

## Feasibility Study For The Establishment of The Center For Data Science Studies at UIN Sunan Kalijaga Yogyakarta

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**Abstract**—With the rapid development of data science research and its more comprehensive application, and to support the integration-interconnection adopted by UIN Sunan Kalijaga Yogyakarta, it is necessary to have an institution overseeing it. This article discusses the feasibility study of establishing a Center for Data Science Studies using SWOT analysis. Furthermore, it discusses the ideal profile of the Center for Data Science Studies, including organizational management, activities management, resource management, and financial management.

**Keywords:** *data analysis, data science, SWOT, feasibility study, management*

### INTRODUCTION

The increasing number of internet users accessing via computer and smartphone has led to a significant increase in the need for data processing and data analysis. In addition, agencies that require decision-making are also starting to pay attention to aspects of agency data, which are increasing in number. Therefore, the concept of a standard statistical method used to process data is deemed necessary to be further developed so that it can be used to process relatively large data.

Data science is a multidisciplinary science, especially mathematics, statistics, and computing, which are currently experiencing very rapid development, especially in the big data and industry 4.0 era. Apart from support from Artificial Intelligence (AI) and the Internet of Things (IoT), the development of data science is also supported by the rapid growth of statistical and computational methods. The primary role of statistical methods in data science lies in the collection, processing, and presentation of data, along with its analysis.

The advantage of data science lies in its ability to identify and solve problems faced by agencies and industries based on the data they have so that the results needed are used in decision-making. The demand for this is increasing, along with the emergence of start-up companies and problems in government and private agencies that require fast and accurate decision-making support based on their data.

The Department of Mathematics, Faculty of Science and Technology, UIN Sunan Kalijaga, with a focus on Statistics and Applied Mathematics, has an excellent opportunity to study and develop data science. Currently, the Department of Mathematics already has a sufficient number of lecturers with expertise in statistics and mathematical modeling. Unfortunately, the Department of Mathematics still needs a platform to facilitate more structured data science research and development activities. This can be seen from the lecturers' research activities and studies on data science which need to be coordinated and tend to form a particular central theme. The concept of integration-interconnection between Islam and Science is adhered to by UIN Sunan Kalijaga Yogyakarta and provides additional motivation for establishing a Center for Data Science Studies. The resulting data science research can have a positive impact in helping to solve various problems, such as in information technology and the economy, including in the social, religious, and community fields.

This study aims to analyze the feasibility of establishing a Center for Data Science Studies as a forum for the academic community of the Department of Mathematics to study, develop and apply data science within the Faculty of Science and Technology UIN Sunan Kalijaga Yogyakarta. This study uses SWOT analysis to conduct a feasibility study on establishing a Center for Data Science Studies. Based on the SWOT analysis obtained, the study center's ideal profile and management design will be formulated. SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) has been widely used to test the feasibility of establishing an institution. The analysis consists of two aspects, namely internal and external aspects. The results from the SWOT analysis can show the level of assessment of strengths, weaknesses, needs, evaluations, modifications, and strategies of owned resources.

According to Fatimah (2016), the SWOT analysis has four things that are main reviews, namely: (1) Strengths, which means strength, is a substantial capital that can be relied on by an institution so that it can understand and know correctly in preparing the vision and mission, as well as future institutional plans; (2) Weaknesses, which means weakness, are deficiencies and limitations that are already owned so that it is expected to be able to anticipate these deficiencies and limitations so that they do not become obstacles to achieving further plans; (3) Opportunities, which mean opportunities, are favorable conditions, so knowing these advantages are expected to be utilized as an advantage towards the success you want to achieve; and (4) Threats, which means a threat, is an adverse condition. Various things that are detrimental to the institution must be considered carefully. Institutions must determine the steps in planning so unwanted threats will not occur.

The purpose of carrying out a SWOT analysis is to combine and integrate the four components mentioned above. The results of the SWOT analysis are expected to be able to prepare strengths, prevent weaknesses, look for opportunities and determine steps to prevent threats from occurring. If these four components can be appropriately implemented, the vision and mission can be achieved successfully to obtain the best and optimal results.

Research related to the analysis of the feasibility of establishing an institution can be found in Hamim and Nurman (2006) regarding the feasibility study of establishing a Masters in Administrative Science Study Program. The research aims to prepare experts who are equivalent to masters. The method used is interviews with alums of undergraduate students. The conclusion of this study is the feasibility of establishing a Master's in Administrative Sciences. In addition, Sutika et al. (2017) research results regarding the feasibility study for constructing the Cokroaminoto shopping center in Denpasar City. This study aimed to determine the feasibility of the Denpasar City government's asset development plan. The method used is observation and interviews. The conclusion of this study is the feasibility of establishing the Cokroaminoto shopping center.

Hadi et al. (2010) examined the feasibility study of establishing a Rural Bank, "Bank Perkreditan Rakyat" (BPR), in Tanah Bumbu Regency. The purpose of this research is to find out whether or not the establishment of a BPR is feasible from a financial perspective. The method used is secondary data analysis from government agencies. This study concludes that it is possible to establish a BPR because the Regional Budget and Revenue Expenditures (APBD) are quite large in Tanah Bumbu Regency. In addition, Hartoyo (2010) has studied the feasibility study for establishing a local

television Public Broadcasting Institution (LPP) in Banyumas Regency. This research aims to see from the legal aspect and the community's response to selecting the LPP. The research method used is primary and secondary data collection. This study concludes that there is feasibility in establishing LPP.

Oktaviany et al. (2016) have examined the feasibility study of establishing a coconut oil manufacturing business in Luwuk, Central Sulawesi. This study aims to determine whether it is feasible or not to establish a coconut oil manufacturing factory. The research method is based on aspects: market, technical, management, finance, socio-culture, and environment. The conclusion of the establishment of this coconut oil manufacturing business is that it is feasible to establish a business. Farid (2019) also reviewed the feasibility study of establishing a chicken feed factory using the Net Present Value (NPV) method. The research location for the study of the establishment of an animal feed factory is Pasaman Regency, West Sumatra Province. Factory establishment considers several aspects: marketing, technical and technology, management and organization, environment, law, and finance. The conclusion from this research on establishing a factory is that it is not feasible to set up a factory.

## LITERATURE REVIEW

### *SWOT Aspects of Center for Data Science Studies from the Human Resources Side*

SWOT is an acronym for strengths, weaknesses, opportunities, and threats. SWOT analysis on human resources considers two factors, namely: internal and external. These two factors can improve or hinder the Center for Data Science Studies. SWOT analysis is an important step that institutions can take and helps accelerate the proactive pace of study centers regarding strategy improvement.

### *The Strength of Center for Data Science Studies from the Human Resources Side*

Institutional strength is an internal human resource factor that enables strategy and function to run as well as possible. The human resource strategy aims to create a high-quality workforce and dream institution. The human resources function involves an operational session, namely a staff gathering session on family benefits and health insurance. The internal strength of human resources includes the leadership that supports strategy development. Another internal factor consists of staff knowledge and expertise, which is responsible for carrying out tactical tasks.

The Department of Mathematics, State Islamic University (UIN) Sunan Kalijaga (Suka) has six doctoral and eight master's teaching staff. All doctoral and master staff have expertise in Data Science. Many students also study data science, so they can help to teach staff at the Department of Mathematics, UIN Suka. Several courses that help students learn Data Science is Statistical Methods, Mathematical Modeling, Data Exportation, Sample Survey Methods, and others.

### *Weaknesses of the Center for Data Science Studies from the Human Resources Side*

The SWOT analysis examines the weaknesses of the institution. Weakness is also an internal factor that is one of the challenges for the institution. Internally, budget constraints and cuts are problems that institutions often face. This is because human resources is not a department that makes money. Human resources must rely on a solid justification for funding investment in institutional activities. However, money is only one of the weaknesses of human resource management. Another area for improvement in

human resource management is staff morale and high staff turnover. This morale is a staff dissatisfaction with the institution.

### ***Opportunities for Center for Data Science Studies from the Human Resources Side***

One of the external factors for human resource management is the opportunity to increase staff due to the increasing demand for data processing and services produced by the institution. Business growth is defined as a change in salary for the better or higher wages for current staff. Along with market demand, agencies can recruit more staff. External factors also emerged as the institution's ability to obtain the unique talents of existing staff. This can improve the institution's reputation and business ranking.

### ***Threats of the Study Center Institute from the Human Resources Side***

Negative external factors are threats to institutions and will eventually impact human resources. The competition between agencies will affect institutional profits, slowdowns, staff reductions, or institutional closures. Another external threat factor is the offer of better wages or benefits from other institutions. This can affect the quality of work in the institution.

Human resources cannot always protect institutions, but it is an area that needs attention. Institutions need to regularly provide assessments in the form of compensation structures and staff opinion surveys. This can improve staff-to-staff relations and strengthen staff-leader relationships. Human resources are expected to become business partners in the institution's business strategies.

### ***SWOT Aspects of the Center for Data Science Studies from the Management Side***

Strengths: The Center for Data Science Studies has qualified management staff. Weaknesses: The institution needs more staff in business management. Opportunity: There is good market growth, such as the need for data requests from students, government, and private companies. Threats: The agency needs more financial or accountant-savvy staff.

### ***SWOT Aspects of the Center for Data Science Studies from Partners***

Strengths: The Center for Data Science Studies has partners from several alums who have worked in government agencies and private companies. Weaknesses: A new institution is about to be established. Opportunity: Institutions have options because there are few or no data science study centers. Threats: The institution needs to be approved by the central leadership of the university.

### ***SWOT Aspects of the Center for Data Science Studies from the Side of Stakeholders***

Strengths: The Data Science Study Center Institute is fully supported by the Head of the Department of Mathematics, UIN Sunan Kalijaga Yogyakarta. Weaknesses: This institution has no weaknesses in terms of stakeholders. Opportunities: Stakeholders can help promote to government agencies and private companies. Threats: From a stakeholder perspective, there is no threat.

### ***SWOT Aspects of the Center for Data Science Studies from a Financial Side***

Strengths: Central Institute for Data Science Studies was funded initially by the university. Weaknesses: This institution has no weaknesses. Opportunity: The institution

will generate much income financially ahead of regional and national elections. Threats: Due to a large amount of income, there is an interest in disbanding or replacing the leadership and staff of an institution that is already running.

Table 1 summarizes the SWOT analysis regarding human resources, management, partners, stakeholders, and finance. Table 1 is to make it easier for us to understand this SWOT analysis briefly.

**Table 1.** SWOT Analysis of the Establishment of a Center for Data Science Studies

No.	Criteria	SWOT Indication			
		Internal Conditions		External Conditions	
		Strength	Weakness	Opportunity	Threat
1	Human Resources	The Mathematics Department has six doctoral and eight master's degrees. Students also assist the Mathematics Department with data science knowledge.	Reduction in salary for staff due to competition in the data processing business. Staff needs more enthusiasm at work because there is saturation.	Increase in staff due to large data processing requests.	Competition between national data processing agencies.
2	Management	Expert teaching staff.	Staff who are business management experts still need to be created.	There are few centers for Data Science Studies.	The institution still needs a financial staff.
3	Partners	The institution already has partners and alums who have worked in state agencies and private companies.	A new institution is about to be established.	There are few centers for Data Science Studies.	The university leadership did not approve of the institution that wanted to stand.
4	Stakeholders	This institution is fully supported by the Head of the Mathematics Department, UIN Suka.	There is no.	Stakeholders have the opportunity to promote to government agencies or private companies.	There is no.
5	Financial	The university initially funded this institution	There is no.	Ahead of regional or national elections, many will want to request data in terms of data collection and data processing.	The Center for Data Science Studies is not receiving funding.

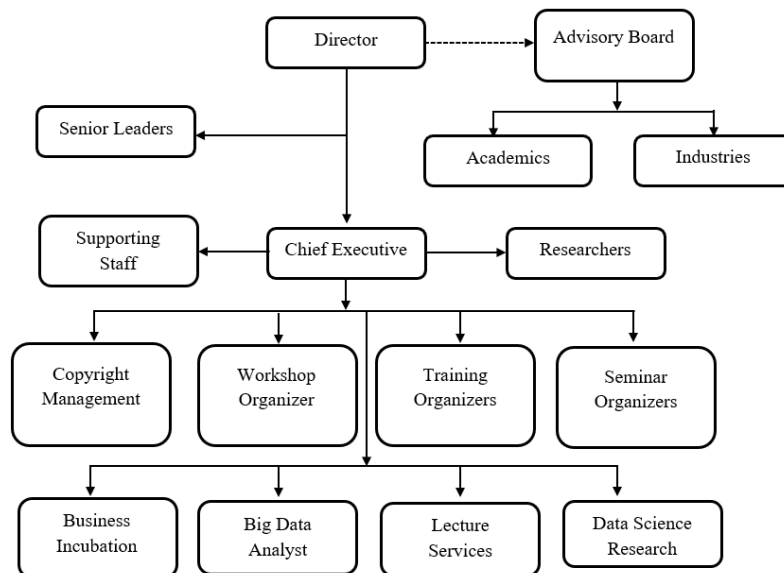
**Source:** Authors

### *Ideal Profile Of The Center For Data Science Studies*

This section will describe the profile of the Center for Data Science Studies, including the organizational structure, the job description for each structure, and the human resources that will fill the organizational structure. The presentation of this section will begin with a discussion of the organizational structure, while the job description and human resources will follow the design of the organizational structure. There are at least two approaches to designing the Center for Data Science Studies' organizational structure, namely the functional and structural approaches. Here is an explanation of the two systems.

### *Functional Approach*

This approach is based on the premise that the organizational structure of the Center for Data Science Studies is formed based on the functions of expertise possessed by the resources of lecturers, researchers, laboratory staff, and educational personnel owned by the Department of Mathematics. Based on this idea, the structure of the Center for Data Science Studies consists of a director, several experts representing each field in data science, several advisory/consideration boards, a chairperson, several heads of areas for several fields to be formed at the Center for Data Science Studies, some staff in each field, and administrative staff. It is also possible to create a research group, namely researchers and graduate students conducting research at the Center for Data Science Studies. Based on the organs that allow for such formation, one alternative organizational structure of the Center for Data Science Studies is depicted in Figure 1 below.



**Figure 1.** The Structure of the Center for Data Science Studies

Next, we will explain the job description for each organ in the organizational structure above. The Director is the main person in charge of the Center for Data Science Studies. He coordinates with senior leaders and advisory boards from academia and industry. The coordination is focused on efforts to develop a study center following the demands of the times. The Director is also responsible for cooperation between the study center and outside parties, academic, industrial, commercial, and professional.

Senior leaders are a group of data science experts in the Department of Mathematics tasked with assisting the director in the center's development. Senior leaders can be divided into three divisions, namely the program development division, the internal development division, and the data science product development division. Senior leaders work independently in carrying out their duties and can ask secretarial staff for help.

The advisory board is an expert whose job is to provide advice and consideration to the director about the development and implementation of activities at the center. The advisory board consists of two elements, namely the academic element and the industrial element. The academic element can be taken from professors and senior lecturers in the Department of Mathematics. In contrast, the industrial segment is taken from the leaders of companies engaged in data science. The advisory board can be active or passive in carrying out its duties. The advisory board's active role is carried out by providing advice and input to the director without being asked first. Meanwhile, the passive role means that they are waiting for the invitation to coordinate from the director.

A chief executive is responsible for carrying out all Center for Data Science Studies activities. The chief executive is in charge of several fields and is tasked with carrying out one work area. In carrying out his duties, the chief executive coordinates with the director to determine the focus of the work.

The Supporting Staff is tasked with supporting the chief executive and areas carrying out the center's activities. The Supporting Staff has two primary duties: secretarial administration and financial administration. The Supporting Staff is headed by a chairman in charge of two divisions: the secretarial and finance divisions. Several employees from educational personnel in the Faculty of Science and Technology assist each division.

Researchers are those who conduct research at the Center for Data Science Studies. Researchers can be both graduate students and off-campus researchers. In conducting research, they are under the supervision of the chief executive. If the researcher needs to communicate with the fields, then it must be with the permission of the chief executive. The researcher's relationship with the Center for Data Science Studies ends the moment they complete their research. Furthermore, they were instructed to convey their research results to the Center for Data Science Studies director.

The copyright management division has the primary task and function of facilitating the management of products produced by the Center for Data Science Studies to obtain copyright certificates and intellectual property rights (HAKI). The working partner in this field is the Department of Law and Human Rights.

The workshop organizer division is tasked with holding workshops related to data science. Workshops can be held according to consumer demand or at the Center for Data Science Studies initiative in responding to existing market needs. Workshops that are stored can be carried out independently by the Center for Data Science Studies or in collaboration with other parties. The orientation of the workshop is more profit-oriented, but it does not rule out the possibility of being part of a community service program.

In line with the workshop organizers division, the training organizers division organizes a training series on data science. The duration of training is usually longer than that of workshops. The training programs are oriented to provide specific expertise in data science. Training instructors are prioritized to come from experts in the Department of Mathematics who master the training theme.

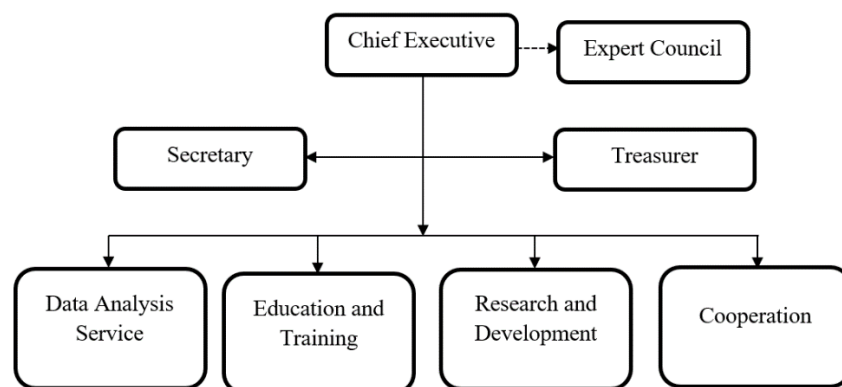
The seminar organizers division has the main task of organizing national and international seminars on data science. The seminar activity aims to disseminate research results in data science and as a place to exchange ideas between data science experts from various countries. The seminar activity also aims to initiate cooperation with the parties present in the seminar. Likewise, seminars can be used to socialize the existence of the Center for Data Science Studies in the international community.

The business incubation division has the primary task and function of accommodating all products produced by the Center for Data Science Studies to be communicated with industry, government, and other stakeholders. This field bridges the products produced by the Center for Data Science Studies so that they continue to report the effects but can be utilized by the broader community by offering the products to industry, government, and other stakeholders.

The primary data analyst division conducts a series of analyses of big data presented. The focus of this field's work is more on the function of big data analysis services from consumers who entrust it to the Center for Data Science Studies.

The lecture services division provides lectures to students at the request of the requesting study program or major. Lecture services can be lectures for an entire semester or only in a few meetings as guest lecturers.

The science research division has the function of researching the development of data science. The research carried out can be in the form of primary or applied research. Basic research aims to develop concepts and theories and construct new ideas about data science. Meanwhile, applied research seeks to solve data science problems based on existing concepts and theories. It can also be in the form of developing existing problem-solving algorithms into more accurate, effective, and efficient algorithms.



**Figure 2.** The Organizational structure of the Center for Data Science Studies

### **Structural Approach**

This approach departs from the premise that the organizational structure of the Center for Data Science Studies is formed based on the type of activity to be carried out. Based on this, the organizational structure of the Center for Data Science Studies may consist of a chairman, secretary, treasurer, and several areas that handle activities. Possible areas to be formed are the data analysis services division, the education and training division, the research and development division, and the cooperation division. Based on the organs that allowed being formed, one of the alternative organizational structures of the Center for Data Science Studies is depicted in Figure 2.

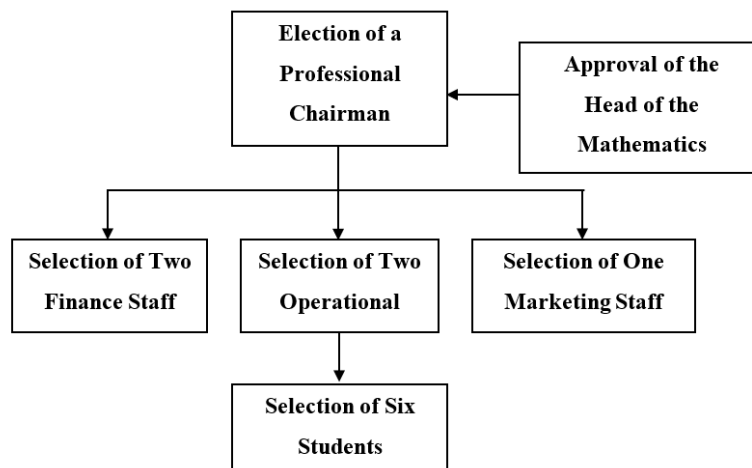


The job description of the main tasks and functions of the organs in the structure above is the same as previously described. The emphasis on the design of this model lies in implementing the activities of the study center. In this case, the study center has the characteristics of being an executor of scientific activities and development.

***Human Resource Management***

Human resources are essential to support the development and growth of the Data Science Center Institute, UIN Suka. Human resources need to be managed with good management to be optimal. If human resources are managed properly, this institution will run well. Before this institution was established, there needed to be a workshop on management governance, one of which was human resource management. In this workshop, human resource management will be studied in terms of career and salary.

Institutional leaders must make decisions with valid data regarding the staff under them. The selection of these staff will influence the development of the Study Center Institute. Leaders also need to establish a system for recruiting staff and processes for resignation, retirement, and dismissal. Leaders also analyze human resource data on the performance of each team. Figure 1 is the process of selecting the leadership and staff of the Data Science Center Institute. in the Department of Mathematics, UIN Suka. There are six doctorates; from the six doctors, you can choose one who is a doctor and an expert in Data Science. Furthermore, financial staff, operational staff, and teaching staff can be selected by the head of the institution based on the professionalism of the existing teaching staff.



**Figure 3.** Selection of Leaders and Staff of the Center for Data Science Studies

***Activities Management***

Activities at the Center for Data Science Studies focus on three sectors: the education and training sector, the research and development sector, and the business incubation and community service sector. The following is described in detail in each of these sectors.

Upbringing and training. The education and training sector provides additional skills to consumers related to data science proficiency. Some of the things that can be done are: 1) Conduct additional teaching related to data processing and programming levels for the academic community, industry, and the general public; 2) Develop institutional cooperation to improve the quality of human resources, both at the local,

national, and international levels, related to data science, advanced programming, and big data; and 3) Organizing national and international seminars/workshops on data science, advanced programming, and big data analysis.

**Research and Development.** The research and development sector has responsibilities in terms of developing data science. This is done by conducting data science research in a structured and sustainable manner. Here are two things the sector can do: 1) Consulting research data analysis cooperation with lecturers/researchers from internal campuses, universities, and other institutions outside the campus; and 2) Scientific development and application of data science, advanced programming, and big data.

**Business Incubation and Community Service.** The business incubation and community service sectors are a follow-up to the other two existing sectors. This sector plays a role in following up on products produced by the Center for Data Science Studies so that the industrial world and society can utilize them. Some of the things that can be done include: 1) Organizing training related to data processing and advanced programming for the academic community, industry, and the general public; 2) Provide in-house training services to stakeholders (industries) related to data science, advanced programming, and big data analysis; and 3) Carry out cooperation with business actors and industry to build start-ups in data science, advanced computing, and big data analysis.

### ***Financial Management***

The sustainability of the Center for Data Science Studies requires sound financial management; this is because finance drives research and development activities. Therefore, finance must be managed effectively and efficiently through financial management that adheres to financial management principles. The principles that must be possessed in financial management are the principle of transparency, the focus of accountability, the principle of effectiveness, and the principle of efficiency. These four principles are applied to the study center's financial management process, which starts with the planning and budgeting process, continues with the implementation and monitoring processes, and ends with the evaluation process.'

In the financial planning process, the Center for Data Science Studies must carry out budgeting activities at the beginning of the year through the Draft Budget called Rencana Anggaran Biaya (RAB). Financial planning is carried out for one year through joint discussion meetings to determine plans for activities to be carried out. In the panel to decide on the RAB, an overview of the use of finances in the short and long term will be produced, so that excellent and mature planning can be provided, including targets to be achieved for the following year.

The implementation process is based on the planning that has been implemented before. The RAB and previously planned needs allocate implementation and financial management at the Center for Data Science Studies. Unforeseen cost needs will be given from activity funds that have yet to be implemented. Every time an activity is carried out, all income and expenditure transactions must be recorded, and proof of the transaction must be attached as a form of accountability to UIN Sunan Kalijaga Yogyakarta. All funds spent must aim for data science research and development activities.

The head of the study center carries out the supervisory process and financial accountability activities as well as all activities of the Center for Data Science Studies annually in the form of a report to UIN Sunan Kalijaga Yogyakarta. As a form of internal

control, an internal report is required, which is issued once a month. This monitoring and accountability process is essential to ensure that all available resources are allocated for activities by the previously prepared RAB.

The financial evaluation process is based on the results of the Center for Data Science Studies's financial accountability reports relating to all financial resources and activities implemented. Evaluation is carried out on all targets that have been achieved and their conformity to the objectives previously determined as the initial plan. The internal evaluation process must be carried out regularly between the leadership and study center members at least once every month. Every year, the head of the study center must account for all funds issued to UIN Sunan Kalijaga and all targets that have been achieved and have yet to be achieved for one year.

Financial management implementation must be based on transparency, accountability, effectiveness, and efficiency principles. Transparency in financial management means there is openness in financial management activities, such as in sources of funds and the amount and details of the funds used. The principle of accountability in financial management means that the funds issued must be by the previously determined RAB. The focus on effectiveness in financial management means that the allocation of funds must be used to support the activities of the study center to achieve the stated goals, and the results are by what has been planned. The principle of efficiency in financial management means that allocating funds supports attaining optimal results. This is reflected in the increase in service and quality of study centers in research and development.

### ***Cooperation Management***

The management of this cooperation is focused on four indicators. The four indicators of cooperation management are (a) planning; (b) organizing; (c) briefing; (d) supervision. Planning is determining what will be done in advance at a specific time, whose staff will do it, what results, and what factors will influence it. In this plan, the collaboration will be carried out by the Central Institute for Data Science Studies in partnership with the Central Statistics Agency (BPS) of Bantul Regency, Special Region of Yogyakarta (DIY). The partnership will be carried out by collecting poverty data in Bantul Regency. Retrieval of poverty data in Bantul Regency is a step to determine how severe poverty is after Covid 19. In addition to BPS Bantul DIY, planning for collaboration is being carried out by the Center for Data Science Studies with the DIY Tax Office. The DIY Tax Service cooperates to record motorized vehicles in arrears of taxes. This is done to determine the potential DIY income received in 2023.

The collaboration between the Center for Data Science Studies was carried out with the Bantul Regency BPS and the DIY Tax Service. The head of the Center for Data Science Studies, one finance staff, one operational staff, and one marketing staff visited the Bantul Regency BPS office and the DIY Tax Service. The principle of this organization is coordination with the Bantul Regency BPS and the DIY Tax Service. The coordination of the Center for Data Science Studies and the Bantul Regency BPS is regarding poverty data in Bantul Regency. Coordination is carried out regarding the number of students deployed. The number of hamlets in Bantul Regency is 934 hamlets. If two students collect poverty data for each hamlet and the two records ten hamlets, then 94 students are needed. Poverty data collection in Bantul Regency with many students aims to make the data valid. Coordination between the Center for Data Science Studies

and the DIY Tax Service is regarding motorized vehicle data that is in arrears. Only a few students are involved in this activity. It is enough for two students to record motorized vehicles that are late paying taxes and how many years they are late paying.

The briefing of the Center for Data Science Studies and BPS Bantul was carried out with the Regent of Bantul Regency. Furthermore, providing input and direction to the Regent of Bantul and his staff regarding steps that can be taken to reduce poverty in Bantul Regency. In connection with the order of the Center for Data Science Studies and the DIY Tax Service, they discussed tax exemption and reported it to the DIY Governor. Poverty and motor vehicle taxes are closely related. If poverty can be reduced, motor vehicle taxes in arrears can be reduced.

Supervision is entirely carried out by both parties, namely the Center for Data Science Studies and the Bantul Regency BPS for poverty data. In contrast, supervision for motor vehicle data that is in arrears is the Center for Data Science Studies and the DIY Tax Service. This is done entirely professionally, so the data is authentic. Supervision is carried out so that work is done on time.

## CONCLUSION

Based on the SWOT analysis that has been carried out, the results show that it is feasible to establish a Data Science Study Center by considering the following: 1) Trends in the need for data analysis are increasing in various fields, including the social and religious areas; 2) Availability of human resources with skills in mathematics, statistics, and data science computing; 3) There must be a forum to facilitate more structured data science research and development activities. Lecturers' research and studies on data science are not coordinated and do not yet tend to form a particular big theme; and 4) UIN Sunan Kalijaga owns the concept of integration-interconnection between science and religion.

From the results of the feasibility analysis of the planned establishment of the Data Science Study Center, the following suggestions are obtained: 1) The discourse on establishing a Data Science Study Center needs to be followed up with the publication of documents ratified by the competent authority; and 2) Efforts need to be made to improve the quality of human resources in quantity and quality as the principal capital of the Center for Data Science Studies.

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