A QUANTITATIVE MODEL APPROACH FOR MEASURING STRATEGIC PERFORMANCE

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Abstract. Football clubs' strategic performance should be evaluated as an important topic in gaining a competitive edge compared to focusing on the financial aspects of a club's operations, as it has traditionally been done. Sports managers are increasingly turning to strategic technologies to obtain accurate and reliable information on their teams' performance. The article will use an empirical quantitative research strategy using economic and non-financial data. The club's strategic success can be evaluated using non-financial data and information, as opposed to the traditional review of financial data and information. Financial perspective metrics increased, but other perspectives—like growth, education, internal operations, and customer service for children and juniors—showed dismal results. A effective strategic performance evaluation instrument has been created to incorporate the effects of the four perspectives in both business and sporting sectors. Our research shows that because the Romanian sports industry is so large and includes the sale of media ownership and sponsorship deals, the technique of evaluating its performance has become more complex and requires more attention. Professional sports teams are constantly competing with one another to attract and keep customers. Everyone has an obligation to deliver services to the end user and manage the data flows that accompany those services. As a result, we discover that the sports industry is a reduced financial equation that includes stadiums as well as practice grounds, which represent the capital invested and the financial outcomes achieved, such as matches sold to customers and broadcast via television and radio.

Keywords: manager; strategic performance; club, evaluation.

Introduction

Instead of concentrating on the financial aspects of a football club's business, as has historically been the case, the strategic performance of football clubs should be evaluated as a crucial topic in enhancing competitive advantage (Rohde & Breuer, 2017).

Today's sports managers are looking at strategic technology to assist them in obtaining precise and trustworthy data regarding the true performance of their teams.

The football teams benefit financially as a result of their strengthened relationship and increased consumer satisfaction (Ramos Acevedo et al., 2020).

An empirical quantitative research methodology based on non-financial and financial data was used in this instance. To move away from the traditional evaluation focused only on financial data and information, the club's strategic success might be assessed using non-financial data and information.

While financial viewpoint metrics went up, other metrics like education, growth, internal operations, and customer service (young/child) revealed unsatisfactory results (Slack et al., 2020, p. 536).

This demonstrates how sports managers have a limited perspective that only considers the financial aspect rather than enhancing the other viewpoints, which is one of the most crucial elements in being successful and competitive.

Furthermore, the literature on strategic performance evaluation (Zülch et al., 2020) lends credence to the notion that four core perspectives—financial, customer, internal operations, and education/development—have a significant impact on strategic performance evaluation.

Vitthalrao Pargaonkar (2020, p. 126) contends that the financial perspective, as well as the customer, internal operations, and education/growth perspectives, all have a significant impact on strategic performance review.

The implications of the four perspectives in the business and sports domains have been incorporated into a potent strategic performance assessment tool.

It takes into account non-financial goals that the company should aim to achieve in addition to attaining financial goals. The accomplishment of the organization's non-financial objectives will help it reach its financial objectives. The institution's chosen strategy necessitates effective financial asset and liability management.

Effective management of the unit under investigation's financial, non-financial, and liability assets is also required (Lussier & Kimball, 2019, p. 528).

In addition to financial assets, companies can build relationships with current customers to keep and satisfy them, seek out new customers and enter new target markets to gain customer loyalty and satisfaction, develop and expand and develop new products or services, etc. by assessing levels of financial and non-financial performance and using balanced scorecard measures (Kraemer & Ratamess, 2004).

According to Smith (2003), the method of assessing the success of the Romanian sports industry is getting more and more complicated because it's a large-scale sector that sells food, sports memorabilia, broadcast rights, and sponsorship deals.

Based on player performance and competition level, resources and qualifications are the most valuable products in football.

The interplay between these components result in added value. Thus, a new instrument that considers both financial and non-financial factors is required to evaluate football teams' performance from a strategic perspective (Lugtu, 2016). This method—known in certain circles as the "Balanced Scorecard"—is used in business to assess an industry's performance.

The Balanced Scorecard has become increasingly popular among business units in recent years as a result of a number of internal and external factors, including the need to translate organizational vision into specific measurable objectives, priorities for operations, resource allocation, and strategy delivery, as well as changes in the market structure, growing competition, and the need to keep up with evolving customer and customer demands (Ramos Acevedo et al., 2020).

The Balanced Scorecard is a market that provides football teams and clubs with a range of features and characteristics that enable sports managers to strike a balance between short-term and long-term objectives (Ngure, 2022).

The former includes operational objectives like selling tickets to games, advertising, renting out stadiums, and arranging for a sufficient number of working hours, while the latter includes strategic goals like winning championships, reaching financial targets, and investing in other up-and-coming or well-known sports teams (Klein, 2016, p. 278).

In this case, internal KPIs for operations, innovation, learning, and development must be matched with measurements and goals for shareholders and customers (revenue and ROI, product price, and marketing reports).

Professional sports leagues are constantly vying with one another to attract and keep fans. Everyone is responsible for managing the information flows that go along with managing services for the end user (Hoye et al., 2015, p. 404).

As a result, we discover that the sports industry consists of a streamlined financial equation that includes training facilities and stadiums, signifying the capital contributed from which financial outcomes, like tickets sold to fans and broadcast on radio and television, are derived.

Financial performance metrics, such as liquidity, which are linked to the indicator and are impacted by market and environmental changes, convey football teams' ability to repay long-term debt.

The aforementioned indications pertain to specific goals and metrics that are intended to be attained about the club's dimensions, revenue generated from operations, capital utilized return, net profit to sales ratio, and club membership growth. Due to their inadequacy in predicting future performance, these metrics are tied to end performance and cannot be used to forecast future performance.

Sales are positively impacted, which raises profit margins, in the absence of other customerrelated metrics that drive the financial target, such as offering items that satisfy customers' requirements and wants in the marketplace and aiming for customer satisfaction.

Customer analytics are available online, and they allow a sports manager to determine the units' market share and number of clients within their desired market groups. These represent the most significant markers of the plan's execution safety as well as efficacy and caliber of results.

Among the measures used are market share, number of agent accounts in target markets, customer satisfaction, retention, and new client acquisition. When the customer and financial perspectives are combined, football club management is presented with a clear picture of customer satisfaction and can pursue strategies related to quality (relatively high price in the market) or cost reduction (ease of purchase and use). It is permitted to offer new, creative services or products with distinctive qualities that draw clients in and make them forget about the cost of the goods or services.

When combined, these traits imply that the company being evaluated is well-positioned to provide value to clients in a way that sets it apart from competitors.

Either a cost-cutting leadership style or a cost-cutting strategy is implemented by the unit, which offers a commodity at a low cost while preserving product quality. Alternatively, charge more than the competition for a unique product of greater quality (Quality Leadership Strategy).

An innovative new product with distinctive features, for instance, might draw in buyers and boost their happiness to the extent that they are ready to overlook the product's price. There are certain variations between businesses and football teams in terms of what goes into internal operations.

Professional athletes, training camps, a team of instructors and coaches, and top-notch sporting goods all serve to promote the sport.

Sports clubs' internal process measurements are centered on the organization's value chain and their goals of boosting production, quality, efficiency, and overall quality control.

For football teams to create value that sets them apart from the competition and draws in customers in cutthroat markets, it is necessary to identify the internal operations that are most

important to fund. This will ultimately benefit shareholders who stand to gain the most from their investments.

The education and development perspective, which is the last viewpoint on the balanced scorecard, is covered in the section that follows.

The foundations that the sports club's management must embrace in order to produce the growth and improvements required to meet its long-term objectives include the development and improvement of the administrative staff, technicians, and players' skills and expertise through scientific and practical training. This is particularly true for the athletes, who provide the majority of the team's competitive advantage.

It is feasible to strategically evaluate the football team's performance from the viewpoints of all interested parties, including sponsors, players, coaches, managers, media, and fans (Slack et al., 2020). This illustrates the potential for new investment opportunities by having a group of sports institution directors apply for the Balanced Scorecard.

Reviewing previous empirical and qualitative research, drawing conclusions from a summary of findings, and identifying key and emerging concerns that highlight research gaps are the objectives of this article.

Future approaches indicate that the management has a new challenge in transforming its human resources into participants who can make money in the business sector by abiding by the guidelines established by the management. Therefore, this feature indicates that in order for employees' performance to be assessed using quantifiable standards, their contributions to the organization's success must be measurable.

In order to assist BSC organizations like 'Viitorul Pandurii' Târgu-Jiu Sports Club - Children's Center and Juniors (https://www.facebook.com/JunioriPandurii/?locale=ro_RO) in resolving their management issues, the goal of this study is to statistically analyze the research conducted by BSC and determine how strategic changes are reflected in the Balanced Scorecard.

Methodology

Methods

According to our research, assessing the performance of the Romanian sports industry is becoming more difficult and demands more focus because it is a large-scale sector that involves the sale of media rights as well as sponsorship agreements, along with the sale of food and sports memorabilia.

As evidenced by how well players perform and the degree of competition, resources and credentials are the most crucial products in football. The interplay between these components results in added value.

Therefore, a new instrument that considers both financial and non-financial factors is required to evaluate football teams' performance from a strategic perspective.

In some quarters, this method—known as the "Balanced Scorecard"—is used in business to analyze an industry's performance.

Due to a number of internal (converting the vision into specific measurable objectives, goals for operations, resource allocation, and strategy delivery) and external (converting the vision into particular measurable objectives, priorities for resource allocation, and strategy delivery) factors, the balanced scorecard has become widely used among business units in recent years.

These factors include increasing competition, growth in the number of customers and their needs, and changes in the market structure.

Football clubs' ability to repay their long-term debt is demonstrated by financial performance metrics that are linked to metrics like liquidity and are impacted by market and environmental shifts.

The aforementioned indications denote particular goals and metrics intended to accomplish particular goals concerning the club's size, operating income, return on capital invested, net profit to sales ratio, and cash flow growth. Because of their insufficiency in forecasting future performance, these measurements are only relevant to the ultimate performance outcomes.

The methods used in this research are:

- > theoretical documentation.
- > evaluation and measurement,
- > observation.
- > processing and interpretation,
- > tabular method.

Results

For 'Viitorul Pandurii' Târgu-Jiu Sports Club - Children and Juniors Center (https://www.facebook.com/JunioriPandurii/?locale=ro_RO) to continue to have a sustained competitive advantage, all its employees, including the manager and the teams, must have the necessary training and growth.

The current research community consisted of the administrative and financial staff of 'Viitorul Pandurii' Sports Club in Târgu-Jiu - Center for Children and Juniors, one of the sports clubs of 'Viitorul Pandurii' Association from Targu Jiu, as well as the financial and non-financial statements of the children's and junior teams.

Evaluating strategy performance by using metrics associated with board balance views on internal, external, financial, customer, and growth operations (Tables 1-4).

The observations were conducted throughout the years 2022–2023.

Table 1. The financial forecast of 'Viitorul Pandurii' Târgu-Jiu Sport Club-Children & Junior Center

Measuring	Result (%)
Return on investment	-65.27%
Return on equity	43.05%
Increased sales revenue	21.62%
Return on sales	-449.66%
Quick rate of liquidity	17.40%

One objective dominates all the factors that influence a football team's success and is fundamental to all of them (Table 1): to win games, place high in the table, and, when suitable, compete internationally in order to attain the greatest sporting success possible. A number of fixed elements, such as league structure, governing association regulations, transfer procedures, and player pools, as well as variable factors, such as players, coaching, staff, management, environment, and facilities, all have an impact on goals.

Among the main themes mentioned above, a team of players and coaches who work well together and have the highest potential is also a key factor. Teams are more likely to bounce back from such failures if they have a strong team culture and plan.

Table 2. The viewpoint of the client regarding the Children and Junior Center at 'Viitorul Pandurii' Târgu-Jiu Sport Club

Measuring	Result (%)
Market share	25.21%
Increase in sales volume	16.29%

Sporting success can lead to significant financial rewards and long-term economic success (Table 2). For instance, hiring a lot of kids and juniors and hiring stronger managers after winning international tournaments are two examples. As a result, the analysis might incorporate pertinent individual elements pertaining to head coach quality and team diversity.

Table 3. Viewpoint of 'Viitorul Pandurii' Târgu-Jiu Sport Club's Children & Junior Center's internal operations

Measuring	Result (%)
Available resources	23.20%
Player productivity	16.92%
The percentage of commitment to training players	68.91%

Because of its low statistical importance, development (Table 3) is another aspect that is not immediately considered, even though it is crucial for future generations, representing the transition to the professional ranks.

Table 4. 'Viitorul Pandurii' Târgu-Jiu Sports Club's Children & Junior Center's educational and developmental outlook

Measuring	Result (%)
Player rotation	35%
Increase in training and qualification expenses	74.48%
Percentage of top players	44%
Player Rewards	44.44%
Increasing spending on research and development	28.20%

The primary argument and challenge for the club selected for analysis is how to best finance and oversee the professional team (Table 4) as well as backing departments while growing and satisfying the needs of the management, shareholders, and stakeholders in order to ensure long-term financial viability.

The results show that the balanced scorecard can be used to evaluate the strategic performance of the local football club under analysis in order to attain suitable outcomes for all of the club's activities and sporting events and to generate meaningful competition, using the data shown in Tables 1–4.

Establishing a youth academy and related programs is challenging and calls for expertise in a variety of areas, from professionalism and character development to football intelligence and teamwork. However, it is essential for the program's success.

This indicates that the study's theoretical model is supported by the quantitative data; additional proof for this claim may be found in Table 5's findings.

Table 5. Results of Using the Balanced Scorecard to Assess Strategic Performance

Insights/Measurement	Results	Evaluation
Financial:		
Return on investment	-65.27 %	Low
Return on equity	43,05 %	Picked up
Increase in sales revenue	21,62 %	Picked up
Return on sales	-449,66 %	Low
Liquidity ratio	17,40 %	Low
Client:		
Market share	25,21 %	Low
Increase in sales volume	16,29 %	Picked up
Internal processes:		
Available resources	23,20 %	Picked up
Player productivity	16.92 %	Low
Percentage of commitment to training	68,91 %	environment
Learning and Development:		
Player rotation	35,00%	Picked up
Increase in training and qualification expenses	74,48 %	Picked up
Percentage of top players	44,00 %	environment
Increasing player rewards	44,44 %	Picked up
Increasing spending on research and development	28,20 %	environment

Overall, it can be said that of all current perspectives, the financial perspective and the customer perspective have the greatest impact on internal attitudes, according to the results of the initial study (Table 5) operations, training, and growth.

This study attempted to ascertain the football club's strategic performance in relation to its overall performance by using the Balanced Scorecard approach. Sports managers used to assess their clubs' performance based on financial metrics.

Discussion and Conclusions

Because the sports club generates revenue for lodging facilities, dining establishments, and the media, it has a beneficial impact on the rise in community interest.

First, public clubs have other needs than private clubs in terms of growth and profitability. Fair competition between clubs is referred to as "competitive balance" in football.

In certain leagues, this creates a competitive imbalance because teams with dedicated investors have more money and can purchase expensive players to improve game results.

There is a compelling argument that more resources translate into better outcomes, which highlights the seasonal financial pressure on 'Viitorul Pandurii' Târgu-Jiu Sports Club -

Children and Junior Center to field the top team to compete against teams that have significantly better or far fewer resources.

Therefore, additional internal KPIs in the financial dimension are required for the branding to have a monetary value and be linked to a licensing sale of items within 'Viitorul Pandurii' Târgu-Jiu Sport Club – Children and Juniors Center.

On the other hand, some branding initiatives do not directly result in monetization because branding can also be a gauge of intangible assets and brand worth.

Due to this, the evaluation method had to change from being focused solely on financial data to being based on a range of financial and non-financial factors that contribute significantly to the club's goal-achieving information.

Sports managers need data and information, and financial measurement is no longer sufficient to deliver them (Adams et al., 2017).

Moreover, this measurement can result in inaccurate conclusions being drawn throughout the evaluation process.

Long-term needs of sports management cannot be met by financial evaluation, even though it may be acceptable in the short term.

According to Coskun et al., (2021), the Balanced Scorecard function comprised strategy formulation and creation in addition to measurement, allowing managers to choose the best methods for accomplishing measurement objectives.

The management had greater freedom in adapting and reformulating the plan in response to changes brought about by advancements since this technology could react to environmental circumstances (Goslin et al., 2020, p. 254).

The overall strategic execution of the club, including the sub-perspectives (financial and customer-facing operations) and the education and growth initiatives, in a manner that presents all relevant and interconnected information regarding all football club activities. It is significant to remember that evaluating a sports team's strategic performance is very different from evaluating an industrial or commercial company. This is because football teams in Romania have access to a multitude of resources and finance, in addition to the advantages of that activity.

It appears that the club's strategic performance can be evaluated by bolstering non-financial metrics pertaining to the voice of supporters and satisfying their demands; retaining team stars and enhancing their effectiveness while luring in good and valuable stars; reorganizing plans to achieve national success; and choosing valuable and qualified coaches.

Who is aware of the players' level of performance and knows how to maintain it to appease supporters and bring in money for the team?

According to the findings of this study, 'Viitorul Pandurii' Târgu-Jiu Sports Club - Children and Junior Center's strategic success could be clearly seen from four distinct perspectives thanks to the implementation of the balanced scorecard (financial, customer, internal operations, education and growth).

Table 5 illustrates how this research result aligns with the conclusions of a prior study that used a balanced scorecard in an industrial setting while accounting for the particularities of the sports business.

Additionally, it is evident that indicators of the financial health of the sports sector have improved:

- > Return on Investment,
- > Return on Equity,
- ➤ Growth in Sales Revenue,
- Quick Liquidity Ratio.

Decisions are made based on the club's financial perspective. However, because of the unique position that the sports industry holds in terms of distinctiveness, they are intimately linked to the satisfaction of fans (customers) with the club's sporting performance.

Internal operations activities also corroborate a decline in participant productivity and average level of commitment to action, as well as a decline in some indicators of learning and development outlook (player turnover, increase in training and skill spending, and percentage of top players), which are linked to value scholarship.

Sports managers can gain strategic insight into their teams' present competitive status by using a balanced scorecard, which enables them to make decisions based on both financial and non-financial data.

References

- Adams, A., Morrow, S., & Thomson, I. (2017). Changing boundaries and evolving organizational forms in football: Novelty and variety among Scottish clubs. *Journal of Sport Management*, 31(2), 161-175. https://doi.org/10.1123/jsm.2016-0286
- Clubul Sportiv Viitorul Pandurii Târgu-Jiu Children's Center and Juniors. https://www.facebook.com/JunioriPandurii/?locale=ro_RO
- Coskun, A., Dinc, M.S., & Tetik, S. (2021). Strategic performance management for soccer clubs: A quantitative model proposal. *Journal of Human Sport and Exercise*, 16(4), 836-852. https://doi.org/10.14198/jhse.2021.164.08
- Goslin, A., Kluka, D. A., López de D'Amico, R., & Danylchuk, K. (2020). *Managing sport across borders: ICSSPE perspectives*. Routledge.
- Hoye, R., Smith, A. C. T., Nicholson, M., Stewart, B., & Westerbeek, H. (2015). *Sport Management. Principles and applications*. Routledge.
- Klein, S. (2016). Defining sport (Studies in philosophy of sport). Lexington Books.
- Kraemer, W. J. & Ratamess, N.A. (2004). Fundamentals of resistance training: progression and exercise prescription. *Medicine and Science in Sports and Exercise*, *36*(4), 674-688. https://doi.org/10.1249/01.mss.0000121945.36635.61
- Lugtu, R. (2016). *A short history of management theory and practice*. http://www.slideshare.net/lugtu/the-evolution-of-management-theory-59979593
- Lussier, R. N., & Kimball, D. C. (2019). *Applied sport management skills*, 3rd edn. Human Kinetics.
- Ngure, S. W. (2022). The balance score card as a strategic plan monitoring and evaluation tool: A practical approach. *International journal of business ecosystem & strategy* (2687-2293), 4(2), 37-49. https://doi.Org/10.36096/ijbes.V4i2.315
- Ramos Acevedo, I. N., Madrigal Castro, A. D., Gonzalez Quesada, O., Figueredo Toledano, R. W., Rodriguez–Gallo Martinez, Y., Barroceta de Rojas, C. R., & Gomez Tejeda, Y. (2020). Balanced scorecard as a tool for sport managers. An approach from Cuban baseball.

- SPORT TK: Revista Euroamericana de Ciencias del Deporte, 9(2), 7-16. https://doi.org/10.6018/sportk.431061
- Rohde, M. & Breuer, C. (2017). The market for football club investors: a review of theory and empirical evidence from professional European football. *European Sport Management Quarterly*, 17(3), 265-289. https://doi.org/10.1080/16184742.2017.1279203
- Slack, T., Byers, T., & Thurston, A. (2020). *Understanding sport organizations: applications for sport managers*, 3rd edn. Human Kinetics.
- Smith, D.J. (2003). A framework for understanding the training process leading to elite performance. *Sports Medicine 33*, 1103-1106. https://doi.org/10.2165/00007256-200333150-00003
- Vitthalrao Pargaonkar, G. (2020). Sports management: physical education. Friends Publications.
- Zülch, H., Palme, M., & Jost, S. P. (2020). Management quality of professional football clubs: the Football Management (FoMa) Q-Score 2018. *Sport, Business and Management: An International Journal*, 10(5), 567-598 https://doi.org/10.1108/sbm-10-2019-0092