

Analysis Quality Athlete Class Special Semarang City Sports (KKO) is being reviewed with Value for Money

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Abstract

Introduction: Special Sports Class Program (KKO) Semarang city is one of the efforts of the local government in improving the quality of local athletes. This study aims to evaluate the performance of the KKO program for the period 2022-2024 using a Value for Money (VFM) approach which includes economic indicators, efficiency, and effectiveness. **Methodology:** the research method combines quantitative and qualitative approaches with data sources in the form of budget realization reports from the Semarang city budget, the achievements of athletes, interviews with relevant parties, and field observations. Data analysis was done descriptively using VFM ratio calculation. **Results:** the results showed that the program has an average effectiveness of 102% (very effective), efficiency of 87% (quite efficient), and the economy of 39% (uneconomical), where the economic aspect is low due to the high cost of procurement of national standard equipment. **Discussions:** the results show that the high effectiveness and efficiency is not enough to guarantee the achievement of the 3E principle as a whole if the economic aspect is not considered, so it needs a more optimal resource management strategy and cross-party collaboration. **Conclusions:** this study recommends optimizing procurement, sponsorship cooperation, and utilization of shared facilities to reduce costs without reducing quality, as well as being a methodological reference for evaluating public sector performance based on 3e principles in the field of sports.

Keywords: *Value For Money, Special Sports Classes, Program Performance, Sports Coaching, Public Sector Evaluation.*

Introduction

The Department of Youth and Sports (Dispora) in the city of Semarang is one of the government agencies with a strategic role in fostering sports achievements at the local, regional, and national levels. The department coordinates various sports in the region and aims to make the city of Semarang a center for coaching athletic achievement in Central Java Province. It also seeks to optimize the potential of athletes to compete at the national and international levels. However, this coaching effort faces several obstacles in practice, including limited sports facilities, an absence of a structured early childhood athlete development program, and budget constraints. These conditions can hinder athletes' achievements, despite the fact that physical quality, technical skills, and physical fitness are important components of sports success (Azizah & Nurrochmah, 2024; Zulviyanto, 2024). Therefore, a comprehensive evaluation of the coaching budget is needed to ensure optimal resource management and improve athlete performance.

The Value for Money (VfM) approach is a widely used method for evaluating the performance of public sector organizations, including those in the sports industry. This concept measures performance based on three elements: economy, efficiency, and effectiveness (Charalambakis, 2022, 2023; Takenaga, 2024). This approach has been applied in various contexts, such as improving the quality of public services in the Bengkulu KONI province and the financial performance of the Karimunjawa District's education and sports department. In sports achievement development, previous studies have discussed determinants of athlete performance, such as sports techniques with a biomechanical

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approach (Bhakti, 2024); physical fitness status (Prayoga & Nurrochmah, 2024) nutritional status and mental health and the relationship between coaches and athletes (Endrawan, 2023; Jowett, 2024; Roux, 2023). However, studies integrating VFM-based performance evaluations to improve the quality of athletes in special coaching programs at the city level are still rare, such as the Semarang City Special Sports Class (KKO).

In theory, Value for Money enables local governments to evaluate how effectively public resources are used (economy), how efficiently they are used (efficiency), and how well they achieve their intended goals (effectiveness) (Amril et al., 2024; Ningrum & Biduri, 2024). Economics emphasizes minimizing input costs without sacrificing quality. Efficiency involves comparing output to input, and effectiveness measures the extent to which program goals are achieved (Özgenel & Mert, 2019; Rockhill et al., 2019). In athlete coaching, applying this concept ensures the budget is used to improve performance indicators, such as physical fitness (Azaza et al., 2019; Escudero-Tena, 2021), engineering skills and mental health (Mandan, 2024). This type of evaluation aligns with current research recommendations emphasizing the importance of integrating budget management, coaching strategies, and athlete achievement (Naderi, 2025; Yang, 2024).

Unlike previous studies, which generally focus on public services or broad-scale financial management, this study focuses on KKO programs in Semarang City Dispora that have never been evaluated using the VfM approach. Specifically, this study targets KKO programs in Semarang City Dispora that have never before been evaluated using the VfM approach. The analysis combines economic indicators, efficiency, and effectiveness with anthropometric data, physical fitness, and athlete performance. The evaluation instrument links financial data with multidimensional indicators of athlete performance to provide a comprehensive view of the relationship between budget allocation and outcomes. This study is urgent due to the need for accountability in the use of APBD funds and to prepare data-based policy recommendations that strengthen coaching strategies for athletes (Cakir, 2021).

To date, no research has directly measured the effectiveness of the KKO athlete development budget in Semarang using a value-for-money approach associated with improving athlete quality. While previous studies have discussed the relationship between physical factors, technique, nutrition, and mental health with athlete performance, none have explicitly linked this relationship to the evaluation of public budgets. This study's novelty lies in integrating VFM measurements with multidimensional athlete performance indicators to provide an overall picture of the relationship between budget use and coaching outcomes.

Based on this background, the aim of this study is threefold: first, to analyze the economic level, efficiency, and effectiveness of the budget program used by Koko Dispora Semarang; second, to assess the relationship between VFM measurement results and improvements in athlete quality based on coaching category; and third, to provide strategic recommendations for optimizing athlete coaching through targeted budgeting.

Method

This study employs a mixed-methods approach that combines qualitative and quantitative methods (Creswell & Creswell, 2017). The qualitative approach was used to collect data through in-depth interviews with relevant parties, including the Semarang City Education Office, as well as other individuals considered competent to provide information. The quantitative approach was used to analyze data in the form of a budget realization report on special class sports activities (KKO) in the city of Semarang and other supporting data. The study took place at the Department of Youth and Sports (Dispora) in Semarang, located at 20 Jalan Pamularsih.

The participants in the study consist of two main groups. The first group consists of qualitative informants who have a direct relationship with the implementation of the KKO program (Adler, 2022; Berends, 2021). This group includes officials from the Semarang City Dispora, representatives from the Semarang City Education Office, trainers, and other relevant parties. The second group consists of the sources of quantitative data, which comes from financial statements, budget realization data, and KKO Semarang performance documents. The study population includes everyone involved in managing and implementing the KKO program in Semarang City. The qualitative sample was selected using a purposive sampling method based on competence and relevance to the research topic. For the quantitative data, all budget documents and reports on activity realization during the research period were used.

The research instruments used include structured interview guides to extract qualitative information from relevant parties, as well as documentation consisting of budget realization reports, activity planning documents, and Ko program implementation records. Additionally, Value for Money performance analysis instruments are used, which include three indicators: economy (inputs compared to standard costs), efficiency (inputs compared to outputs), and effectiveness (outputs compared to outcomes against predetermined targets). Success is measured based on criteria referencing Kepmendagri No. 690,900-327 from 1996.

Table 1. Value for Money Measurement of Semarang City KKO 2022-2024

Ratio (%)	Economic Criteria	Efficiency Criteria	Effectiveness Criteria
≥ 100	Very Economical	Highly Efficient	Very Effective
90 – 100	Economical	Efficient	Effective
80 – 90	Quite Economical	Quite Efficient	Quite Effective
60 – 80	Less Economical	Less Efficient	Less Effective
< 60	Uneconomical	Inefficient	Ineffective

Table 2. Structured Interview Sheet

No.	A. Economic Aspects
1	What is the procurement process for KKO training equipment and facilities during the 2022–2024 period?
2	Are there efforts to reduce procurement costs? If so, what is the mechanism?
3	Is the allocated budget proportional to the results obtained?
B. Efficiency Aspects	
1	How are resources (budget, trainers, and facilities) utilized in implementing the KKO program?
2	Are there strategies to avoid wasting resources?
3	How is the coordination between parties supporting KKO activities?
C. Aspects of Effectiveness	
1	To what extent has the KKO program achieved its planned goals?
2	Has the quality of coaching and the achievements of athletes improved during the program?
3	What factors are most influential to the program's success?
D. Recommendations and Improvements	
1	What suggestions do you have for improving the KKO program's performance in the future?
2	Are there other forms of support or cooperation that could strengthen coaching of athletes?

The research procedure begins with the preparation phase, which includes drafting proposals, obtaining research permits from relevant parties, and preparing data collection instruments. Furthermore, qualitative data were collected through structured interviews with selected informants from the Semarang City Dispora and the Semarang City Education Office. Quantitative data were collected from budget realization reports, planning documents, and Ko program implementation records. The researcher also conducted a literature study, collecting references from relevant books, journals, and official websites. After collecting all the data, the next step is data management. This involves organizing the interview results, documentation, and financial data for analysis according to the established method.

This study uses qualitative descriptive method to analyze interview data and documentation, as well as quantitative analysis to measure performance based on value-for-money approach. Qualitative analysis is performed by encoding the interview results using the help of NVivo software, identifying key themes, and drawing conclusions based on field findings. Quantitative analysis is done by calculating the ratio of economy, efficiency, and effectiveness of financial statements and KKO performance. The results of qualitative and quantitative analysis are then integrated to provide a comprehensive picture of the relationship between budget use and the achievement of athlete coaching targets.

Results

This study analyzed the performance of the Semarang City Special Sports Class (KKO) program from 2022 to 2024 using a value-for-money approach that includes three main indicators: economy, efficiency, and effectiveness. Data was sourced from the Semarang regional budget document (APBD), budget realization reports, and other supporting data. Additionally, interviews were conducted with the Department of Education and the Department of Youth and Sports (Dispora) in Semarang to strengthen

the interpretation of the performance measurement results. Based on the analysis results, the economic value of the KKO program increased from 27.28% in 2022 to 43.71% in 2023 and reached 47% in 2024. However, the average economic value during the study period was only 39%, placing it in the "uneconomical" category. This indicates that the costs incurred are relatively larger than the standard inputs, so the program does not adhere to the principle of saving resources.

In 2022, the efficiency achievement of 98% was categorized as "efficient," but in 2023, it dropped to 68%, which was categorized as "less efficient." In 2024, the efficiency value rose again to 97%, entering the "efficient" category. The average efficiency over three years is 87%, which falls under the "fairly efficient" category. These fluctuations indicate differences in the level of conformity between inputs and outputs in each fiscal year and can be influenced by the planning and execution of activities.

Meanwhile, the effectiveness of the KKO program tends to be high. In 2022, the effectiveness value was 156%, falling into the "very effective" category. It decreased to 57.25% in 2023, which is considered "ineffective," but increased to 93% in 2024, which is considered "effective." The average effectiveness during the study period was 102%, which falls under the "highly effective" category. Overall, these results demonstrate that the KKO program consistently achieves and often exceeds its target outcomes, particularly in enhancing the performance of athletes in various championships at the city, provincial, national, and international levels.

Based on interviews with informants, we know that the procurement process for Semarang City KKO training equipment and facilities for the 2022–2024 period follows government procedures and uses an auction mechanism. Some special equipment is obtained through direct appointment due to limited market availability. Cost reduction efforts include choosing local brands whose quality is close to international standards and making large purchases to obtain discounts. However, the allocated budget is not considered fully comparable to the results obtained, particularly from an economic standpoint, since the high cost of procurement is not always offset by a long service life. To optimize efficiency, available resources are utilized through a structured training schedule, distribution of trainer duties according to specialization, and rotational use of facilities. Waste prevention strategies include routine equipment maintenance, rotational facility use, and periodic need evaluation. Regular meetings are held between Dispora, trainers, and schools to coordinate efforts, although schedule synchronization is sometimes constrained.

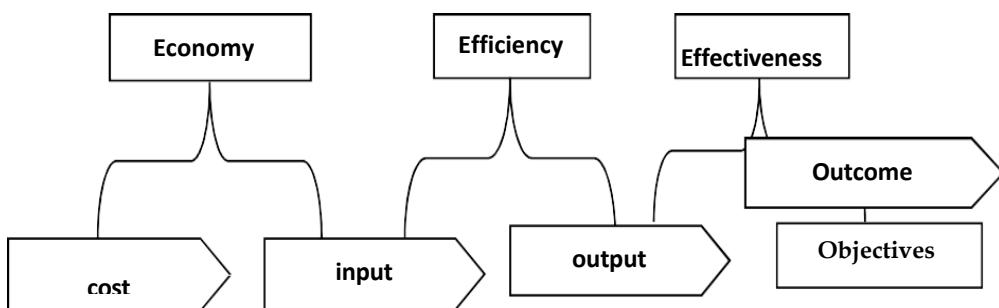
In terms of effectiveness, most achievement targets have been met, particularly at the provincial and national levels. However, some sports have not met their targets. The quality of coaching has improved significantly, particularly in popular sports such as athletics and football. This improvement is supported by the presence of quality coaches and an increase in training frequency. The factors that most influence the program's success include budget support, coach quality, athlete motivation, and the opportunity to participate in various competitions. Informants also offered recommendations for the future, including expanding cooperation with sponsors, gradually procuring equipment, and adding training facilities for sports lacking them. Another proposed form of support is establishing cooperation with colleges, professional clubs, and private parties for joint training and funding competition activities.

Table 3. Structured Interview Results

No.	Aspect	Inquiry	Summary Of Answers
1	Economy	What is the procurement process for KKO training equipment and facilities during the 2022–2024 period?	Procurement is conducted through auctions according to government regulations. Some special equipment is acquired through direct appointment due to limited availability.
2	Economy	Are there efforts to reduce procurement costs? If so, what is the mechanism?	To get discounted prices, use quality local brands that are close to international standards and buy in bulk.

3	Economy	Is the allocated budget proportional to the results obtained?	Although the budget is quite large, it is not economically feasible because the high cost is not offset by the long duration of use.
4	Efficiency	How are resources (budget, trainers, and facilities) utilized in implementing the KKO program?	Resources are utilized optimally through structured training schedules, distribution of trainer duties according to specialization, and use of rotating facilities.
5	Efficiency	Are there strategies to avoid wasting resources?	Routine equipment maintenance, facility rotation, and periodic evaluation of needs prevent non-urgent purchases.
6	Efficiency	How is the coordination between parties supporting KKO activities?	There are regular meetings between Dispora, coaches, and schools, although scheduling synchronization is still an obstacle.
7	Effectiveness	To what extent has the KKO program achieved its planned goals?	Most targets were achieved, especially at the provincial and national levels. However, not all sports met their targets.
8	Effectiveness	Has the quality of coaching and the achievements of athletes improved during the program?	The quality of coaching is improving, particularly in popular sports such as athletics and football, thanks to high-quality coaches and increased training frequency.
9	Effectiveness	What factors are most influential to the program's success?	Support includes budget, quality coaches, athlete motivation, and competition opportunities at various levels.
10	Recommendations & Improvements	What suggestions do you have for improving the KKO program's performance in the future?	Sponsorship, gradual procurement of equipment, and addition of training facilities are needed for branches lacking them.
11	Recommendations & Improvements	Are there other forms of support or cooperation that could strengthen coaching of athletes?	There should be cooperation with colleges, professional clubs, and private clubs for joint training and competition funding.

Source: Research Data 2024

**Figure 1. Value For Money Framework****Table 4. Semarang City KKO Value of Money Measurement 2022-2024**

No	Year	Economy (%)	Efficiency (%)	Effectiveness (%)
1	2022	Uneconomical (27.28%)	Efficient (98%)	Highly Effective (156%)
2	2023	Uneconomical (43.71%)	Less Efficient (68%)	Ineffective (57.25%)
3	2024	Uneconomical (47%)	Efficient (97%)	Effective (93%)
Average	2022–2024	Uneconomical (39%)	Moderately Efficient (87%)	Highly Effective (102%)

Source: data processed from Semarang city budget, 2022-2024

Discussion

The Semarang Special Sports Class (KKO) program combines formal education with sports coaching to help student athletes develop optimally, both academically and physically. However, the program faces several challenges, including limited budget allocation, imprecise planning, fluctuating efficiency, and relatively high costs compared to standard inputs. These issues indicate an imbalance between outcomes and resource savings. In the context of public sector management, Value for Money (VfM) is an appropriate framework for assessing programs' economic, efficiency, and effectiveness aspects simultaneously (Hermain et al., 2020; Huzaema et al., 2025; Margareta et al., 2023). Theoretically, value for money focuses on the efficient use of resources (economy), achieving outputs commensurate with inputs (efficiency), and successfully achieving outcomes that meet or exceed targets (effectiveness) (Astuti & Falikhatur, 2024; Setyowati, 2023).

The findings of this study reinforce those of Amajida et al., (2024) who evaluated KKO management at the high school level. They found that, although achieving goals is highly effective, the economic aspect tends to be weak due to high financing costs. This shows a general pattern across regions where the success of athletes' achievements has not been accompanied by cost efficiency. However, these findings contradict Wicker & Frick, (2020) assertion that long-term coaching of elite athletes increases budget efficiency by reducing inefficiencies. At KKO Kota Semarang, the relationship between effectiveness and economic value is not automatic, as the economic value remains low despite the high effectiveness. Fluctuations in efficiency are consistent with the findings of Hermain et al., (2020), Margareta et al., (2023), who emphasize the influence of policy dynamics, priority changes, and budget realization on the performance of public programs. In the context of sports, Muhibbi et al., (2023) and Gaulrapp, (2023) demonstrated that factors such as athlete injuries, gender disparities, and competition intensity impact coaching effectiveness.

From a coaching management perspective, Iwasa-Madge & Sesbreno, (2023) emphasized the importance of incorporating nutrition into athlete development. Meanwhile, (Kerr et al., 2021), using an Actor-Network Theory approach, asserted that networks of coaches, athletes, facilities, and technology must support each other to achieve efficiency. However, this study indicates that integration is not fully optimal in KKO Semarang. Walton, (2022) emphasizes that athlete well-being is an important element in achieving long-term outcomes. Smaranda et al., (2024) utilize artificial intelligence to monitor athletes' health as a strategy to prevent injury losses. This integration of health technology has not been significantly implemented in KKO Semarang.

Furthermore, Shi & He, (2024) study of athlete biorhythms and injury prevention and Kim, (2020) study of the balance between academics and sports for student-athletes showed that non-financial factors can influence the achievement of goals, which this study has not measured quantitatively. Linkages with Esariti et al., (2020) and Lasmiatun & Wijaya, (2024) are that the management of public services, including sports, requires planning based on service quality and user satisfaction so that goals are achieved cost-efficiently. In sports coaching, this is commensurate with athlete, coach, and school satisfaction. This study reveals the phenomenon of "effectiveness bias," the tendency to focus on athlete achievement (outcomes), even when the cost of coaching exceeds economic standards. This suggests that high effectiveness is not necessarily accompanied by efficiency or economy, even in the medium term. Additionally, presenting three-year trend data provides a dynamic picture of efficiency fluctuations and inter-year comparisons, which are rarely revealed by similar studies.

The findings of this study have several significant practical implications for improving the effectiveness of coaching programs for athletes. First, a detailed audit of each coaching cost component can optimize the budget. This step allows for the identification of less efficient financing items and the allocation of more targeted funds to support priority needs. Second, cross-agency coordination must be strengthened to enable more precise program planning. This approach minimizes program overlap, increases interagency synergies, and ensures that each activity receives optimal support from various stakeholders. Third, integrating technology and fulfilling athlete nutritional needs is an important strategy for reducing losses due to injury. Using performance monitoring technology and health data analysis to implement proper nutrition patterns will help keep athletes in excellent physical condition, accelerate recovery, and support maximum achievement. Implementing these three steps in an integrated manner will allow the athlete's coaching program to run more efficiently and sustainably while achieving better results.

The study has limitations that must be considered when interpreting the results. First, the data sources are limited to regional budget documents (APBD) and a small number of interviews. This limits the exploration of non-financial factors, such as athlete motivation, coach satisfaction, and facility quality. These limitations cause the analysis to focus more on administrative and budgetary aspects while neglecting to quantify the psychological dimensions and quality of service that could affect athlete performance. Second, the study did not quantitatively analyze the risk of injury, competition load, and the health aspects of athletes. These indicators are important for providing a complete picture of the athlete's readiness and sustainability. The absence of a comprehensive analysis of these health and physical risk dimensions may limit the strategic recommendations, particularly those related to injury prevention and long-term performance optimization.

By understanding the outlined practical implications and limitations of this study, stakeholders can design an efficient athlete coaching strategy that touches on crucial aspects such as motivation, health, and performance sustainability. An adaptive, collaborative, and evidence-based approach will align each adopted policy and program with real needs and respond to the evolving dynamics of the sports world. Thus, the results of this study can provide a solid foundation for building a more scalable, long-term athlete coaching system and contribute to regional and national achievements.

Conclusion

This study concludes that the performance of the Semarang City Special Sports Class (KKO) program for the period 2022-2024 based on the Value for Money (VFM) approach shows very high effectiveness with an average of 102%, efficiency is quite good with an average of 87%, but the economic aspect is still low with an average of 39% due to the high cost of procurement of national standard equipment. The novelty of the study lies in the comprehensive application of the VFM method through a combination of quantitative and qualitative analysis, which extends the study of evaluation of public sector performance in the field of sports. In practical terms, the results of the study recommend optimizing the procurement of goods and services, increasing cooperation with sponsors, and utilizing joint training facilities without reducing the quality of coaching. Methodologically and academically, these findings are expected to be a reference for local governments and subsequent researchers in designing, implementing, and evaluating sports coaching programs based on 3e principles (Economical, Efficiency, Effectiveness) in order to improve the performance and sustainability of athletes' achievements in the future.

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Conflict of Interest

The writer states that there are no conflicts of interest.

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