

Strategic Management for Long-term Sustainability in Higher Education Institutions

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ABSTRAK

Tujuan penulisan artikel ini adalah untuk mengetahui referensi terkait manajemen strategis di pendidikan tinggi. Penelitian ini dilakukan menggunakan metode Systematic Literature Review. Artikel yang digunakan diperoleh dari database Scopus dengan pencarian spesifik, yaitu "manajemen strategis di pendidikan tinggi". Hasil pencarian mengungkapkan bahwa terdapat 18 artikel dari tahun 1999 hingga 2023. Hasil ini menunjukkan bahwa kata kunci ini masih jarang digunakan sebagai judul dalam penelitian yang ada. Penelitian ini dilakukan di berbagai negara, yaitu Inggris, Amerika Serikat, India, Swedia, Rusia, Indonesia, Chile, Portugal, Jamaika, Polandia, Vietnam, Ekuador, dan Uni Emirat Arab. Artikel-artikel tersebut ditulis dengan menggunakan berbagai metode penelitian, namun umumnya disajikan sebagai studi kasus. Hasil penelitian menunjukkan adanya keragaman diskusi dalam manajemen strategis yang dilakukan di institusi pendidikan tinggi. Artikel ini juga mencakup konsep dan implementasi manajemen strategis di pendidikan tinggi. Diharapkan artikel ini dapat memberikan gambaran mengenai area penelitian yang masih dapat dikembangkan terkait strategi manajemen di pendidikan tinggi.

ABSTRACT

The purpose of writing this article is to find out references regarding strategic management in higher education. This research was conducted using the Systematic Literature Review method. The articles used were obtained from the Scopus database with a specific search, namely "strategic management in higher education". The results of the search revealed that there were 18 articles from 1999 to 2023. These results indicate that this keyword is still little used as a title in existing research. This research was conducted from various countries, namely England, USA, India, Sweden, Russia and Indonesia, Chile, Portugal, Jamaica, Poland, Vietnam, Ecuador and the United Arab Emirates. Articles are written using various research methods, but are generally presented as case studies. The research results show the diversity of discussions in strategic management carried out in higher education institutions. The article also covers concepts and implementation in strategic management in higher education. It is hoped that this article will provide an overview of research areas that can still be developed regarding management strategies in higher education

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1. INTRODUCTION

Higher education institutions play a significant role in shaping and advancing a nation. As centers of advanced learning, universities are not only places for the development of science and technology but also arenas for pursuing innovation and new discoveries that drive progress [1]. Furthermore, higher education institutions are responsible for producing quality human resources, providing expertise and skills for the younger generation, who are the main pillars of economic development. Higher education also has a substantial social impact, creating an inclusive environment where various communities can learn together and expand their understanding [2]. Higher education institutions also preserve and develop national culture and maintain the identity of the nation through teaching, research, and community service in various fields of knowledge. Therefore, the role of universities goes beyond merely providing academic degrees; they serve as a foundation for growth, innovation, and sustainability of the country.

Strategic management is the key to an organization's success in facing the complexities and dynamics of the business environment [3]. By formulating and implementing the right strategies, an organization can direct itself towards achieving long-term goals and maintaining its relevance in a constantly changing market. Strategic management helps organizations identify growth opportunities, manage risks, and enhance competitiveness. An integrated SWOT analysis aids organizations in understanding their internal strengths, addressing weaknesses, optimizing market opportunities, and anticipating threats [4]. Additionally, strategic management facilitates the effective allocation of resources, whether financial, human, or technological [5]. Through a systematic planning process, organizations can innovate, adapt to market changes, and maintain a competitive advantage. The application of strategic management also strengthens coordination throughout the organization, ensuring that all elements work synergistically towards common goals. In other words, strategic management is not just an administrative tool; it is the foundation for an organization's growth, sustainability, and competitiveness in a dynamic market [6].

Higher education institutions, as organizations, need to think about strategies for sustainability [7]. Education with a sustainable concept is often a focal point globally [8]. In a constantly changing context, strategic management allows institutions to respond appropriately to the dynamics of the education market and societal needs. Strategic plans guide the development of relevant and innovative curricula, adapting teaching methods to technological advancements and the latest educational trends [9]. These strategies assist institutions in attracting and retaining quality faculty, as well as building strong partnerships with the industrial world. By focusing on strategy, higher education institutions can efficiently manage resources, including the allocation of funds for research, infrastructure development, and student support. The implementation of strategic management supports the achievement of the institution's vision and mission, creates an inclusive learning environment, and enhances the institution's positive impact on the social, economic, and cultural development of the communities they serve. Through wise planning and implementation of strategies, higher education institutions can confidently face future challenges and make significant contributions to the advancement of education and society.

Strategic management in higher education is increasingly being discussed by researchers in various parts of the world, including Indonesia. Strategic management in this

sector faces situations that require resilience and the ability to adapt effectively. First, dynamic changes in the higher education ecosystem, such as technological advancements and demographic shifts, create difficulties in formulating responsive and relevant strategies. Technological advancements compel institutions to continually update their teaching methods [10], while demographic changes necessitate adjustments in services and curricula to meet the diverse needs of the population [11]. Limited financial resources often present challenges, requiring higher education institutions to carefully manage their budgets to ensure the achievement of long-term strategic goals. Efficient utilization of funds, including for research, infrastructure development, and student support, is crucial for maintaining institutional sustainability. Additionally, obtaining support from various stakeholders, such as faculty, students, and the broader community, poses a social and political challenge that requires strategic approaches.

Higher education institutions also face pressure to meet quality and accreditation standards [12], making performance evaluation and reporting complex aspects of strategic management. This includes the need to ensure that academic programs, facilities, and administrative processes meet the criteria set by accreditation bodies, which in turn affects the institution's reputation and attractiveness to prospective students. The ability to integrate technological innovations into learning and administrative processes presents a critical challenge, given the ongoing technological advancements. Accreditation bodies have innovated by introducing SAPTO as an online-based accreditation system [13]. This condition indirectly instructs that higher education should continuously progress alongside the evolving technology. Institutions must adapt to the latest digital tools and platforms to enhance the learning experience and improve operational efficiency in resource management. Increased competition among higher education institutions to attract quality students, secure research funding, and maintain academic reputation is also a crucial factor that requires careful strategies. By identifying and addressing these challenges, strategic management in higher education can provide solid guidance for achieving the institution's vision and mission [14]. Effective strategies will help institutions navigate rapid changes, adapt to societal needs, and positively impact the development of education and society as a whole. This is important to ensure that institutions not only survive but also thrive in a competitive educational environment.

The strategic management process is a systematic series of steps designed to guide an organization in achieving its goals effectively and efficiently [15]. This process begins with establishing the organization's vision and mission, which provide direction and long-term objectives. Next, the situation analysis stage involves an in-depth assessment of internal and external factors that may influence the organization. This includes evaluating internal strengths and weaknesses, as well as opportunities and threats from the external environment. The next step is to formulate a strategy, where the organization develops an action plan based on the results of the situation analysis. This strategy must align with the organization's vision and mission and be responsive to environmental changes. After the strategy is formulated, the next step is implementation, which involves organizing resources, allocating responsibilities, and ensuring that all elements of the organization are effectively involved. This process continues with evaluation and control, where the organization's performance is measured against its established strategic objectives. This evaluation may involve key performance

indicators (KPIs), customer surveys, or financial analyses. If there is a mismatch between actual performance and the established goals, the organization can make changes and adjustments to its strategy or implementation.

The strategic management process is not a one-time step but a continuous cycle. Organizations need to adapt to changes in the internal and external environment and continuously identify opportunities and overcome challenges [16]. By going through these stages systematically, organizations can ensure that the strategies adopted are relevant, measurable, and support the achievement of their long-term goals. This research aims to analyze and summarize various literature related to the strategic management process in the context of higher education. By examining existing sources, this research will identify trends, best practices, and challenges faced by higher education institutions in implementing strategic management. Furthermore, this research is expected to provide useful insights for developing effective strategies to enhance the quality of education and the relevance of institutions amid rapidly changing dynamics.

2. METHODS

This research was conducted using the literature study method. The literature study research method is an approach used to investigate and develop a comprehensive understanding of a particular topic based on existing literature reviews. The stages in this method include several systematic steps. First, researchers identify relevant research topics and detail the research questions they want to answer. The next step involves searching the literature through trusted sources such as databases of scientific journals, books, and indexed articles. The literature used is references obtained from searches with the keywords "strategic management in higher education" and "strategic management in higher education". After the literature is collected, the researcher carries out critical evaluation and selection to determine the relevance and quality of the sources to be used. A comprehensive analysis of the selected literature was then conducted to identify emerging findings and trends. The final stage involves preparing a literature synthesis, in which the researcher constructs a thorough understanding of the topic, identifies gaps in knowledge, and formulates implications or directions for future research.

3. RESULTS AND DISCUSSION

The search was carried out using the Scopus database with TITLE-ABS-KEY ("strategic management in higher education"). The results show that there are only 18 articles that use these keywords from 1999 to 2023.

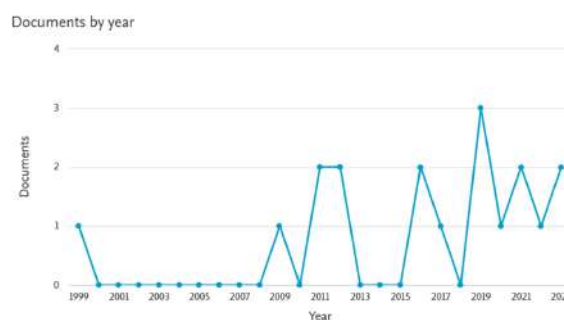


Figure 1. The Scopus database with TITLE-ABS-KEY

Based on the graph above, it can be seen that there is still little research on strategic management in higher education. The number of studies from year to year is no more than 3 articles.

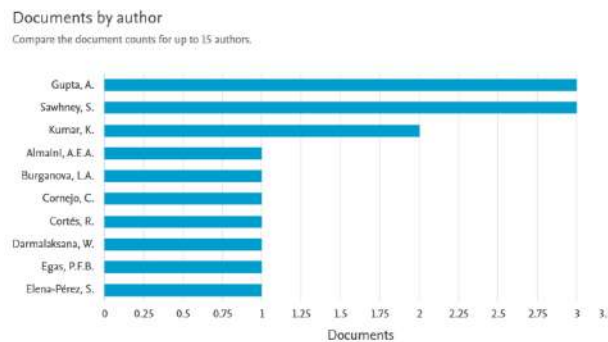


Figure 2. The existence of the authors in the research keywords searched

The graph above shows the existence of the authors in the research keywords searched, the most of which are only three articles, namely Gupta A, and Sawhney, S. The publications carried out by both of them are in the form of articles and book chapters.[17], [18], [19].

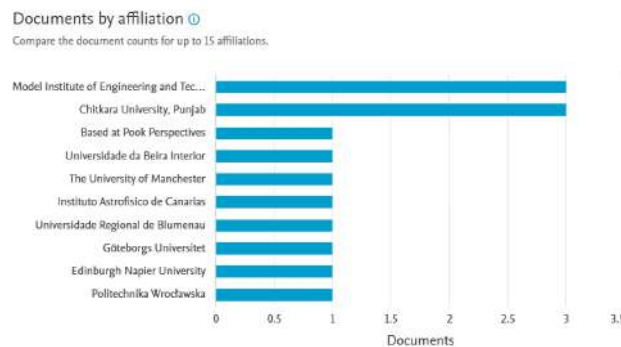


Figure 3. That the agency that produces the most publications regarding strategic management in Higher Education

The graph above shows that the agency that produces the most publications regarding strategic management in Higher Education is the Model Institute of Engineering and Technology.

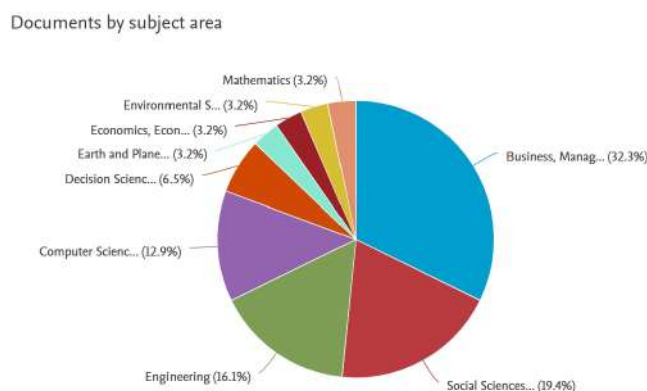


Figure 4. Business and Management are the subject areas most related to strategic management topics in Higher Education

The graph above shows that Business and Management are the subject areas most related to strategic management topics in Higher Education.

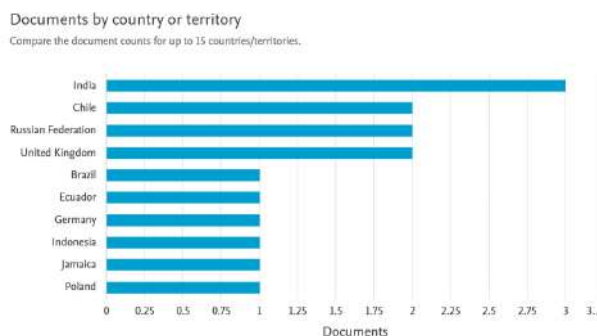


Figure 6. That are active in publishing in the research area that is the boundary of this research

The graph above shows countries that are active in publishing in the research area that is the boundary of this research. The most productive country is India with 3 publications.

Table 1. Digest of Journal Publications

No.	Writer	Type	Country	Title	Year	Objective	Research methods	Results
1	Rynca, Radosław and Piórkowska, Natalia	Article	Poland	Using ranking and optimization methods in strategic management in higher education	2023	This article presents a proposed university management model that supports the strategic management process at universities.	Quantitative with linear programming	This article presents a proposed use of the strategy implementation model and examples of its use
2	Sir, Nguyen An; Kien, Nguyen Trung; Trang, Nguyen Ngoc; Tu, Nguyen Thanh; Hue, Nguyen Thi	Article	Vietnamese	Research on Quality Cultural Factors that Influence Internal University Education Quality Assurance in Vietnam	2023	This research aims to identify and evaluate quality culture factors that influence the establishment, operation, and effectiveness of internal educational quality assurance in Vietnamese universities.	Mix method with qualitative and quantitative data	The findings show that quality culture factors that have an impact on internal quality assurance include academics, social sciences, humanities, culture and the environment.
3	Egas, Paúl Francisco Baldeón; Saltos, Miguel Alfredo Gaibor; Proaño, Iveth Carolina; Recalce, Henry; Leon, Giraldo	Conference paper	Ecuador	Strategic Management for Higher Education based on Data Analysis: a literature review UISRAEL case study	2022	The aim of this research is to determine the current situation of strategic management in higher education based on data analysis	Study of literature	A case study of one of Ecuador's Higher Education.
4	Williams,	Article	Jamaica	Strategic	2021	This paper	Action research	The research

	Densil			planning in higher education: a simplified B-VAR model		proposes a simplified and efficient strategic planning model that can be used by executives to facilitate strategic planning in Higher Education.		presented in this paper finds that strategic planning models used in higher education are generally complex, most are designed specifically for each institution and lack clarity regarding the implementation process. To address these issues for strategic planners in higher education, this paper proposes a simple model that can be adapted by any higher education institution to assist their strategic planning process. Brainstoming-Visioning Action Results (B-VAR), which is a solution to this problem, presents the various elements of the strategic planning process that need to be in place to develop a viable, implementable strategic plan that will produce results. real results for HEI.
5	Ruff, Claudio; Ruiz, Marcelo; Flores, Tomas; Cornejo, Cristian; Cortes, Roberto; Matheu, Alexis	Conference paper	Chile	Management Models and Higher Education Strategic Management, Continuous Improvement, and Their Impact on Rankings	2021	This paper aims to describe the institutional development achieved by Bernardo O'Higgins University (UBO, by its initials in Spanish) during the last decades and the scope of its academic management.	Quantitative method	UBO's administrative features have a positive impact on quality, teaching and research, demonstrated by the University's position in national and international rankings in the last ten years.
6	Sawhney, Sahil; Sharma, Kulwant Kumar; Gupta, Ankur	Article	India	Penetration and prevalence of strategic management in higher education	2020	The premise of this paper is to examine the extent of implementation of Strategic	Quantitative method	SM maturity in institutions implementing SM was assessed, while leadership and institutional

				institutions in India		Management as a tool for achieving institutional excellence and sustainability in IHEs through a survey of 368 leaders from higher education institutions across India.		readiness with respect to SM adoption were evaluated. Finally, institutional challenges in widely implementing strategic management and increasing its effectiveness are also discussed.
7	Sawhney, Sahil; Kulwant Kumar; Gupta, Ankur	Article	India	Adopting strategic management in higher education in India: Needs, challenges and ideas	2019	This paper examines the current state of higher education in India which necessitates the implementation of strategic management by institutions to achieve long-term sustainability and success.	Study of literature	This paper reflects on the challenges in implementing strategic management and ideas to facilitate its implementation in the Indian context.
8	Jamaluddin, Dindin, Ramdhani, Muhammad Ali; Priatna, Tedi; Darmalaksana, Wahyudin	Article	Indonesia	Techno University to improve the quality of Islamic higher education in Indonesia	2019	The aim of this research is to explore the techno university concept developed by reputable and international campuses, to reveal management strategies of public institutions in improving technology-based service standards.	Qualitative descriptive	The results of this research are a needs analysis and design of a techno university concept for ensuring the quality of higher education.
9	Yureva, OY; Yureva, OV; Burganova, LA	Article	Russia	Strategic management in higher education systems: A methodological approach	2016	The researchers examined methodological approaches to strategic management in higher education systems.	Qualitative	This paper concludes that, since higher education institutions have their own specificities, their strategic management mechanisms should be based on their own methodology and should be different from the strategic management methodology of commercial

								organizations. The conclusion is that strategic management is risky management, and when applied at university level, the risk of social consequences of risks associated with the use of personnel increases.
10	Kormakova VN; Musaelian EN; Romanov VA	article	Russia	Strategic management training of future specialists in the higher education system: Conceptual basis	2016	Strategic management model for the development of vocational training in higher education institutions	Theoretical and methodological analysis	A conceptual model for strategic management has been developed based on the analysis of extensive experience and generalization for the management training of future specialists in higher educational institutions.
11	Matherly, Laura L	Article	United Arab Emirates	A causal model predicting students' intention to enroll is moderated by university image: Using strategic management to create competitive advantage in higher education	2012	The aim of this paper is to model the decision criteria used by students in choosing a university, determine the factors that influence university image, and ultimately predict intention to enroll.	Quantitative	When strategic decisions are based on data from target groups, programs and services can be tailored to generate competitive advantage. Drawing from the paradigms of performance excellence and strategic management, a conceptual model is proposed. A positive image is thought to result from awareness of information, experience and favorable characteristics such as academic quality and program availability. The results show mixed support for the mode
12	Wilbon, Anthony D	Article	United States of America	Interactive planning for strategy development in an academically	2012	This paper evaluates the approach taken by university-based collaborative	Case study	By utilizing the concepts of road mapping and interactive planning, this case study provides

				based cooperative research enterprise		research to describe integrated planning processes that support strategic management in higher education settings.		insight into the participatory approach used and provides modifications to several conceptual models to illustrate the advantages and disadvantages of this process.
13	Elena-Pérez, Susana A Send an email to Elena-Pérez S.; Saritas, Ozcan B; Pook, Katja C; Warden, Campbell	Article	Spanish	Ready for the future? A university's ability to manage its intellectual capital strategically	2011	This paper aims to explore the possibility of combining foresight techniques and intellectual capital management, as two participative strategic management approaches, in higher education institutions.	Study of literature	A proposed integrated use of foresight and intellectual capital management for universities is suggested. The presented case study illustrates how foresight provides an excellent approach to answer the question of how to develop a shared vision of the future and jointly determine the best strategy for adapting the organization to the new context, and the role intellectual capital management models play in the strategy. management, resource allocation and monitoring of organizational goals and performance. Practical implications: The issues discussed in this paper can provide a starting point for better integration of strategic management in higher education institutions.
14	Mainardes, Emerson Wagner; Ferreira, João M.; Tontini, Gerson	Article	Portugal	Creating competitive advantage in Higher Education Institutions: proposal and test of a conceptual model	2011	This research aims to propose and test a conceptual model that explains the process of identifying competitive	Case study	The main contribution of this research is the adaptation of three theoretical approaches in the field of business strategy in the higher education sector. These

						advantages in a Higher Education Institution		findings provide evidence that, to be competitive, HEIs must have stronger relationships between resources, regions and stakeholders.
15	Theeb M.; Gupta NK; Almaini AEA	Conference paper	Great Britain	Change management in higher education	2009	This paper aims to explain basically reflect the scientific and practical steps that must be followed in management strategies and business organizations to find out the differences between them and the steps involved in management strategies for higher education institutions.	Qualitative descriptive	the strategic situation of higher education in terms of positive and negative strategies and offers core ideas for change in higher education as part of a response to the strategic model.
16	Norback, Lars Erik; Nordberg, Christina; Olsson, Lars Erik	Article	Sweden	National devolution in Swedish higher education – a search for new local leadership. The case of leadership development at Göteborg university	1999	This paper describes the development of a 10-day interfaculty leadership training course for department heads, directors of studies, and other local managers.	Qualitative descriptive	The implications for strategic management in higher education include: building a new social identity as a leader, gaining leadership acceptance in a culture of individualistic academic freedom, training academic leaders according to professional values, and addressing accountability in a collegial decision-making environment.

Rynca & Piorkowska, discusses the proposed strategic management model accompanied by implementation and examples of its use [20]. Tuan et al, discusses quality culture factors in internal quality assurance at universities [21]. Egas et al, reviewing various literature in strategic management related to a case at a university [22]. Williams, discusses strategic planning in higher education [23]. Ruff et al, reviewing strategic management and management models in higher education in the context of continuous improvement [24]. Sawhney et al, discusses the function of strategic management in increasing the excellence of a university [19], the needs, challenges, and ideas in adopting strategic management in higher education [25] and discusses a case in strategic management in higher education [18]. Yureva et al, discusses approaches to strategic management in higher education [26]. Kormakova et al, developing a model for training on strategic management for leaders in higher education [27]. Matherly, modeling decision making in selecting higher education institutions with strategic management as a tool for creating competitive advantage [28]. Wilbon, discusses integrated planning in strategic management in higher education [29]. Elena et al, discusses participatory strategic management approaches in higher education by combining two techniques [30]. Mainardes, proposed a model for identifying competitive advantages in higher education [31]. Theeb et al, discusses change management mechanisms in higher education [17], and Norback et al, discusses leadership and its implications for strategic management in universities [32]. The research carried out by researchers used research methods, both qualitative, quantitative and mixed methods.

Some of the research conducted only discusses one process at the strategic management stage. For example, research on situation analysis was carried out by Mainardes et al to analyze the situation to identify the advantages of the university, this is the stage of internal situation analysis in strategic management [31]. Strategy formulation in higher education is a critical stage that involves identifying the long-term direction and goals of the institution. The initial stage in formulating this strategy involves forming a strategic team or committee consisting of leaders and key stakeholders in higher education. This team is responsible for detailing the institution's vision and mission, creating a shared understanding of long-term goals, as well as evaluating internal strengths and weaknesses, as well as opportunities and threats from the external environment [23]. Wilbon also discusses interactive planning roadmaps. Strategy implementation in higher education is a critical phase that requires the active involvement of the entire academic and administrative community [29]. Once the strategies have been formulated, the next step is to transform the vision and plans into real action. This involves efficiently allocating resources, including budget, teaching staff, and facilities, to support strategy implementation. At the implementation stage, several studies regarding strategic management in higher education regarding implementation of strategic management as carried out by Rynca & Piorkowska [20]. Monitoring and evaluating strategies in higher education is a crucial step to ensure the success and sustainability of strategic plan implementation. This process involves continuous observation and assessment of the progress and impact of the strategies that have been adopted. Monitoring focuses on routine monitoring of the implementation of strategic activities, including performance measurement and achievement of interim targets. Strategy evaluation involves an in-depth analysis of the results that have been achieved and the impact of the strategy on the long-term

goals of the institution. By referring to previously established performance indicators, evaluation helps identify success and evaluate the effectiveness of the strategy.

4. CONCLUSION

Strategic management in higher education as the main keyword in research conducted in the literature on scopus.com apparently does not contain many references. There were 18 references detected, but in this literature study not all of them were examined because some references could not be accessed in full. Research on strategic management in higher education has been carried out in various countries, one of which is Indonesia. This shows that research on strategic management in higher education can still be studied and developed into a scientific discipline.

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