EFFECTIVENESS OF HUMAN RESOURCES IN IMPROVING THE QUALITY OF LIBRARY SERVICES IN THE DIGITAL ERA

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Abstract: Objective: This study aims to analyze the effectiveness of human resources in enhancing the performance of library employees at SMK Negeri 2 Buduran, Sidoarjo Regency. The research focuses on understanding how human resource competence, technological support, and organizational context contribute to the quality of library services in the digital era. **Method:** A qualitative approach with a case study method was employed. Data were collected through semi-structured interviews with library staff and school management, participant observations of library activities, and analysis of relevant documentation. These methods provided an in-depth understanding of the dynamics influencing employee performance in the library setting. **Results:** The findings show that the performance of library employees is significantly influenced by three interrelated factors: the competence of human resources, the use of technology (such as automation systems), and contextual elements including leadership support and employee motivation. These factors collectively determine the ability of the library to meet the evolving needs of users. **Novelty:** This study provides a focused assessment of how human resource effectiveness shapes library performance in a vocational high school environment. It highlights the importance of investing in staff development, optimizing digital tools, and fostering institutional support to create responsive and efficient library services aligned with the demands of the digital age.

Keywords: HR Effectiveness, Employee Performance, School Libraries, Vocational Schools, Library Management

Introduction

School libraries, especially in Vocational High Schools (SMK), have a very important role in supporting the smooth teaching and learning process [1], [2]. The library also functions more than just a book storage room, but rather as an information center that provides a variety of resources to develop student competencies [3], [4]. In the increasingly advanced digital era, school libraries face increasingly complex demands, not only limited to providing physical book collections, but providing easy and relevant access to digital resources [5], [6], [7], [8]. The presence of libraries can certainly formulate strategies to increase the capacity of human resources and technology towards the development of school libraries in the digital era [9], [10]. With that, it can create SMK libraries that are adaptive to technological developments, have competent human resources, and are able to provide quality services to support student learning, so that school libraries can become dynamic learning resource centers that are relevant to the needs of the world of work.

In Indonesia, vocational libraries often struggle with a number of obstacles, especially the lack of human resources and technology optimization [11], [12]. This problem is reflected in the insufficient number of librarians, both in quantity and quality, where often only one or two staff

take on various tasks, ranging from collection management to library promotion [13]. This situation is exacerbated by the lack of relevant educational background, which results in suboptimal skills in library management and information services [14]. Furthermore, the rapid development of information technology presents its own challenges, where technology has the potential to be an effective solution through automation, digitization, and online services [15]. However, the implementation of these technologies is often hampered by lack of staff competence, budget constraints, and resistance to change [16], [17]. To overcome these challenges, the active role of the community is crucial, librarians, teachers, students and parents need to collaborate to raise awareness of the importance of school libraries, supported by the government and private sector through the provision of adequate budgets and training [18], [19].

Some of the phenomena that often arise in SMK libraries related to human resources and technology include low student interest in reading, which can be caused by irrelevant collections, inadequate facilities, or lack of promotion [20]. In addition, the utilization of technology by library staff is also not optimal, which is often caused by lack of training, limited access, or lack of motivation [21]. Lack of support from school leaders is also an obstacle, which can be caused by a lack of understanding of the importance of libraries, budget constraints, or different priorities. On the other hand, the utilization of social media as a means of library promotion shows potential to increase student and teacher engagement [22].

This study is based on two main theoretical frameworks, namely the Human Capital theory initiated by Becker (1964) and the Technology Acceptance Model (TAM) developed by Davis (1989) [23], [24]. Human Capital theory emphasizes that increased productivity and performance can be achieved through investment in human resources, especially through education and training. In school libraries, this means that developing library staff competencies is key to improving service quality as well as operational efficiency [25]. Meanwhile, TAM explains that technology acceptance by users is influenced by factors such as perceived ease of use and perceived benefits. An in-depth understanding of these factors is essential in effectively implementing technology in the school library environment [26].

Human resources (HR) and technology in vocational libraries are a major concern. Conceptually, school libraries should have qualified human resources and adequate technology to support the teaching and learning process. However, the reality shows that many school libraries are still struggling with limited human resources and technology. Therefore, this research is important to provide a deeper insight into the problems faced by SMK libraries, so that appropriate strategies can be formulated to overcome these problems and improve the quality of library services. Based on these problems, this research focuses on analyzing the effectiveness of human resources in improving the performance of library employees at SMK Negeri 2 Buduran, Sidoarjo Regency. The basic concepts underlying this research include human resource effectiveness, which refers to the level of success of human resources in achieving organizational goals; employee performance, which measures the work achieved by employees in carrying out their duties; and school library, as an organizational unit that provides information sources and services to support the student learning process.

Methods

This research uses a qualitative approach with a case study method to explore in depth the effectiveness of human resources (HR) in improving the performance of library employees at SMK Negeri 2 Buduran. The case study was chosen because it allows researchers to explore complex phenomena in their natural context with the SMK Negeri 2 Buduran library as a single unit of analysis. This approach is relevant because it is in line with the Human Capital theory which emphasizes that investment in human resources, such as education and training, will increase productivity and organizational performance [23], [24].

Data will be collected during the internship period in September 2024 through three main techniques: (1) semi-structured interviews with library staff, the library head, and relevant parties such as the vice principal, aiming to understand their perceptions and experiences of HR

effectiveness (Patton, 2002); (2) participatory observation of activities and interactions in the library to get a first-hand view of work practices and resource utilization; (3) and analysis of school documents and library archives, including organizational structures, job descriptions, and performance reports, to complement and validate data from other sources [27].

Research instruments include a flexible interview guide, structured observation sheet, and document checklist. Data analysis will be carried out qualitatively using content analysis techniques, which include data reduction to summarize relevant information, data presentation in the form of descriptive narratives and visualization if needed, and drawing conclusions based on the interpretation of research findings related to the effectiveness of HR in improving the performance of library employees at SMK Negeri 2 Buduran [28].

Results and Discussion
Human Resources and Performance

SMK libraries often face limited human resources, both in quantity and quality. At SMK Negeri 2 Buduran, field facts show that the limited number of library staff requires them to handle various tasks at once, ranging from collection management, user services, to library promotion. This condition, in accordance with HR theory, can have a negative impact on performance, as staff may feel exhausted, less focused, and have less time to develop themselves.

Limited human resources (HR) are often a major obstacle for SMK libraries, both in terms of numbers and qualifications. At SMK Negeri 2 Buduran, the limited library staff had to take on a variety of tasks at once, ranging from collection management to promotion, which could potentially reduce performance due to fatigue and lack of focus. This finding is in line with [29] who highlighted that the ideal librarian-student ratio was not met, and who found that lack of training resulted in librarians' low skills in managing a modern library. Limited human resources is a crucial issue that needs to be addressed in order for SMK libraries to function optimally as learning resource centers.

Human Resource Competencies and Service Quality

Library staff have appropriate educational backgrounds. Observations in the field show that the competence of library staff in the field of information technology greatly affects the quality of services provided. Staff with good technology skills are able to utilize the library automation system effectively, provide access to digital resources, and provide online services to users. This is in line with the Human Capital theory (Becker, 1964) which states that investment in HR competency development will increase productivity and added value.

Technology Utilization and Work Efficiency

The utilization of technology can be a solution to overcome human resource limitations. At SMK Negeri 2 Buduran, the implementation of a library automation system has helped speed up administrative processes, such as catalog management and book circulation. However, the effectiveness of this automation system is highly dependent on the staff's ability to operate it and utilize it optimally. This shows that investment in technology must be balanced with training and development of human resources so that the technology can provide maximum benefits.

School Leader Support and Work Motivation

The importance of support from school leaders for library development. This support can be in the form of adequate budget allocation, provision of adequate facilities, and providing opportunities for staff to attend training and professional development. Observations in the field show that support from school leaders greatly influences the work motivation of library staff. Staff who feel supported and appreciated tend to be more enthusiastic in carrying out their duties and providing the best service. This is in accordance with the theory of work motivation (Herzberg, 1968) which states that factors such as recognition, responsibility, and opportunities for development can increase work motivation.

Elements that Support the Effectiveness of Library Service Quality

Below is a table of elements that support the effectiveness of library service quality at SMK Negeri 2 Buduran:

Table 1. Supporting Elements of Effectiveness of Library Service Quality of SMK Negeri 2 Buduran

Supporting Elements	Description	Analysis
Human Resources Competency Improvement	Professional training and development in the fields of information technology, digital library management, service innovation, and library promotion strategies.	Improving HR competency directly impacts staff's ability to provide quality services, utilize technology effectively, and adapt to changing user needs. Competencies that are relevant to current developments will increase library competitiveness..
Optimizing Technology Utilization	Effective and efficient use of library automation systems, development of digital libraries with relevant online resources.	Optimizing technology improves library operational efficiency, expands access to information, and increases user satisfaction. Good automation systems speed up the process of borrowing and returning books, while digital libraries provide access to unlimited resources.
Increasing School Leadership Support	Adequate budget allocation for library development, provision of facilities, and training opportunities for staff.	The support of school leaders is essential to ensure that the library has sufficient resources to run its operations and improve the quality of its services. This support also shows that the library is recognized as an integral part of the learning process in schools.
Increasing Cooperation and Collaboration	Collaboration with other libraries or related institutions, involving students and teachers in library promotion.	Collaboration and cooperation broaden the range of resources and knowledge available to libraries, and raise awareness of the importance of libraries among students and teachers. It can also create mutually beneficial synergies.

Source: Processed by researchers, 2024

The table above shows that the effectiveness of the quality of library services at SMK Negeri 2 Buduran is highly dependent on four main elements: HR competency, utilization of technology, support from school leaders, and cooperation. These four elements are interrelated and influence each other. Improving HR competency will enable more effective utilization of technology, which in turn will improve the quality of services. Support from school leaders is essential to ensure that the library has sufficient resources to develop HR and utilize technology. Cooperation with other parties can expand the reach of resources and knowledge available to the library. By paying attention to and managing these four elements effectively, SMK Negeri 2 Buduran can improve the quality of library services and make it a dynamic learning resource center that is relevant to the needs of students and teachers.

The effectiveness of library service quality at SMK Negeri 2 Buduran revealed four crucial interrelated elements: HR competency, technology optimization, school management support, and collaboration. [30] emphasized the importance of librarian competency, especially in IT, to service quality. SMK Negeri 2 Buduran supports this, as seen from the effectiveness of skilled staff in operating automation systems and providing digital access. In line with that, [31] explained that technology increases efficiency and access to information, which is also reflected in the use of automation systems in this school. [26] described improving service quality, with the support of facilities and training that increase staff motivation. [32] explained that expanding library resources, which can be realized through inter-library loans or shared access to online databases.

Thus, effective library service quality at SMK Negeri 2 Buduran depends on the synergy between HR competency, technology, school support, and collaboration, which reaffirms that these factors are key to the success of school libraries.

Conclusion

Fundamental Finding: The study reveals that the effectiveness of human resources in enhancing the performance of library staff at SMK Negeri 2 Buduran is shaped by the complex interaction between HR competencies, technological utilization, and contextual support factors such as leadership involvement and employee motivation. Although some digital tools are in place, challenges remain in ensuring staff readiness and system optimization. **Implication:** To improve library service performance, the school should prioritize the development of human resource competencies through targeted training in information technology, digital library management, and user engagement strategies. Furthermore, optimizing the library automation system by promoting its full utilization, expanding access to digital resources, increasing leadership support through adequate funding and training opportunities, and building external partnerships with other libraries are crucial steps toward sustainable improvement. **Limitation:** This research is limited to a single case study at SMK Negeri 2 Buduran, which restricts the generalizability of the findings. Context-specific variables such as institutional culture and resource availability may differ in other schools and affect the applicability of the recommendations. **Future Research:** Future studies should aim to design measurable human resource development frameworks for school libraries and evaluate the long-term impact of technology investments on student outcomes, particularly in terms of digital literacy and access to information. Comparative studies across multiple schools would enrich the understanding of scalable strategies for effective library transformation in the digital age.

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