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ASSET MANAGEMENT STRATEGY IN SUPPORTING SMART CAMPUS (CASE STUDY AT IPDN JATINANGOR CAMPUS)

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Abstract
The transition toward smart campus development requires higher education institutions to strengthen digital governance, asset utilization, and technological integration to improve operational performance and service quality. This study examines the effectiveness of asset management practices at IPDN Jatinangor in supporting digital transformation through the implementation of smart campus initiatives. Using a descriptive qualitative approach supported by institutional reports, policy documents, and expert interpretations, the analysis shows that asset management at IPDN is currently positioned as a supporting component in the digital transformation process, contributing 48.14 percent to smart campus readiness. However, 37.07 percent of asset governance practices do not yet adequately support digital development, and only 14.81 percent demonstrate full alignment with smart campus objectives. Supporting factors include national and regional financial allocation, central government and ministry grants, institutional status as a public administration higher education provider, and strategic support from planning and financial agencies. Conversely, key challenges include limited digital literacy, inadequate dissemination of smart campus initiatives, insufficient leadership prioritization, infrastructure gaps, and the need to refine the existing smart campus master plan. The study proposes strategic strengthening through improved policy clarity, enhanced organizational capacity, better leadership commitment, and increased digital governance maturity. These findings contribute to a deeper understanding of how institutional asset management can improve the effectiveness of smart campus implementation and provide practical direction for policy enhancement and future development.

Keywords: Smart campus, asset management, digital transformation, higher education governance, institutional strategy, IPDN Jatinangor

Introduction

1. Background:

In the past decade, the development of higher education has increasingly aligned with global digital transformation, where information technology becomes a critical driver in institutional competitiveness, service efficiency, and educational innovation. Universities are required to evolve from traditional operational frameworks into digitally empowered ecosystems capable of supporting real-time services, data-driven decision-making, and integrated academic and administrative platforms. This transformation has led to the widespread adoption of the Smart Campus concept, which refers to the strategic application of digital infrastructure, intelligent systems, and integrated asset management to enhance educational quality and institutional performance. As noted by Alrasheedi and Capretz (2019), smart campuses are characterized by interconnected systems that enable seamless communication among campus stakeholders, optimization of resource use, and enhanced user experience across learning, research, and governance processes. In this context, asset management becomes a foundational component for ensuring that digital investments translate into measurable institutional improvements.

The rapid expansion of information systems in higher education also reflects global pressures for transparency, accountability, and sustainability in the management of institutional resources. Universities today handle extensive physical assets, such as buildings, laboratories, equipment, and IT infrastructure, as well as digital assets including databases, learning platforms, and knowledge repositories. Effective asset governance is therefore crucial not only for operational continuity but

also for maintaining financial prudence, supporting academic excellence, and ensuring compliance with regulatory and accreditation standards. According to International Organization for Standardization (ISO 55000), asset management must provide systematic oversight throughout the asset lifecycle to achieve maximum value, long-term resilience, and stakeholder satisfaction. This perspective is consistent with the rising expectation that universities adopt management models aligned with modern digital governance frameworks, particularly those that leverage real-time data, automation, and predictive analytics.

Despite these global trends, many higher education institutions continue to face challenges in realizing integrated smart campus models. One of the most persistent issues is the fragmented nature of asset monitoring and decision-making, where departments operate in isolation, databases lack interoperability, and leadership is unable to access reliable performance information. Fernando et al. (2022) argue that digital transformation in the education sector is often hindered by inadequate digital alignment between organizational strategy and technological systems, resulting in inefficiencies and increased operational risks. Traditional asset management practices rely heavily on manual tracking, delayed reporting, and reactive maintenance, which limit the ability of institutions to respond to technological failures, financial constraints, and evolving academic needs. As universities increase investments in digital infrastructure, these traditional approaches become increasingly unsustainable, leading to rising maintenance costs, resource misallocation, and underutilization of assets.

To address these challenges, many universities have begun adopting technology-enabled solutions designed to shift asset management from reactive to predictive and strategic practice. Solutions such as Internet of Things (IoT) monitoring, integrated enterprise platforms, and decision-support systems allow institutions to track asset performance continuously, automate maintenance alerts, and produce real-time analytics for resource planning. As noted by Shakya and Kehrwald (2023), smart infrastructure systems in education can significantly improve utilization efficiency and operational reliability by enabling administrators to anticipate future needs and allocate resources proactively. Similarly, cloud-based asset management architectures allow multi-stakeholder collaboration, support remote access, and reduce reliance on manual procedures, which is particularly valuable in large educational environments with complex asset portfolios.

Existing studies also highlight the importance of digital governance frameworks that enable alignment between technological deployment and institutional strategic objectives. For instance, the Technology–Organization–Environment (TOE) framework, frequently applied in digital adoption research, emphasizes that technology effectiveness depends on coordinated organizational readiness, leadership commitment, and environmental support. Applied in smart campus development, this suggests that technological systems alone do not guarantee improvement without corresponding changes in administrative capabilities, human skills, and strategic vision. As Priyadarsini and Ranganathan (2021) explain, digital asset management requires institutional transformations in planning, human resource development, decision-making structures, and routine workflow processes. Therefore, the shift toward smart campus capability must be understood not only as technological modernization but as an organizational reform where data, infrastructure, and management processes converge.

Studies on smart campus adoption further emphasize the role of integrated asset management in improving accountability and transparency in higher education. Integrated digital systems provide continuous documentation of asset utilization, financial efficiency, maintenance performance, and cost-benefit realization. Such systems support measurable decision-making, reduce dependency on individual departments, and strengthen institutional governance. According to Shah and Patel

(2022), real-time reporting enhances compliance and ensures that leadership can evaluate investment returns with greater accuracy. In addition, transparency in asset performance supports accreditation processes and aligns institutions with international education quality standards. However, despite clear benefits, many universities lack comprehensive implementation models that combine digital asset monitoring with strategic management frameworks, resulting in fragmented innovation and suboptimal outcomes.

Although significant progress has been made, the existing literature still lacks studies that specifically explore asset management strategies in the context of smart campus development in emerging higher education systems. Much of the prior research focuses on technological deployment, digital systems, and IT service performance, while fewer studies investigate how technology-supported asset governance influences overall institutional resilience, planning capability, or policy execution. This gap is critical because universities in developing regions often face limited resources, infrastructure disparities, and evolving regulatory environments that make strategic asset management both more challenging and more essential. As a result, there is a need to develop comprehensive studies that examine not only the technological dimension of smart campuses but also the managerial and governance structures necessary to translate technology into measurable institutional effectiveness.

Therefore, this study aims to analyze asset management strategies to support the development of a smart campus environment within higher education. The novelty of this study lies in its integrated approach that treats asset management not merely as an administrative procedure but as a strategic pillar of digital transformation supported by technological systems, organizational capability, and governance alignment. By examining how institutions manage, monitor, and optimize assets throughout their lifecycle, this research contributes to a deeper understanding of the mechanisms that enable universities to transition successfully into intelligent, data-driven ecosystems. The scope of the study includes evaluation of current asset practices, the role of digital platforms, institutional challenges, and potential strategies that align operational efficiency with the broader vision of smart campus excellence.

Methods

This study adopted a qualitative descriptive research design to explore how asset management strategies support the development of a smart campus environment in higher education institutions. A qualitative approach was selected to enable a deeper understanding of organizational processes, managerial perspectives, and institutional realities that cannot be fully captured through numerical indicators. The research was conducted in a university undergoing digital transformation initiatives, where information systems had begun to be integrated into administrative and operational asset governance. This context provided a suitable setting for observing how digital platforms influence planning, monitoring, and decision-making in real institutional conditions.

Data were collected through semi-structured interviews, document analysis, and direct observation. Participants were selected purposively to ensure that respondents had direct involvement in asset administration and digital system implementation. Interviews collected insights from administrative officers, unit managers, and technical staff responsible for system integration. Supporting data were obtained from institutional documents such as policies, asset inventories, strategic plans, financial records, and system dashboards. Direct observation in administrative environments allowed the researcher to examine how digital systems were used in practice, how administrators accessed asset information, and how workflows unfolded within the technology-supported environment.

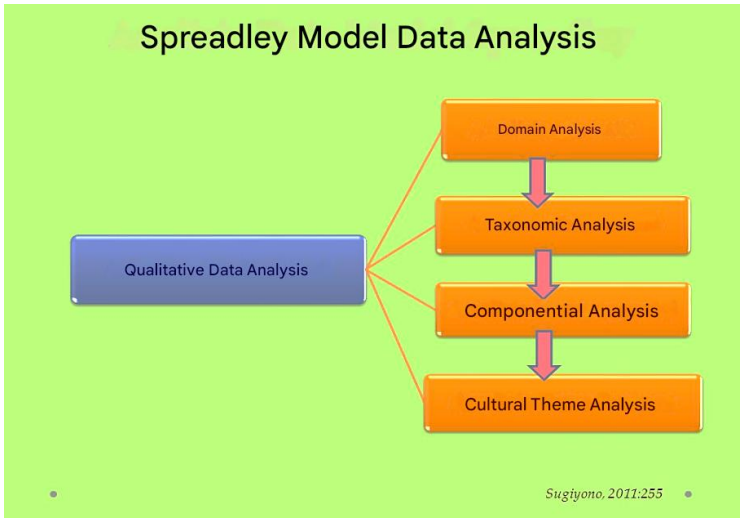

Figure 1. Spreadley Model Data Analysis

Thematic analysis was employed to process and interpret the collected data. Interview transcripts, document notes, and observation records were coded to identify recurring patterns related to strategic alignment, organizational readiness, data integration, and perceived performance improvements. Themes were then synthesized to produce a structured interpretation of how digital asset management contributes to smart campus goals such as transparency, efficiency, and informed decision-making. Methodological rigor was strengthened through triangulation between data sources and participant verification to ensure that interpretations remained consistent with stakeholder perspectives.

Results

Management asset in support *smart campus* at IPDN campus Jatinangor

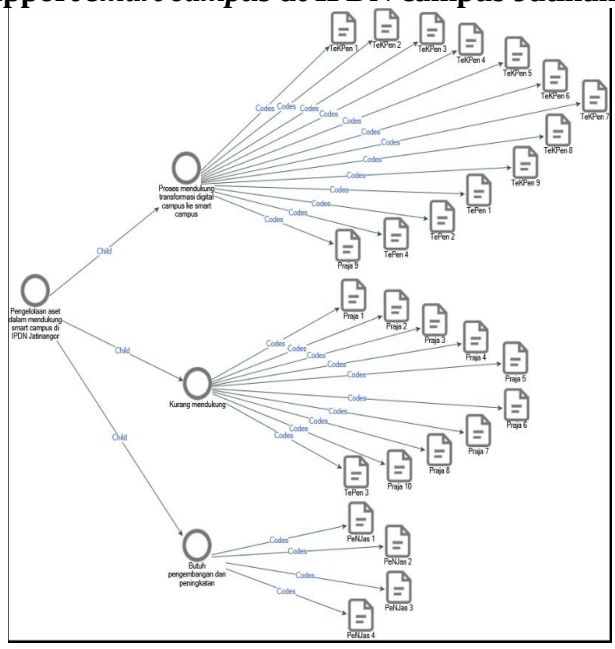

Figure 1. Project Map Asset Management in Support Smart Campus at IPDN Jatinangor campus
Source : processed researchers via NVivo software 15, 2025

From the analysis researchers to to 27 informants can obtained information management asset in support *smart campus* at IPDN campus Jatinangor which consists of from planning assets , procurement assets , inventory assets , legal audit of assets , valuation assets , operation and maintenance assets , write-offs assets , updates assets , transfer assets , as well as extermination asset still in the process of supporting *digital campus* going to *smart campus* with prepare infrastructure physical and non- physical . In Figure 11, it is obtained information that from 10 (ten) informants civil servants there were 9 (nine) informants who conveyed management asset moment This No support *Smart campus* at IPDN Jatinangor . Interview results researchers to informant civil servants as the party who feels direct service education own the view that states that *smart campus* at IPDN campus Jatinangor Not yet implemented

Supporting and inhibiting factors management asset in support *smart campus* at IPDN campus Jatinangor

Supporting factors

There are 8 (eight) big ones top evaluation factor supporters , majority informant evaluate that factor supporters management asset in support *smart campus* at IPDN campus Jatinangor moment This in succession covers financing from budget income state spending (APBN), grants government area , lecturer IT savvy , grants ministry domestic , located in the area college high , college tall civil service , campus mental revolution , and support from BAPPENAS and the Ministry of Finance's DJA. The percentage can shown by visualization *project map* under This :

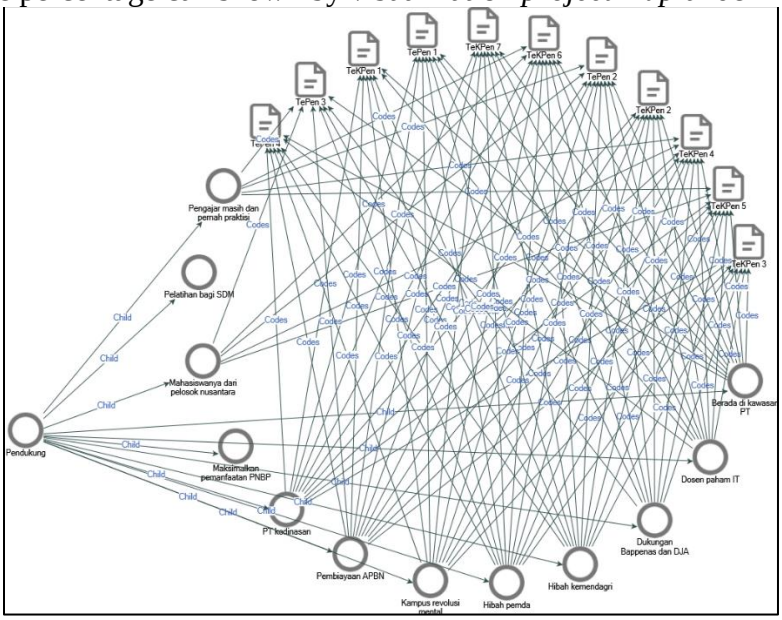

Figure 2. *Project Map* Supporting Factors Asset Management in Support *Smart Campus* at IPDN campus Jatinangor (Informant for Education Personnel (TeKPen) and Educator Personnel (TePen))

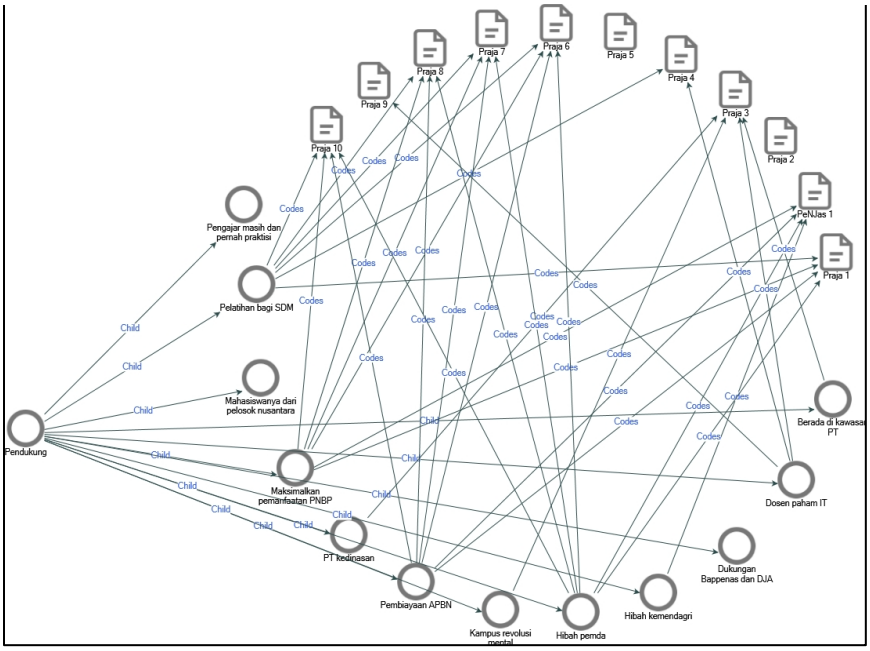

Figure 3. *Project Map* Supporting Factors Asset Management in Support *Smart Campus* at IPDN campus Jatinangor (Informant Praja and Service Providers (PeJAs))

Source : processed researchers via NVivo software 15, 2025

From figure 12 and figure 13 it is obtained information that factor supporters management asset in support *smart campus* at IPDN campus Jatinangor is financing sourced from the APBN with percentage 62.96%, grant government area with percentage 62.96%, lecturer understand IT with percentage of 48.14%, Ministry of Home Affairs grant with percentage 44.44%, located in the area college high in Jatinangor with percentage of 44.44%, is college tall official duties with percentage 37.03%, campus mental revolution with percentage of 40.74%, and support from BAPPENAS and DJA Ministry of Finance with percentage 29.62%

Financing sourced from the state budget

Universities (PTN) in Indonesia can shared into 3 (three), namely PTN Legal Entity (BH), PTN Public Service Agency (BLU), PTN Unit Work (SatKer). Specifically IPDN is located at PTN Satker under the Ministry of Home Affairs so financing all activity education Still sourced from the state budget. Different with PTN Satker , PTN non Satker filled allocation his education from the APBN by 20% while IPDN does not allocated education funds by 20% so that IPDN must utilise allocated budget from the Ministry of Finance through the Ministry of Home Affairs with scale priority

Government grants area

Government regions (local governments) can give financial assistance to college high, good college state universities (PTN) and college tall private (PTS). This financial assistance can in the form of grant. With allocation budget from the limited APBN one of support that can utilized is grant from government area. As for the grant intended the good in form goods compared to money. Government area can give grant to IPDN campus Jatinangor in the form of supporting equipment and supplies facilities and infrastructure infrastructure physical and nono physique in supporting smart campus at IPDN campus Jatinangor . Giving grant intended customized with applicable rules.

IT- savvy lecturers

In this era of everything digitalization and learning based technology moment This . Educators and education staff who understand will IT is very required . Educator namely lecturers who understand

IT do not forever originate from background behind informatics engineering science or system information . Lecturer at the moment this , is needed skills in understand and utilize IT as supporters implementation learning at IPDN campus Jatinangor . With existence a number of lecturer understand IT then will capable balance IPDN students, some of whom big is IT- savvy Gen Z generation

Home Affairs Grant

IPDN as unit Work from the Ministry of Home Affairs and print cadre guardian civil servants who do not only placed in government area but also in Ministries/Institutions there are Power pull big get help in the form of grant goods in supporting smart campus at IPDN campus Jatinangor . The grant in question can in the form of help study program laboratory or classroom.

Is at in the area college high in Jatinangor

Subdistrict area Jatinangor , district Sumedang moment This own Power pull consisting namely become place gathering a number of college tall namely Padjadjaran University (UNPAD), Institute Technology Bandung (ITB), Institute Indonesian Cooperatives (IKOPIN), Institute Domestic Government (IPDN), and the presence of Telkom University nearby Jatinangor . This is can become factor supporters IPDN *smart campus* campus Jatinangor Because smart campus development in one campus can influence surrounding campuses, especially in matter exchange of data and information . Exchange of data and information intended can caused by interaction students and staff educator as well as his education both formal and informal

College tall official duties

IPDN is college tall official duties and including the oldest in Indonesia. IPDN printer cadre pamomg civil servants No only just print cadre guardian civil servants but through a known educational process Trinity centralized namely teaching, training and care: a) Mental revolution campus; b) Support Bappenas and DJA Ministry of Finance.

Inhibiting factors

There are 8 (eight) big ones top evaluation factor inhibitors , majority informant evaluate that factor inhibitor management asset in support *smart campus* at IPDN campus Jatinangor moment This consecutive includes grand design *smart campus* Not yet There is or clarity customized smart *campus* needs at IPDN campus Jatinangor Not yet there is, Efficiency budget, resources Power man not enough understand related *smart campus*, not yet become scale priority leadership, infrastructure physical and non- physical Not yet adequate, scale planning and budgeting Not yet maximum, minimum digital literacy as well socialization *smart campus* Not yet maximum in the academic community and cadets. The percentage can shown by visualization *project map* under This:

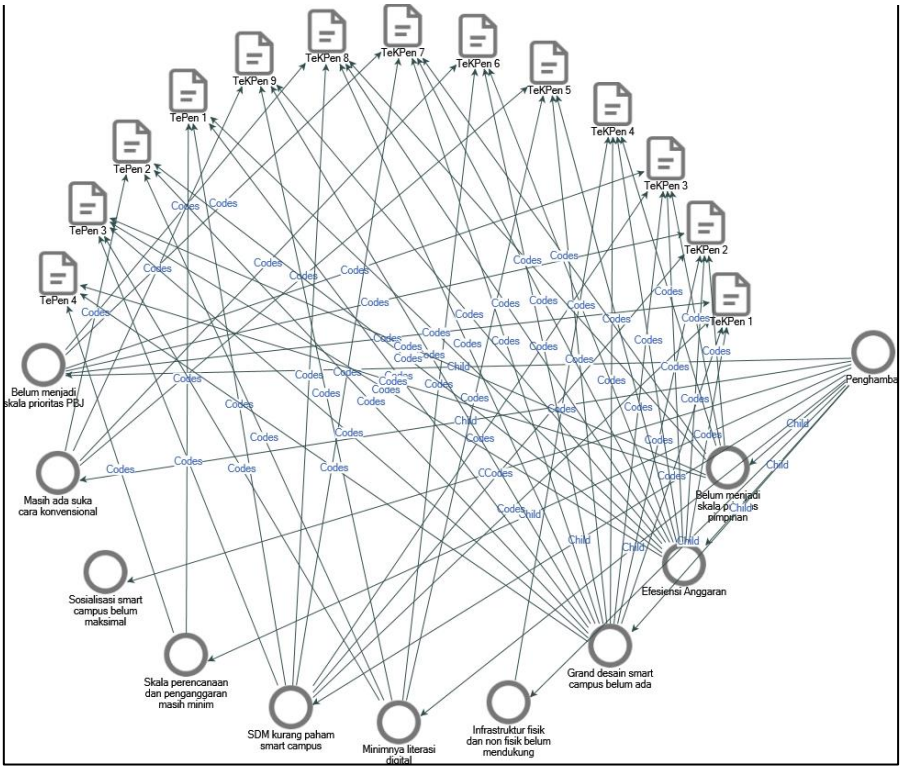

Figure 4. *Project Map* Inhibiting Factors Asset Management in Support *Smart Campus* at IPDN campus Jatinangor (Informant for Education Personnel (TeKPen) and Educator Personnel (TePen))

Source : processed researchers via NVivo software 15, 2025

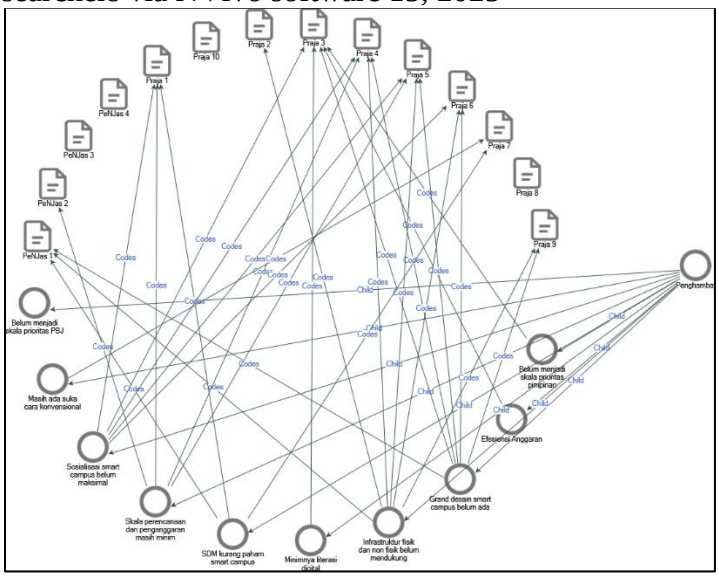

Figure 5. *Project Map* Inhibiting Factors Asset Management in Support *Smart Campus* at IPDN campus Jatinangor (Informant Praja and Service Providers (PeJAs))

Source : processed researchers via NVivo software 15, 2025

From figure 14 and figure 15 it is obtained information that factor inhibitor management asset in support *smart campus* at IPDN campus Jatinangor is a grand design *smart campus* Not yet There is or clarity customized smart *campus* needs at IPDN campus Jatinangor Not yet There is with

percentage 66.66%, Efficiency budget with percentage 48.14%, source Power man not enough understand related *smart campus* with percentage 37.03%, not yet become scale priority leadership with percentage 29.62%, infrastructure physical and non- physical Not yet adequate with percentage 25.29%, scale planning and budgeting Not yet maximum with percentage 22.22%, the minimum digital literacy with percentage of 22.22% and socialization *smart campus* Not yet maximum in the academic community and civil servants with percentage 18.51%

Management strategy asset in support *smart campus* at IPDN campus Jatinangor

***Strength* (power)**

From the analysis researchers to collaboration literature and answers informant related *strength* (power) then obtained 5 (five) internal strengths with order: clarity *smart campus/ grand design smart campus*, leadership organization, capacity organization, workforce educator as well as education Still or Once practitioners, participants educated (praja) from remote areas of the archipelago. The percentage can shown by visualization *project map* under This:

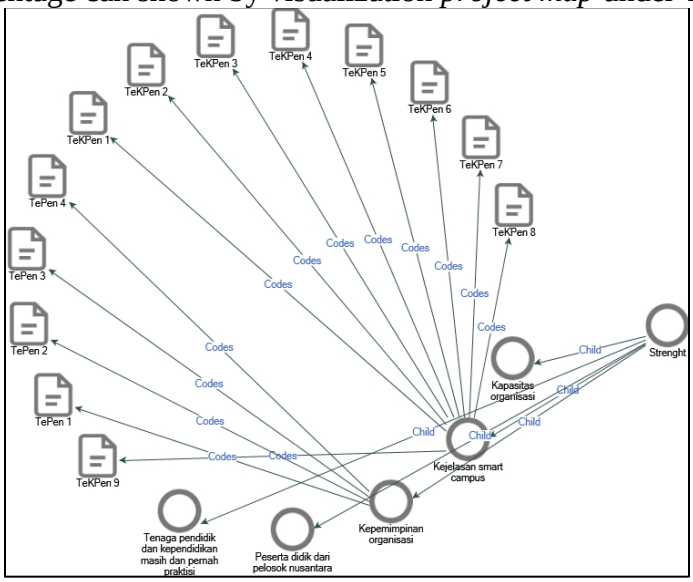

Figure 6. *Project Map Strength* Asset Management in Support *Smart Campus* at IPDN campus Jatinangor (Informant for Education Personnel (TeKPen) and Educator Personnel (TePen))

Source : processed researchers via NVivo software 15, 2025

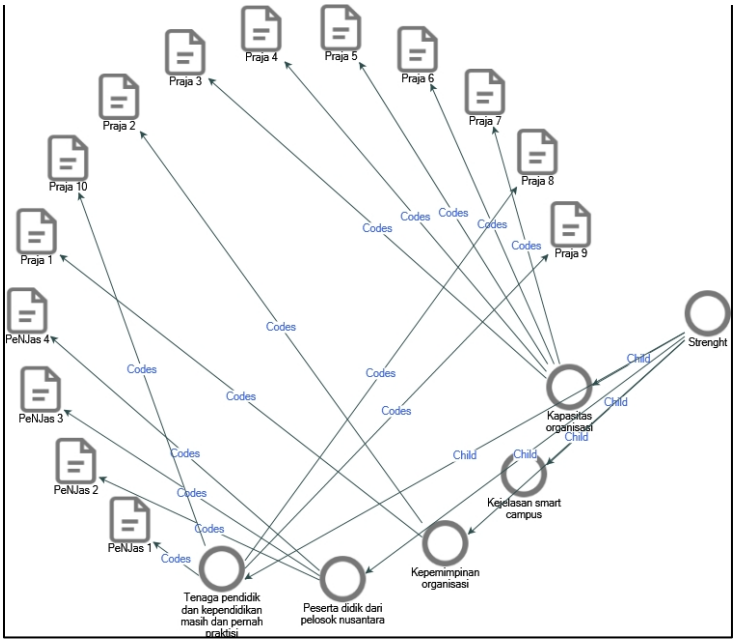

Figure 7. *Project Map Strength* Asset Management in Support *Smart Campus* at IPDN campus Jatinangor (Informant Praja and Service Providers (PeJAs))

Source : processed researchers via NVivo software 15, 2025

From figure 16 and figure 17 it is obtained information that management *strength* asset in support *smart campus* at IPDN campus Jatinangor is clarity (*grand design*) *smart campus* with weight percentage 31.68%, leadership organization with weight percentage 25%, capacity organization with weight percentage 20.29%, power educators and education Still or Once practitioners with weight percentage 12.87%, participants educate from remote areas of the archipelago with weight percentage 10.14%

Opportunities

From the analysis researchers to collaboration literature and answers informant related *opportunities* (opportunities) then obtained 5 (five) opportunities that are owned with order development area technology inside campus , APBN support , use application Ministry of Education, Research , Technology and Higher Education , Ministry finance , ministry of home affairs , industrial revolution 4.0 in ease of learning process , and campus driving force mental revolution . As for the percentage can shown by visualization *project map* under This :

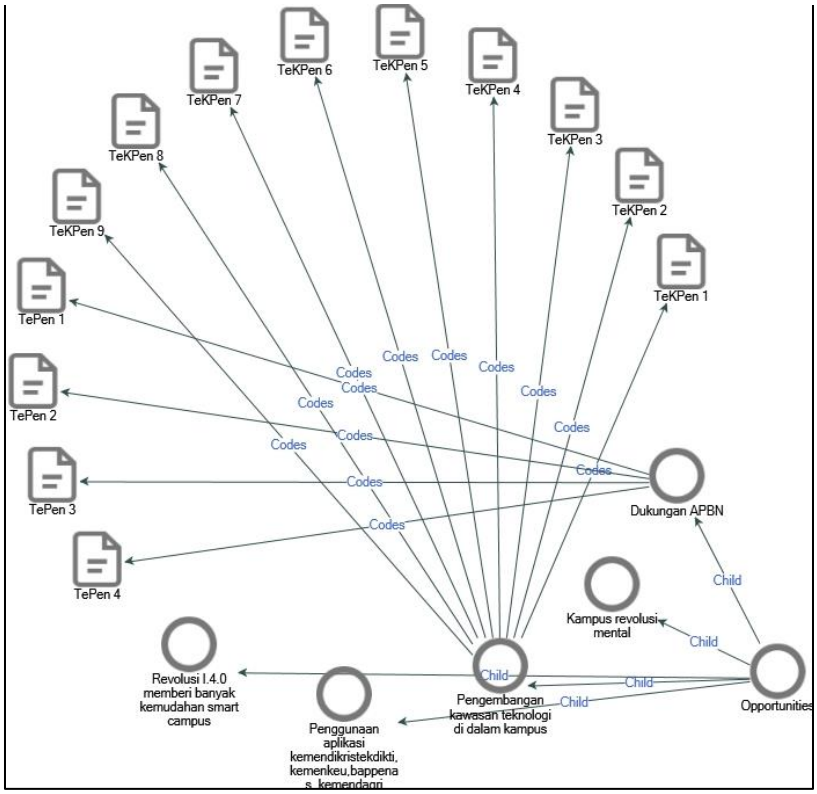

Figure 8. *Project Map Opportunities* Asset Management in Support *Smart Campus* at IPDN campus Jatinangor
(Informant for Education Personnel (TeKPen) and Educator Personnel (TePen))
Source : processed researchers via NVivo software 15, 2025

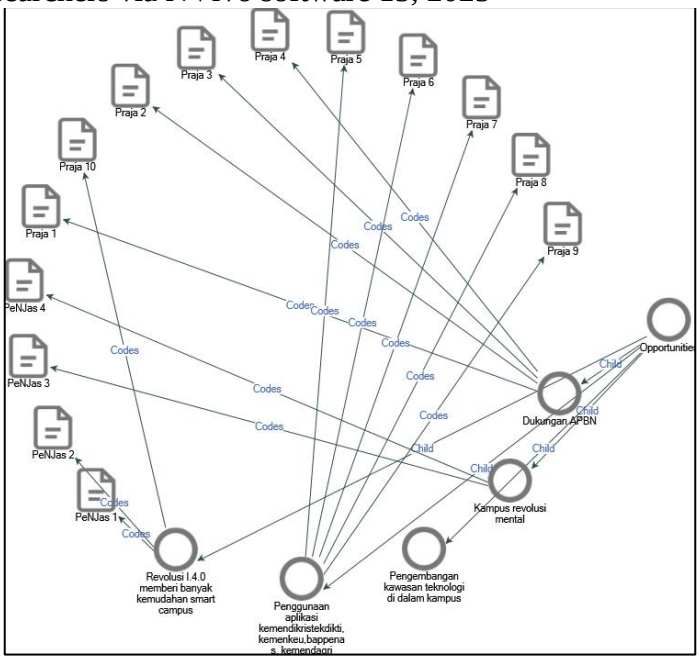

Figure 9 *Project Map Opportunities* Asset Management in Support *Smart Campus*

at IPDN campus Jatinangor (Informant Praja and Service Providers (PeJAs))

Source : processed researchers via NVivo software 15, 2025

From Figure 18 and Figure 19 it is obtained information that management opportunities asset in support *smart campus* at IPDN campus Jatinangor is development area technology inside campus with weight percentage of 30.12%, APBN support with weight percentage 26.66%, usage application Ministry of Education, Research , Technology and Higher Education , Ministry finance , Ministry of Home Affairs with weight percentage of 18.76%, industrial revolution 5.0 in ease of learning process with weight percentage of 14.81% and campus driving force mental revolution with weight percentage 9.62%

***Aspiration* (harapan)**

From the analysis researchers to collaboration literature and answers informant related *aspiration* (hope) then obtained 5 (five) hopes that are owned with order availability cadre government superior , professional, empowered competitive and integrity , education IT- based (multimedia and 3D visualization), the development of an integrated knowledge management system with *learning management system*, building asset strategy management , to become college tall the service that organizes knowledge government accredited superior . As for the percentage can shown by visualization *project map* under This :

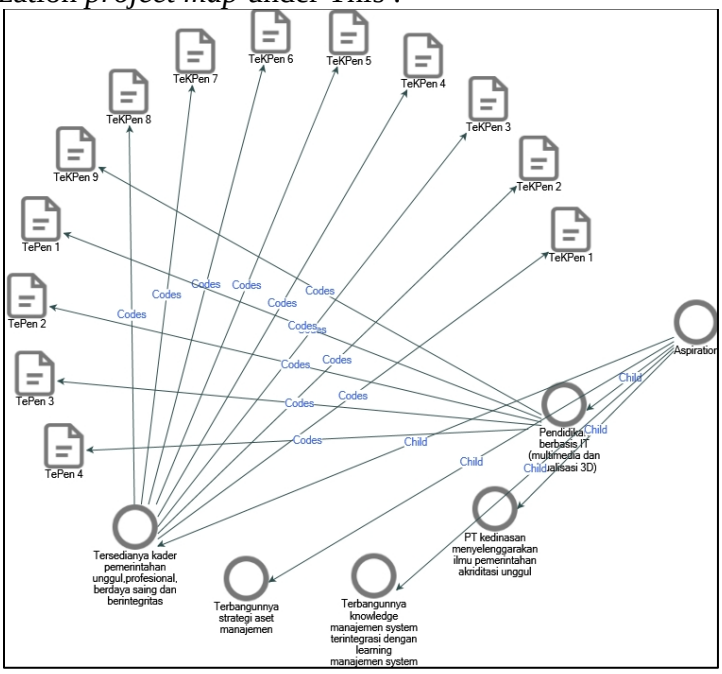

Figure 10. *Project Map* Asset Management *Aspiration* in Support *Smart Campus* at IPDN campus Jatinangor (Informant for Education Personnel (TeKPen) and Educator Personnel (TePen))

Source : processed researchers via NVivo software 15, 2025

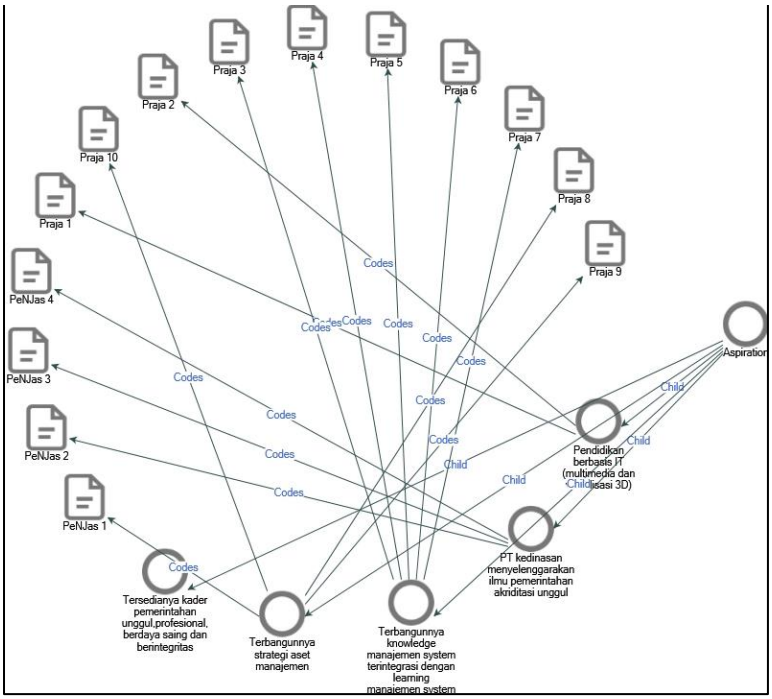

Figure 11. *Project Map* Asset Management *Aspiration* in Support *Smart Campus* at IPDN campus Jatinangor (Informant Praja and Service Providers (PeJAs))

Source : processed researchers via NVivo software 15, 2025

From figure 20 and figure 21 it is obtained information that the aspirations (hopes) of management asset in support *smart campus* at IPDN campus Jatinangor is availability cadre government superior , professional, empowered competitive and have integrity with weight percentage 27.62%, education IT- based (multimedia and 3D visualization) with weight percentage 24.42% , the development of an integrated knowledge management system with *learning management system* with weight percentage 21.68%, building an asset strategy management with weight percentage of 15.06% , to college tall the service that organizes knowledge government accredited superior with weight percentage 11.18%

***Result* (result)**

From the analysis researchers to collaboration literature and answers informant related *aspiration* (hope) then obtained 5 (five) hopes that are owned with order accreditation superior knowledge government in college tall service - based *smart campus* , improvement quality competent graduates , improvement quality education , research and community service to society , improvement service to society , improving governance government

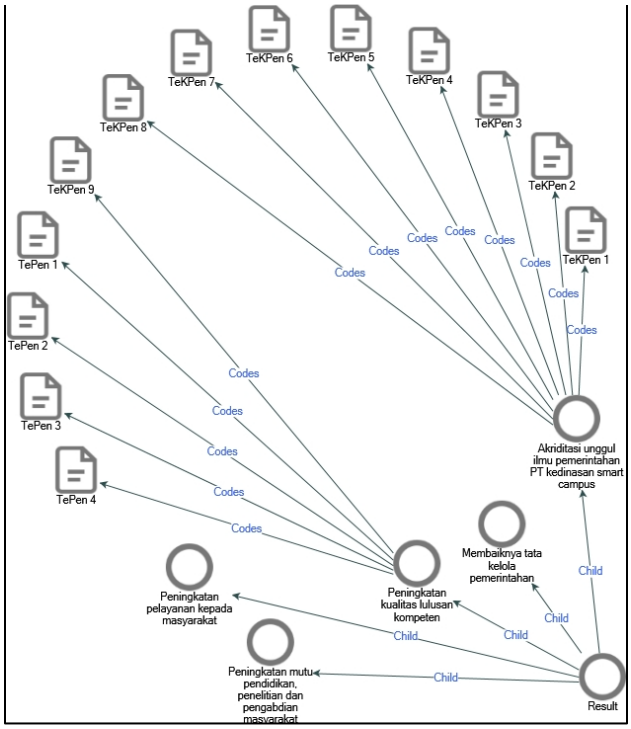

Figure 12. *Project Map* Asset Management *Results* in Support *Smart Campus* at IPDN campus Jatinangor (Informant for Education Personnel (TeKPen) and Educator Personnel (TePen))
Source : processed researchers via NVivo software 15, 2025

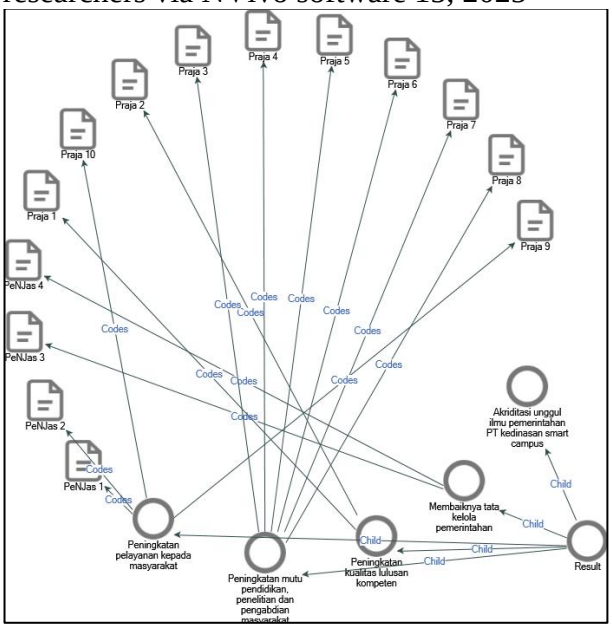

Figure 13. Project Map Asset Management Results in Support Smart Campus at IPDN campus Jatinangor (Informant Praja and Service Providers (PeJAs))
Source : processed researchers via NVivo software 15, 2025

From figure 22 and figure 23 it is obtained information that management *results* asset in support *smart campus* at IPDN campus Jatinangor is accreditation superior knowledge government in

college tall service - based *smart campus* with weight percentage 27.20% , increase quality competent graduates with weight percentage 24.26%, increase quality education , research and community service to public with weight percentage 23.77%, increase service to public with weight percentage of 15.44%, and improved governance government with weight percentage 9.31%

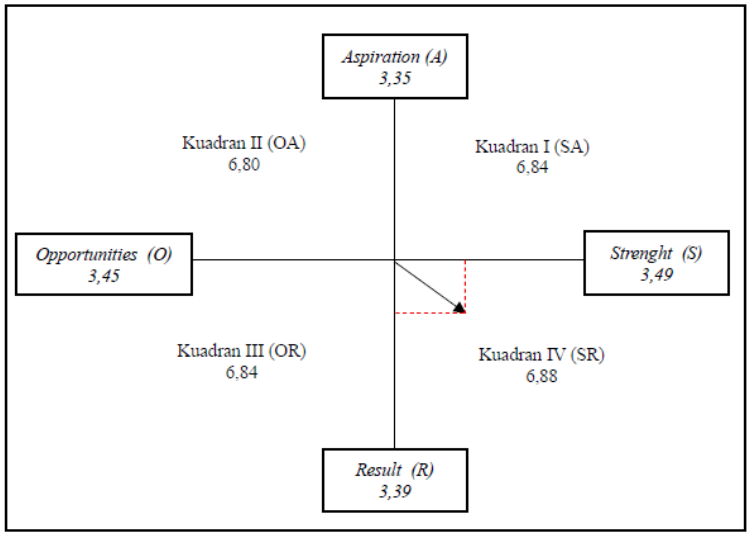

Figure 14. Cartesian Diagram of SOAR Analysis

Source : processed researchers from answer informant , 2025

From the picture above , obtained information that SOAR strategy analysis for management asset in support *smart campus* at IPDN campus Jatinangor be on the scale priority quadrant IV , namely create strategies based on strength For reach measurable / determined results . The combination of strategies referred to as following : 1) clarity of *the smart campus* program For reach accreditation superior knowledge government in college tall service - based *Smart campus.* Clarity of *the smart campus* program intended is a grand design IPDN *smart campus*; 2) strengthening leadership organization For reach improvement quality competent graduates; 3) strengthening capacity organization For reach improvement quality education , research and community service to public; 4) strengthening power educators and education who have / are still practitioners For reach improvement service to public ; 5) strengthening participant students who come from from remote areas archipelago For achieving governance government

However so , not means quadrants I, II, and III are excluded but become scale priority Is quadrant IV. Priority quadrant I , namely create strategies based on strength For reach desired expectations. The combination of strategies referred to as following : 1) strengthening clarity of *the smart campus* program For fulfillment - oriented availability cadre government superior domestic , professional and empowered competitive and have integrity; 2) strengthening leadership organization that is oriented towards implementation education IT- based (multimedia and 3D visualization); 3) strengthening capacity oriented organization awakening *knowledge management* integrated *system* with *learning management system* ; 4) strengthening power educators and education who have / are still practitioners For oriented building an asset strategy management; 5) strengthening participant educate from remote areas an archipelago oriented become college tall the service that organizes knowledge government accredited superior

Priority quadrant III , namely create a strategy with utilise opportunity with oriented to the results that have been determined . The combination of strategies referred to as following : 1) utilise opportunity development area technology inside campus For reach accreditation superior knowledge government in college tall service - based *smart campus*; 2) take advantage of

opportunity budgeting from the APBN for reach improvement quality competent graduates; 3) utilise opportunity use applications created Ministry of Education , Research, Technology and Higher Education, Ministry of Finance , Bappenas For reach improvement quality education , research and community service public; 4) utilise opportunity building an asset strategy management For reach improvement service to public; 5) utilise opportunity become college tall the service that organizes knowledge government accredited superior For reach governance improvements government

Priority quadrant II , namely create a strategy with utilise opportunity with oriented hope . The combination of strategies referred to as following : 1) utilise opportunity development area technology with fulfillment - oriented availability cadre government superior domestic , professional and empowered competitive and have integrity; 2) utilise opportunity budgeting from the APBN with oriented towards implementation education IT- based (multimedia and 3D visualization); 3) utilise opportunity use applications created Ministry of Education , Research, Technology and Higher Education, Ministry of Finance , Bappenas and Ministry of Home Affairs with oriented to awakening integrated *knowledge management system* with *learning management system*; 4) utilise opportunity the industrial revolution 5.0 which is a lot convenience in the learning process teach with oriented to building an asset strategy management; 5) utilise opportunity campus driving force mental revolution with oriented become college tall the service that organizes knowledge government accredited superior

Interview results with informant so obtained elements or required components in improvement and development *smart campus* that is :

a) Speed wifi internet network
b) *Smart classroom*
c) *Smart lights*
d) CCTV
e) *Smart laboratory*
f) *Smart alarm* earthquake or and fire
g) *Smart board* / TV

As Figures 25 and 26 below :

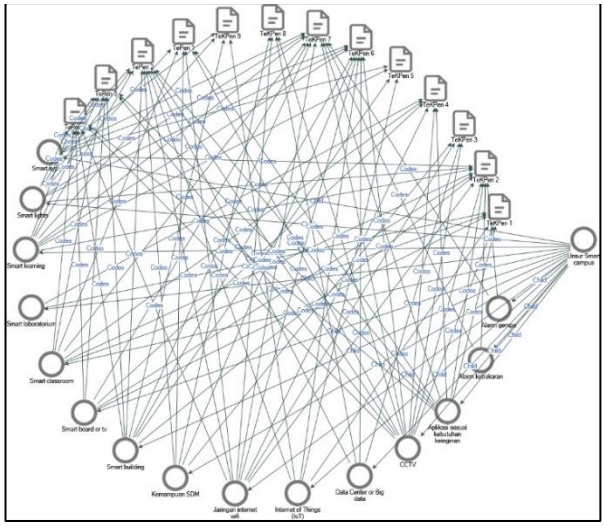

Figure 15. Project Map Element Component Smart Campus
at IPDN campus Jatinangor (Informant for Education Personnel (TeKPen) and Educator Personnel (TePen))

Source : processed researchers via NVivo software 15, 2025

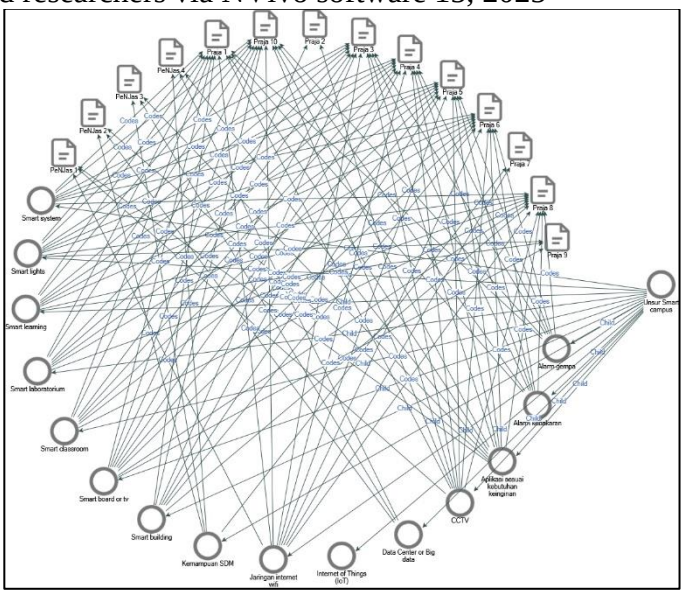

Figure 16. *Project Map* Element Component *Smart Campus*
at IPDN campus Jatinangor (Informant Praja and Service Providers (PeJAs))
Source : processed researchers via NVivo software 15, 2025

4. Conclusion

The analysis shows that asset management at IPDN Jatinangor contributes only moderately to the development of a smart campus, with 48.14 percent categorized as supporting transformation processes, 37.07 percent indicating insufficient support, and only 14.81 percent fully aligned with smart campus objectives, suggesting that asset governance remains suboptimal and requires significant improvement to meet institutional digital goals. The study identifies several supporting factors, including national budget allocation, government and ministry grants, institutional status as a higher education institution for public administration, and external support from national planning and financial agencies, all of which provide a foundation for advancing digital integration. However, progress is constrained by several challenges such as the need to refine the grand design of the smart campus, budget efficiency constraints, limited organizational understanding of smart campus concepts, low prioritization at the leadership level, inadequate physical and digital infrastructure, limited planning and budgeting optimization, insufficient digital literacy, and inadequate dissemination of smart campus initiatives across the academic community. Strategic strengthening is therefore required in leadership commitment, organizational capability, implementation of a clear smart campus roadmap, enhancement of academic and professional capacity, and development of governance practices that enable smooth and measurable digital transformation.

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