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Facility and Infrastructure Management at the International Class Program of the State Islamic University in Indonesia

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Abstract

This study investigated the development and management of existing facilities and infrastructure at the International Class Program (ICP) of the State Institute for Islamic Studies (SIUS), Indonesia. The researchers adopted a descriptive qualitative approach involving nine informants in the professional capacities of chancellor, vice chancellor, dean, deputy dean, head of the program, director of ICP, and the heads of division and related departments. The researchers utilized observation, interview, and documentation to collect the data. The data were analyzed using content analysis, thematic analysis and Miles & Huberman model that involve data collection, data reduction, data display, and conclusion drawing. The results showed that management of facilities and infrastructures in the ICP fulfills requirements of a place, amenity, or piece of equipment for a particular purpose and the basic physical space required for the operation of the ICP. The facility and infrastructure development and management in the ICP of SIUS account for long-term needs in accordance with the master plan that has been prepared. Furthermore, to obtain optimal development results with timely and appropriate indications, SIUS has compiled a Grand Design of Facilities and Infrastructure for 2020–2024.

Keywords**:** *Facility development and management, infrastructure development and management, ICP, SIUS*

Introduction

Rapid technological developments in recent times demand progress in all domains of life, including education. In the last few decades, classroom teaching media have evolved from blackboard to whiteboard to LCD screens (Adu et al., 2022; Subedi & Subedi, 2020). Students can now easily access their educational needs through their mobile phones. However, formal education in the form of classroom teaching remains the prime choice to acquire knowledge. Therefore, formal education from elementary to higher levels must adapt to the dynamics of ongoing developments (Budiharso, et. al., 2022).

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Education can be defined as a process of self-formation and self-determination in an ethical manner and conforming actions to the conscience (Kohnstamm & Gunning, 1995). The education system comprises several components that are interconnected with each other. None of these components is more important than the other as each component has an equally important role in supporting the quality of education. To achieve quality education, these components must be linked holistically. Infrastructure is one of the components that support the establishment of high-quality education. An institution's infrastructure of good quality in the form of comfortable study rooms, laboratories, and complete teaching aids actively assists the learning process and thus contributes to the institution's education quality. Students' fieldwork practices tend to be more fruitful when carried out in a proper place that can broaden their insight and experience (Budiharso & Tarman, 2020; Matabane et al., 2022).

Based on a survey conducted by PISA (Programme for International Student Assessment) in 2018, education quality in Indonesia ranked 74 out of 79 countries. Budi Trikorayanto, an education observer, said that one of the reasons behind Indonesia's low ranking was its underqualified education managers. Educational management aims to facilitate the implementation of educational activities and place them according to their roles so that educational goals can be accomplished (Hikmat, 2009). Achievements need to be made in various aspects of education itself adjusted to the management function, including the management of infrastructure. Therefore, if the management is poor, no improvements will be made in education (Whitaker, et al., 2022).

Universities play a major role in students' overall development. In the process, of course, many obstacles are encountered considering that the management of higher education is fairly complex (Muniapan, 2007). Gulua (2020) conducted a study to analyze the challenges of higher education management, which were discussed from two different perspectives: the management process and its supporters, namely, ergonomics and infrastructure issues. Facilities and infrastructure, therefore, are factors supporting the course of learning in higher education. Therefore, it is important to pay attention to the facilities and infrastructure that can support the development of the education management model required by universities. Fodrey & Lindbeck (2010) noted that universities must be as effective and efficient as possible in involving the technological means and facilities for its development so that they can contribute to students' academic success.

Facility and infrastructure management is a collaborative process to utilize all educational facilities and infrastructure owned by schools effectively and efficiently (Baharuddin, 2010). Facilities and

infrastructures are the prime components of education, and their management is necessary to support fruitful teaching and learning. Bafadal (2004), as cited by Kurniawati & Sayuti (2013), affirmed that facility and infrastructure management is used to provide professional services in the field of facilities and education to implement the educational process effectively and efficiently. To elaborate and explore more about this management, the State Islamic University of Salatiga (henceforth, SIUS) as one of the state Islamic universities in Indonesia has opened an International Class Program (ICP), where it tries to incorporate all the components of national education with international essence in terms of language and practice to maximize students' potentials and to educate the next generation of the nation to develop cognitive abilities, creative skills, and have the ability to adapt and socialize.

However, in practice, facility and infrastructure management of the ICP is confronted with various obstacles. For example, the planning of infrastructure facilities was still unclear, such as funding and the person in charge of its managerial work. Furthermore, procurement of infrastructure facilities was not optimized either from the purchasing or caring or recycling of goods. The maintenance and storage management of the infrastructures, as well as administrative procedures, have not been clearly recorded, thereby hindering an effective and efficient learning process.

In addition, the ICP shared the use of the infrastructure with the regular class, even though it is seen from the load of courses and skills that must be achieved. It is only natural that the ICP gets several supporting facilities to achieve the desired competence, such as an art room and a common room so that students can learn optimally. To some extent, the infrastructure is still lacking in terms of specifications and is inadequate for such a special class. Furthermore, the researchers also noted that there was no special laboratory for ICP students at SIUS. The need for this laboratory is related to language and cultural learning, which is highly intensive for ICP students at SIUS.

From the above discussion, it is clear that there exists a gap in facility and infrastructure management during teaching and learning activities of the ICP at SIUS, which lent an impetus to the researchers for studying, reviewing and researching the same. The findings of this study are expected to furnish insights regarding the merits and shortcomings of facility and infrastructure development and management of the ICP at SIUS. The study results are anticipated to be useful for improving the performance of education managers, stakeholders, as well as students who are the objects of program implementation.

Literature Review

Infrastructure Management

Facility and infrastructure management is a process focusing on regulating and maintaining educational infrastructure so that the educational process can be implemented optimally and meaningfully. These management activities can be in the form of planning, procurement, supervision, inventory storage, and elimination and arrangement. This was confirmed by the Ministry of National Education (2013), which remarked that facility and infrastructure management is an arrangement of facilities and infrastructure, which includes planning, organizing, implementing, and evaluating programs of facility and infrastructure activities in schools, guided by the principles of management implementation.

The scope of facility and infrastructure management according to the Ministry of National Education (2013), as cited by Ananda & Banurea (2017), can be explained as follows:

1) *Needs analysis and planning*: According to Mustari & Rahman (2014), planning for educational facilities and infrastructure is a process of analyzing and determining the requirements of the learning process so that the terms "primary needs" and "supporting needs" emerge. Therefore, planning for infrastructure requires a needs analysis because the needs for infrastructure are dynamic.
2) *Procurement*: It is a process of setting the program for obtaining the facilities and infrastructure of educational institutions in the future to achieve educational goals. As this process is a follow-up process after the planning, the latter must be prepared in a clear and detailed manner so that the procurement of the required facilities can be arranged according to the requirements identified by the needs analysis.
3) *Inventory*: It is the activity of recording and coding of goods as well as making reports on the procurement of goods.
4) *Distribution and utilization*: After the inventory is carried out, the infrastructure is distributed according to its use, to be further utilized by those who need it. Utilization of these goods must adhere to the principles of effectiveness and efficiency in accordance with the SOP made by the manager so that there are clear regulations regarding the use of these goods.
5) *Maintenance*: Maintenance of infrastructure is implemented so that the facilities can perpetuate the durability of the goods. In addition, the infrastructure is expected to always be ready,

pleasing to the eye, and easy to use. Therefore, maintenance is an important aspect of infrastructure management.

6) *Elimination*: Elimination aims to prevent large expenditures for security and/or maintenance costs. It also prevents wastage of maintenance over inventory items that are no longer useful and lighten the inventory burden.
7) *Supervision and accounting (reporting)*: It is an effort made to control infrastructure as part of the activity of keeping, maintaining, and utilizing infrastructure for the success of learning in an educational institution. Furthermore, it is necessary to underline that school facilities and infrastructure belong to non-individual institutions; indeed, the situation must be reported to the authorities.

The Standard of Facilities and Infrastructure

The standard of learning infrastructure is a minimum criterion of facilities and infrastructure in accordance with the needs of the content and learning process to achieve high-quality learning outcomes of the students.

Ananda & Banurea (2017) discussed the Regulation of the Minister of Research, Technology and Higher Education No. 44 in 2015, concerning National Higher Education Standards, and remarked that the standard of learning facilities includes but is not limited to: (1) furniture, (2) educational equipment, (3) educational media, (4) books, e-books, and repositories, (5) information and communication technology facilities, (6) experimental instrumentation, (7) sports facilities, (8) art facilities, (9) public facilities, (10) consumables, and (11) maintenance, safety, and security facilities.

The number, type, and specifications of the facilities are determined on the basis of the ratio of the use of the facilities in accordance with the characteristics of the methods and forms of learning and must ensure the implementation of the learning process and academic administration services (Sukmayadi & Yahya, 2020). Meanwhile, infrastructure standards include but are not limited to: (1) land, (2) classroom, (3) library, (4) laboratory/studio/workshop/production unit, (5) place to exercise, (6) space for art, (7) student activity unit room, (8) college leadership room, (9) lecturer room, (10) administration room, and (11) public facilities (Ananda & Banurea, 2017).

Management of facilities and infrastructure is the responsibility of the institution and must include the phases of planning, implementing, monitoring, and evaluating (Sukmayadi & Yahya, 2020).

Infrastructure management should also be included if new programs are introduced. In this case, the ICP at SIUS is an instance of a superior program introduced by universities to maximize the potential of graduates. Therefore, in addition to the infrastructure requirements fulfilled by the university, as a flagship program, there are several additional infrastructure facilities that have been determined, namely: (1) student boarding house, (2) international standard classrooms, (3) language laboratory, (4) art room, (5) common rooms, and (6) proper wireless internet connection (Ananda & Banurea, 2017; Sukmayadi & Yahya, 2020).

Methods

To achieve the objectives described previously, this study used a descriptive qualitative approach. A qualitative approach helps achieve an understanding of how the studied phenomenon is viewed by the participant or other informants or stakeholders and does not relate to the researcher's own perspective (Creswell & Poth, 2018; Sugiyono, 2014). Therefore, the researchers utilized interviews to collect data and documentation to support the result data of the research (Schamber, 2000).

In qualitative research, the main research instrument is the researcher himself/herself. Researchers, as human instruments, play a role in determining the focus of research, selecting informants as data sources, collecting data, assessing data quality, analyzing data, interpreting data, and giving meaning and making conclusions from their findings (Creswell & Poth, 2018; Sugiyono, 2014). Therefore, the researcher is the key instrument in qualitative research. The data sources in this study are the parties concerned or involved in the management of a cross-study based education curriculum of the ICP at SIUS.

To collect data, the researchers used observation, interview, and documentation (Sugiyono, 2014). The researchers chose the 10 informants who were competent in organizational management and were in the professional capacities of chancellor, vice chancellor, dean, director of the ICP, and the heads of division and related departments.

Observation

Observation in this study has been made three times during the research. The first observation was used to check the overall facilities and infrastructures in general suitable with what the documents identified. Second observation was to see whether the functions of the main facilities and infrastructures are well developed. The last observation was specifically used for supervision and

monitoring. Careful check was made to confirm the properness of the quality of the facilities and infrastructures. Results of three-time observation were recorded to see the proper functions of the facilities and infrastructures.

Interview

Semi-structured interview was made to collect more depth information regarding the facilities and infrastructures of ICP. Semi-structured interview was selected because it is easy to construct and if the questions are not proper, the researchers are easy to skip and change to other questions that are more relevant (Creswell & Poth, 2018). The interview took 30-40 minutes each, so for 10 interviewees the researchers need around 400 minutes or 6 hours. The interview started at 08.00 am and ended at 2 pm, with one hour break at 12.00 am for lunch. During the interview a research collaborator helped the researchers to set the records and video-tape the interview processes. The results of interview were transcribed verbatim so that they appeared as the original dialogues (Schamber, 2000).

Document Analysis

Documents to be analyzed in this study include agenda, minutes of meetings, manuals, books and brochures, printed and electronic materials, computer based and internet that contain words and images (Corbin & Strauss, 2008). The documents present 'social facts' that are produced, shared, and used in socially organized ways (Atkinson & Coffey, 2004) to elicit meaning, gain understanding, and develop empirical knowledge (Corbin & Strauss, 2008). The empirical evidences from the documents are identified and categorized relevant to the research questions and together with the results of observation and interview, data are integrated.

To analyze the data, the researcher used Miles, et.al., (2014) model, which involves data collection, data reduction, data display, and conclusion drawing or verification. In addition, the researchers also used content analysis initiated by Zhang & Wildemuth (2016). Data analysis according to Zhang & Wildemuth (2016) works as follows. Data that are obtained from the interview are transcribed verbatim. Based on the transcript, themes are identified according to the research questions. Then, the data are given number on each category and the researchers selected the proper themes that have been numbered for the final data (Fereday & Muir-Cochrane, 2006).

Thematic analysis is to recognize data that emerge themes for the basis of categories for analysis (Fereday & Muir-Cochrane, 2006).

Results and Discussions

Facility and Infrastructure Management of the ICP

Issues pertaining to facilities and infrastructures of ICP regard with financial, procurement of land and building for learning activities, and proposal to approve the budget. Management of facilities and infrastructures of the ICP is carried out by submitting requests for needs to the faculty as the institution that oversees the ICP. ICP management holds an audience with stakeholders to collect initiatives for the development of facilities and infrastructure, especially in the ICP, as given the changing times, facilities and infrastructure must be developed and improved as well.

The director said:

(1) International program is our ultimate goal to make advantage of our university. Therefore, facilities and infrastructures to fill the standard of international program are of priority.

In managing the infrastructure development, the ICP director encountered various obstacles, such as the unavailability of special classrooms to implement learning activities so that the ICP shared facilities with other study programs and faculties. Such a problem surfaced because ICP management has funding constraints to apply for extensive facilities and infrastructure. Funding for facilities and infrastructure is requested through submission, and then the budgeting is decided by the dean (Kolios & Read, 2013). Meanwhile, the analysis of the needs for infrastructure is performed to determine the current requirements for facilities and infrastructure to achieve the program's vision and mission. Given such circumstances, the ICP director coordinates with the rector and the dean of the needs analysis process for the planning of facilities and infrastructure of the ICP. In addition, the ICP director strives to carefully and precisely maintain educational facilities and infrastructure, so that the existence of these infrastructure facilities will always be in a ready-to-use state as and when they required. Financial manager explains:

(2) Management regarding financial supports is our big issue. Beside limited budget is available, options to handle basic needs such as land for the international building standard is hard to find. In addition, it is quite problematic in our context to increase the number of tuition fee from the students.

The procurement of the facilities and infrastructures is done in accordance with the institute's regulations. However, some facilities still belong to the institute or faculty, and therefore, the ICP

authorities need to submit the request for special needs, including ICP courses, such as dance and drama, which require a special room. In addition, ICP students also need a space, or a common room, wherein they can gather and interact. Currently, these rooms are used on a sharing basis, where if the ICP students need the room, they can borrow it from the faculty.

Furthermore, as ICP is implemented on a full-day basis, ICP management requires a permanent residence for its students to run this program optimally. Previously, when the ICP was run on Campus 2 of SIUS, the dormitory was located near the campus area, making it easier for students to mobilize to and from the campus. However, when the policy changed, and the new policy required the implementation of the program to be moved to Campus 3, the former dormitory could no longer be used as it was too far away. Therefore, the ICP management committee decided to use a rental house or use a house that was donated for student activities. The coordinator states:

(3) It is still a problem to serve a house of dormitory for the international students. The house should be able to accommodate international students. As our budget is not enough to procure, we rent a house that is suitable for this objective.

Regarding the maintenance, ICP faculty is responsible for maintaining the facilities and infrastructures of the ICP. Maintenance plays a critical role in the management of facilities and infrastructures because it contributes to facilitating the learning activities, for instance, the case with traditional gamelan musical instruments, which require maintenance and repair. Their maintenance is necessary to preserve the authenticity of the sound of the musical instruments. The types of infrastructure maintenance efforts that have been carried out include replacement, repair, transformation, and procurement.

Besides the maintenance of facilities and infrastructures, supervision and reporting are also the responsibility of the faculty. Efforts have been made to supervise the infrastructure of the KKI program to maintain the infrastructure used by storing these items in a special room and providing a certificate of borrowing and returning. The facility and infrastructure accounting (reporting) scheme is implemented in accordance with faculty regulations. The process of evaluating the availability and use of infrastructure facilities for the ICP identifies the facilities that are necessary and can be added or replaced.

One major obstacle in the development and management of facilities and infrastructure is waiting for the proposed budget facility to be approved. This can be ascribed to red tape bureaucracy, where the application is on the waiting list for a long time without any clear decision of approval

(David & David, 2011; Budiharso & Tarman, 2020). The optimization of the procurement, use, maintenance, and arrangement of infrastructure facilities for the KKI program are still not optimal because the rooms are still moving to adjust the spatial planning needs with other programs (David & David, 2011).

The availability of infrastructure is influenced by the availability of rooms and funding. However, the evaluation of infrastructure facilities in the ICP has revealed better outcomes in recent times (Budiharso & Tarman, 2020). Recently, the facilities and infrastructure have fulfilled the needs that support the success of learning in the ICP, but the fulfillment of other infrastructure facilities such as special international classrooms, art rooms, and common rooms are still very much needed for the optimization of the ICP (Dyson, 2004).

This finding confirms the study of Budiharso & Tarman (2020) stating that facilities and infrastructure are the basic needs of higher education management. The facilities have to made available (Ananda & Banurea, 2017) for the ICP in a high standard. The process of the procurement, however, should be integral to the strategic policy (Budiharso, et.al, 2022). Further, the strategic management will commence from the planning, implementing and evaluation (Budiharso, et, al, 2022) that is a part of strategic management (David & David, 2011).

Development and Management of ICP

The development of infrastructure and facilities is carried out with reference to long-term needs in accordance with the master plan that has been prepared by SIUS. To get optimal development results with timely and appropriate quality indications, SIUS has compiled the 2020–2024 Facilities and Infrastructure Grand Design (David & David, 2011). The management of infrastructure development for the ICP is carried out by the general section of SIUS based on the needs compiled by the ICP management committee. The need for these infrastructure facilities is compiled in the form of program and budget proposals by following the general rules of government agency budget planning (Dyson, 2004).

This finding is in agreement with David & David (2011) budget in common has been a big problem to find that needs a careful strategic management. More budget impacts problems on the effective use of the finance. In addition, budget also relates to the analysis that relates to SWOT (strengths, weaknesses, opportunities, threats) analysis and analysis of PESTLE (Political, economic, social,

technology, legal and environmental) (Kolios & Read, 2013). Financial chief of the university admits:

(4) We sometimes already planned the budget, submit to the government, but often the proposal is refused, or we receive less than what we propose. Consequently, we cancel the program or we build as the finance can afford.

The primary responsibilities of management of facility and infrastructure development for the sustainability of the ICP are: 1) providing convenience to users (students) so that service quality and satisfaction levels are maintained through good management of infrastructure; 2) managing infrastructure development adequately, thereby significantly impacting the quality of output/graduates management; and 3) ensuring the suitability of the facilities and infrastructures provided in accordance with the demands and needs (Kolios & Read, 2013).

For fulfilling needs related to facilities and infrastructures, there are two types of planning applied in SIUS, namely: (1) Planning for infrastructure facilities based on the master plan, as outlined in the grand design, and (2) Optimization and adjustment of infrastructure-related needs by collecting data on proposals from units, institutions, and faculties (David & David, 2011).

The procurement of facilities and infrastructure should consider ICT that serve the whole university needs for communication and publication services. The director says:

(5) The facilities and infrastructure in this era should involve information technology. It means we have to serve big bandwhich that can cover the needs for teaching, public information and other needs of publication.

This study finds that financing program adheres to the regulation in the university. We find that the form of financing carried out in funding infrastructure facilities on campus is done through two regulations. First, the development of infrastructure facilities is sourced from the APBN, PNBP, and SBSN budgets with the amount of the budget in accordance with the approval of the Ministry of Finance. Second, The budget allocation for infrastructure for the ICP is given in accordance with the proposal by considering the availability and adequacy of the macro budget at the institutional level. The regulations follow steps of management to meet the standard procedures (Budiharso, et. al., 2022; David & David, 2011; Dyson, 2004; Kolios & Read, 2013).

In addition, the procedure for the procurement of facilities and infrastructures follows the following pattern: input (proposal/planning) –approval (budget approval) – process (procurement process) –output (results/goods) (Famularsih, et al., 2016; Dyson, 2004). Each level, be it institute

or faculty, follows the same steps without any special treatment. In the procurement of infrastructure for the ICP, there is a form of cooperation with other parties by adjusting the applicable provisions (Kolios & Read, 2013). Then, for the method of procurement of infrastructure in the ICP, it is proposed to the faculty, and then the faculty proposes to the rector/institute by following the applicable rules (Dyson, 2004). Sources of funds for the procurement of infrastructure for the ICP come from PNBP, SPP, and UKT. However, to procure infrastructure, there is a difference between the ICP and the regular class as it is a flagship program of faculty and not a major of regular class in faculty (David & David, 2011).

In general, the procedure of inventory for the facilities and infrastructures of the institute where all assets owned by SIUS are recorded in the SIMAK-BMN application. The facility and infrastructure inventory code scheme automatically appears according to its type after being entered into the SIMAK-BMN application. The finance and BMN divisions assisted by SIMAK-BMN operators are the parties responsible for facility and infrastructure investment (Dyson, 2004). Then, the role of the dean and ICP director in the facility and infrastructure inventory process for the ICP is that the inventory supports the rectorate because the asset recording system is centralized (Famularsih, et al., 2016).

The scheme for distributing infrastructure from the institute to the ICP is submitted through the faculty. There are infrastructure facilities that can be used by all levels of the institute, such as a prayer room, however, there are also those that can only be used by certain groups, such as *gamelan* (Hole, 2010). Based on the statement of the head of the faculty section, the ICP's facilities are in accordance with the Regulations of the Ministry of Research, Technology and Higher Education No. 44 in 2015 concerning National Higher Education Standards, in which the standard of learning facilities includes, but is not limited to: (1) furniture, (2) educational equipment, (3) educational media, (4) books, e-books, and repositories, (5) information and communication technology facilities, (6) experimental instrumentation, (7) sports facilities, (8) art facilities, (9) public facilities, (10) consumables, (11) and maintenance, safety, and security facilities (Hrebiniak, 2006). Meanwhile, infrastructure standards include but are not limited to: (1) land, (2) classroom, (3) library, (4) laboratory/studio/workshop/production unit, (5) place to exercise, (6) space for art, (7) student activity unit room, (8) college leadership room, (9) lecturer room, (10) administration room, and (11) public facilities (Ananda & Banurea, 2017).

Although some facilities and infrastructures are still used together with other study programs, the standard of facilities and infrastructure, as mentioned above, can be fulfilled by the faculty and institute. In addition to the above facilities and infrastructure, there are other facility and infrastructure requirements that should be fulfilled by the faculty considering that ICP is the faculty's flagship program, such as art room, common room, and a WiFi connection (Huang, et. al., 2009). Some of these have been fulfilled but are still being shared with other study programs, such as a WiFi connection. Then, at the student dormitory itself, there is no WiFi connection facility, even though there is still learning going on at the dormitory. The ICP still shares other facilities and infrastructures, such as art rooms and classrooms, with regular classes (Kolios & Read, 2013). In addition, the art room is still joined with other rooms, while the common room and language laboratory are still not fully developed (Huisman, et. al., 2007). Considering the high intensity of learning activities and intensive language learning studies, these two facilities should be provided to maximize the teaching and learning process at ICP (Ananda & Banurea, 2017).

Furthermore, as stated earlier, the ICP dormitory at Campus 2 could not be used. This resulted in a reduction in students' productivity as they were too tired during their course. Therefore, the temporary solution regarding this problem would be to use a rental house that could be used for learning as well as a boarding house for students (Mahlalela, 2017).

The scheme for the utilization of special infrastructure facilities is through submitting permission to the related parties. The role of the rectorate, dean, and ICP director in the process of distributing and utilizing infrastructure for the ICP is to distribute goods or infrastructure carried out by the general section of the rectorate to related units in accordance with the proposal. To some extent, the head of the administration of FTIK is the party responsible for supervising the infrastructure of the ICP (Mahlalela, 2017). The role of the dean in the process of monitoring and accounting (reporting) of infrastructure for the ICP is to conduct regular monitoring of infrastructure facilities including the condition, number, and position of infrastructure facilities as outlined in the list of room items (DBR) (Kolios & Read, 2013).

Some efforts have been made to supervise the infrastructure of the ICP by coordinating special infrastructure facilities through WhatsApp. Meanwhile, the infrastructure facilities accounting (reporting) scheme is developed to update the list of room items (DBR) every year to ascertain the condition of the infrastructure (Mahlalela, 2017). If any form of damage is found, maintenance or repair is considered necessary. If the condition of the goods is not feasible, then it is reported to

the general rectorate for recording and entering the warehouse prior to deleting the goods (Huisman, et. al., 2007).

Evaluation of the availability and the use of infrastructure facilities on the campus for the ICP is through regular monitoring by both the rector and the faculty. Meanwhile, the obstacles in developing facilities and infrastructure on campus surface due to the limitations of the flow and the applied rules. In addition, the availability of space, which is very limited, causes overlooking of certain requests, which contributes to the hindrances encountered by the ICP director in further developing the facilities and infrastructures (Budiharso & Tarman, 2020).

The reporting of the utilization in developing infrastructure facilities is done by recording goods in the warehouse and the minutes of deletion being material for the preparation of infrastructure plans and budgets for the following year (David & David, 2011). To optimize the procurement, use, maintenance, and arrangement of infrastructure facilities for the ICP, it is carried out by collecting a comprehensive proposal data for the needs of ICP facilities and infrastructures to prepare a procurement plan. It implies that the aspects that affect the availability of infrastructure are the availability of budget and the priority scale of infrastructure facilities at the institutional level (John & Senith, 2013).

Conclusion

The management of facilities and infrastructures of the ICP currently implemented is an effort to procure the fulfillment of a place, amenity, or piece of equipment provided for a particular purpose and the basic physical space required for the operation of the ICP. Most of the requirements of the facilities and infrastructures have been fulfilled, though they are utilized on a sharing basis. However, there are still some facilities that need to be procured, such as an art room, a common room, and a language laboratory. The facility and infrastructure development and management at the ICP of SIUS is developed with reference to long-term needs in accordance with the master plan that has been prepared. To obtain optimal development results with timely and appropriate indications, SIUS has compiled a Grand Design of Facilities and Infrastructure for 2020–2024.

This study has a novelty in that management that fits to serve facilities and infrastructure is strategic management that is integral with vision and mission of the organization. However, this study has the drawbacks in that limited participants are involved in this study. Future research is suggested to extend the sample and implemented survey research to improve the pitfalls of this study.

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