

Information Systems Management as an Academic Organizer of Madrasah Diniyah

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Abstract

This research aims to reveal information systems management as the development of academic administration. To find out academic goals. This research uses a qualitative approach. Data collection techniques were carried out using interviews, observation, and documentation studies. Data analysis includes data reduction, data presentation, and conclusion, checking the validity of the findings by extending participation, and triangulation techniques of sources, theories, and methods. The conclusion is that the Head of the Madrasah, Academic and Curriculum Sector, and Human Resources and Services Sector. The results of the research findings show that: (1) The PSB activity process is still manual, the Santri registration business process is still conventional, the business process for determining homeroom teachers, the business process for determining learning schedules, the learning business process up to the Santri graduation process is carried out by Madrasah Diniyah Al -Hikam Bogor does not yet have written and documented standard procedures. (2) The Madrasah Diniyah Al-Hikam Bogor academic application/information system only coordinates the KMB Santri, both the Awaliyah program and the Wustha program. So information system management has not been fully carried out by the Madrasah. There needs to be strategic planning to build a system that can be integrated with other systems. To improve the quality of products and services, and also provide easy satisfaction for stakeholders.

Keywords: Management, Information System, Academic Organizer

1. Introduction

The use of Telecommunications, Information, and Communication in the Islamic Education sector cannot run well without a Management Information System (SIM). Tata Sutabri in G. Murdick and Joel E. Ross defines MIS as a communication process where input information (Input) is recorded, stored, and processed to produce more useful result information (Output) in the form of decisions regarding planning, organizing, and monitoring.

Therefore, our attention needs to look at basic Islamic education (Madrasah Diniyah) currently which is still minimal in its management. Yusuf Hanafiah stated in his research, that the problems experienced by Madrasah Diniyah include weakness in managing the institution, a curriculum that is not up to date, lack of human resources in quality and quantity, lack of facilities and infrastructure, very concerned about the trend of decreasing student interest (Santri), as well as the lack of general funding.

The madrasah itself was formed with a regulation issued by the Minister of Religion in 1964, where in this madrasah the main curriculum was religious sciences. Madrasah can be said to be an additional school for students who study in public schools, for those who feel they are lacking and want additional religious education, they can go to Madrasah. 8 For some groups of society, Madrasah Diniyah is a non-formal educational institution that can help them in equipping them with good morals. commendable for his students.

Madrasah Diniyah is also regulated by Ministry of Religion regulations, which include: First, Madrasah Diniyah is an educational and teaching institution with classical methods for understanding Islamic religious knowledge, with a total of students or more consisting of ages 7 to 20 years. Second, the essence of education and teaching applied at Madrasah Diniyah has the aim of providing additional and deepening Islamic religious knowledge to students who still do not receive Islamic religious knowledge lessons in public schools. Third, Madrasah Diniyah has three program levels, namely: Madrasah Diniyah Awaliyah, Madrasah Diniyah Wustha, and Madrasah Diniyah Ulya.

Other educational institutions (within the Al-Hikam Foundation), such as the Student Islamic Boarding School, Ma'had Aly Islamic College, and many other units. Madrasah Diniyah Al-Hikam Bogor itself is one of the madrasahs that has at least utilized ICT. This can be seen in daily operational activities which cannot be separated from the use of computers in processing data and information.

Based on the explanation of the problems above, the researchers conducted research on the theme of academic management information systems which is expected to help solve problems related to academic services at Madrasah Diniyah Al-Hikam Bogor.

2. Research Methods

This research uses a qualitative approach that describes actual phenomena occurring in the field, taking into account the research focus, which is interpreted by the researcher according to the desired meaning.

2.1. Data collection technique

In collecting data in this research, three methods were used consisting of interviews, observation, and documentation. In collecting data carried out in this research, researchers used techniques so that the data collected supported and complemented one technique with another.

- a. An interview or a company usually uses the term interview as a technique for collecting data that is used to obtain answers from informants by using question and answer methods, or an interview is also defined as a dialogue carried out by information seekers to obtain information from informants during interviews.
- b. Observation also called in-depth observation, is a technique or way of collecting data by making direct observations of an ongoing activity.
- c. Documentation study is a way to collect data through written remains, especially in the form of archives including books about opinions or theories, postulates, or laws, and so on, which relate to the problem in the focus of this research.

2.2. Data Analysis

Data analysis is the process of systematically searching and compiling data from what is produced after interviews, in the form of field notes, and documentation by organizing the data results by categorizing and classifying them into items, then synthesizing them by arranging

them into a pattern. , choose carefully what is important and studied, it will produce a conclusion that will make it easier for yourself and others who observe it.

3. Results and Discussion

3.1. Research result

Based on the results of interviews and observations in the research field, namely Madrasah Diniyah Al-Hikam Bogor, the researcher provided several findings and explanations. The following are the results of the research findings:

3.2. Business Process for Academic Implementation Activities at Madrasah Diniyah AlHikam Bogor

- a. PSB activity business processes are still manual and do not have definite procedural guidelines. The results of observations related to the PSB business process at Madrasah Diniyah Al-Hikam Bogor are orderly, but the implementation of online-based registration of new students is still not available or has not been implemented. Likewise, the PSB committee itself still does not have specific guidelines such as SOPs and other procedures. Of course, it still uses a manual system so its implementation is still not optimal.
- b. The business process for registration activities for old and new students is still conventional and there are no written and documented standard procedures. The results of observations related to the Santri registration business process at Madrasah Diniyah Al-Hikam Bogor have been effective considering that there is no need for other procedures that could cause additional workload or malfunction in the academic section of Madrasah Diniyah Al-Hikam Bogor. It's just that these activities are still manual and do not have standard operational standards, so they are not good from a management perspective for the long term of an educational institution.
- c. In this case, there is no written and documented standard procedure in the business process for determining class teachers. The results of observations related to the business process for determining homeroom teachers at Madrasah Diniyah Al-Hikam Bogor, overall have not been effective, because there are still no standard procedures to serve as guidelines for supervisors or supervisors. This can be overcome by daily supervision of the homeroom teacher by the supervisor so that each homeroom teacher can control his grades and 95 achievements so that when a new program opens, all he has to do is adjust the homeroom teacher's assessment to the appropriate class.
- d. The business process of determining learning schedules in this case will be something important for KBM, however, Madrasah Diniyah AlHikam Bogor does not yet have standard operational standards as a scheduling guide. The results of observations related to the business process of determining the learning schedule implemented at Madrasah Diniyah Al-Hikam Bogor have been very effective because they can reduce the material burden if one day the teaching and learning activities are not running due to holidays or being interrupted by other activities. So that learning goals and achievements will be easily achieved with the intended daily targets. However, there is very little attention as the basis for organizing these activities does not yet have a standard SOP as a guideline for its implementation.
- e. The business process of learning activities up to the Santri graduation process carried out by Madrasah Diniyah Al-Hikam Bogor does not yet have written and documented standard procedures. From the results of observations related to the learning management business process up to the Santri graduation process, it can be concluded that the Madrasah in question

has made several efforts to make the KMB activities up to the Santri graduation good and orderly. However, in the researcher's view, there are still several long-term shortcomings that must be implemented by madrasas, namely the preparation of standardized and documented SOPs so that each activity has a definite direction and purpose. According to researchers, it would be better if all activity processes at the Madrasah in question had operational standards that had been agreed upon by the Head of the Madrasah and were well documented.

3.3. Management of Academic Information Systems as Academic Administration for Madrasah Diniyah Al-Hikam Bogor

The Madrasah Diniyah Al-Hikam Bogor academic information system/application only covers KMB Santri, both the Awaliyah program and the Wustha program. The results of observations related to the academic information system (application) implemented by Madrasah Diniyah Al-Hikam Bogor have not been able to fully facilitate academic activities or processes as a whole. As one example, the activity of registering new students cannot be accessed through the system in question so it still uses manual methods and cannot be done online. According to researchers, the existing information system (application) is only limited to managing teaching and learning activities so that it can make it easier for Madrasah Heads to find obstacles and problems in Santri education.

Based on several findings and explanations. So the following is a table of research findings:

So the researcher's explanation is related to the results of research on academic information systems as a development of the academic administration of Madrasah Diniyah Al-Hikam Bogor, which the researcher can conclude as follows: In general, the business process of academic administration at Madrasah Diniyah Al-Hikam Bogor takes place continuously, due to the business processes carried out not with standard operating procedures or not with clear guidelines, so it is difficult to measure the level of success of academic implementation so far. However, the research findings can be used as evaluation material for Madrasah Diniyah administrators, especially the Head of Madrasah and Academic Affairs of Madrasah Diniyah. Then the management and information system, which is considered a development in the implementation of Madrasah academics, still does not fully coordinate all Madrasah Diniyah academic activities, because it is only able to support Santri teaching and learning activities, there are still no other systems that can be used to support the Santri registration process. student registration, determining class teacher, determining learning schedule, etc. 100

4. Discussion

4.1. Business Process of Academic Implementation Activities at Madrasah Diniyah Al-Hikam Bogor

Business processes are the main part of an organization or institution to achieve initial goals. This represents a series of activities which, when combined, will produce something of added value for customers or consumers, both internal and external. According to Indrajit and Djokopranoto, business processes are several activities that convert several inputs into outputs for other people.

So the business process is very urgent in carrying out certain activities in the educational context because it has the aim of understanding what procedures exist to reduce liability fraud and to identify who is involved in the entire business process in the organization or institution.

Based on observations made by researchers at Madrasah Diniyah Al-Hikam Bogor as a research object related to the business process of organizing academic activities. So it can be classified as follows:

- a. The business process for accepting new students is still manual and does not have definite procedural guidelines.
- b. The old and new Santri registration business processes are still conventional and there are no written and documented standard procedures.
- c. In this case, the business process for determining homeroom teachers does not yet have a written and documented standard procedure.
- d. The business process of determining learning schedules is not based on procedural guidelines. Because there is no SOP yet.
- e. The learning business process up to the Santri graduation process carried out by Madrasah Diniyah Al-Hikam Bogor also does not have written and documented standard procedures.

So Madrasah Diniyah Al-Hikam Bogor requires a standard procedure that consists of several interrelated processes to direct and control activity by adjusting the activity's business processes. Referring to Setiawati, business processes are a key instrument for managing procedural activities that are carried out as an understanding which has implications for building performance relationships as well as improving the connection between activities. Business processes are also a management discipline that focuses on improving performance by managing business processes in an organization.

Therefore, the initial stage that needs to be considered is to assemble activities into a standard procedure which is then compiled into a document (Standard Operational Procedure). SOP. 120 SOP is a guideline or reference for an activity that contains operational procedures for existing standards in an organization.

SOPs are used to ensure that all decisions and actions, as well as the use of process facilities carried out by organizational members, can run effectively efficiently, consistently, standardized, and systematically. SOPs are prepared to shorten work processes, increase work capacity, and regulate performance so that they remain within the framework of the company or institutional vision and mission. With the existence of SOPs, the management of routine daily work can be standardized to achieve maximum and efficient results.

Thus, the purpose of preparing an SOP in an organization is to facilitate and equalize the perception of everyone involved in the activity so that they better understand each step of the activity that must be carried out in each job.

According to Gabriele in his research, SOP is a basic element that can increase performance efficiency. According to him, SOPs are seen as things that make an organization or company more efficient. Sometimes SOPs in companies are often incomplete, for example in terms of work steps that are less detailed, so this makes employees have to make extra efforts to ask colleagues or superiors. Efficiency here is in the context of the completeness of SOPs, which exist in incomplete processes or workflows, such as in the marketing section. In the delivery letter issuance section, it should be written about the stages of making letters and invoices, and then to whom they should be given.

So it can provide an analogy for educational institutions if there is no standard SOP that can be used as a guideline for carrying out certain activities. What if there is an empty class while there is an Asatidz who happens to have no teaching obligations other than his schedule? So it can be concluded that SOPs can increase efficiency for a person's work activities in a particular organization. Apart from SOPs as performance efficiency, SOPs are also seen as a way to be consistent in the service process.

According to Vania, designing SOPs in the production-to-distribution process for the company so that the products produced can have quality stability and the quality can be maintained. The draft SOP is structured and detailed so that it can be used as a guide so that anyone who reads the SOP will carry out the same procedures and be able to produce products that comply with standards.

Based on this research in production at the company level, production at the education level in certain institutions is a teaching and learning process, meaning that SOPs are seen to make teaching services or other things consistent without any reduction in quality, for example, teachers who are used to teaching based on the RPP in the learning cannot be the same as a teacher who only teaches carelessly.

In the context of Madrasah Diniyah education, the educational path available at the institution is non-formal, but in terms of service we want to prove that even though there are many shortcomings, every staff and human resource in the institution has clear operational guidelines. This will ensure that production activities remain unchanged and consistent in good quality.

In connection with SOPs as efficiency and consistency in educational services, researchers can conclude that SOPs are a means of eliminating variations in performance caused by people completing the same work process but in different ways. A process is a series of actions that a person must carry out to complete a job. SOPs describe the steps people should use to complete the process. SOPs are not only considered as sheets of paper containing instructions and step by step, on how to complete an activity well, structured, and systematically.



Figure 1 SOP planning
(Source: Yumpu)

The process for developing the perfect SOP with a participatory approach. A participatory approach means encouraging every individual or group who will be involved in SOP activities to contribute to its development. Carrying out these activities or processes requires environmental adaptation, but will maximize the procedural process because it involves many people. This is different from doing it individually which will take a long time to complete the activity.

Developing SOPs to meet the desired standards should be done in collaboration with experts or those who are competent in their fields. The Madrasah Head can schedule a meeting and invite competent people to be more optimal in the implementation process because competent people can fill in gaps and obstacles during the 106 preparation of SOPs.

Early planning determines the chances of success by implementing the SOP. The next step is development, this stage is an important stage for the success of the process. Because it

is at this stage that everyone involved must begin to feel ownership of the SOP that is being prepared. Members of staff will feel more ownership if this process is used as momentum to incorporate ideas from members.

The Madrasah Head ensures that all staff and HR have received a copy of the SOP. So the initial stage in implementing SOPs places more emphasis on good practice so that you can better understand the procedures correctly and not make any wrong steps. Always train yourself down to the most detailed things. If it is not based on practice, it is feared that it will give rise to multiple interpretations of the process steps in different ways, even though the results are the same. Because it will cause inconsistent service and 107 variations that are considered dangerous to the process until completion.

4.2. Information Systems Management as Academic Administration for Madrasah Diniyah Al-Hikam Bogor

In Jogianto's opinion, system development means a new system to replace the old system as a whole or improve an existing system. 126 Referring to McLeod, when discussing information systems in an organization or institution in the era of technological reform, it will indirectly involve information and communication technology.

According to Baruch Collage as quoted by Abd. Razak & Aziz Dereman, that digital or technology-based educational institutions are an illustration of all educational resources realized in the form and educational systems integrated in the form of a Web system. Information and communication technology is the main means in the education delivery system that is developed on a digital basis. Based on observations made by researchers, it can be explained that the Madrasah Diniyah Al-Hikam Bogor academic application/information system only covers KMB Santri, both the Awaliyah program and the Wustha program.

Value Chain Model is a term formulated by Michael Porter (2015). This model is directed at business organizations that aim to increase profits and profits in business operational processes which are intended to identify activities for creating, delivering, and supporting the organization's products or services.

With the development and role of ICT as a strategic weapon, this model has been widely adopted as an approach to optimize the application of ICT as well as the application of the required information systems. There are two main activities in this Value Chain Model, namely main activities and supporting activities. The main activities are directly related to the process of creating and delivering products or services.

These main activities are grouped into five sections, namely Inbound Logistics; Operational; Outbound Logistics; Marketing & Sales; and Services. Each main activity is associated with supporting activities that help to improve the effectiveness and efficiency of the organization. Meanwhile, in supporting activities, there are four areas, namely Procurement, Technology Development including Research & Development activities, Human Resources Management, and Infrastructure Support. As in the following picture:

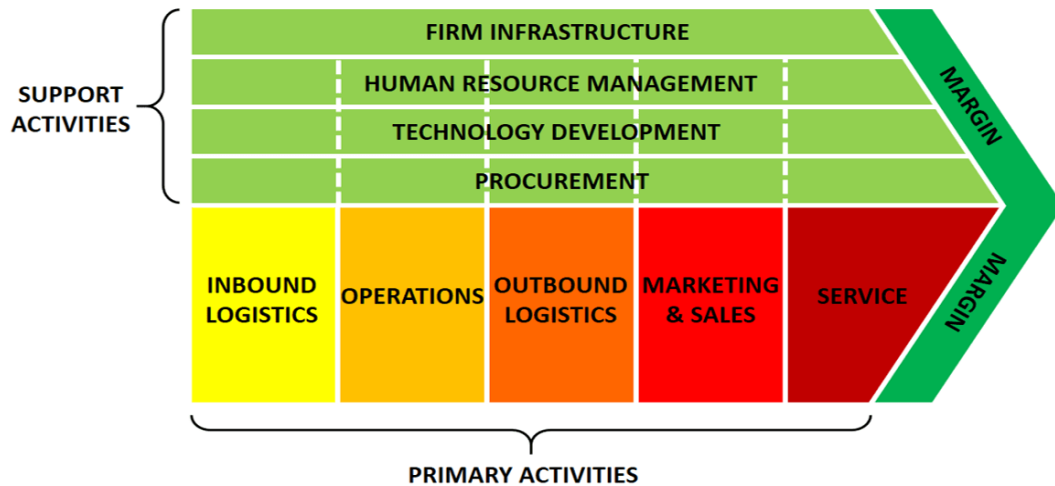


Figure 2 Basic Value Chain Model
(Source: Createrly)

The image above is conceptualized for business processes in a company or organization that contain profit value or generate profits to be generated. However, in the educational context of Madrasah Diniyah, researchers consider it necessary to make institutional governance better in educational services and academic management.

The main activity is the strategy used for activities that are directly linked to the process of searching for service products, the processing of materials that have been obtained from the search process, up to the evaluation stage, and after completion, it is made into a product (the educational context is graduates/alumni) that meets the standards the objectives of the implementation of education initiated by the academic department.

Then it is supported by the use of managed information systems that can be integrated by information system management. This will be illustrated in the following image



Figure 3 Madrasah Diniyah Academic Service Activities
(Source: Antara news)

The implementation and utilization of information system management can be said to be strategic or optimal and maximal if it can create added value in each process in academic administration. As discussed above, there are two major functions of information system management in the educational context of academic services, namely main activities or front office and supporting activities or back office.

The management of information systems as a development for the provision of education offered is as follows:

- a. Promotions/Brochures Promoting Madrasah Diniyah using social media will add value and can improve the quality of the Madrasah. Especially with content that can cover madrasa profiles with short videos. So social media is a supporter of brochure distribution activities carried out on the streets or in public places.
- b. New Student Registration, registering new students will be easier with an online-based special new student admission information system. Because every new student will register without having to come to the Madrasah because it can be accessed from the home of each student's guardian.
- c. Entrance Test The student registration process is usually followed by a test, so that the academic department can find out the abilities of the prospective student, so with a special examination system that can be accessed online, students don't need to come to the location. Only by doing or interviewing from home accompanied by each parent. So the special examination system will support the process of holding student entrance examinations.
- d. Registration The registration process is still in the stages for the process of entering new students, this activity usually coincides with filling in the formula and making payments for student education services. So with the Special Her Registration information system, for parents who are busy working, it is enough to register from a distance by simply making a transfer to the bank, the system will automatically read that the student's parents have made payment and registration for their child.
- e. Determining the Class Teacher The process of determining the class teacher will involve the ustadz being ready to become the homeroom teacher in a particular class using predetermined procedures. So the information system for determining the special class teacher will be able to help determine the homeroom teacher so that it can be done automatically and quickly. The academic section only determines a few steps without requiring a long time.
- f. Determining Learning Schedules The process of determining scheduling will take a long time for Madrasahs which still do it manually, because they have to be careful so as not to clash with other hours. With a special learning schedule information system, you will automatically be able to schedule according to what the academic department wants. And relatively does not require a long time. So a special scheduling information system will support the scheduling process quickly and precisely.
- g. Learning Process The learning process is the most core and important part of other academic activity processes. Because it is directly related to the relationship between students when teaching and learning in the classroom. So a special learning information system will be able to help in assessment and evaluation. Because the track record of students' grades can be accessed in the history of the system, trade can always control the development of students' abilities more easily. So the learning information system can support the learning process and learning evaluation easily.
- h. Determining Class Promotion The process of determining class promotion will be the responsibility of the class teacher when they have taken the exam in the final semester. So by looking at the results of the learning process and the daily grades in the Special Class promotion determination system, it will be easier for the class teacher in a short time. The system for determining special class promotions can also automatically print students' study results cards in real-time and does not take a long time. So the information system for determining class promotion will help the process of increasing students' classes.
- i. Graduation Examination The graduation examination process sets the standard for certain madrasahs to be declared to have passed using different processes. So, the Special Graduation Information System will be able to help the students' graduation

process by managing data and several report results in the students' history. The special graduation information system will be able to help speed up the student graduation process.

- j. Graduation Registration The graduation registration process will be a precious moment for students and their parents. Usually, the academic department checks all students' files and payments. To simplify the graduation process, with the Special Graduation Registration system, it will be easier to obtain the files in the database in the system. So the student graduation registration information system can support the student graduation process.
- k. Alumni. After the students graduate, the students have become alumni and it will usually be difficult to find information about the alumni's situation. So with a special alumni information system, it will be able to become a forum for continuing to search for and disseminate information to alumni who have spread throughout the region.

Referring to each flow of academic administration activities being linked to supporting activities that help to maximize management and improve the effectiveness and efficiency of the academic administration process, it can be concluded as follows:

- a. SIM as a development of science.
- b. SIM as a learning tool.
- c. SIM as an educational facility.
- d. SIM as a competency standard.
- e. SIM as supporting educational administration.
- f. SIM as a tool for academic management
- g. SIM as educational infrastructure.

After the management of educational institutions understands the concept and strategic role and function of information system management in developing the architecture of academic delivery services. So you need to understand what to do:

- a. Can be functional between units in the education system to produce efficient and effective education services.
- b. Develop, control, and manage secure ICT systems and infrastructure based on Connectivity, Interoperability, and Portability.
- c. Determine the direction of the Smart Madrasah application system to reduce development, implementation, and operational time and costs.
- d. Maintaining data and electronic integrity, developing information, and providing methods for disseminating information data to users.
- e. Become part of planning and development and be responsible to the Head of the Madrasah.
- f. Promote or socialize the benefits of using ICT to Madrasah stakeholders to achieve strategic goals.

Thus, the discussion related to information system management as the development of academic administration can be summarized as Madrasah Diniyah Al-Hikam Bogor needs to determine the direction of the Smart Madrasah application system to reduce development, implementation, and operational time and costs.

5. Conclusions and Suggestions

5.1. Conclusion

Based on the results and discussion, several conclusions can be drawn, including the following:

- a. Business Process for Academic Implementation Activities at Madrasah Diniyah AlHikam Bogor SOP as Efficient and can provide consistent services in academic implementation. SOPs as a means of eliminating variations in performance caused by people completing the same work process but in different ways. So SOPs are used to guide an organizational or institutional activity process. SOP is also a task or activity that results in a worksheet process carried out by someone as a form of responsibility at a certain point in time. Actors or people in charge who carry out their duties or activities well directly in business processes.
- b. Academic Information Systems Management at Madrasah Diniyah Al-Hikam Bogor Two major functions of information systems management in the educational context in academic services, namely main activities or front office and supporting activities or back office. Thus, information system management as the development of academic administration at Madrasah Diniyah Al-Hikam Bogor needs to determine the direction of the Smart Madrasah application system to reduce development, implementation, and operational time and costs.

5.2. Suggestion

Based on the discussion and conclusions, several suggestions need to be made, including the following:

- a. To the Head of Madrasah Diniyah Al-Hikam Bogor to pay attention to the function of organizing and implementing academic activities, both planning and evaluation processes, by always controlling the activities of the Awaliyah and Wustha programs, to prepare all academic regulations clearly and documented, and always supervising the academic management function both from curriculum and teaching and learning activities for students so that there can be a harmonious relationship between top management and management levels at Madrasah Diniyah Al-Hikam Bogor.
- b. To the academic section (curriculum) of Madrasah Diniyah Al-Hikam Bogor to always carry out evaluations both individually and simultaneously involving all existing human resources. To develop management information systems in the academic and service sectors that directly involve all human resources in learning so that they always pay attention to educational values.
- c. To all readers, the researcher is aware that this thesis is still far from perfect both in terms of methodology and analysis. Given these shortcomings and limitations, it is hoped that there will be constructive criticism and suggestions for further improvement and development, especially regarding management information systems as a development for the academic administration of Madrasah Diniyah.

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