institutions. Hence, the cost leadership is a prime attribute for these institutions. However, there is also differentiation strategy visible in the approach of the UK higher education institutions. These strategies enable the higher education institutions to sustain the operations in long run by being more effective in terms of scale of economies. Therefore, the study supports work of Ahmed et al., (2015), Andrews (1971), Burnes (2014), and Kettunen (2003). Moreover, there is also hint towards the longer-term sustainability to be attained through the business level strategy, which means that Grove & Pugh (2017) argument is confirmed that operational efficiency attained through cost reduction leads to strategic planning sustainability. There is also reflection of diversification used by the institution, however, there is no evidence regarding use of technology to attain differentiation, but customer-orientation and brand image is strengthened through diversification and differentiation. Hence, to larger extent, the work of Kettunen (2003) is supported in this regard because brand loyalty and customer loyalty is sustained through these strategies. Partially, there are evidence regarding the improvement in the business growth and profitability, which again confirms the earlier argument of Kettunen (2003).

Strategic planning within the higher education sector of the UK

Participant 1: *“See there are different types of challenges that we are facing. For instance, one of such challenge is being able to survive in situation of uncertainty. Like right now, we are not sure how this BREXIT will affect our operations and our strategic industrial partners. So, we have to have sustainable approach. Being able to continue in same vein with balance without getting off the track”.*

Participant 6: *“The sustainability in the education sector is measured in two-ways. How it is operating while dealing with the challenges and how the business orientation remains a supreme objective. When dealing with the challenges, it reflects the ability of having sustainable approach. On the other hand, being able to progress by expanding the business. This is always depending on the strategic collaboration”.*

Participant 13: *“The sustainability is a result of continuous work towards mission, vision, and objectives of the institution. We ensure that the concerns of all stakeholders are taken into account. There is smooth flow of operations on all levels”.*

Participant 19: *“Like I told earlier, the environment is very dynamic and volatile, so sustainability requires continuous working in the desired direction. While doing so, we ensure that all stakeholders are satisfied. Their concerns are taken seriously, and they are informed about vision. We have meetings and seminars to ensure we all are on same page”.*

Participant 20: *“Whether it is a long-term or short-term goal the operational efficiency could only be attained through the proper use of various resource. This requires a proper planning. Step by step, one at a time is a best way to tackle the issues and strong planning helps in resolving issues. With it, we strengthen our institutional policies by reducing public expenditure, focusing more on improving the outlook of the society etc”.*

For the higher education institutions, it is essential to continue operations in a balanced manner to meet with the changes and demands of the environment. Hence, the role of the sustainable operations further escalates, which indicates that the present findings are aligned with the work of Grove & Pugh (2017). Moreover, these is also trace of importance of strategic planning to deal with different types of threats in the volatile environment. Thus, the study supports work of Common et al., (1992). The involvement of the educational institutions in various schemes so that

strategic collaboration works for the betterment of the society and environment. Hence, again, the present findings are consistent with the argument of Common et al., (1992). There is strong evidence from this study that strategic collaboration helps the institutions in attaining sustainable growth and development. The strategic planning is vital for achieving strategic planning sustainability. Since, the findings of this study found that short-term objectives are achieved through operational strategies while long-term objectives are achieved through corporate and business strategies. Together, all helps in the sustainable operations. Thus, this indicates that present findings are aligned with the work of Ahmed et al., (2015). Moreover, the vision and mission of the organisation is attained through the proper planning at all levels while keeping in mind the concerns of all stakeholders, such as, government, community, students, strategic partners, etc. Therefore, it could be confirmed that the strategic planning sustainability is attained while considering the short-term and long-term impact on the stakeholders while also ensuring there is growth and development at a constant rate. In addition to that, concern for the environment while operating to ensure there is steady growth with the passage of time. The work of Ahmed et al., (2015) and Meek & Wood (1997) are supported by present findings. The reason for having the focus on small objectives is to ensure there is constant evaluation of the short-term objectives. These short-term objectives eventually with time turns into long-term effectiveness.

The literature has found support related to this sustainable approach. One of the reasons for this approach in the UK higher education sector could be attributed to the recent changes in the UK laws and policies related to international students because majority of the UK higher education institutions depend on the international students for profit orientation, especially in the London city. The findings also confirmed that there is a huge uncertainty in the UK environment due to partially changing immigration policies and the BREXIT thus, the institutions require to work on their strategic plans for a longer timeframe in order to make it more effective in the volatile environment. Therefore, the findings support work of Meek & Wood (1997). The findings also revealed expenditure reduction and proper utilization of resources with effective and efficient management are part of strategic plans that eventually help the institutions in attaining strategic planning sustainability in the UK market. Therefore, findings are aligned with the work of Meek & Wood (1997). There is also the emphasis on the internal functionality helping the institutions in maintaining sustainable growth and development, hence, the findings support the work of Boyett (1996). Lastly, there is also the trace of using own strategic planning framework to deal with the different types of situation while focusing on the long-term and short-term objectives. Hence, the findings are consistent with the work of Morris (2000). These strategic model helps the institutions in developing the administrative process that includes all types of strategies such as operational, business, and corporate level strategy. The process is a continuous chain that works in a rigorous manner to ensure that all the objectives are attained in timely manner. Moreover, this helps in the adequate resource utilization, which is why the institutions can maintain sustainable operations.



Figure 6: Interview findings – graphical presentation

Panel discussions with the experts from Higher Education Institutions:

Table 6: Panel discussion responses

	Which Strategic model your institution was using and what are they using now?
Institution I	No institution works without model. Previously we were more into goal orientation. Now we are adaptive to environmental forces. We are using what we still have, but yes, the focus of model is changed. From small goals to long term sustainable strategic plans Yes, now the focus is on sustainable growth and development so there is a shift in approach while we were more focused on short objectives like making profit, administrative process to continue, ensuring academic strategies are properly executed.
Institution II	We hadn't altered or move from one model to another. The top leadership have a complete plan to implement at all level and each move is strategically organized. There is curriculum-centred, issue-resolving move, and scenario-based model. So, basically, it's the combination of different models to combat different issues. There is no change like giving up previous one and opting new one, but we have a full-proof strategic model to ensure we are good to go in all types of situations.
Institution III	You can't name a model. A strategy is a strategy, and the model is the way institution make it work. I will not label it by name, but I can firmly tell you it covers everything from small to major issues and it has all that we need to thrive in the dynamics. Absolutely, my colleague has clearly explained it and there is not much I can add to it. Yes, I agree, the model was there, it is still, and the same model will be there. It will only modify and update with the time.
Institution IV	We are into upgradation process. The strategies are continuously evolving according to the new demands and requirement of the stakeholders as well as environment. I would say, we have a contingent model that is channelized to work according to the requirement of the situation. It requires the coordination between all units Yes, the model is in process of modification and that is the case always. As the demands in the market change, we adjust our working strategies, operations and so on as per the situation.

There are mix evidence regarding the strategic planning models within the Higher Education Institutions in the UK. From one institution, there is a trace of shift from previous model to new through changing a focus of the strategic planning. Previously, there was more emphasis on the

short-term goals whereas now the trends of the strategic planning models are directed towards the attainment of sustainable growth and development with the passage of time. This is largely because of the uncertainty within the UK education market. The environment is already volatile while the changing governmental policies related to immigration law in the recent times have emerged as less international student friendly. Moreover, the Brexit situation has further increased the uncertainty in the market. Thus, the institutions have opted for more contingent and flexible strategic planning models. On the other hand, another institution considered that there is no single strategic model but a combination of various intact to ensure the long and short-term goals are achieved in effective and efficient manner. Nevertheless, the core argument of all the institutions reflected that the contingent approach is highly essential that could be attained through the collaboration within the units. Hence, the findings are consistent with the work of Bryson (1995) and Delprino (2013).

Since, indirectly, there is a confirmation of different models operating such as, “curriculum-centred strategic planning process” for meeting the various academic requirements and overcome challenges, thus, the work of Dolence (2004). On the other hand, Bush (2016) argument is also established that under this model, focus remains on the attainment of short-term and long-term goals. Furthermore, the issue-based strategic planning model that focuses on the internal and external factors so there is higher flexibility in achieving the organisational targets through focusing on the problems, hence, the work of Bush (2016) is confirmed. This is more of proactive planning model used by the higher education institutions in the UK. Furthermore, the scenario-based strategic planning model that is highly flexible and intakes the approach depending upon the situational factors. Thus, the findings of Cohen (2016) is confirmed by the present findings.

Table 7: Panel discussion responses

	What is the impact of higher education on the UK economy? Any positive or negative impact? If so, how?
Institution I	- There is a huge positive impact on the UK economy. It provides job opportunities to large number of people while give a foundation to students to earn a professional degree so they can contribute to the economy in one way or the other. - I will not say any negative impact on the economy, but you can say that London is overcrowded now.
Institution II	- The contribution of higher education towards the economy of UK is extremely high. People working in the universities are part of communities, so they are earning which improves their living standards. - The research and development units are also positive contribution of the universities. These researches on different aspects are helping the society to shape in better way. - See when foreign students come to the UK, it is like foreign investment coming to our country, so it is indeed a positive sign for the economic betterment. These students pay for accommodation, living expenses, buying clothes, food etc so they are all good sign for the economy. This is an indirect positive contribution of universities towards the economy.
Institution III	- I would say that the improvement in the educational results reflect that there is higher economic growth in the UK both at micro and macro levels. I don't see any negative impact but yes there are more competition which has escalated the demands for housing and living cost has increased. - Yes, I agree that there are more congestions because of too many people coming in. It is not only that people are coming through education industry, but you can see a lot of EU citizens are coming for better future opportunities.
Institution IV	- The workforce of professionals is contributing to the economy of the country and these professionals are developed by University education system. - There is relatively positive strong impact on the economy. Students are also working as part-timers and they do make a good portion of workers contributing to the economy of the nation. - The living cost has grown quiet high because of the excessive population.

From the discussion with the experts, it is found that higher education institutions have a positive impact on the UK economy. Large number of students form part-time workforce, which is equally important for running the economy of the UK. There is large number of jobs that are filled by the local and international students studying the the UK. Thus, this study supports the claims of UK Universities Report (2015) that the UK economy is supported by the millions of jobs and university provides enough workforce to the country. Hence, the contribution of the universities towards the economy is evidently visible. Furthermore, there is also the evidence that the workforce of the universities are part of the societies and communities, so these universities require workforce to do all types of tasks. Such workers being the part of societies and communities are reflecting that there is role of the universities in providing job opportunities that strengthens and improves the economic outlook of the nation.

Table 8: Panel discussion responses

	How do you see the strategic planning within the University? Especially in the situation of Brexit.
Institution I	• In the competitive context, strategic planning is essential for the universities. It helps in retaining competitive advantage in the market. Brexit is a tricky situation, there is a low of uncertainty. We are working on the basics. Keeping it simple. • Strategic planning is going well, but at the moment picture is not very clear about the Brexit. The reason for people voting for it was to ensure the UK secure its economic entity. In this all, it should be forgotten that the workforce is coming from EU and it can have severe effect on the businesses in the UK.
Institution II	• The strategic planning helps the university in developing ways to structure its operations in efficient way. In case of Brexit, I cannot say anything with precession. It can be quite a challenge. Though people casted vote for it based on nationalism, but it has affected the universities a lot. Not only our workers, but also the students come in large number from EU. It affects our business in more than one way. The strategic plan is to ensure that in case of Brexit, there is not too much adverse effect on the business. • Strategic planning helps in long-term orientation. On the other hand, Brexit is happening because of the pressure of local losing jobs to the Europeans. There is a pressure groups working ensure the nationals have more jobs. In this all situation, the universities are going through somewhat too serious situations. We don't want to lose our talented workforce and we want to remain attractive in the Europe.
Institution III	• How well the university is doing currently depends on the ability of designing their policies. Finding a right balance is essential. Flexibility is key in the strategic planning. • We are contributing more to the EU then the other EU members and this could be very wisely use to spend on our own people. Say roughly per head between 250 to 300 per person is given to EU, same could be used for these people to have better life, education etc. • See large number of students are coming from the EU and in case of Brexit, there is a likely chance of losing those people to other EU based universities. The importance of strategic planning further increases with such situation. We have covered our bases. We know and therefore, as part of planning we are looking for other potential markets in Asia etc. You cannot be dependent on one market so you must have flexible plans to deal with such factors.

Institution IV	• Collaboration and coordination are part of strategic planning. Designed in a way that is effective to fasten the process of operations through communication. • A huge chunk of the UK's contribution goes into EU budget while this could be used for own people. Over 10 to 14 billion yearly we contribute to EU but our parliament can use it for own people so that is the drawback of being in the EU. • Strategic planning is effective at present, but there is no idea how things will shape up after Brexit. We might not have those EU students who can have EU funding to study with us. This is a big loss for us. We are thinking to make some strategic collaboration and find a way. However, there is no clarity about it.
----------------	---

This study supports the work of Conway et al., (1994) that strategic planning in the UK higher education is to ensure that the university can compete and gain advantage over others in the competitive environment. Furthermore, the work of Hunter (2013) is also supported by this study that strategic planning serves as a well-organised and logical approach to ensure the routine operations are carried out in right way. Thus, this is also evident that the main aspect of the usage of strategic planning is to ensure realistic approach is made to accomplish the strategic long-and-short term objectives. Additionally, there are traces of strategic planning requiring flexibility to ensure there is a right balance to accomplish strategic objectives. The institutions require vertical and horizontal coordination, which comes through effective communication. The work of Hunter (2013) is confirmed that internationalization process exceeds rapidly with the collaboration and coordination, which is the part of strategic planning within the institution.

Brexit related strategic planning was also asked from the experts and it is found that the situation is very uncertain. Most of the universities are not very cleared about it but going on with keeping the basics on. There is a confirmation of fact that the reason for voting in favour of Brexit is to secure the economic entity of the UK remains top priority. However, in doing so, the large number of workers coming from EU are left to suffer. The experts conveyed the notion that one of the factors behind Brexit is the nationalistic view within the Great Britain. There is a general notion that locals are losing jobs to the European and in case of Brexit, more jobs will be for locals than EU. Therefore, the nationalism is a view that has played its part in the promotion of Brexit. However, there is no certain idea about its impact would be longer or shorter for the universities, but it appears that universities can lose its potential workforce. In addition to that, the funds for EU students such as loans and grants could also be lost by the universities if Brexit happens. This means that there could be less financial gain because of losing EU students, who are eligible to such funds. There is indirect evidence regarding the immigration crisis within the Europe that has triggered the Brexit campaign in the UK. With this campaign, different sectors are adversely affected and hence, this research also investigated the impact it has on the UK higher education. It is evident that there is a higher uncertainty about the situation at present but to larger extent it is predicted that many professionals would return to their homelands while the funding for EU student would limit, which would lead to lower attraction from the EU market. Hence, the predictions are indicating that the work of Ruyter (2018) is somewhat in consideration.

Table 9: Panel discussion responses

	How the situation of Brexit could affect the UK higher education.
Institution I	• There is a negative impact at the moment. Clearly, there is a drop in the higher education of the UK's growth rate percentage because of the Brexit. • I can see very visible drop in the value of British pound immediately after the Brexit voting. There is a possible chance of losing funding and also the learning system could affect to some extent. Even the research funding opportunities might get limited for the authors to collaborate with other authors while using EU research funding. • It has created uncertainty in the market. Most of the EU citizen working in the UK are unsure and wants to leave the UK. This is not good for education sector because large number of our workforce is made of the EU citizen.

Institution II	• Large number of our EU students were approved to EU funding while with the Brexit, there is likely possibility of losing those potential market because there will be new policies etc. Like think of it as of now the Asian students have no such funding so we have a decline in those admissions so if the same funding is cut off for EU students then we would have decline in the number of students. • It didn't go well for us. We are seeing a drop in the EU students. • The students and the faculty from EU are confused. Honestly, we are fearing of losing them if Brexit happens and there is no other alternative to safeguard them.
Institution III	• Honestly, I do not know but I fear the impact would be negative and quite severe. That is my gut feeling. There could also be likely possibility of emergence of stiff competition because the UK would be exiting from the EU while other competitors like Germany, France etc would use it to their advantage to attract those students and workforce. So there could be a negative impact. • We won't know unless we encounter the Brexit but yes it appears that we can lose some strategic collaborations, funding, work-related resources, and potential student market. • We are already losing our workers. It is an early exit for some of the administrative staff after Brexit voting, so yes it negative. On the other hand, it can really open some new directions for the institutions to address the market situations and work on collaborative grounds.
Institution IV	• It is a confusing scenario. No one knows for sure what will happen so we cannot predict how it will affect the UK higher education market. There will be positive and negative to it. In the hindsight, it appears like negative would be more than positive. • Yes, I agree that it is uncertain so it's a pre-assumption but looks like it will take some time to absorb the pressure if we lose potential workforce and students. • Nothing known at present, but the impact will be negative. At least for some time period, the institutions would suffer from the loss of EU market. The resources and funds would be lost unless there is some alternative strategy.

It is evident that there is a situation of higher degree of uncertainty in the UK at present about the Brexit. Like many other sectors, there is not a clear picture in the education sector. However, when the voting of Brexit came out, there was a significant fall in the British pound against the US dollar. It is found to be higher since 1985. There is a significant drop in the stock market across the world. It has also affected the people, workers from the EU working in the UK are not sure about their future and indicated of returning to their respective countries. Hence, this study supports the notion of Neves and Hillman (2017) that workers from the EU countries working in the UK are perplexed and unsure about their future because of the situation of Brexit.

Furthermore, large number of students coming from EU countries and these are not only students but also a part of part-time workforce. According to the official report of the UK universities (2018) report, out of 17% percent academic staff while administrative staff up to 6 are from the EU constituting workforce in the UK higher education. This could be affecting the plans of the higher education institutions in the UK because if these workers decide to leave institutions and return to their countries then it could affect the operations of these higher education institutions. Hence, there is evidence that the negative impact would be largely visible in the case of Brexit. The study of Neves and Hillman (2017). Although, there was no mention of the projects like funding through Horizon (2020) and Erasmus Student Exchange Scheme but to some extent these programs would be affected by the Brexit. On paper, there are evidence of drop to some extent in the number of the EU students because of EU scholars would be no longer the beneficiary to the funding and loan to study in the UK. They would be having same fee structure and it could lead to reduce in the potential target market. Thus, in this aspect, present study supports the work of Ruyter (2018). This also reflect that there is likely possibility of fundamental changes in the structure and operations of the UK higher education because it would be opting for another schemes and plans to ensure

the workforce requirements and new potential markets are attracted. It could also lead to change the UK higher education to transform into a pressure group for the legislation. In other words, the UK higher education system would want to sustain its operation and market value by offering something to the workforce and students from the EU and other potential markets. Therefore, the legislation may come up with a plan to have structural changes in the operations and policies related to workers as well as students to support their living in the UK.

Table 10: Panel discussion responses

	What are challenges you do see that the higher education in the UK is being facing and what is the likely solution for it?
Institution I	- Although, we are talking a lot about the Brexit from a while, but I still think this is a one odd situation. This changing situation could be a challenge for the education sector in the UK. Another could be increased demand of the market. Increased competition in the world is also a challenge. While the solution is to remain calm and deal with all by having a thorough planning. More collaboration and having higher strategic partnership. For demands in market and even situations of higher uncertainty, the solution is to be more proactive and have scenario-based approach to tackle such issued. - I must say, I agree with the lead in the discussion. But I will add to it the increase in the living cost of students is a challenge for the UK higher education system. The living expense, especially for the international student is a serious challenge. Solution is honestly, not known, however, the international students should be given some flexibility in study plans and working hours to make it through the toughest phase. For us, they are the business and if they are not able to stay in such situation that it is going to affect our business plans, operations and goals to larger extent. - Certainly, Brexit is a challenge for us. We can lose some potential students and funding. Not to mention the skilled workers but we have a solution to find new ways to fulfil the goals and objectives of our institution.
Institution II	- Intense global competition is a biggest challenge. Now it is not only the UK that offers a quality education but there are now many other good institutes in the Europe that are doing the same. International market is expanding while there is too much concentration on the London city so there is higher pressure. Sometimes the main university is facing a serious challenge to have a decent batch while London campus is a reason to sustain in the market. This is a challenge for the education sector. The solution is to give incentives to students, so they are encouraged to move to main campuses in different regions. - I would say the increasing tuition fee is also a challenge for the UK higher education sector. The increase in fees is one of the biggest challenge because students are moving to other European countries because the facilities might be lesser but there is a degree worth from Europe, which is still superior to them when they return back to their Asia, Africa or Latin America. - The sustainability is one of the challenges. It is not easy to sustain in the constantly changing environment that is throwing new challenges every time. The solution is to start with strategic models that are more flexible, adaptive and consistent. So, the use of such model is a solution to sustain in the environment.
Institution III	- Within the departments, there are various challenges such as marketing department has different agenda to ensure we remain able to compete with other forces. The administrative department has the challenges of ensuring smooth administrative operations, IT is doing its own work while finance department is facing challenges to find a balance between available financial resource and its optimal usage. The solution on the department level is to meet their operational tasks through adequate execution of plans. - There are internal challenges and external challenges. Internally, challenge

	of ensuring things go as per the university's set targets while external challenges include satisfying the expectations of the different stakeholders. The solutions are going through designed approach. The coordination between department is a key for us and communication is a key for meeting the expectations of different stakeholders. • I agree that there are both types of challenges, some are short term other are longer, some are internal others are external. The solution is going through strategic approach to deal with them. There are constantly different challenges arising for the institutions and the solution is sticking to the basics.
Institution IV	• Available fund to run the operations is a challenge. Sustaining in the existing tough competition is a challenge. Attracting new markets and satisfying the needs and demands of the existing stakeholders is also a challenge. When you say the solutions to these challenges. It totally depends on the type of institution and the ongoing situation. For instance, in our case, funding is a challenge and the solution is exploring new markets to ensure operations carry on. Sustaining in the tough competition is a challenge for us, and therefore, we are using environmental tools such as academic mapping and BSC to ensure the objectives are met. Attracting new markets is a challenge that could be resolved by having strategic collaboration and providing programs that is worth value a money. Now, the challenge of keeping all stakeholders happy is very difficult and the only solution I can see is finding a middle path that is win-win to both. This could be done through strategic planning. • I am in complete agreement with the all mentioned points. There are different challenges, and these are due to changes in the environment. Solutions are based on the situations. Strategic model helps in the decision-making at all levels so that helps in overcoming those challenges.

The discussion revealed that there are various types of challenges faced by the higher education institutions in the UK. These challenges are different for different institutions. Some of the challenges are arising because of the changes in the external environment whereas other are resulting from the internal variations. Similarly, some challenges are found to be long-term while other are short-term. Nevertheless, these different challenges affect the operational plans and functionality of the higher education institutions. The solutions to these problems depend on the type of situation. However, the strategic model has a pivotal role in administering and resolving those issues. One of the key challenges that emerged from the discussion is intense global competition. It is right to state that international students are important for the institutions in generating revenue and with the growth of institutions, other countries in the Europe, such as, Germany, France, Sweden, etc are some of the competitors for the UK. These countries are giving tough competition to the UK higher education market. Also, there is no one approach to deal with the increasing competition in the global market and students are moving to these other countries due to changes in the policies of limited stay etc. Thus, this could be a reason for losing the potential market to these other competitors. In this aspect, the question arises regarding sustaining the operations in the international market. Additionally, the internal competition is bringing imbalance in the market. As evident from the discussion, there is higher traffic of students in the London in comparison to other regions in the UK. Mostly, the international students prefer to study in the London, which disbalance the ratio because the main campus in other region has lesser traffic while in the London there is higher ratio. Moreover, the living expense in the London is also more than other regions. There is no likely solution to this existing issue but there is a need for having good governance and right planning to deal with this issue.

Table 11: Panel discussion responses

	Which strategic model do you think is more appropriate for the Higher Education Institutions in the UK? Such as, mental model? Nested circle etc to maintain sustainable development and why?
Institution I	• Personally, I think different models are effective for different institutions. It depends on their goals and focus. For sustainable development operations, model must have dimensions to cover environment, social and economic perspective. • Combination of different models to ensure there is operationalized sustainable development. It depends on the situation. For different institutions, different models are effective. • There is no one size fit for all. I personally think a model which comprehensively deals with the systems and operations in a long run to ensure universities are achieving its strategic objectives and sustainable growth.
Institution II	• It depends on the level of strategies. There is no specific model to use always but when we are looking for sustainable development, we ensure that economic and societal aspects are properly covered. • Strategic framework contains everything. It has backup plans, contingent approaches and looks into all dimensions. It has no specific name but blend of many things. • If I certainly have to name a model, then it is nested circle because there are many situations where things overlap. Sometimes there are repetition while other times there is a completely different scenario. So, I personally feel nested circle is advantageous to use in order to have sustainable development.
Institution III	• I have seen different universities have different approach and framework to deal with the scenarios. It is not named specifically but has features of all different models. I think the level of strategy is also equally important. The corporate level strategies are more interlinked with the sustainable development and other strategies work as a support thing. I cannot name any one model but mixture of many that could help in implementing corporate strategies for sustainable development. • Agree that depending on the structure and operations, all institutions work differently towards mission and vision. Some institution prefers rigid approach and might stick with mental model, some might like flexible approach and opt for nested model. Others might even come up with own crafted model to deal with their existing issues. All are used and brings results differently for these institutions. • For me mental model is more effective in long run. It is really effective to achieve sustainability.
Institution IV	• Nested model is useful in maintaining sustainable development progress by using all types of strategies at different levels. Together they work to achieve the sustainable growth and development. • All models are fine. They are many strategies that affect the businesses in long run and these models provide the strategic framework to execute those strategies in positive way.

In the discussion, it is found that there is no specific model, which is more effective and comprehensive. However, the combination of different models interlinked with one another to ensure the best possible results could be attained. Additionally, different institutions use different models to ensure the goals and focus are maintained so that the environment, social, and economic perspective could be covered by having sustainable operations. Nevertheless, the aspects of all different models have been confirmed by this study. The mental model of Rosner (1995) is confirmed to be used to some extent by the institutions to have sustainable development. Similarly, the aspect of Scott and Gough (2003) are also confirmed that by means of metaphor, the sustainable development is achieved. At times, these institutions focus on two out of three (economy, environmental, and social) dimensions. As evident from the discussion, there is often overlapping of dimensions when institutions do strategic planning to sustain its operations. Hence, the present findings are aligned with the earlier work of Lozano (2008) and Waas et al. (2011). Since, some

panellists stated that two out of three dimensions should be at least covered to ensure there is sustainable development. This indicates that nested circle is also followed in the higher education sector. The findings are confirming the use of few dimensions out of all, therefore, the nested circle proposed by Hart (2000) is confirmed by present findings. It is found that the magnitude of strategy affecting the sustainable development process within the higher education sector is evident through different models in long run, but these models are modified and implemented as per the required scenario. This is the new finding from the present study. Additionally, the discussion also revealed that the levels of strategies differ for different levels thus, this study confirm the initial notion of researchers, namely; Ahmed et al. (2015) and Kettunen (2003).

5. Conclusion

It is found from qualitative findings that economic, social, and environmental dimensions are most frequently considered for sustainable development of the British Higher Education Institutions. Therefore, the work of Hart (2000), Lozano (2008), Rosner (1995), Scott & Gough (2003), and Waas et al., (2011) are supported through present findings. It also showed that for assessing and measuring the sustainable development, different models are used by the public universities. In this regard, different level of strategies interlinked with the strategic management are combined to help institutions in achieving the higher level of sustainable development in long run.

Corporate, business, and operational level strategies are components of the strategic management process that helps the institutions in the attainment of organisational objectives in effective manner so that development as well as growth is sustained in both; long and short run. The strategies enable the organisations to achieve competitive edge in the operative market. Therefore, previous work of Ahmed et al., (2015), Chakarvarthy and Henderson (2007) and Schermerhorn (2012) has been confirmed through present study findings. However, the above-mentioned studies were limited in providing the in-depth analysis of the industry through primary investigation. Further, the work of Ahmed et al. (2015) specifically focused on the types of strategies, but lack in providing the practical model to improve the sustainable operations. In contrast, present study offers a TOWS strategy to improve the overall functioning within the education sector. Moreover, the work of Chakarvarthy and Henderson (2007) focused on the usefulness of hierarchy of strategic framework through renewal of organisations whereas the idea is obsolete when changing complex business environment is considered. Therefore, this study advances further by not only confirming their work but also ensuring that proposed model OITGA to have practical implications.

In relation to strategies and strategic management process, the participants were asked about the core themes driven from the strategic management process in the UK and interview results showed that sustainable development is the major theme whereas competitiveness, organisational objectives and survival are found through this study. Again, the present findings are in line with the work of Ahmed et al., (2015), Chakarvarthy and Henderson (2007) and Schermerhorn (2012). These driven themes to larger extent reflect the effectiveness of strategic management for sustainable development and dealing with various external environmental challenges. To further explore the sustainable development and effective strategic management, the effectiveness of different level of strategies were investigated. The interview findings confirmed that stability and growth are both attained through corporate level strategy. Often the state universities either use growth strategy or stability strategy to secure its position in the market to deal with external environmental challenges. It is found that stability strategy is more effective in ensuring the smooth flow of operations so that there is higher ability to deal with the challenges, however, equally important is growth strategy to expand and compete in the market. Situational demands risk factors in the environment are the key aspects for which growth strategy is essential as it helps in sharing risk while social, economic, and environmental stability is attained to meet the external challenges in the operating market. Thus, the work is in line with the work of Ahmed et al. (2015), Koch

(2000) and Locke (2007). The growth in the market is attained through different approaches such as, mergers, joint ventures, and strategic collaboration. These growth strategies to some extent help in retaining sustainable operations therefore, the study supports work of Ahmed et al. (2015), Child (2001) and Schermerhorn (2012) in this regard. Building upon the deficiencies lacking the previous literature, it is understood that those studies have considered straightforward scenarios while there is a flux at present in the UK higher education environment. For instance, uncertainty created by BREXIT scenario is unique and there is no proper strategy to deal with such situations. Hence, this study applied practical approach through using environmental scanning tools with flexible strategic framework to deal with various uncertainties.

Similarly, the role of business level strategies was also evaluated in this regard and results showed that differentiation, focus, and overall cost leadership strategies are effectively used by the UK higher education institutions so that strategic moves are made to ensure customers are attracted. These different business strategies are effective in helping the institutions to maintain its operations competitive so that the external environmental challenge of meeting the needs of the consumers and survive the competition from the rivals. The use of all type business strategies within the UK higher education institutions means the findings support the work of Kettunen (2003). The use of overall cost leadership frequently in the higher education reflect the cost efficiency to ensure the challenge of sustaining position in the cut-throat competition within the customer-led market. It is also found that universities operating in the Niche market having their objectives through division to centre its focus while strengthens the position of institutions within the complex business environment. The work of Burnes (2014) is confirmed that in order to meet the external environmental challenges, the higher emphasis is drawn on the business level strategies and policies and therefore, the sustainable development is attained through cost leadership so that there is higher cost efficiency. The work of Grove and Pugh (2017) is supported to some extent because ability to stay in competitive market leads to the long-term sustainability of the institutions. It is concluded that the reduction in cost leads to improved efficiency that forms sustainable growth and development, which in return strengthen the position of institution within the operating market. Scale of economies are achieved which helps in the improvement of institution's ability to survive and thrive in complex business environment. The environmental scanning tool TOWS is applied in this study to deal with such uncertainties.

6. Recommendations for FMCG

OITGA Strategic Framework

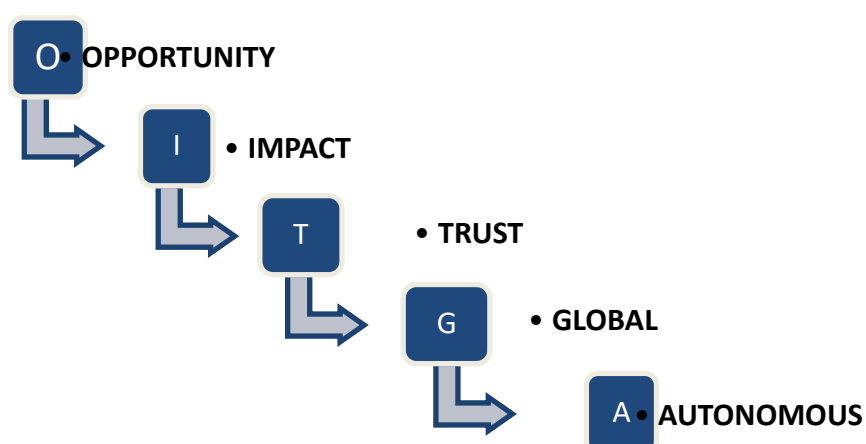


Figure 6: Proposed Strategic Framework

The strategic framework is based on the creating a better future for the institutions and the strategic partnership with the industries based on the OITGA (opportunity, impact, trust, global and autonomous) vision. The proposed OITGA model is to ensure there is opportunity for transforming the learning experiences at institution in the professional world so there is value-added skills developed that helps the professionals and partner industries. This is part of the corporate strategy to ensure the strategic ties are improved through two-way communication. Another important part of strategic framework is to ensure there is better impact on the dimensions such as economic, cultural, social, and civic one by developing knowledge and applicable skills. This could be a part of the business and operational level strategies to ensure the market-led partnership. Trust is another important aspect of the recommended strategic framework. The corporate level strategy should also focus on creating a widespread support and political trust so that civil societies, public services, and economic growth opportunities for the students enhance. The strategic framework should focus on developing global leadership within the education sector at national and international level so that there is better mobility for the students to develop and it will boost the UK programs overseas expansion, that would further improve the chances to sustain the environmental challenges in the external markets. Lastly the operational level strategy should include the autonomous decision making and adoption of flexible routine strategies so that the diversified missions and the consistently changing environmental needs of the individuals, communities, and sectors could be fulfilled by the operative machinery (sub departments) of the institutions. This is the collective responsibility of the governance and leadership within the higher education to ensure the sub-departments work autonomously for the stable and sustainable operations so that there is enhanced positive impact.

In accordance to have this strategic framework effective, it is also important that the interlinked policies and procedures are properly evaluated. The UK-wide approach is essential to have higher level of diversity within the policies so there is strategic partnership within the higher education as well as outside higher education to multiply the positive affect on the individuals and societies while there is increased influence and reach to large audience. There is already a work in process, but this would require a better effort after Brexit to have strategic collaboration within EU and outside EU, such as Africa and Asia should be reached by offering professional graduate programs. It would be a strategic attempt to ensure there is higher strategic planning sustainability attained by diversifying the focus and shifting in other direction so there is no over reliance on one specific market (EU market). The corporate, business, and operational level strategies should be further improved to have maximized economic and social values of the institutions for the betterment of business, communities, civil societies, and students in all regions via knowledge transformation, teaching and open exchange of technologies and ideas. Hence, it is recommended that the collective voice of the universities should be formed to have a global outlook. It should also include to support the collaboration and international exchange so that along with the international partner countries, the UK also sustain advantage by having workforce in different sectors by providing practical exposure with professional certifications. There is also requirement of adopt flexible strategies at all levels to have strategic partnership with industries and work with their requirements to provide potential work resources to them while on other hand, fulfil the expectations of the students by offering them opportunities to further improve their professional learning and capabilities. The corporate level strategies shall also focus on the commitment to improve social cohesion and betterment of living standards by reducing inequality via increasing access to educational opportunities. Thus, this strategic framework would be highly effective when all types of strategies within the higher education institutions work together because only then the universities would be able to achieve OITGA sustainability in the complex environment.

References

- Abdul-Kadir, N. A. (2012). *Strategy management process in higher education: a case study on a Malaysian public university*. Semantic Scholar. Retrieved from: <https://www.semanticscholar.org/paper/Strategy-management-process-in-higher-education%3A-a-Kadir/c6df4834d8322ba32302a61e1b9c19994d9f5a9e>
- Ahmed, J. U., Ahmed, K. U., Shimul, A. S., & Zuñiga, R. (2015). Managing Strategies for Higher Education Institutions in the UK: An Overview. *Higher Education for the Future*, 2(1), 32–48.
- Andrews, K. (1971). *The concept of corporate strategy*. Homewood, IL: Irwin.
- Barney, J.B. (2002). Strategic management: From informed conversation to academic discipline. *Academy of Management Executive*, 16(2), 53–57.
- Brown, R., & Carasso, H. (2013). *Everything for Sale? The Marketisation of UK Higher Education*. London and New York: Routledge.
- Browne, J. (2010). *Securing a sustainable future for higher education: an independent review of higher education funding and student finance*. UK: Department for Business, Innovation and Skills.
- Brundtland, G. H. (1987). *Report of the World Commission on environment and development: "our common future."*. United Nations.
- Bryson, J. M. (1995). *Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement* (2nd ed.). Ann Arbor, MI: Jossey-Bass.
- Buckland, R. (2009). Private and public sector models for strategies in universities. *British Journal of Management*, 20(4), 524–536.
- Bush, J. (2016). *Plan To Fix The Student Loan Crisis*. Forbes. Retrieved from: <https://www.forbes.com/sites/jonhartley/2016/01/19/jeb-bushs-plan-to-fix-the-student-loan-crisis/#5f7cc488100a>
- Chakravarthy, B. & Henderson, J. (2007). From a hierarchy to a heterarchy of strategies: Adapting to a changing context. *Management Decision*, 45(3), 642–652.
- Chalmers, L. (2007). Sustainability Education. *New Zealand Geographer*, 63(3), 225.
- Child, J. (2001). *Learning through strategic alliances*. In M. Dierkes, A.B. Antal, J. Child & I. Nonaka (Eds), *Handbook of organizational learning and knowledge* (pp. 657–680). New York: Oxford University Press.
- Cohen, S. (2016). *Female Leadership Is Key to High Performance*. Retrieved from: <https://www.td.org/insights/female-leadership-is-key-to-high-performance>
- Conway, T., Mackay, S., & Yorke, D. (1994). Strategic planning in higher education: Who are the customers. *International journal of educational management*, 8(6), 29-36.
- Deloitte. (2015). *Higher education is evolving - As the business model changes, the governance model must too*. Deloitte. Retrieved from: <https://www2.deloitte.com/ca/en/pages/human-capital/articles/higher-education-is-evolving.html>
- Delprino, R.P. (2013). The Human Side of the Strategic Planning Process in Higher Education: Chapter 2: The Players. *Planning for Higher Education*, 41(3).
- de Wit, H., & Hunter, F. (2015). The Future of Internationalization of Higher Education in Europe. *International Higher Education*, (83), 2-3.
- Dolence, M. G. (2004). The curriculum-centered strategic planning model. *Centre for Applied Research, Research Bulletin*, 2(10).
- Eckel, P., & Trower, C. (2019). *Stop Planning. Colleges and universities would be better served by focusing on the other half of strategic planning: the strategy*. Retrieved from: <https://www.insidehighered.com/views/2019/02/14/colleges-need-rethink-strategic-planning-opinion>
- Faizan, R., & Haque, A. U. (2019). Working Efficiency of Contrasting Genders under Eustress,

- Distress, Hyper-Stress, and Hypo-Stress, *Prabandhan: Indian Journal of Management*, 12(11), 32-46.
- Grove, J. (2015). 7 key challenges for UK higher education, Times Higher Education. Retrieved from: <https://www.timeshighereducation.com/features/7-key-challenges-uk-higher-education>
- Grove, K. & Pugh J. (2017). Assemblage, transversality and participation in the neoliberal university. *Environment and Planning Development*, 35(6), 1134-1152.
- Goldman, C.A., & Salem, H. (2015). *Getting the Most Out of University Strategic Planning Essential Guidance for Success and Obstacles to Avoid*. RAND Corporation. Retrieved from: <https://www.rand.org/pubs/perspectives/PE157.html>
- Gusakov, A., Haque, A. U., & Jogia, A. V. (2020). Mechanisms to Support Open Innovation in Smart Tourism Destinations: Managerial Perspective and Implications, *Polish Journal of Management Studies*, 21(2), 142-161.
- Haque, A. U., Kot, S., and Imran, M. (2019). The moderating role of environmental disaster in relation to microfinance's non-financial services and women's micro-enterprise sustainability, *Journal of Security and Sustainability Issues*, 8(3), 355-373.
- Haque, A. U., Nair, S. L. S., & Kucukaltan, B. (2019). Management and Administrative Insight for the Universities: High Stress, Low Satisfaction and No Commitment, *Polish Journal of Management Studies*, 20(2), 236-255.
- Haque, A. U., Sher, A., & Urbański, M. (2020). Is the role of Authentic Leadership Effective in Managing Occupational Stress and Psychological Capital? *Forum Scientiae Oeconomia*, 8(2), 59-77.
- Haque, A. U., Yamoah, F., & Sroka, W. (2020). *Willingness to Reduce Food Choice in Favour of Sustainable Alternatives: The Role of Government and Consumer Behaviour (chapter 3)*, In: W. Sroka (ed), *Perspectives on Consumer Behaviour*, Springer.
- Hart, S. L. (2000). *Beyond Greening: Strategies for a Sustainable World*, Harvard Business Review.
- Hunter. (2013). *Local Strategic Plan 2016-2021*. Local Land Services. NSW Government.
- Hassanien, M. (2017). Strategic Planning in Higher Education, a Need for Innovative Model, *Journal of Education, Society and Behavioural Science*, 23(2), 1-11.
- Hinton, K.E. (2012). *A practical guide to strategic planning in higher education 50*. Retrieved from: <http://oira.cortland.edu/webpage/planningandassessmentresources/planningresources/SCPGuideonPlanning.pdf>
- Huge', J., Waas, T., Eggermont, G., & Verbruggen, A. (2011). Impact assessment for a sustainable energy future—reflections and practical experiences. *Energy Policy*, 39, 6243–6253.
- Hussain, N., Haque, A. U., & Baloch, A. (2019). Management Theories: The Contribution of Contemporary Management Theorists in Tackling Contemporary Management Challenges, *Journal of Yasar University*, 14 (SI), 156-169.
- Imran, M., Haque, A. U., and Rebilas, R. (2018). Performance Appraisal Politics and Employees' Performance in Distinctive Economies, *Journal of Polish Management Studies*, 18(2), 135-150.
- Javed, B., Khan, A. K., Arjoon, S., Mashkoor, M., and Haque, A. U. (2018). Openness to Experience, Ethical Leadership and Innovative Work Behavior, *Journal of Creative Behavior*, 1-13.
- Johnson, G., & Scholes, K. (1993). *Exploring corporate strategy: Text and cases*. Cambridge: Prentice Hall.
- Kettunen, J. (2003). Strategic evaluation of institutions by students in higher education. *Perspectives: Policy and Practice in Higher Education*, 7(1), 14-18.
- Koch, S. (2000). *Smart Things to Know about Strategy*, Capstone - Amazon.

- Kot, S., Haque, A. U., and Baloch, A. (2020). Supply Chain Management in SMEs: Global Perspective, *Montenegrin Journal of Economics*, 16(1), 87-104
- Kotler, P., & Murphy, P. E. (1981). Strategic Planning for Higher Education. *The Journal of Higher Education*, 52(5), 470-489.
- Lozano, R. (2008). Envisioning sustainability three-dimensionally. *Journal of Cleaner Production*, 16(17), 1838–1846.
- Meek, V.L. & Wood, F.Q. (1997). *Higher education governance and management: An Australian study*. Canberra: Deetya.
- Morris, H. (2000). The origins, forms and effects of modularisation and semesterisation in ten UK-based business schools. *Higher Education Quarterly*, 54(3), 239–258.
- Neves, J., & Hillman, N. (2017). *Student academic experience survey*. Higher Education Policy Institute and Higher Education Academy, 12.
- Osborne, T. D. (2020). *University-Business Cooperation Country Report UK*. Retrieved from: <https://www.slideshares.net/todddavey/universitybusiness-cooperation-country-report-uk-30302375>
- Rothblatt, S. (2012). *Structure and Management of Higher Education Institutions*. In: S. Rothblatt and B. Wittrock (eds.), *The European and American University Since 1800. Historical and sociological essays*, Cambridge University Press.
- Ruyter, A. D. (2018). *Brexit and UK higher education: Some Reflections*. Retrieved from: <http://ukandeu.ac.uk/brexit-and-uk-higher-education-some-reflections/>
- Sanden, G.R. (2015). Language strategies in multinational corporations. A cross-sector study of financial service companies and manufacturing companies. PhD Series 21.2015. (Law, Informatics, Management, Accounting, Comm. and Cult.) LIMAC School. Retrieved from: <https://openarchive.cbs.dk/bitstream/handle/10398/9174/Guro%20Refsum%20Sanden.pdf?sequence=1>
- Schermerhorn, J.R. (2012). *Management*. New York: John Wiley & Sons.
- Scott, W. and Gough, S. (eds) (2003). *Sustainable Development and Learning: Framing the Issues*. London: Routledge Falmer.
- Ślusarczyk, B., & Haque, A. U. (2019). Public services for business environment: challenges for implementing Industry 4.0 in Polish and Canadian logistic enterprises. *Administrative and Management Public*, (33), 57-76.
- Swain, H. (2018). *Opportunity and risk: universities prepare for an uncertain future* -Brexit, funding changes and a tarnished reputation are some of the issues facing the sector. The Guardian. Retrieved from: <https://www.theguardian.com/higher-education-network/2018/feb/07/opportunity-and-risk-universities-prepare-for-an-uncertain-future>
- Tascioglu, M. (2015). Sustainable Supply Chain Management: A Literature Review and Research Agenda. *Journal of Management Marketing and Logistics*, 2(1), 1-11.
- Universities UK Report. (2018). *Universities in the UK*. Retrieved from: <https://www.postgrad.com/study-in-uk/uk-universities/universities/>
- Urbański, M., and Haque, A. U. (2020). Are You Environmentally Conscious Enough to Differentiate between Greenwashed and Sustainable Items? A Global Consumers Perspective, *Sustainability*, 12(5), 1-26.
- Waas, T., Hugé, J., Verbruggen, A., & Wright, T. (2011). Sustainable development: A bird's eye view. *Sustainability*, 3, 1637–1661.
- Watson, D. (2005). The University and Its Communities. *Higher Education Management and Policy*, 19(2): 14-23.
- Zechlin, L. (2008). Strategic Planning in Higher Education. *International Encyclopedia of Education*, 4: Oxford: Elsevier. 256-263.