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Strategic Management of Learning Facilities and Infrastructure in Developing Fashion Expertise Competency at SMK Negeri 6 Garut Regency

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Abstract. This research addresses critical challenges in managing facilities and infrastructure within Vocational High School (SMK) Fashion Expertise programs, such as limited budgets, poor maintenance, and a disconnect from current fashion industry technology. Effective strategic management is crucial for SMKs to produce competent, work-ready graduates. This study aimed to describe the strategic management of learning facilities implemented to enhance fashion competency at SMKN 6 Garut Regency. A qualitative case study design utilized data from observation, interviews, and documentation. The findings indicate that the school effectively implemented strategic management principles, encompassing environmental analysis, strategy formulation, implementation (including the Teaching Factory model), and rigorous evaluation. This systematic approach ensured that the school's facilities were complete, well-maintained, and integrated into practical learning programs. The successful implementation significantly improved student competency and industry alignment. The study recommends continuous staff training and strengthening collaboration with industry partners to keep facilities updated with the rapid advancements in fashion technology.

Keywords: Strategic Management; Facilities and Infrastructure; Competence Expertise

1 Introduction

This research found several main problems and challenges in the management of facilities and infrastructure for the Vocational High School (SMK) Fashion Expertise Program. These include budget limitations, which restrict the procurement of modern practice tools and facilities required by current fashion industry standards; inadequate maintenance, leading to quickly damaged and unusable practice tools, thereby reducing student practice frequency; less than optimal integration with industry, causing practice facilities to lag behind the latest fashion technology developments; and insufficient planning, which results in inappropriate facility procurement not aligning with actual learning needs.

Many educational facilities and infrastructure in SMKs currently do not meet national education quality standards [1]. Providing quality educational facilities and infrastructure is a crucial foundation for producing competent and competitive human resources [2]. Vocational High Schools, as vocational education institutions, play a strategic role in equipping students with practical skills relevant to industry needs [3] SMKs aim to prepare graduates to enter the workforce in accordance with their chosen field of expertise [4]. However, the high unemployment rate among vocational high

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school graduates indicates a gap between the competencies possessed by graduates and the demands of the workforce. This raises questions about the effectiveness of educational facility and infrastructure management in supporting the improvement of students' skills competencies [5]. Adequate facilities and infrastructure are a determining factor in creating a conducive and effective learning environment.

Effective management of educational facilities and infrastructure is key to optimizing available resources to support the learning process [6]. Fashion expertise is a field that is highly dependent on the availability of adequate facilities and infrastructure, such as sewing machines, measuring instruments, representative practice rooms, and quality textile materials. As a vocational education institution with a fashion expertise program, SMK Negeri 6 Garut Regency has a responsibility to ensure that the available facilities and infrastructure can optimally support the development of student competencies. Limited facilities and infrastructure can hinder the learning process and reduce the quality of graduates.

Strategic management of facilities and infrastructure is crucial for optimizing educational resources and improving student competencies, particularly at SMK Negeri 6 in Garut Regency. Proper and efficient management of facilities and infrastructure is vital to supporting learning [7]. Educational infrastructure policies require special attention to the organization, procurement, maintenance, and disposal of these facilities and infrastructure to align with educational goals. Effective and efficient planning and procurement of these facilities are essential components in improving educational quality.

The urgency of this research is to analyze how educational facilities and infrastructure management strategies can be implemented effectively to improve fashion expertise competency at SMK Negeri 6 Garut Regency. The formulation of the research problem focuses on environmental analysis, strategy formulation, strategy implementation, and strategy evaluation in educational facilities and infrastructure management. The purpose of this research is to analyze the dimensions of educational facilities and infrastructure strategic management implemented at SMK Negeri 6 Garut Regency, which includes environmental analysis, strategy formulation, strategy implementation, and strategy evaluation. The main innovation is a learning resource management strategy that supports the development of students' fashion skills. This innovation includes strategically organized and planned learning resource management so that learning facilities and equipment can be utilized effectively and efficiently to support fashion skills competency.

The management approach aligns learning resources with industry needs and developments in fashion technology, enabling students to acquire relevant, work-ready skills. This involves improving the quality of learning through the addition and maintenance of adequate resources, including practical tools, materials, and laboratory space, to support a more optimal learning process. Furthermore, it facilitates collaboration between schools, businesses, and industry to support the provision of learning resources that meet fashion industry standards [7].

The innovations proposed in this research include structured management and utilization of adequate facilities and infrastructure, as well as the development of interactive and applicable learning methods. One example of this innovation is the development of a more focused Lesson Plan (RPP) and student practice sheets (*jobsheets*) to enable students to be more active and easily understand the fashion

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practice material. Furthermore, the use of modern technology and practical tools in the workshop supports students' readiness to face the real world of the fashion industry.

Strategic management, developed by Wheelen and Hunger, is a series of managerial decisions and actions that determine an organization's long-term performance [8]. Strategic management involves an ongoing process that includes planning, implementing, and evaluating activities designed to achieve organizational goals.

Environmental Observation. Includes analysis of external factors (opportunities and threats) and internal factors (strengths and weaknesses) to understand the conditions that influence the achievement of organizational goals. SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) is often used in this stage.

Strategy Formulation. The process of developing the organization's vision, mission, goals, and strategies and policies based on the results of environmental observations. This step aims to determine the long-term plans that will be implemented by the organization. Strategy Implementation. Stages of applying strategies through programs, budgets, and procedures so that organizational goals can be achieved effectively and efficiently. Evaluation and Control. Monitoring and control efforts aimed at ensuring that the entire strategy process runs according to plan and making corrections if there are deviations or obstacles.

Information systems can be used to plan business strategies to give companies a competitive advantage. Effective strategic decision-making requires a deep understanding of the organization's internal and external environments [9]. Evaluation strategies are crucial for organizational quality control management, serving as a monitoring mechanism that ensures continuous quality standards, optimizes operational performance, and strengthens competitiveness on the global stage [10].

Educational facilities and infrastructure are vital physical resources in supporting the learning process in schools. Complete facilities and infrastructure help improve the quality of learning. Facilities are tools and equipment directly used in the educational process, such as classrooms, laboratories, libraries, and practical equipment. Meanwhile, infrastructure is facilities that indirectly support the educational process, such as sports fields, roads, electricity networks, and clean water. Effective management of facilities and infrastructure includes planning, procurement, inventory, maintenance, and disposal in accordance with needs and applicable standards [11], [12].

Fashion competency encompasses the knowledge, skills, and attitudes required to produce high-quality fashion products that meet industry standards. These competencies include the ability to design, pattern-make, cut, sew, finish, and perform quality control. Improving the fashion competency of vocational school students can be achieved through various approaches, such as improving the quality of the curriculum, teacher training, providing adequate facilities and infrastructure, and collaborating with industry. The availability of competent human resources in their fields is key to a company's success [13]. To meet the need for improved performance within an organization, one approach is through training and human resource development [14].

Educational quality reflects various interrelated and interdependent dimensions. Improving the educational agenda is crucial for national development. Educational quality can be defined as the degree of alignment between educational processes and outcomes and established standards. Educational quality is influenced by various factors, such as curriculum, teaching staff, facilities and infrastructure, school

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management, and support from the community and government. To maximize the use and management of educational facilities, schools must be independent in organizing and managing school needs based on student goals. Schools must also focus on improving human resources, including principals, teachers, and administrative staff, before creating quality learning [15]. Effective educational management can create a productive learning environment, optimize resource use, and improve learning quality.

2 Method

The research approach in this study uses a qualitative approach to generate descriptive data. Qualitative data provides in-depth information about the phenomenon under study, allowing for a more comprehensive understanding of the implementation of educational facilities and infrastructure management strategies [16].

The research method used is a case study to gain an in-depth understanding of how educational facilities and infrastructure management strategies are implemented at SMK Negeri 6, Garut Regency.

Data collection techniques included in-depth interviews, direct observation, and documentation studies to gather comprehensive and in-depth data. Data analysis was conducted using the Miles and Huberman interactive model, which includes data collection, data reduction, data presentation, and conclusions.

3 Result

3.1 Strategic Environmental Analysis: Assessing Internal Capabilities and External Dynamics

The foundational phase of optimizing educational assets at SMK Negeri 6 Garut Regency necessitates a rigorous and comprehensive strategic environmental analysis. This analytical process serves as the critical bedrock for formulating highly precise, context-aware strategies in the management of educational facilities and infrastructure. By systematically evaluating both the internal ecosystem of the school and the broader external industry landscape, the institution aligns its operational trajectory with the first foundational step of strategic management articulated by Wheelen & Hunger [8]. This systematic approach ensures that infrastructural investments are not made arbitrarily, but are driven by empirical data and strategic foresight.

The Internal Environmental Analysis involves a deep, critical evaluation of the school's existing infrastructural strengths, operational weaknesses, and pedagogical resources. This begins with a granular inventory of all current facilities and infrastructure. Administrators and department heads conduct exhaustive data collection on every available physical asset within the fashion department. This includes cataloging sewing laboratory rooms, specialized machinery (such as high-speed sewing machines, industrial overlock machines, and precision cutting tools), press tables, dedicated competency test rooms, fashion design studios, and the bandwidth and reliability of internet access. This inventory is not merely a quantitative count but a qualitative assessment of the institution’s physical readiness to deliver high-level vocational education.

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Following the inventory, the school engages in identifying the suitability and industry alignment of these assets. This crucial step involves evaluating the exact parity between the school's practical tools and the rapidly evolving standards of the modern fashion industry. It requires answering whether the existing facilities are adequate in both quantity—to support optimal student-to-machine ratios—and quality. Facility suitability assessments examine if all machines are functioning at peak performance, and whether practice rooms meet ergonomic and occupational health standards, such as proper lighting, adequate ventilation, and safe electrical routing. Furthermore, this assessment scrutinizes supporting facilities that bridge the gap between education and commerce, such as professional work display rooms, active production units, and spaces dedicated to special job fairs.

A natural progression of this internal audit is the rigorous identification of systemic problems and infrastructural needs. Through direct observation, critical teacher reflections, and structured student feedback, the institution maps out specific deficiencies. These may range from the presence of obsolete or damaged manual practical tools to uncomfortable, poorly optimized practice spaces. Crucially, in the contemporary educational landscape, this also involves identifying a lack of digital-based teaching materials or modern software—such as Computer-Aided Design (CAD) for pattern making—that currently hinder students' creative potential and their ability to compete in modern, technology-driven fashion design.

To bridge these identified gaps, the school must develop and strengthen precise corrective actions. This involves drafting meticulously prioritized plans for the procurement, proactive maintenance, or comprehensive modernization of practical tools. For example, if digital literacy in design is lacking, the corrective action prioritizes the procurement of digital fashion design software and the simultaneous training of both students and teaching staff. Additionally, corrective actions extend beyond physical assets to include establishing robust partnerships with businesses and industry. These partnerships are vital to expand student experiential learning through structured internships or collaborative, boutique fashion industry-based projects. Finally, continuous evaluation and monitoring of the internal environment are established through regular student satisfaction surveys, analysis of learning outcomes, and the rigorous assessment of practical sewing and fashion design competencies.

Complementing this internal focus, the External Environmental Analysis casts a wider net to identify emerging opportunities and looming threats originating from outside the school's immediate control. This involves actively scanning the horizon for disruptive technological developments in garment manufacturing, shifts in national educational or economic policies, and the evolving, highly specific skill needs of the global and local job markets [17], [18]. To synthesize these internal and external dimensions, the SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis emerges as a highly effective analytical tool.

By integrating the results of both environmental analyses, the SWOT matrix allows educational leaders to formulate nuanced, highly targeted strategies that leverage institutional strengths against market opportunities, while mitigating infrastructural weaknesses and external threats, ultimately ensuring the successful achievement of long-term school goals [2], [19].

3.2 Strategy Formulation and Comprehensive Infrastructure Planning

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Transitioning from analysis to actionable foresight, the formulation of the educational facilities and infrastructure strategy at SMK Negeri 6 Garut Regency is directly dictated by the empirical findings of the strategic environmental analysis. This progression perfectly mirrors Wheelen & Hunger's second step of strategic management [8]. The core objective of this formulated strategy is multifaceted: it aims to substantially improve the operational quality of existing facilities, systematically procure new infrastructure that precisely aligns with current technological advancements and industrial demands, and critically, increase the intellectual and technical capacity of the human resources tasked with managing these physical assets.

The formulation of this comprehensive strategy is broken down into several deliberate, highly structured phases, beginning with the Planning of Facilities and Infrastructure. This is not a generalized administrative task, but rather a highly specific needs analysis tailored exclusively to the fashion expertise program. It mandates a detailed forecast of required practical tools, raw consumable materials, and necessary supporting facilities. Crucial to this planning phase is the fundamental principle that infrastructural procurement must directly serve pedagogical aims; therefore, planning must meticulously account for the specific learning materials and the exact vocational competency demands that students are expected to achieve upon graduation.

Following planning is the critical phase of Procurement and Inventory. The strategy dictates that procurement must never be theoretical but strictly adjusted to the actual, verified needs and the demonstrated potential of the student body. Furthermore, procurement strategies must adopt a lifecycle perspective, considering the current condition and depreciation of existing equipment to ensure the entire laboratory ecosystem consistently meets stringent industrial usage standards.

Once assets are acquired, the strategy emphasizes highly optimized Use and Utilization. Facilities and infrastructure represent a significant capital investment and must be utilized at maximum efficiency across both theoretical and practical learning modules. The formulated strategy mandates that the use of these spaces must actively support innovative, student-centered learning processes. The physical environment must become a dynamic third teacher, configured to align with the most effective pedagogical methods for accelerating the achievement of complex student competencies.

To protect these investments, the strategy institutionalizes rigorous Supervision and Maintenance protocols. Supervision transitions from a purely administrative oversight to a collaborative responsibility shared actively by subject teachers and dedicated laboratory managers. This collaborative oversight ensures that facilities do not fall into disrepair but remain in pristine, industry-ready condition. Preventative, scheduled maintenance is codified as a critical operational necessity rather than a reactive afterthought, recognizing its importance in significantly extending the service life of expensive machinery and ensuring the absolute safety of students during complex manufacturing practices.

Finally, the formulation stage requires transparent Reporting and Evaluation mechanisms. Detailed reporting on the current condition, utilization rates, and anticipated future needs of facilities and infrastructure is carried out routinely. These reports are systematically channeled to both internal school leadership and relevant external educational agencies. This transparency ensures that strategic evaluation is

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continuous, and that the financial and logistical planning for all future procurement cycles is based on an uninterrupted stream of accurate, real-time institutional data.

Ultimately, thorough, forward-looking planning for the procurement of facilities and infrastructure remains a profoundly crucial step in the broader discipline of educational asset management. This meticulous process must constantly balance the actual, ground-level needs of the fashion program's expertise against the rapid pace of technological developments in the textile industry and the realities of the available institutional budget. Furthermore, to guarantee the efficacy of these plans, the strategy actively mandates the involvement of all relevant stakeholders. By including teachers, students, educational staff, and industry advisors in the planning discourse, the institution ensures that the facilities and infrastructure ultimately provided are not only truly in accordance with pedagogical needs but are positioned to be utilized to their absolute maximum potential [20].

3.3 Systematic Implementation and the Teaching Factory (TEFA) Evaluation

The transition from strategic formulation to tangible reality marks the implementation phase of the educational infrastructure and facilities strategy at SMK Negeri 6 Garut Regency. This phase is executed in a highly systematic, coordinated, and deliberate manner, faithfully aligning with Wheelen & Hunger's third step of strategic management. The successful implementation of these carefully developed strategies serves as the primary catalyst for elevating the fashion skills competency of vocational students, transforming them from passive learners into industry-ready practitioners.

This systematic implementation manifests through several core operational pillars. The first is the Provision of Complete and Adequate Facilities and Infrastructure. Implementation demands that school laboratories and practice rooms transcend traditional classroom setups to accurately reflect the high-pressure conditions and exacting standards of the commercial fashion industry. This requires outfitting spaces with a comprehensive array of industry-grade facilities, including specialized sewing machines, dedicated pattern-drafting rooms, professional fashion show rehearsal spaces, and the full spectrum of modern practical tools.

Supporting this physical implementation is the absolute necessity for Sustainable Management and Maintenance of Facilities. Implementation requires that management is executed in a highly planned, cyclical manner. This encompasses not only the initial procurement but the strict adherence to routine maintenance schedules and the continuous technical evaluation of facilities, ensuring that every piece of equipment functions flawlessly and safely during intense practical sessions.

Perhaps the most transformative aspect of this implementation is the adoption and integration of the Industry-Based Learning Model, specifically the Teaching Factory (TEFA). The TEFA model represents a paradigm shift, physically and pedagogically integrating theoretical knowledge with rigorous practical application within a school environment meticulously designed to mimic a commercial fashion enterprise. This model immerses students in the entire production lifecycle—from client consultation and design, through manufacturing, to quality control and marketing. This creates authentic, high-stakes work experiences, actively encourages entrepreneurial innovation, and promotes a seamless "link and match" between the vocational school's

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output and the industry's workforce demands, ensuring graduates are exceptionally prepared for immediate employment or independent entrepreneurship.

To support the TEFA model, implementation also necessitates Curriculum Development and the Strengthening of Industrial Character. The school curriculum is fundamentally adapted by heavily integrating concepts of industrial management systems, rigorous professional work ethics, and the overarching culture of the commercial fashion world. This holistic educational approach equips students not merely with technical sewing skills, but with a profound understanding of the broader production processes and business management principles required to thrive in the modern fashion sector. Naturally, none of this implementation is possible without the unwavering Support from School Management and Stakeholders. The deep commitment from school leadership, coupled with active, sustained collaboration with industry partners and government stakeholders, is absolutely crucial for securing the relevant funding, facilitating knowledge transfer, and ensuring the continuous, sustainable development of the school's infrastructure.

Finally, to close the strategic loop, rigorous Evaluation of the implemented strategy is conducted periodically. This aligns perfectly with Wheelen & Hunger's final step [10], serving to objectively measure the true effectiveness of the implemented infrastructural strategy. The data generated from these evaluations is systematically utilized to inform, refine, and pivot future strategic improvements [21]. To maintain objectivity and comprehensive insight, this evaluation process is highly inclusive, actively involving teachers, students, education staff, and critically, representatives from the fashion industry and the broader community.

This comprehensive evaluation of educational infrastructure and facilities must adhere to strict, standardized metrics to accurately gauge its impact on improving fashion expertise competencies. Primarily, it includes a rigorous assessment of the physical condition of all existing facilities—such as practical workshops, laboratory rooms, heavy machinery, raw materials, and other supporting equipment. This assessment is benchmarked strictly against applicable national standards, specifically the comprehensive guidelines outlined in the Minister of Education and Culture Regulation Number 34 of 2018 [22].

Furthermore, the evaluation deeply analyzes the exact suitability of the existing infrastructure and facilities against both the pedagogical needs of the curriculum and the current operational standards of the industry. The core metric is whether the school's facilities successfully and accurately reflect the actual work environment found in modern fashion and clothing manufacturing enterprises. The evaluation also heavily scrutinizes the ongoing development and operational success of the Teaching Factory (TEFA) learning model, measuring its effectiveness in providing students with direct, hands-on experience through the manufacturing process and product innovation.

Additionally, the strength and depth of the school's collaboration with industry partners and professional designer associations are evaluated, as these relationships are vital for continuously improving laboratories and acquiring updated tools that remain relevant to fast-changing fashion industry trends. Ultimately, this comprehensive evaluation meticulously covers spatial dimensions such as the size of the practice space, maximum student capacity, optimal student-to-machine ratios, and the ergonomic suitability of furniture, equipment, and educational media. The empirical results drawn from this rigorous evaluation phase are subsequently used to formulate evidence-based

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recommendations for future infrastructural improvements, ensuring that strategic management remains an active, continuous cycle, and guaranteeing that institutional investments truly maximize student competency and preparedness for the professional world.

4 Discussion

The analysis of the implementation of strategic management concerning learning facilities and infrastructure at SMKN 6 Garut Regency reveals a structured, deliberate effort to align educational resources with the demands of the modern fashion industry. The school's approach closely mirrors the four sequential phases of Wheelen & Hunger's Strategic Management model—Environmental Analysis, Strategy Formulation, Strategy Implementation, and Evaluation and Control—while simultaneously navigating the unique challenges inherent to vocational education in Indonesia, particularly resource scarcity.

The initial phase, Environmental Analysis (Observation), was performed comprehensively, serving as the necessary diagnostic tool before strategic action. The internal analysis, which involved a meticulous inventory of facilities (sewing laboratories, specialized machines, fashion studios) and a direct assessment of their operational readiness and conformity to industry standards, was particularly strong. This detailed approach moved beyond mere data collection; it became a crucial method for identifying the specific gap between the existing resources (strengths and weaknesses) and the rapidly evolving demands of the fashion industry (opportunities and threats).

The finding that the school explicitly assessed the suitability of tools against industry standards—a key element missing in many vocational institutions [1]—shows a proactive managerial mindset. Furthermore, the identification of problems, such as damaged practice tools or the lack of digital fashion design software, provided clear targets for the subsequent stages. By integrating this internal analysis with an understanding of external factors (e.g., government policies and market needs [17], the school successfully laid the groundwork for a relevant strategy. This foundational phase validates the principle that effective strategic decision-making requires a deep, dual-sided understanding of the organizational environment [9]. Without this rigorous, data-driven analysis, any subsequent strategy would be a generalized wish rather than a targeted plan.

The Strategy Formulation phase at SMKN 6 Garut successfully translated the insights from the environmental analysis into a coherent set of long-term plans. The strategies formulated—focused on improving existing quality, procuring new, technologically relevant facilities, and enhancing human resource capacity in facility management—demonstrate a commitment to the school's vision.

The formulation was characterized by two critical managerial components: specificity and stakeholder alignment. The planning for facilities was not generic but was tied directly to the needs of the fashion expertise program, considering specific learning materials and competency demands (e.g., the need for digital design software training). This focus is vital because, as a competency-based field, fashion relies heavily on specialized, modern equipment [23]. By incorporating the needs of teachers,

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students, and staff into the planning process—as highlighted —the school ensured that the planned facilities would be maximally utilized and appropriate for the actual pedagogical context [20], [23].

The commitment to technological alignment is the strategic core here. The formulation explicitly aimed at procuring facilities that matched technological developments and industrial needs, directly addressing the initial problem of poor integration with the industrial world. This moves the school beyond a reactive state (fixing broken machines) to a proactive one (acquiring high-tech equipment to mirror industry best practices), which is fundamental to boosting graduate competitiveness [2].

The Strategy Implementation stage is where the strategic vision transforms into tangible operational activities. The success of implementation at SMKN 6 Garut was attributed to its systematic and coordinated approach, supported by strong commitment from the entire school community.

The most notable strategic implementation was the adoption and integration of the Teaching Factory (TEFA) model. TEFA is more than just a method; it is an organizational strategy that physically and functionally merges the learning environment with the industrial environment. This approach aligns perfectly with the goal of vocational education, which is to create "real work experience" and encourage link and match between the SMK and the industry [4], [24]. By creating production units and managing them with industrial character (including management systems and work ethics), the school achieves three crucial outcomes:

Contextual Learning: Practical learning is no longer simulated but involves real production processes and quality control, thereby improving the comfort and effectiveness of student practice. Resource Sustainability: The TEFA model, when successful, can generate internal revenue, offering a partial solution to the perennial problem of budget limitations and facilitating the self-procurement and maintenance of tools.

Competency Deepening: Students are equipped with not only technical skills (sewing, cutting) but also crucial soft skills related to production management and business ethics, enhancing their readiness to face global and technological challenges [15].

Furthermore, the implementation also included essential support functions: continuous management and maintenance (addressing the initial problem of fast equipment damage) and curriculum adaptation (integrating industrial character). These actions ensured that the investment in facilities was protected and pedagogically relevant.

The final phase, Strategic Evaluation and Control, is essential for organizational quality control and long-term sustainability. The evaluation process at SMKN 6 Garut was designed to be rigorous, continuous, and multi-stakeholder. The evaluation's scope, covering the size of the practice space, student capacity ratios, and the suitability of equipment against national standards [22], shows a commitment to formal quality assurance. More strategically, the evaluation emphasized alignment with industry standards and the assessment of the TEFA model’s effectiveness. By involving industry and designer associations, the school ensures that its performance metrics are relevant to the actual job market, directly strengthening the link and match component.

The critical output of this evaluation phase is the use of results to recommend policy improvements and strategic management actions—a necessary feedback loop for a

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closed-loop strategic system. This moves the school beyond simple performance reporting to using data to justify future investment and refine operational strategies, ensuring that the heavy investment in facilities truly impacts student competency and entrepreneurship readiness. In summary, the strategic management of facilities at SMKN 6 Garut Regency exhibits a strong level of coherence. The strategy successfully turned the internal weaknesses (limited, outdated tools) into external opportunities (industry partnership, TEFA model) based on rigorous analysis. The systemic approach, supported by commitment from stakeholders, has resulted in tangible improvements in student competency [8].

Intensifying Human Resource Capacity Building (HR): While facilities are managed, the effectiveness of the coaching clinic approach for teacher training, as discussed in related educational management studies, should be integrated into the strategy. Teachers must be continuously trained not only in new technology operation but also in maintenance and pedagogical integration of those high-tech tools [14].

Formalizing Industry Partnership into Co-Ownership: Partnership should evolve into a formal co-ownership model where industry partners are involved not just in evaluation and internships, but in the joint planning and co-funding of facility modernization, ensuring that the school's facilities are consistently updated according to the latest fashion technology, mitigating the risk of future technological obsolescence.

5 Conclusion

The research on the strategic management of learning facilities and infrastructure in developing the Fashion Expertise Competency at SMK Negeri 6 Garut Regency firmly concludes that the school has successfully implemented a systematic and coherent strategic management framework, closely aligned with the principles outlined by Wheelen and Hunger [10]. This managerial approach has been instrumental in transforming facility constraints into a key strategic advantage, leading to a palpable improvement in student competency and industry readiness.

The study confirms that strategic management is not merely an administrative exercise but a dynamic process comprising integrated stages that directly impact educational quality. The initial phase, Environmental Analysis, was meticulously executed, moving beyond simple inventory to critically assess the gap between existing resources and precise industry standards. This data-driven diagnosis established a strong, evidence-based foundation for all subsequent actions. The Strategy Formulation phase successfully translated these insights into actionable plans, prioritizing the procurement of technologically advanced equipment and fostering human resource development, directly addressing the core problem of technological obsolescence.

Crucially, the Strategy Implementation at SMKN 6 Garut was highly effective, characterized by the successful integration of the Teaching Factory (TEFA) model. This industry-based learning environment serves as the strategic nexus where theoretical knowledge, practical skills, and industrial character are synthesized. The TEFA model not only provided students with authentic work experience but also served as a sustainable mechanism for continuous facility utilization and partial self-funding, effectively mitigating the perennial challenge of budgetary constraints. Furthermore,

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the systematic management and maintenance protocols ensured the longevity and operational readiness of the specialized equipment.

The final stage, Evaluation and Control, functioned robustly as a quality assurance mechanism. By subjecting the facilities and learning outcomes to assessment based on industrial standards and involving industry partners in the review process, the school ensured its pedagogical output remained relevant and competitive. This commitment to a closed-loop managerial cycle, where evaluation results immediately inform future Planning and resource allocation, guarantees the long-term sustainability and responsiveness of the school's facilities management system.

In essence, the findings validate the thesis that effective strategic management of facilities and infrastructure is an indispensable factor for improving the competency of vocational graduates. The systematic implementation created a conducive and effective learning environment, directly leading to graduates who are not only technically skilled but also equipped with the industrial character and entrepreneurial mindset demanded by the labor market. The success of SMKN 6 Garut provides a compelling case study for other vocational institutions struggling with resource management, demonstrating that strategic coherence and strong stakeholder commitment can overcome inherent institutional limitations.

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