



Modern management and its role in improving the performance efficiency of the Iraqi Federation for Bodybuilding and Physical Fitness

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Abstract. The research was conducted in order to develop and introduce a modern management scale for the Iraqi Bodybuilding and Fitness Federation, develop and apply a performance efficiency scale for the Iraqi Bodybuilding and Fitness Federation as well as identifying modern management of its role in raising performance efficiency within the Iraqi Bodybuilding Federation. Due to the nature of the problem, this researcher used a descriptive approach with relational methodology. The research sample was selected from among the members under the authority of the sub-federation of the Iraqi Bodybuilding and Fitness Federation (150 members). The two scales were applied to a sample of bodybuilding (75) members for the period from (June 6, 2025) to (August 4, 2025). This was an exploratory foray into the development of the two scales. To check the scales, the researchers used construct validity: this type of validity is verified via statistical analysis of items. 24 items for the modern management scale, and 22 items for the performance efficiency list were finalized after thorough revision of the two scales. Having developed the two scales, the researchers used the final scales with a sample of 70 members between August 20th 2025 and September 15th 2025. Results were discussed with pertinent scientific references. The findings of the study concluded that there is a moderate range of application ideas for modern management concepts in the Iraqi Federation for Bodybuilding and Fitness. They suggested adopting clear strategies for the complete application of modern management concepts in the Iraqi Federation for Bodybuilding and Fitness.

Keywords: Modern Management, Organizational Performance Efficiency, Sports Federation Governance, Strategic Sports Management, Administrative Performance in Sports Organizations.

1 INTRODUCTION

In the past few years, global transformations in management strategies and technology, as well as the competitive landscape, have rapidly transformed sports organizations (Li et al., 2024). This

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has made it imperative for sports federations to take on modern management concepts and practices in order to guarantee the efficiency and effectiveness of the administrative performance, these are no longer adequate to address modern-day issues (Hussain et al., 2019). Therefore, strategic planning, effective leadership, total quality management and use of modern technology have fundamentally come to be regarded as key facilitators to institutional performance and organizational goals (Daft, 2016).

Modern management is an integral system for the use of human and material resources, increasing cooperation between departments, increasing the efficiency of decision-making processes in the enterprise, while creating conditions for continuous innovation and development (Yayha et al., 2024). The level of administrative performance and quality services provided are positively affected accordingly (ANANYI & Ololube, 2023). Moreover, the modern management is helps to establish a flexible organizational atmosphere that can swiftly respond to shifts and attain institutional excellence by using scientific techniques in planning, organizing, directing, and controlling (Armstrong 2020).

In the sports industry, this relationship is more critical than in traditional management because in sports institutions, through a mutual effect of administration, technology, and organization are very much dependent on each other (Daneshpour & Nazari, 2013). Sports federations depend heavily on how well they are run, their administrative systems, resource management and overall coordination of activities. It results in better administrative performance and higher sports success (Hoye et al., 2015).

The Iraqi Federation for Bodybuilding and Physical Education is one of the most prominent sports institutions that seeks to develop its administrative performance in line with the requirements of sports development. The benefits of modern management concepts are reflected in increasing the efficiency of administrative work, contributing to improving the quality of performance, raising the level of services provided to athletes and working to achieve strategic objectives for the federation (Valiyev et al., 2025). Hence, it is essential to establish the relationship between the development of modern management and improving administrative performance within the federation, due to its positive effect on developing institutional work to enhance the ability of preserving excellence and sustainability (Lashchuk, 2021).

This highlights the need to study the impact of modern management on administrative performance in the federation. In light of the previous information, this study seeks to emphasize the concept of modern management as a key mechanism in enhancing administrative performance within the Iraqi Federation for Bodybuilding and Fitness. Which, in turn, will hopefully create a scientific context that can help the process of administrative development in sports institutions through identifying the extent of modern management concepts to be applied and the relationship between them and performance Administrative.

Research Problem

The need for agility or the ability to respond quickly and effectively to new challenges (IDEA Factory) has become critical for modern sports organizations due to rapid changes in the work environment, advances of technology and greater competition. This requires the use of modern management methods that can render administrative performance more efficient, thus enabling organizations to successfully and efficiently reach their goals. Traditional management methods already make it difficult to keep up with the need for institutional development. Hence, it becomes



important to educate these organizations on modern management concepts that include strategic planning, quality management, leadership and use of technology in administrative activities (ANANYI & Ololube, 2023).

Administrative behavior efficiency is an important criterion for determining the success of sports organizations. The degree of institutional performance associates the impression that management to efficiently enclose and organize all available resources, tactics needed for activities on time. This help in enhancing the quality of services rendered and providing a satisfaction to the beneficiaries (Hoye et al., 2015). Martin (2000) stated that most of sports organizations in this regard has weakness in applying modern managerial methods which adversely affects its administration performance and makes it impotent to reach their institutional excellence.

Especially since many sports federations (e.g. the Iraqi Bodybuilding and Fitness Federation) contribute to its administrative development towards meeting the aims of sports development but the extent of implementation for modern management and its impact on the administrative performance in both parts of federation needs to be checked. Assessment of the current administrative processes is vital for understanding strengths and weaknesses, thereby creating a tailored plan to bolster efficiency. Failure, or ineffectively imbuing a modern management vision, into the organization can result in reduced performance and degraded administrative coordination and decision making (Daft, 2016). Hence, the research problem is identified by the following principal question: What is the role of modern management in enhancing administrative performance in the Iraqi Federation for Bodybuilding and Fitness?

Research Objectives

1. Developing and applying a modern management scale for the Iraqi Federation for Bodybuilding and Fitness.
2. To establish an efficient performance scale for the Iraqi Federation for Bodybuilding and Fitness.
3. To identify modern management and its role in the efficiency of performance for the Iraqi Federation of Bodybuilding and fitness.

Research Scope

1. Human Scope: The sub-federations of the Iraqi Federation for Bodybuilding and Fitness members.
2. Time Scope: June 22, 2025 to November 10, 2025.
3. Spatial Scope: The sub-federations of the Iraqi Federation of Bodybuilding and Fitness.

Definitions of Terms

1. Modern Management: Modern Management refers to modern management methods and concepts developed with the goal of improving work efficiency and effectiveness by adopting strategic planning, utilizing technology, developing human resources, and fostering teamwork to effectively achieve organizational purposes (ANANYI, & Ololube, 2023).
2. Performance Efficiency: The proportion of resources used by an organization or individual to maximum advantage in generating defined goals with minimum time, effort and cost while maintaining a high level of quality in the outcome (Daft, 2016).

2 METHOD

The method used by the researcher is descriptive, as the nature of the relations is appropriate to this problem. This kind of scientific research seeks to solicit data and information about a distinct phenomenon through means such as questionnaires, interviews, or observation (Khlaifawi, 2024).

Samples

The study sample included (150) members from the sub-federations of the Iraqi Federation for Bodybuilding and Fitness. The overall sample was further categorized into the pilot study group, the training group and the application group. The division of the research sample appears in Table (1).

Table 1 shows the distribution of the research sample

Variables	Research Sample	Exploratory Sample	Construction Sample	Application Sample
Numbers	150	5	75	70
Percentage	100%	3.33%	50%	46.66%

Research Tools and Data Collection Methods

Arabic and foreign sources.

The Internet.

The Modern Management Scale.

The Performance Efficiency Scale.

SPSS software for statistical data processing.

Field Research Procedures

Steps for Constructing the Study Scales:

The researchers constructed the two scales as follows:

Formulating the Statements: A number of statements were formulated for the two scales to obtain the results, in accordance with the nature of the research sample. There were (20) statements for the Modern Management Scale and (22) statements for the Performance Efficiency Scale.

The researcher used the Likert scale in constructing the scale questionnaire.

Following the aforementioned procedures, the researcher conducted a pilot study on a sample of (5) members on (June 29, 2025) to establish suitable conditions for administering the main test to the construction and application sample.

The two scales were administered to the construction sample of (75) members from (July 6, 2025) to (August 4, 2025). The purpose of this pilot study was to develop the two scales.

Scientific Basis of the Two Scales

Validity of the Two Scales

The researchers used construct validity to verify the two scales. This type of validity is verified through statistical analysis of the statements. The researcher verified this by extracting the following indicators:

Discriminatory Power of the Scale Statements

To achieve this, the researcher adopted the two-groups approach to calculate the discriminatory power of the statements using the independent samples t-test. The aim of analysing the statements was to retain the statements with high discrimination, which are the good statements, as shown in Appendixes (3 & 4).

Reliability of the two scales

The researchers confirmed the reliability of the two scales using Cronbach's alpha coefficient with the Statistical Package for the Social Sciences (SPSS). A good scale is one that is reliable (Kadhim et al., 2025). Applying this coefficient to the construct sample of (75) members revealed a very high reliability coefficient.

Table 2 the values of the reliability coefficient of the two scales

Scale Name	Number of Items	Sample Size	Cronbach's Alpha Value	Significance	Reliability
Modern Management	24	75	0.968	Significant	High and Stable
Performance Efficiency	22	75	0.891	Significant	High and Stable

Application of the Two Scales

The two scales were finalized with (24) statements for the Modern Management scale and (22) statements for the Performance Efficiency scale. After the two scales were constructed, the researchers applied the final scales to the research sample of (70) members, from (20/08/2025) to (15/09/2025).

3 RESULT

Table 3 the presentation of statistical data for the research sample specifications.

Scale	Mean	Standard Deviation	Skewness Coefficient
Modern Management	74.328	8.635	0.536
Performance Efficiency	69.597	6.735	0.864

The descriptive statistics for the Modern Management and Performance Efficiency scales are shown in Table (3). The mean for Modern Management was 74.328 (SD = 8.635), which suggests a relatively high level of perceived modern administrative practices as well as moderate respondent variability.

For Performance Efficiency, the mean is 69.597 (SD = 6.735), which shows a relatively stable perception of performance levels across potential observations and slightly lower dispersion than in Modern Management. The skewness coefficients of Modern management (0.536) and Performance Efficiency (0.864) also report acceptable values (± 1), confirming the distribution approximates normality; hence, the appropriateness of using parametric statistical analyses on the data.

To verify the relationship between self-esteem scale scores and achievement motivation among students of the College of Physical Education and Sports Sciences at Anbar University, the researcher presents the results of the correlation matrix in Table (4):



Table 4 the results of the correlation matrix for the domains of the two scales for the application sample.

Scale	Mean	Standard Deviation	R Value	Sig. Value	Result
Modern Management	74.328	8.635	0.957	0.000	Significant
Performance Efficiency	69.597	6.735			

It is a strongly linear correlation, which based on that so for the observed sample higher modern management practices correlates with higher research performance efficiency. This $p < 0.001$ shows that this is a statistically significant relationship in which we believe the correlation is much more likely than due to random chance. Modern management practices explain a significant amount of variance in organizational performance, and vice versa with high correlation between the constructs. These results provide empirical evidence for the hypothesized relationship between contemporary administrative styles and performance effects.

4 DISCUSSION AND CONCLUSION

The study results showed a slight statistically significant relationship between modern management and performance efficiency within the Iraqi Federation for Bodybuilding and Fitness. This indicates a positive impact of modern management, though not to a high level, suggesting that the application of modern management concepts still requires further development and implementation within the Federation (Ferlie & Ongaro, 2022). The presence of these statistically significant indicators reflects the existence of modern management practices to a certain degree, but not at a level sufficient to achieve full institutional excellence or high performance.

This finding aligns with the findings of ANANYI & Ololube, 2023, who stated that while applying modern management principles contributes to improved performance, weak or incomplete application can lead to limited impact. The effectiveness of modern management depends on the extent to which an organization adopts strategic planning methods, develops human resources, and integrates technology into its administrative work (Basiru et al., 2023). This result can also be interpreted as indicating that while the federation may possess some sound administrative practices, there is a need to enhance administrative efficiency by developing administrative systems and modernizing organizational procedures to align with the requirements of modern institutional work. Sports organizations striving for excellence require management that relies on competence and experience in selecting leaders and staff to ensure the efficient achievement of objectives (Hoye et al., 2015).

The findings also indicate that the federation will need to concentrate its organizational investment on building human resource capacity by hiring specialized administrators and offering systematic training schemes for its staff. This is an important factor for increasing the quality of administrative action and efficiency in making decision. According to Daft (2016), investment in human resources represents one of the conducting factors in enhancing performance and concurrently raising the level of organizational efficiency.

On the other hand, the results may reflect the presence of some organizational challenges, such as the influence of personal relationships or favoritism on certain administrative decisions. This can limit the achievement of organizational fairness and affect performance efficiency



(Bakare, 2024). Modern management is based on the principle of merit and competence in distributing responsibilities and tasks, independent of personal considerations, which contributes to strengthening organizational trust and achieving effective performance (Abd et al., 2025). Accordingly, the Iraqi Federation for Bodybuilding and Physical Fitness needs to adopt more comprehensive administrative development strategies, focus on applying modern management principles more deeply, promote the principle of professional competence in selecting leaders and employees, and move away from unprofessional practices, in order to contribute to achieving institutional excellence and raising the level of administrative performance.

Conclusions

1. The study results showed a moderate level of application of modern management concepts within the Iraqi Federation for Bodybuilding and Fitness.
2. A significant relationship exists between modern management and performance efficiency, indicating that adopting modern management methods contributes to improved performance. However, this effect is still limited and needs strengthening.
3. The simple statistical significance level indicates that the application of modern management within the Federation has not yet reached the level required to achieve institutional excellence or high performance.
4. Current performance reflects the presence of some positive management practices. However, there is a need to develop organizational systems and procedures to align with the requirements of modern management.
5. The results highlight the importance of human resources and administrative competencies in improving performance levels within the Federation.
6. Some non-competency-based organizational practices, such as personal relationships or favoritism, may reduce the effectiveness of administrative performance.

Recommendations

1. Clear strategies should be adopted to comprehensively implement modern management concepts within the Iraqi Federation for Bodybuilding and Fitness.
2. Organizational systems and procedures should be developed to meet the requirements of modern institutional work.
3. Focus on attracting specialized administrative talent when selecting leaders and staff within the union to ensure improved administrative performance.
4. Do not engage in unprofessional practices such as nepotism and allocate responsibilities based on merit and competence.
5. In addition to administrative skills, employee professional ability is also a development phase.
6. Advance what you can by establishing modern technology in administrative work for efficiency and better decision-making.

5 PRACTICAL APPLICATION

The results of this study present practical directions for sport federation administrators and decision makers, notably in developing Nations. The theoretical implications and contributions lie in the close link found between contemporary management tools and performance efficiency, suggesting sports firms should embrace at least three features of modern management practices,



namely strategic planning; information technology-supported organizational structure (administrative technology) and meritocracy in appointing managers. Without a doubt decisive management reforms within the Iraqi Federation for Bodybuilding and Fitness such as developing professional training programs for administrative staff, along with digital management systems and transparent decision-making processes will contribute to organizational performance at large. Moreover, the modern management and performance efficiency scales developed here can serve as diagnostic tools for the policymakers and federation leaders to regularly assess their administration's effectiveness to support timely improvement. These practices also may be a reference for other sports federations that want to strengthen institutional governance and enhance the quality of services provided to athletes and stakeholders.

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APPENDIXES

Appendix (1) Self-Esteem Scale Questionnaire

No.	Items	Strongly Agree	Agree	Neutral	Strongly Disagree	Disagree
1	The federation has a clear strategic plan to achieve its objectives					
2	The management operates according to a defined future vision					
3	The management relies on planning in implementing activities and programs					
4	Leadership is clear in directing employees					
5	The management encourages teamwork spirit					
6	Leadership supports initiatives and new ideas					
7	The management demonstrates flexibility in decision-making					
8	Employees are selected based on competence and experience					
9	The federation provides training and development programs for employees					
10	Tasks are distributed according to employees' professional capabilities					
11	The management continuously seeks to develop employees' skills					
12	Employees' performance is evaluated periodically					
13	The federation uses technology to accomplish administrative tasks					
14	Electronic systems contribute to facilitating administrative work					
15	Information and data are stored in an organized and up-to-date manner					
16	The management relies on accurate information in decision-making					
17	The management continuously seeks to improve service quality					
18	The management is committed to beneficiary satisfaction with the federation's services					
19	Quality standards are applied in administrative work					
20	The management encourages innovation and continuous development					
21	The management demonstrates transparency in dealing with employees					
22	The management promotes a culture of cooperation among employees					
23	The management strives to achieve institutional excellence					



24	The management works continuously to improve organizational procedures					
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Appendix (2) Performance Efficiency Measurement Questionnaire

No.	Items	Strongly Agree	Agree	Neutral	Strongly Disagree	Disagree
1	Administrative tasks are carried out with high accuracy					
2	Employees demonstrate a high level of commitment at work					
3	Work outcomes are characterized by quality and precision					
4	Tasks are completed on time					
5	Administrative procedures proceed at an appropriate speed					
6	Work is accomplished with minimal delay					
7	Available resources are utilized efficiently					
8	The level of resource waste within work is low					
9	Available capabilities are used optimally					
10	Management makes decisions objectively					
11	Decisions are based on accurate information and data					
12	Decisions are made at the appropriate time					
13	The federation achieves its administrative objectives efficiently					
14	Work results are consistent with the established plans					
15	Administrative performance contributes to institutional development					
16	There is continuous follow-up on work implementation					
17	Administrative problems are resolved effectively					
18	Employees assume their job responsibilities seriously					
19	The work environment is characterized by organization and discipline					
20	Positive results are achieved from administrative performance					
21	Performance efficiency contributes to improving service quality					
22	Employees demonstrate a high ability to accomplish tasks					

Appendix (3) shows the discriminatory power of each item in the Modern Management Scale

Item No.	Lower Group Mean	Lower Group SD	Upper Group Mean	Upper Group SD	Calculated (t) Value	Significance Value	Result
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1	2.530	0.615	5.0000	.00000	28.345	.000	Significant
2	2.711	0.753	5.0000	.00000	21.983	.000	Significant
3	3.202	0.749	5.0000	.00000	18.544	.000	Significant
4	3.102	0.984	5.0000	.00000	12.247	.000	Significant
5	2.698	0.870	5.0000	.00000	18.534	.000	Significant
6	3.100	0.653	5.0000	.00000	20.335	.000	Significant
7	3.244	0.662	5.0000	.00000	18.547	.000	Significant
8	2.612	0.759	5.0000	.00000	21.213	.000	Significant
9	2.387	0.532	5.0000	.00000	34.312	.000	Significant
10	2.673	0.591	5.0000	.00000	27.548	.000	Significant
11	2.612	0.759	5.0000	.00000	21.213	.000	Significant
12	2.387	0.532	5.0000	.00000	34.312	.000	Significant
13	2.673	0.591	5.0000	.00000	27.548	.000	Significant
14	2.449	0.792	5.0000	.00000	22.542	.000	Significant
15	2.513	0.610	5.0000	.26066	22.246	.000	Significant
16	2.510	0.598	5.0000	.00000	24.767	.000	Significant
17	3.244	0.895	5.0000	.00000	20.876	.000	Significant
18	2.777	0.841	5.0000	.00000	17.436	.000	Significant
19	2.879	0.516	5.0000	.00000	17.827	.000	Significant
20	2.775	0.367	5.0000	.00000	31.521	.000	Significant
21	2.587	0.842	5.0000	.00000	21.325	.000	Significant
22	2.697	0.527	5.0000	.00000	34.579	.000	Significant
23	2.235	0.893	5.0000	.00000	27.854	.000	Significant
24	2.574	0.257	5.0000	.00000	22.327	.000	Significant

Appendix (4) shows the discriminatory power of each statement in the performance efficiency scale.

Item No.	Lower Group Mean	Lower Group SD	Upper Group Mean	Upper Group SD	Calculated (t) Value	Significance Value	Result
1	3.1579	.71759	5.0000	.00000	15.824	.000	Significant
2	2.8421	.75431	5.0000	.00000	17.635	.000	Significant
3	3.3684	.85174	5.0000	.00000	11.808	.000	Significant
4	2.3158	.90360	5.0000	.00000	18.312	.000	Significant
5	2.7619	.69175	5.0000	.00000	20.968	.000	Significant
6	2.3810	.76357	5.0000	.00000	22.229	.000	Significant
7	2.4048	.70051	5.0000	.00000	24.010	.000	Significant
8	2.652	0.663	5.0000	.00000	21.837	.000	Significant
9	3.020	0.691	5.0000	.00000	20.367	.000	Significant
10	2.716	0.612	5.0000	.00000	27.736	.000	Significant
11	2.652	0.663	5.0000	.00000	21.837	.000	Significant
12	2.777	0.841	5.0000	.00000	17.436	.000	Significant
13	2.879	0.516	5.0000	.00000	17.827	.000	Significant
14	2.775	0.782	5.0000	.00000	30.467	.000	Significant
15	2.367	0.614	5.0000	.00000	23.552	.000	Significant
16	2.9048	.90553	5.0000	.00000	14.995	.000	Significant
17	2.7857	.92488	5.0000	.00000	15.516	.000	Significant
18	2.465	0.615	5.0000	.00000	28.765	.000	Significant
19	2.714	0.677	5.0000	.00000	23.768	.000	Significant
20	3.020	0.777	5.0000	.00000	17.986	.000	Significant



21	2.513	0.610	5.0000	.26066	22.246	.000	Significant
22	2.510	0.598	5.0000	.00000	24.767	.000	Significant

Appendix (5) shows the correlation coefficient between the statement score and the total score of the Modern Management Scale

Item No.	Simple Correlation Coefficient	Significance Value	Result
1	0.523	0.000	Significant
2	0.521	0.000	Significant
3	0.579	0.000	Significant
4	0.853	0.000	Significant
5	0.569	0.000	Significant
6	0.785	0.000	Significant
7	0.568	0.000	Significant
8	0.975	0.000	Significant
9	0.567	0.000	Significant
10	0.726	0.000	Significant
11	0.932	0.000	Significant
12	0.587	0.000	Significant
13	0.678	0.000	Significant
14	0.871	0.000	Significant
15	0.578	0.000	Significant
16	0.965	0.000	Significant
17	0.538	0.000	Significant
18	0.835	0.000	Significant
19	0.842	0.000	Significant
20	0.736	0.000	Significant
21	0.598	0.000	Significant
22	0.875	0.000	Significant
23	0.569	0.000	Significant
24	0.624	0.000	Significant

Appendix (6) shows the correlation coefficient between the statement score and the total score of the performance efficiency scale.

Item No.	Simple Correlation Coefficient	Significance Value	Result
1	0.785	0.000	Significant
2	0.512	0.000	Significant
3	0.852	0.000	Significant
4	0.741	0.000	Significant
5	0.963	0.000	Significant
6	0.924	0.000	Significant
7	0.572	0.000	Significant
8	0.598	0.000	Significant
9	0.615	0.000	Significant
10	0.420	0.000	Significant
11	0.868	0.000	Significant
12	0.978	0.000	Significant
13	0.865	0.000	Significant
14	0.754	0.000	Significant



15	0.598	0.000	Significant
16	0.457	0.000	Significant
17	0.578	0.000	Significant
18	0.856	0.000	Significant
19	0.615	0.000	Significant
20	0.420	0.000	Significant
21	0.897	0.000	Significant
22	0.739	0.000	Significant