



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

International Journal of Current Research
Vol. 12, Issue, 04, pp.11243-11247, April, 2020

DOI: <https://doi.org/10.24941/ijcr.35596.04.2020>

INTERNATIONAL JOURNAL
OF CURRENT RESEARCH

RESEARCH ARTICLE

ESTABLISHING A SYSTEM FOR MEASURING THE ORGANIZATIONAL PERFORMANCE OF A NODE OF THE ASSOCIATIVE NETWORK OF AFRICAN ATHLETICS

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ARTICLE INFO

Article History:

Received 28th January, 2020

Received in revised form

14th February, 2020

Accepted 28th March, 2020

Published online 30th April, 2020

Key Words:

Organizational Performance,
Performance Indicator, Evaluation
System, ECOGRAI, African Athletics.

ABSTRACT

This article conceives a system of evaluation of the organizational performance of a node of the associative network of the African athletics. Performance indicators aligned with the major strategic objective have been developed and integrated into a performance construct of a network entity. The developed measurement system assesses the organizational performance of the outputs against baseline activity forecasts perceived by the network's top. It is likely to constitute the frame of a physical computing medium that can generate objective values different from the sports results in force for evaluation purposes of this network.

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Citation: AKOUETE Coffi David, SAÏDOU Victor, LANHA Magloire, HOUNSOU Sèmako Julien, ABALLOT Emile-Jules, DANSOU H. Pierre and HASCHAR-NOE Nadine. 2020. "Establishing a system for measuring the organizational performance of a node of the associative network of african athletics", *International Journal of Current Research*, 12, (4), 11243-11247.

INTRODUCTION

The performance of an organization is an object of study and a central issue of its management. Nowadays, it is apprehended in a global way and refers to actions, results, success, achievement, yield or even victory (Bourguignon 1995, Lebas 1995, Bessire 1999). Several authors agree that it is a social construct that is contingent, multidimensional, multi-criteria and intrinsically related to the context, strategy and stakeholders of an organization (Winand et al., 2010; 2000, Bayle 2000, Madella 1998, Bitton 1990). While organizational performance is inseparable from the purpose, purpose, missions and goals of an organization (Le Moigne, 1974, Yassine, 2003), it is above all its goal that is the target to be reached, since it concerns the outcome and expresses an intention to move from one current state of performance to another (Ravalomanantsoa, 2009, Marcotte, 1995, Kromm, 1997).

Very often, the decision to move from one performance state to another is triggered in the decision-making centers that is to say within the entities of an organization or an inter-organizational network. Once the decision is made, the levers to favor or accelerate the evolution of the organization toward the goal are what are called decision or action variables (El Mahmedi et al., 2005). These are elements that can modify the state of a piloted system and serve as a measure to assess the accuracy of a decision (Ducq, 1999). Thus, the variables of decision and action, declining of the strategy of the organization, are full of indicators of measurement of the performance. Linking these indicators with the objectives and decision variables is considered effective in designing an organizational performance measurement system (Bitton 1990, Ducq 1999, Doumeings 1998, Yassine 2013). In sports, organizational, structuring and productivity constraints do not spare sports organizations. This is why the International Olympic Committee and the International Sports Federations prescribe, since the 2000s, the development of a culture of organizational performance as a new deal managerial modernization and sustainable development of the sport (Bayle, 2000).

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This requirement has been accompanied by an increased need for simple, objective and well-equipped procedures to help sports leaders measure the performance of the institutions they manage. Certainly measures of the performance of sports organizations exist but remain rare and very little developed (Madella, 1998, Bayle, 2005). While sports results are often used to answer this need for evaluation, they pose the practical problem of finding ways to generate performance values of sports organizations different from competition statistics alone. In the associative network of African athletics, leaders recognize the obsolescence and ineffectiveness of traditional tools for measuring the performance of the entities of this network and sports results (Faty, 2011). Under these conditions, it becomes problematic to grant the activities of the different entities and to identify in real time, if their operation follows a direction conducive to the achievement of the objective of the network. Since 1980, efforts have been made to frame the activities of athletics institutions in Africa. Reforms undertaken at the Congress held in Helsinki in 1983 listed the activity of the network in two areas, including administration and competitions (CAA, 2001). In 2013, the Council of the African Confederation of Athletics extended this scoping process to regional entities (Circular Letter No.010/2013/MF/SG of 10th October 2013), circumscribing their business administration, competitions, funding research and other activities. This delimitation of the scope of activities of the regions illustrates the direction taken by the head of the network towards a certain standardization of their operation, and thus from all the different nodes of the network which are the federations, the high training centers (HPTC) and Regional Development Centers (RDCs). Following this determination to simplify and make more objective measure of organizational performance of the institutions of the African athletics, this study examines the management structure of the network's strategy, policy centers, decision variables and indicators can help to generate values other than sports results, to measure the performance of an entity of this network. The objective of this study is to design a system for measuring the performance of a node of the associative network of African athletics which we will organize the presentation into three parts, the methodology (1), results (2) and discussion (3) followed by a conclusion.

METHODOLOGY

Participants: The surveyed participants (4) are African athletics experts chosen on the basis of their seniority and membership in athletics governing bodies in Africa. Two are directors: one has been in business for more than 20 years and has been in service at the network's head office for 8 years; the other, is a senior cadre of training and training centers involved in African athletics for at least 25 years and who has been a director for 15 years. A third is a senior executive active in the network for 40 years. He coordinates the activities of the technical direction of a federation for 15 years. Finally, the fourth is a chartered accountant engaged in the management of African athletics for over 10 years. These experts, directly involved in the decision-making chain at the top of the network, freely agreed to take part in our study.

Instruments and procedures: A RGIA grid (Result Graph and Interrelated Activities) and two questionnaires forms were used. The grid RGIA is a chart crossing, in line, the dimensions of a construct of the performance of a network node and in column, horizons, periods and objectives strategic (long-term), tactical (medium term) and operational (short

term). It was used to model the steering structure of the network strategy. One of the questionnaire sheets was administered to identify the decision centers related to each function of a network node, the objectives of these decision centers and the decision variables used by the decision makers to achieve the set objectives. A second sheet helped to develop the indicators and to establish their links with the objectives and the decision variables. An exploratory study conducted from 1st to 7th April 2014 at the head office of the network, identified the major strategy of the network. Semi-structured interviews were conducted from 9th to 14th April 2014 to identify reference activities as ad hoc evaluation criteria. A qualitative evaluation, using a 5-point Likert scale, favored factorial analyzes in principal components that made it possible to structure the adhoc assessment criteria identified around the dimensions and the axes that summarize them. Discussions, lasting from 45 minutes to 1 hour, were conducted from 4th to 9th August 2014 with the experts to select a number considered reasonable (3) indicators by performance axis. Finally, the measurement system was developed by assembling the dimensions, decision centers, objectives, decision variables and performance indicators developed.

RESULTS

Steering Structure of the Network Strategy on the African Continent: On the axis of the functions are written the components of a construct of the performance of a node of the network comprising three dimensions: sporting, promotional and organizational. On the management axis, the objectives related to these functions are broken down, according to their time horizon and period, into the strategic (long-term), tactical (medium-term) and operational (short-term) plans.

Consistency of objectives with the strategy of the network: Graph 1 illustrates the coherence of the link between the network strategy, the global objectives and the objectives assigned to the decision centers of a node of the network.

System for measuring the organizational performance of a network node: This table presents the components of the measurement system developed by assembling the essential functions, the decision centers, the objectives of the decision centers, the decision variables within the reach of decision-making center managers and the performance indicators.

DISCUSSION

Validity of indicators developed: The quality of the participants, essentially made up of the leaders of the body at the top of the network, suggests that their reduced involvement in this study is far from detrimental to the accuracy and relevance of the decisions they have taken to development and selection of performance measurement indicators. In this respect, the expertise of these leaders is a source of validation in context of the indicators developed. In the light of the recognized double function of indicators, namely measurement and assistance to piloting, the measurement system has been developed taking into account the dimensions of the performance of an entity on the one hand and the strategy major network on the African continent on the other hand. This is what gives the selected indicators their validity and which, therefore, gives the possibility of an extrapolation of their scope to all the nodes of the network.

Table 1. Essential Functions and Objectives of a Network Node

Functions Objective	External Information	Sports Management	Promotion Management	Organization management	Internal Information
Horizon: 4 years Period: 1 year Strategic	Activities allowing the pursuit of the global purpose of the network	Develop strategic plans for short, medium and long term development	Organize quality competitions	Have a functional headquarters	Have a functional headquarters
Horizon: 1 year Period: 6 months Tactical	Harmonize and synchronize program execution	Train technical-administrative staff Organize the detection and training of athletes	Plan the media coverage of competitions Improve the quality of competitions	Define a functional organization chart Coordinate the activities of the headquarters services	Adjust resources to constraints
Horizon: 6 months Period: 1month Operational	Monitor and evaluate the activities carried out	Organize technical and administrative seminars and seminars Organize training camps and camps	Communicating with members Facilitate the participation of the best athletes and officials.	Recruit qualified staff Control actual achievements	Deploy resources in the field

Table 2: Basic Architecture of the Measurement System

Functions	Decision Center	Objective	Decision variables	Performance indicators
Organisation	General Secretariat	Ensure the institutional functioning	Headquarters activities Assizes of the governing bodies Equipment of the services	Number of active services Number of seats of the governing bodies Number of services equipped Rate of self-financed activities
Sport	Technical direction	Develop strategic plans for development	Internships and training camps Participation in competitions Internships and seminars	Number of internships and training camps Number of internships, seminars Rate of participation in competitions Annual plan execution rate
		Organize competitions	Respect for cycles Respect of the specifications Quality of the officials	Number of competitions planned per cycle Frequency of compliance with the specifications Competition performance rate Participation rate of the technical officials
		Secure the coaching	Coaching Support Staff Compensation Officials Support	Number of coaches supported Number of paid administrators Number of technical officials supported Overall rate of staffing
Promotion	Marketing Direction	Ensuring the quality / attractiveness of competitions	Presence of the best athletes Representativeness of members Media coverage	Number of Best Athlete Cases Number of Member Engagement Cases Number of Media Engagement Cases Overall Media Coverage Rate

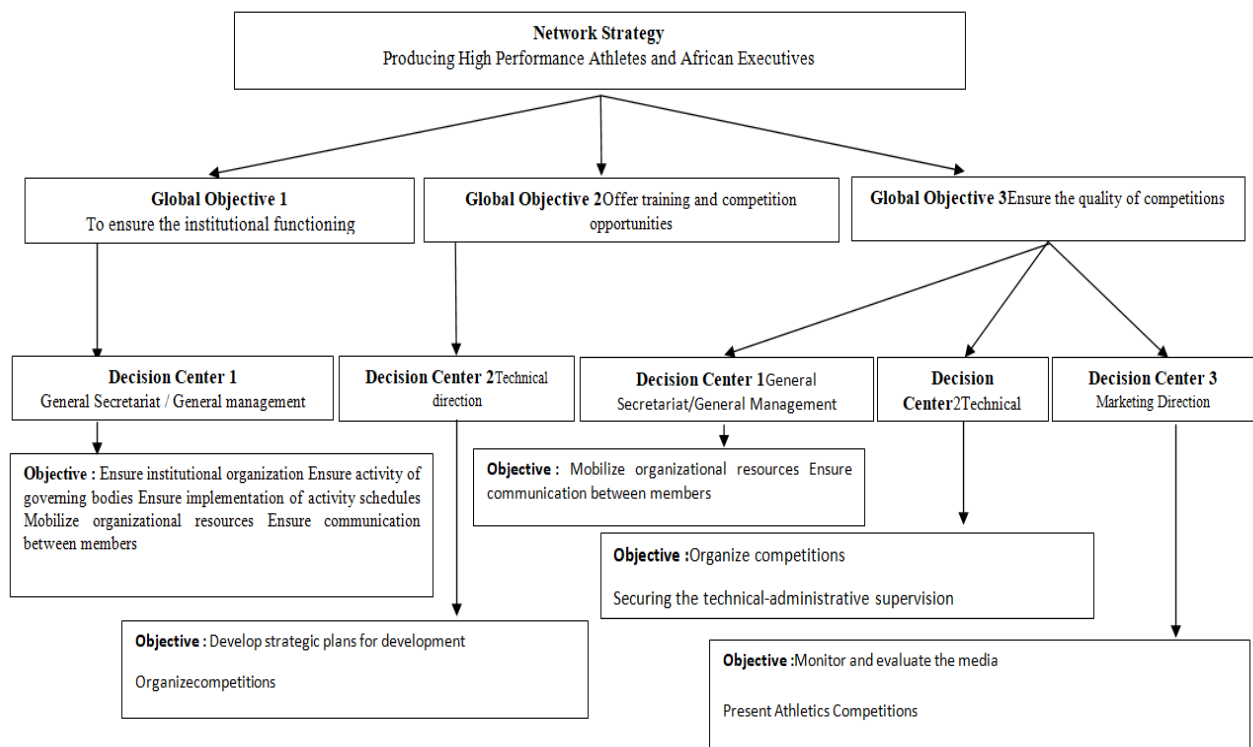


Figure 1. Consistency of decision center objectives with strategy

Like other authors, we used the opinion of leaders to translate their expectations into performance measurement indicators for sports organizations (Bayle 2005, Madella 1998). Admittedly, the number of indicators (20) included in the measurement system developed may seem somewhat weak, compared to the indicators used (65 and 110) respectively in France by Bayle (2005) and in Italy by Madella (1998) to evaluate the performance of some national sports federations, but this in no way affects the relevance of the indicators developed.

Validity of built measurement system developed: The development of the system of measuring the organizational performance of a node of the network required (based on) the notified assessments of experts and leaders located at the top of the network. The consensus of these actors with regard to the dimensions of this performance was restored after the factorial analyzes carried out to build the framework of the measurement system. As a result, it can directly measure the construct of the performance of an entity as it is perceived, represented and understood by the leaders. Several authors have already used factorial analyzes to model and analyze the validity of the performance construct of interorganizational structures (Frédouet and Le Mestre, 2005). While the organizational, sporting and promotional dimensions highlighted have been identified from the six dimensions of the performance of a sports organization (Bayle, 2000), in developing countries, studies show that the functioning of sports organizations tends to be reduced to these three categories of organizational, sports and promotional activities (Mayam, 2006). Thus, we have described the organizational dimension as being related to the quality of the services of an organization (Chelladurai *et al.*, 1987, Madella, 1998); the sporting dimension as part of the transversal statutory provisions and therefore of the sovereign function of sports organizations (Winand *et al.*, 2010) and, finally, the promotional dimension as linked to the media impact of the organization (Bayle, 2000). These different relationships allowed us to see the validity potential of the constructed measurement system.

Conclusion

The objective of this work was to design a system for measuring the organizational performance of an entity of the associative network of African athletics. Attention was focused on the perception, representation, and understanding of what organizational performance would be for the top leaders of the network who were involved in the work. In view of the results obtained, it is possible to remember that the measurement system that the research has achieved has a strong potential for construct validity to directly measure the performance of a network node. This measurement system is therefore likely to constitute the internal armature of a physical computing medium that can generate objective values different from the only sports results still used to evaluate the organizational performance of an associative sports network.

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