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## Business incubators as drivers of innovation: Implications for investment and privatization initiatives within Saudi sports clubs

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### Abstract

This study explores the role of business incubators as pivotal drivers of innovation within the context of Saudi sports clubs, particularly in light of recent investment and privatization initiatives. As the landscape of sports management transforms, Saudi Arabia has begun embracing a more privatized approach to sports club operations, encouraging private entrepreneurs to invest in this burgeoning sector. This paper examines the challenges faced by small- and medium-sized sports clubs, including high failure rates, within a competitive and rapidly evolving market. It argues that establishing business incubators can mitigate risks and offer a supportive environment for new and existing sports clubs to innovate and thrive. By fostering a knowledge-based, innovation-oriented culture, the research emphasizes the necessity of strategic investment in business incubators to ensure the sustainability and growth of sports organizations in a dynamic economic landscape. Furthermore, the implications for stakeholders within the sports industry and recommendations for the effective implementation of incubators are discussed.

**Keywords:** Business incubators, economic development, innovation, sports clubs, privatization, Saudi Arabia.

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**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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## 1. Introduction

The United States is the most sports-mature country in the world, and one of the important reasons for its rapid economic development is the sports industry. However, in recent years, Saudi Arabia has set off a wave of sports investment [1]. The sports investment and the privatization of sports clubs are predicted to have broader and broader development [2]. Unlike in the past, the Saudi Arabian government is no longer fully responsible for sports clubs and is opening up to the private sector

for management. Therefore, many private entrepreneurs see investment in new sports clubs or the acquisition of existing sports clubs as a new revenue stream and gradually participate in developing this rapidly growing industry [3]. There is no doubt that the establishment of sports clubs is a good thing, creating benign competition and creating a new type of sports business, however, the greater the business, the more the risk, since the proportion of successful sports clubs is relatively low in the world; therefore, it will be a wise choice to incubate business incubator [4]. In addition to the new breed of entrepreneurs, many sports clubs already in existence are also considering expanding their business, incubating business incubators as a development platform in a new direction [5]. Many private entrepreneurs see the operation of a sports club as an emerging opportunity to invest [6]. At the same time, the high failure rate comes from private sector sports clubs. This is exactly a reason that can prove the necessity and urgency of business incubators. Participants in the sports field can bypass this risky development and think of starting a sports business in a new direction [7].

Building a knowledge-based, innovation-oriented industry and fostering an innovation culture in existing companies are key goals of national and industry policies. This is confirmed by the sports industry, especially the sports management industry, as the sports business is significantly affected by trends that have been shaping the traditional market economy [8]. There are several contributing factors to the emergence of sport management as a significant specialty. For the past decades, sport has been viewed as a peculiar but unimportant field [9]. The emergence of a distinct sports business industry is a relatively new development [10]. Now, huge amounts of money are spent on sports as an industrial product [11].

In recent years, small- and medium-sized sports clubs in Saudi Arabia have found themselves under increasing pressure to compete. One factor contributing to this context has been the growth of a knowledge-based, innovation-oriented global economy [12]. The incidence of economic and financial crises during the 2010s ushered in an era of great uncertainty in the global and national economies; very few industries and companies can remain immune to the dynamic forces of the marketplace under such prevailing challenging circumstances [13]. The emerging business, economic, and social environment has demonstrated the relentless implementation of concepts and principles aimed at enhancing efficiency, improving competitive standing, and broadening market horizons for a variety of sports club organizations, and establishing a whole new set of challenges and circumstances that have never been dealt with [14]. Among the concepts and principles that have been emanated to address these new circumstances is that of business incubators. Given the above, the study discusses the role of business incubators among Saudi sports clubs [15].

Business incubators are significant because of their ability to foster innovation to generate new business ideas and provide on-site services and high-quality infrastructure while also easing the shortage of investment and enhancing privatization projects [16]. Lately, the increase in the sports industry's competition and diversity has bolstered the need for business incubators' presence as a unit of management in sports clubs. Moreover, privatization is found to be effective at enhancing sports clubs' utilization of business incubators [17]. Privatization projects may facilitate business incubation processes, which can ease the allocation of business incubators for sports clubs. The contests in sports clubs are mostly based on the operation of sports gambling, advertising, and broadcasting rights, among other things, but not on sports abilities, which often results in a lack of performance fairness. Thus, to stimulate the sports industry and cope with the trend of Economic Diversification in Sports Policy, the potential role of Business Incubators in Sports clubs will be regarded as a tangible unit in the management of sports clubs. Sports are not only associated with health, amusement, or leisure activity in this regard, but they also have straightforward implications for economic and industrial growth [18].

Professional sports may generate new business chances and might be used as an appliance for diplomacy. However, the decreasing prize amount of the league may impact the business development of sports clubs in the long run. It is important to stimulate the abilities of those clubs and develop more business opportunities to make profits. Currently, there are no reports on the Business Incubators in the Saudi sports clubs. Hence, the possibility of sports clubs developing with business incubators in Saudi Arabia is explored by analyzing the public. The feasibility of opening business incubators in sports clubs might be regarded as an action-based booster idea of the sports industry for each Saudi sports association [19]. The business incubator model is relatively new in Saudi Arabia. Business incubators are important to help new business startups, especially those innovating technologies or methods to compete in domestic and international markets and build strong and competitive companies. The business incubator is a stimulus to economic sustainability through the transfer of economies to knowledge economies, evolving country economies, which can produce high added value in the long term. So, business incubators, in some circumstances, become a strategic in-house program to reduce risky pilots, in addition to increasing the success rate of new startups [20].

As with other countries, business incubators in Saudi Arabia are designed to help new business startups. In Saudi business incubators, the participation of existing companies is also launched by supporting and adopting new technologies in their products or production. Business incubators are a catalyst for creating startup companies. In general, business incubators will create a market for business services such as legal services, financial services, and other shared services [21]. Business incubators target business startups, creating higher employment opportunities at low setup costs. As a market of new ideas, the business incubator will stimulate economic improvement and advancement. The literature emphasizes that business incubators have a positive role in local and regional economic growth and diversification. Business incubators can also increase the success rate of new businesses by providing general services to improve local development [22]. The increase in the number of creative startups set up by incubators can support economic dependence and can also help in expanding the scope of cooperation in the field of R&D. At a broad level, it is clear that business incubators have a significant impact on a country economy, particularly the success rate of new businesses, the variety of economic resources available to new startups, and the full-service business incubator improve the success rate of new businesses [23].

Participating as the suppliers of business incubators in developing countries may also provide additional benefits, particularly in the provision of global market access for new enterprises. Successful exports from new businesses stimulate

competitive markets with new technologies, a make or method that will improve the performance of businesses. As an exporter, it has a major impact on creating a market for products. The domestic venture may help local companies to produce new products, even if the foreign venture may also help in the provision of a new method [24]. The main business incubators offer a set of different services to participating projects, including marketing, legal, financial, strategic management, and other types of knowledge support. The precise group of services offered by an incubator determines the type of support given to projects [25]. It is expected that a typical type of support would involve business planning and feasibility study recommendations in the early stages of the project, market development, and client matching for investment opportunities as the project moves along, and business strategies, mergers, and privatization issues as it starts producing revenues [26].

A project that receives successful incubation support will get local and expatriate investments as well as local and foreign cash flows, initiating a range of innovative activities and new projects, and leading to employment creation in Saudi sports clubs. The potential growth of these clubs will eventually lead to an increased capacity and more focus on privatization policies and increased revenues [27]. As a service provider, incubators operate as management organizations for shared services, logistics, marketing, and other support operations. It is expected that incubator services would lower the project cost of production, that more projects will become viable because of the reduced costs, and that those projects that would be viable without the services have a higher profit. All these benefits will feed back into a 'cycle of innovation.' The model of incubation development is used to tie these hypotheses together and to see how they are affected by the introduction of incubator services [28]. Data for the empirical test come from five projects that are initially rejected because their costs exceed their revenues and are then given incubator support. Since the potential benefits in each of these projects differ substantially, the statistical tests are multi-faceted, incorporating cross-section, time series, and analysis [29].

### *1.1. Background and Rationale*

Understanding the role of business incubators in fostering business growth and innovation is crucial. However, this is not an easy endeavor in the context of the sports industry in the Kingdom of Saudi Arabia [30]. Although sports clubs have recently undergone privatization and investment projects, making them a suitable subject for incubation, business support organizations are absent [22].

The rapid increase of privatization and investment projects in the Saudi sports market, which often involves the initiation of new sports infrastructure, modern sports centers, stadiums, and the overall upgrading of the facilities, calls for examining innovative approaches that could fuel the progress of privatization and investment efforts and nurture the development and modernization of these businesses. Moreover, the privatization strategy of Saudi sports clubs is adjusted towards the implementation of investment projects [31]. A review of the privatization and investment plans of sports clubs reveals the need for modernization and the establishment of new facilities, and raises questions about the feasibility of investment projects. The rationale is that the commercialization, privatization, and investment projects of sports clubs will be enhanced by business incubators that support new companies, products, and technological improvements [32]. There is a lack of structured business support systems, such as incubators, guiding the sports clubs through the difficult formative moments. Alongside the absence of pilot projects or empirical evidence about the success, compatibility, and capacity of the sport private sector in utilizing an incubation system, justifies academic attention moreover, alignment of this study with the National Strategy for Economic Diversification and Vision 2030, which emphasizes business support (including incubation) for nascent businesses and the private sector, respectively, is considered promising in fostering debate and creating external validity [33].

Understanding the potential of incubators in even niche markets, such as in the sports sector, and forming strategic alignments with this industry harbors possible economic benefits. The basis for this is that eight local business incubators in Saudi Arabia, of varying characteristics, are examined and evaluated to determine if they could bolster the ambitions of the sports clubs participating in the privatization and investment projects. This paper proposes and tests the theoretical framework that business incubators will foster the development and progress of sports clubs engaged in investment projects, and in so doing, will drive industry innovation [34].

The paradigm of the sports industry has altered considerably in recent years. The notable growth and professionalization in the sector have caused market saturation, structural changes, and global competition [35]. Therefore, sports clubs are faced with the challenge of innovation to maintain their market positions. This endeavor involves a melding of new concepts, techniques, technologies, and strategies; it requires their "growing commitment to innovation," not only regarding the products and services they offer but also in the way the practices and strategies of club management are apprehended. However, sports clubs are commonly characterized by a historically substantial blend of conservatism, trust, and identity [36].

In this regard, sports clubs have found it progressively harder to act in the commercial sector without more adaptability and financial abilities. Several EC regulations have urged privatization, notably in the form of a business. Here, business incubators have employed remarkable growth in various fields in a domestic and international context [17]. Although crossovers between the sports sector and business incubation to date only exist sparingly, the reproduction of business strategies and systems in economic sectors is increasingly observed in sports, implicating collaborative objective potentials [37].

In recent years, the Saudi sports industry has shifted due to factors such as globalization and increased investment. Clubs are now expected to generate revenue and gain fans, a departure from individual club traditions. This has put a strain on local sports clubs as competitive pressures and complex socio-economic shifts leave them vulnerable. As a result, club investment in infrastructure, business processes, and overall strategy improvement has become essential for survival [36].

Business incubators provide a potential bridge between the traditional culture of the clubs and the modern approaches needed for successful entrepreneurial development. Utilizing support mechanisms such as addressing funding barriers, providing resources and facilities, and business services helps new businesses grow [38]. Although sporting clubs have not been the central focus for entrepreneurs or developers, the nature of the sports clubs hints that traditional types of business support mechanisms may not necessarily fit their culture or objectives. Considering the significant change in structure and restraint in funds, they may not be conducive to capturing the importance of exploring this dynamic [38].

### *1.2. Purpose of the Study*

The purpose of this study is to investigate the role of business incubators in relation to innovating and supporting privatization in Saudi sports clubs. Therefore, the research aims to describe the functions of sports incubators and their services. Exploring best practices helps sports clubs develop a roadmap. This academic study identified analyses of startups within sports incubators based on a survey of the practices of the Business Incubator Center and examples of its implementation in Saudi sports clubs, as well as an analysis of the recommendations provided to sports clubs.

Business incubation has developed as a popular voluntary empowerment tool for new businesses and entrepreneurs. However, management literature has largely overlooked sports incubators despite the broad diversity of contexts and adequate episode theory settings in an industry. The study contributes to the expansion of episode theory in terms of the industry, context, and early development [30]. The results guide further participants in an incubator web to understand whether supporting, servicing, or organizing businesses can benefit their enterprises most effectively [39].

### *1.3. Research Objectives*

Business incubators have successfully created new jobs, commercialized technologies, and fostered entrepreneurship in many developed and developing countries [30].

They provide a wide range of services and process assistance to newborn companies to enhance their survival rates. They contribute positively to the national economy by supporting economic diversification, fostering entrepreneurship, technology transfer, wealth building, and creating new job opportunities [40]. This paper is focused on Saudi sports clubs. There has been increasing interest in the sports industry with many recent efforts to establish professional clubs. This interest in sports is expected to grow in the coming years. As a result, sports clubs need effective administration and management to keep pace with technological advancements and nurture innovation. It is expected that establishing business incubators in sports clubs will enhance their performance [41].

The primary aim of this study is to explore the role of business incubators established in sports clubs in the Saudi sports industry. The research concentrates on the role of incubators in fostering innovation and entrepreneurship. The objectives of this research are to assess 1) the role of business incubators in the development and advancement of Saudi sports clubs, especially in terms of driving innovation and fostering entrepreneurship, and 2) the relationship between investment and privatization projects in Saudi sports clubs, with special reference to the establishment of business incubators, and the entrepreneurial ecosystem being built around Saudi sports clubs' investment and privatization projects. It is anticipated that the study findings will contribute constructively by providing new insights and identifying best practices and success factors in the study of investment and privatization projects as perceived in the case of Saudi sports clubs. A further aim is to understand the difficulties presented in the case of Saudi sports clubs in the driving innovation process to overcome challenges and difficulties that may be encountered. To achieve the research's goals, a broad literature review of current practices, challenges, and trends concerning business incubators in the sports sector, as well as the impact of external environmental factors in fostering innovation, will be presented. Additionally, a comprehensive literature review, theoretical framework, and a structured approach for data collection and analysis have been developed. The structured approach in the proposed research consists of a literature review, background information about business incubators, privatization projects in sports clubs, and the sports industry environment in Saudi Arabia.

A mix of tools and support services empowers entrepreneurs to overcome obstacles, thereby increasing the chances of their business's success [42].

The question becomes how the support that incubators provide can be geared to engage the sports industry. Also, useful insights are likely to be gained into the processes and trajectories by which certain sports organizations become more innovative using these tools. This study focuses on understanding the mechanisms by which incubators can help bring about significant changes. To this end, attention is focused on the potential role that specialized business incubators may play, informed by surveys with senior staff.

### *1.4. Research Questions*

The following questions are posed in line with the research objectives:

Q1: What is the role of business incubators in the development and advancement of Saudi sports clubs?

Q2: What is the relationship between the drivers of innovation in Saudi sports clubs, with special reference to the establishment of drivers of innovation in business incubators?

Q3: Are there statistically significant direct correlations between the entrepreneurial ecosystem being built and the investment and privatization projects of Saudi sports clubs?

## **2. Literature Review**

The purpose of this literature review is to critically examine existing research and theories that are relevant to the topic to be researched. The foundational concepts around business incubators have been explored, including what they are, how

they function and operate, and the impact they have on start-up companies in a variety of industries. The literature review is linked to a critical analysis of these functions as they drive innovation and privatization projects in sports clubs in Saudi Arabia. Moreover, how the privatization issues related to such clubs can be equipped with multiple opportunities to start sports [18].

Business incubators have been defined as specialized programs or organizations that support new ventures during their earliest phases, providing a range of services such as managerial assistance, access to financing, and social networking opportunities [43]. This definition frames business incubators as nurturing ecosystems wherein startups receive intense support, potentially elevating their chances of sustainability in the long term, Ravichandran and Dixit [44]. Vaz et al. [24] highlighted the significance of Importantly, business incubators foster economic growth by helping new ventures to be established, a process that in turn can expand the number of employment opportunities. Furthermore, Diawati and Sugesti [45] confirmed that in recent years, business incubators have helped foster new opportunities and the emergence of innovative technologies in a wide range of sectors.

The study conducted by Klostern and Bienkowska [46] the sports industry can be another segment that benefits from innovative management strategies, from nutrition to player performance management. Clubs that demonstrate quality both on and off the pitch can expect enhanced audience engagement as well as financial incentives.

This paper presents a research project that focuses on the investment and privatization projects of Saudi sports clubs to improve their efficiency and the quality of services. The paper argues that establishing business incubators in Saudi sports clubs is a feasible solution, exploring how such business incubators could drive innovation in both operational and commercial activities.

### *2.1. Concept of Business Incubators*

A business incubator is defined as a specialized program capable of providing a value-added service for the developers of the participating companies [17].

Business incubators are organizations that nurture the development of new, innovative companies. They help start-ups to survive and grow during the beginning stages of development by providing an array of targeted resources and services that can help increase the success rate of the participating companies. Incubators host companies for a defined period of time, leading to an exit strategy [47].

### *2.2. Innovation in Sports Clubs*

Innovation in Sports Clubs can be recognized as a development or improvement that better current performance. There are numerous ways to innovate and support innovation throughout a club; be it through changes in routine operations, putting new technology to use, updating facilities and equipment, business model design, driving the development of new products and services, playing style adaptation, cooperation with partners on and off the field, or cultural projects or social responsibility initiatives [48].

Innovation can boost sports clubs' performance, provide fan bases with new forms of engagement, and, crucially, offer a competitive advantage as it becomes more prevalent off the field. Traditional clubs and their governing bodies have been slow to innovate. Sport has resisted professionalization in ways other industries have accommodated globalization, investment, market knowledge, rent-seeking through regulation, and institutional orthodoxy. A different reality is already beginning. There is an immediate need to grasp how sports businesses can and should innovate to avoid being marginalized. Business incubators can make significant contributions to this rapidly evolving area [19].

### *2.3. Investment and Privatization in Sports Clubs*

In recent years in Saudi Arabia, the strategic partnership arrangements with investors in the energy sector and Saudi sports clubs have increased across different sectors. In the context of becoming more democratic and transparent, it is expected to be structured around the prominent shares of the founders of Saudi sports clubs. Such a footprint of privatization is a consequence of the search for alignment with the targets of the Saudi Arabian National Economic Vision 2030 [49]. National economic return issues to be considered as part of Saudi's sports sector are largely driven by globalization, competition, and market rules [50]. The privatization process, developing within this perspective, has gained importance in ensuring that substantial revenue allocation is obtained from investments. Sports clubs that initiated privatization utilized the alternatives listed and established agreed partial partnerships with investors [51].

### *2.4. Impact of Business Incubators on Investment and Privatization Projects*

The systematic and comprehensive incubator facility and its impact on driving sporting investment projects are an emerging area rich with potential. Research on the nature and outcomes of investment projects is nascent, particularly in terms of their efficacy in incubation programs and the role of the sports incubator. This subsection reviews the literature and focuses on the tangible impacts by examining the case of driven investment and privatized sporting clubs in Saudi Arabia [42].

Business incubators are seen as a vital facility for the development of a country's sports industry. The Saudi case is used to reflect the potential of incubators and strategies to build a healthy context to attract investments and privatize sporting clubs. The highlights the challenges that sports investment incubators face and suggests ways to mitigate these issues. Furthermore, the business model of the sports incubator, the attributes of the incubated sporting projects, and the private clubs are examined. The interest in business incubators in developed and developing countries has emerged for addressing the economic development and diversification of various sectors [52].

As a comprehensive facility, incubators are believed to accelerate venture development by improving start-ups and offering strategic consultation to entrepreneurs. Investment ventures, be they newly established start-ups or privatized projects, are deemed innovative and ambitious efforts that require an advanced and competitive environment. The role of incubators in emerging as a successful business model for investment projects in the literature is discussed. In line with the presumption that incubators are catalysts of commercial-driven technology, investment incubators are likely to be the launch of an enabling environment for start-ups and privatization efforts in advanced technology sectors, including communication, medical devices, and energy [37].

The major focus of the investment facility was to enable access to capital and to attract potential investors to financially support the incubated ventures. Such an approach led to the success of incubated projects with investment ranges of \$300,000 to over \$5 million, exerting a profoundly significant positive impact on the ventures' chances of survival. Moreover, successfully incubated projects secured more investments from networking and other sources before and beyond the incubation period. The completion of due diligence progressed rapidly and efficiently compared to non-incubated ventures. As a result, the success rate of investment projects in incubators exceeded 50%, which is considered a relatively high metric for this kind of ambitious and experimental undertaking. On the contrary, the success rate of non-incubated investments remained below 17%, highlighting the necessary role of the incubator facility with its unique programs and services [53]. The literature has also illustrated studies of how incubators have played an active role in the successful privatization of investment ventures in various sectors and industries, including agriculture, healthcare, and hospitality.

### 3. Methodology

The research group consisted of various leaders from the Saudi Ministry of Sports, including chairpersons, board members of sports clubs, executive directors, activity managers, financial managers, and individuals from several committees. Participants needed to have a minimum of 10 years of experience in their respective fields to be eligible for the study. The study included a total of 445 individuals as its sample. A descriptive methodology was utilized for the research. Details regarding the study sample can be found in Table 1.

**Table 1.**  
Description of the study sample

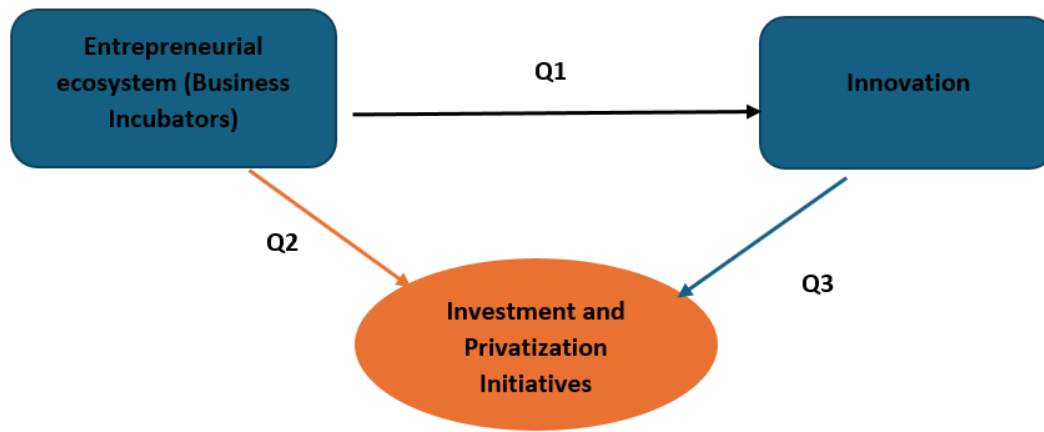
No.	Profile	Basic Sample	Sample Survey
1	Authorities in the Saudi Ministry of Sports...	63	7
2	Individuals in leadership positions and board members of sports organizations.	105	9
3	corporate leaders	52	6
4	Task overseers	88	5
5	Financial regulators	49	4
6	Individuals from various committees.	88	6
Total		445	37

#### 3.1. Data Collection Tool

The research employed three questionnaires to collect data. The initial questionnaire was aimed at determining the influence of business incubators on sports clubs within Saudi Arabia. It consisted of 15 statements, and participants' responses were recorded using a three-point Likert scale (3 for "yes," 2 for "to some extent," and 1 for "no"). This questionnaire was divided into three sections, covering Reasons for Backing and Advancing Initiatives, and Assistance with Logistics, Expanding Funding Avenues (refer to Appendix A for more details).

The second questionnaire aimed at the level of innovative performance in Saudi sports clubs. This one had 10 statements, with responses also assessed through a three-point Likert scale. It was organized into two sections that focused on fostering creativity and innovation, putting resources into the Human Aspect (see Appendix B for more information).

The third questionnaire had 10 statements focused on the correlations between the entrepreneurial ecosystem and investment/privatization projects in Saudi sports clubs, with responses also assessed through a three-point Likert scale. It was organized into two sections that focused on: the correlations between the entrepreneurial ecosystem and Saudi sports clubs' investment and privatization projects, offering advisory assistance (see Appendix C for more information). Content validity was achieved through a meticulous review. A three-level Likert scale was used to evaluate participants' responses, offering an equitable approach to capturing their viewpoints. This method facilitated a clear understanding while maintaining controlled response options. The internal consistency coefficient, analyzed with Cronbach's alpha, affirmed the stability and validity of the tools, both deemed acceptable for this type of research. A detailed framework for the study is shown in Figure 1, which also outlines the research aims and the relationship between innovative performance and business incubators, along with the steps involved in the regression analysis. The first question (Q1) seeks to assess the current use of business incubators for investment and privatization initiatives in Saudi sports clubs. The goal of the second question (Q2) is to explore the innovative practices within Saudi sports clubs. The third question (Q3) investigates the correlations between the entrepreneurial ecosystem and investment/privatization projects in Saudi sports clubs, which also projects how business incubators could be leveraged to improve innovative performance in investment and privatization endeavors within Saudi sports clubs.



**Figure 1.**  
Research framework.

### 3.2. Research Timeline and Statistical Analysis

The baseline study was carried out between January 5 and February 26, 2025. The statistical coefficients were computed using IBM Corporation's SPSS social sciences statistical software (IBM Corporation, USA, Armonk, New York). The data were analyzed using means and standard deviation, comparative weight, typical response, and Chi-square ( $X^2$ ).

## 4. Results

A scree plot illustrating the eigenvalues of the factors extracted from a questionnaire measuring the role of business incubators in the development and advancement of Saudi sports clubs. Table 2 shows the answers to the questionnaire on the role of business incubators in the development and advancement of Saudi sports clubs. The percentage ranges from 43.02% to 65.77%, with an overall percentage of 59.23% for the Reasons for Backing and Advancing Initiatives. The Assistance with Logistics axis ranges from 25.68% to 29.53%, with an overall percentage of 27.00%. The expanding Funding Avenues axis ranges from 43.77% to 73.43%, with an overall percentage of 59.78%. The overall percentage for the scale as a whole is 76.60%.

**Table 2.**

Means and Standard Deviation. Comparative weight, typical response, and  $X^2$  regarding the influence of business incubators in sports clubs within Saudi Arabia ( $n = 445$ ).

No.	Item	Mean	SD	$X^2$	sig	Imp. Percentage
The first axis: Reasons for Backing and Advancing Initiatives (RBAI)						
1.	Projects in incubation receive access to bank credit services.	1.49	0.79	398.92	0.001	43.02%
2.	Research is currently underway to explore the implementation of business incubators.	1.59	0.87	296.33	0.001	56.43%
3.	The concept of developing the project is formulated into a strategy along with the necessary processes that need to be started.	1.86	0.96	152.73	0.001	65.77%
4.	A work map is accessible through collaboration between the organizations and the individuals responsible for business incubators.	1.69	0.92	199.97	0.001	59.57%
5.	The right climate, necessary resources, and organizational framework exist for business incubators.	1.58	0.83	387.47	0.001	56.00%
6.	Some laws and regulations oversee the operations of business incubators.	1.86	0.94	134.21	0.001	65.13%
7.	<b>Total axis</b>	1.68	0.69	1532.21	0.001	59.23%
The second axis is assistance with logistics.: (AI)						
8.	Entities and agencies are inviting investors to back their projects.	1.60	0.66	224.02	0.001	26.34%
9.	Revised databases are accessible to staff members.	1.81	0.74	190.67	0.001	29.02%
10.	Assistance is offered in the area of initiating and setting up projects.	1.56	0.81	387.83	0.001	25.68%



11.	A highly effective technological system is accessible to perform and oversee the activities.	1.91	0.87	89.29	0.001	29.53%
12.	<b>Total axis</b>	1.75	0.85	883.82	0.001	27.00%
The third axis: Expanding Funding Avenues: (EFA)						
13.	The initiatives to be developed come with the creation of a work plan.	1.60	0.86	381.56	0.001	47.77%
14.	The starting funds can be utilized during the founding phase of the projects being incubated.	1.48	0.72	467.98	0.001	43.77%
15.	The necessary spatial environments and suitable tools are accessible for establishing business incubators.	2.34	0.80	184.31	0.001	73.43%
16.	Certain investment funds are dedicated to supplying resources for funding incubated projects.	1.91	0.94	88.72	0.001	59.05%
17.	Initiatives are connected to products in industries, market dynamics, and demands.	1.58	0.78	319.51	0.001	47.00%
18.	<b>Total axis</b>	1.63	0.60	451.46	0.001	54.33%
19.	<b>Total questionnaire</b>	1.51	0.81	2681.68	0.001	76.60%
Last Confident = (0.63)		The Pinnacle of Culture = (0.71)				

Table 2 displays the findings of the opinion poll that was conducted. The poll aimed to determine the influence of business incubators on sports clubs within Saudi Arabia. Five themes frequently appeared and converged in a rich information space: natural innovation drivers; how business incubators align and promote growth through drivers' lenses in Saudi sports clubs; investments in business incubators in mega sports club clusters; the biases of privatization in competitive sports markets; and unpublished results checking the foundation of business incubators in Saudi sports clubs. This is shown by the average response range of 1.49 to 1.86 for all items in the first dimension. The average response for this dimension was 1.68, indicating that Saudi sports clubs are the main growth engine of innovation that relates to the national target (i.e., health, education, sports, etc.), while the rest serve as catalysts to support Saudi sports companies. Business incubators were found to align and unlock growth through the lens of the migrant driver in Saudi sports clubs. Thus, it becomes necessary to drive innovation from Saudi sports clubs and the cities in which they operate. In similar trends, a broader spectrum of investment projects and privatization was suggested to promote and replicate business incubators as the general conclusion [4]. The average responses for the second dimension, assistance with logistics, ranged from 1.56 to 1.91. The average response for this dimension was 1.75, indicating that the logistics role in the enterprise is a very important determinant of a successful business, where logistics management plays a crucial role because it can affect the success or failure of the project implementation process.

Well-coordinated, effective, and efficient logistics can help accelerate project implementation times. Based on this background, coordination of the logistics of Investment Projects is as important [54]. Sports logistics requires a strategic approach, encompassing post-event, inventory, procurement, and event management play pivotal roles in sports logistics and supply chain operations. To enhance efficiency and operational capabilities in different sports events, clubs, and academies, improved logistics strategies, event management, and negotiation skills are paramount [55]. This inherently unique sector of the sports industry additionally deals with athlete merchandise, supply chains, and collaboration with different sponsors. It is envisaged that the exploration of the logistics behind sports events will add to operation-related logistics on Sports Clubs in Saudi Arabia, Being one of the leading nations in the Middle East [7]. Saudi Arabia is currently emphasizing a vast number of sports initiatives and projects. With the increasing number of academies, clubs, and professional leagues, the demand for effective logistics solutions has also risen drastically [19]. Thus, this study discovers and elaborates on the specific demand, challenges, and supply of logistics support for sports clubs in Saudi Arabia. This research finds that the sports industry has unique characteristics and inherent complexities, resulting in distinctive demands compared to all other traditional sectors. The logistics performance and the proper management system of clubs and events have a significant effect on the successful operation of the entire industry. By acknowledging the variety of limitations and sector-specific challenges, the supply of professional and specialized sports logistics support can enhance operational efficiency and promote the dignified growth of Business Incubators. Average responses for the third dimension, Expanding Funding Avenues, ranged from 1.48 to 2.34. The average response for this category was 1.63. This demonstrates that Saudi clubs have to revisit their funding strategies. The three key most viable current funding options can be recommended based on the currently available information. Partnerships with major companies may provide extensive cash in return for a public association of the brand and royalties from successful games. Low-cost measures to improve fan engagement can provide higher ticket and merchandise sales. Moreover, long-term fan engagement and growth can be achieved by supporting grassroots and youth leagues. Thus, and in light of the review made, there are fundamental recommendations for decision-makers of Saudi sports clubs: 1. Adopt an adaptive approach to funding and be wary of ephemeral income sources. 2. Diversify funding sources as much as possible.



A scree plot illustrating the Drivers of Innovation performance in Saudi sports clubs. Table 3 presents the results of the Drivers of Innovation performance in Saudi sports clubs. The percentage ranges from 47.34% to 64.35%, with an overall percentage of 59.69%. Axis ranges fostering creativity and innovation range from 59.03% to 64.35%, with an overall percentage of 59.69%. The expanding resources into the Human Aspect axis range from 47.34% to an overall percentage of 49.34%. The overall percentage for the scale as a whole is 56.69%.

**Table 3.**

The Drivers of Innovation performance in Saudi sports clubs was assessed through relative weight, average response, and X2 (n = 445).

No.	Item	Mean	SD	X2	Sig.	
The first axis: fostering creativity and innovation (FCI)						
1-	Innovation and creativity are embraced in both marketing strategies and production methods.	1.93	0.96	56.95	0.001	62.34%
2-	Contemporary sources of scientific and technological knowledge can be utilized for the implementation of business incubators.	1.89	0.99	99.87	0.001	59.87%
3-	The knowledge deficiencies of employees at both technical and technological tiers are filled.	1.82	0.97	197.81	0.001	56.04%
4-	There exists a fund for short-term financing aimed at innovators.	1.95	0.98	156.29	0.001	59.03%
5-	Efforts are underway to adapt innovations to better support entrepreneurs' concepts.	1.98	0.99	166.17	0.001	64.35%
	Total axis	1.98	0.96	56.97	0.001	59.69%
The second axis: Putting resources into the Human Aspect (PRHA)						
6-	Approaches that can nurture ideas and facilitate long-term planning exist.	1.63	0.81	1063.29	0.001	49.68%
7-	Programs for guidance and training are accessible to human resources.	1.57	0.73	384.62	0.001	47.69%
8-	Focus is directed towards enhancing knowledge and information related to human resources.	1.64	0.78	378.77	0.001	49.02%
9-	Human resource abilities are perpetually enhanced.	1.56	0.73	289.93	0.001	47.34%
10-	Focus is placed on the technical and technological education of personnel.	1.70	0.75	394.03	0.001	52.01%
11-	Total axis	1.62	0.66	188.18	0.001	49.34%
12-	Total questionnaire	1.84	0.79	2905.41	0.001	56.69%
13-	Last Confident = (0.63)			The Pinnacle of Culture = (0.71)		

Table 3 displays the findings of the opinion poll that was conducted. The poll aimed to assess the Drivers of Innovation performance in Saudi sports clubs. On the positive side, technological advancements and lifestyle changes encourage the public to pursue diversified and personalized entertainment, leisure, and exercise. This is reflected in the average response range of 1.82 to 1.98 for all items in the first dimension. The average response for this dimension was 1.98, indicating that the Drivers of Innovation performance in the sports community observes and participates in innovative management and operational methods to change traditional practices, expecting to enhance economic, social, or even political efficiency [22]. The average response for the second dimension ranged from 1.57 to 1.70, with a response of 1.62, indicating that innovative forces in sports can be considered as innovation drivers. As small and traditional organizations, sports clubs find it difficult to fulfill these roles without external support. Hence, business incubators, entities specifically designed for the growth of radical innovations, address the challenges faced by sports clubs by offering financial, informational, and social support, thereby strengthening their competitive edges. Therefore, identifying the potential innovation drivers shaping the development of sports clubs is a good starting point for them to embrace innovation and update [21].

According to innovation drivers, Innovation drivers have primarily been divided into two categories, environmental and technological drivers. There are three recognized categories of drivers: market drivers, government drivers, and competitive drivers. The innovation drivers and business-related goals of Saudi sports clubs are analyzed using both reports and interviews. Finally, the emergence of business incubators working with Saudi sports clubs is discussed as a way to drive innovation forward in the sports club sector. Another aim of the study is to examine the nature of innovation drivers in the sports market and clubs that are often overlooked. On the other hand, innovation drives competitiveness, small-scale clubs are urged to understand the landscape of the possible notifications via external signals and to adopt appropriate strategies [15].

A scree plot illustrating the correlations between the entrepreneurial ecosystem being built and Saudi sports clubs' investment and privatization projects. Table 4 presents the results of the correlations between the entrepreneurial ecosystem being built and Saudi sports clubs' investment and privatization projects. The percentage ranges from 45.00% to 73.35%, with an overall percentage of 53.37%. The first axis is titled 'The Entrepreneurial Ecosystem and Saudi Sports Clubs' Investment and Privatization Projects,' ranging from 45.00% to 57.67%. The overall percentage for the scale as a whole is 50.34%. The second axis is titled 'Offering Advisory Assistance,' ranging from 43.67% to 73.35%. The overall percentage for the scale as a whole is 56.36%.

**Table 4.**

Means and Std. Relative weight, average response, and  $X^2$  of the correlations between the entrepreneurial ecosystem being built and Saudi sports clubs' investment and privatization projects (n = 445).

No.	Item	Mean	SD	$X^2$	sig	Imp. Percentage
The first axis: the Correlations between the Entrepreneurial Ecosystem and Saudi Sports Clubs' Investment and Privatization Projects: (MSDP)						
1.	The entrepreneurial ecosystem is significantly shaped by funding for sports teams.	1.49	0.79	398.92	0.001	45.00%
2.	Investments attract more entrepreneurs to the region	1.59	0.87	294.63	0.001	48.33%
3.	Government policies facilitate investment projects for sports clubs	1.87	0.96	152.97	0.001	57.67%
4.	The entrepreneurial ecosystem is significantly impacted by investments in sports clubs.	1.69	0.92	199.79	0.001	50.67%
5.	Government policies work to enable investment initiatives for sports clubs.	1.58	0.93	391.27	0.001	48.01%
6.	Total axis	1.68	0.89	1553.31	0.001	50.34%
The second axis: offering Advisory Assistance (OAA)						
7.	Advice regarding the feasibility of investment projects is offered.	1.60	0.96	382.49	0.001	48.68%
8.	Legal guidance is offered to inform employees about the laws and regulations.	1.48	0.82	466.98	0.001	43.67%
9.	Expert guidance is offered in the area of creative initiatives for staff members.	2.34	0.81	195.24	0.001	73.35%
10.	Offers financial guidance concerning the management of project accounts.	1.91	0.95	89.92	0.001	59.006
11.	Advisory services are offered in the area of promoting creative concepts.	1.58	0.88	317.45	0.001	48.02%
12.	Total axis	1.83	0.80	471.56	0.001	56.36%
13.	Total questionnaire	1.74	0.90	2482.68	0.001	53.37%
Last Confident = (0.63) The Pinnacle of Culture = (0.71)						

Table 4 displays the findings of the opinion poll that was conducted. The poll aimed to understand the correlations between the entrepreneurial ecosystem being built and Saudi sports clubs' investment and privatization projects. The privatization of professional sports clubs is becoming a global trend and has been a practice in Saudi Arabia for over a decade. This is shown by the average response range of 1.49 to 1.87. The average response for this dimension was 1.68, indicating that gone are the days when sports clubs were managed by government officials. They have now been handed over to private companies for management or investment [40]. The average responses for the second dimension ranged from 1.48 to 1.91, with an average response of 1.83, indicating that sports clubs, particularly football clubs, are gaining significant attention worldwide as they provide opportunities to showcase local talent, awareness programs, entertainment, build clubs at the grassroots level, and much more. Now, more and more investors are looking to invest in sports clubs, thus increasing privatization.

The findings of a poll revealed that Saudi enterprises want to recruit technology, practice creative research and development, master emerging markets, be attentive to start-ups, and be interested in participating in venture capital funds. Therefore, these measures would strongly enhance the entrepreneurial spirit among Saudi businesses. In addition, even though the Saudi e-government platform is available for coaching services to start-ups, few are aware of this reality, let alone use it. Consequently, the Saudi government should increase awareness of executive services available for new entrepreneurs in the Kingdom and empower and foster entrepreneurship programs in collaboration with academic institutions.

The realization of sports projects is the outcome of the new vision "Vision 2030" and the investment approaches defined in the action plans. Opening the way for sports investors has also played a major role in the enthusiasm for investment. Contributions made with equity rights licenses that the owners will receive from various organizations have been the biggest factor in enabling the implementation of projects. On the other hand, the development plan shows that the interest of the state and private companies in sports fields has increased over the years. Additionally, the realization of these investment projects is carried out in partnership with the local authorities of the state and private companies [56].

## 5. Discussion

It is evident from Tables 2,3,4 that business incubators and their effect on promoting entrepreneurship have been guided by the understanding that innovation is key to successful entrepreneurship, while adaptation, particularly the privatization of sports clubs, is a sine qua non for further successful engagement in a rapidly changing environment. The results uncover multiple successful models that could be used to replicate a successful template. Similarly, it also demonstrates that sports clubs could be facilitated in their gradual privatization process at various stages of incubation and by various forms of

assistance through sports-business incubation contracts. This study brought novel topics into the discussion of entrepreneurship in sports. Successful models of business incubation can be replicated to create the template that will ensure their successful establishment in the future, enabling them to compete with already well-established business incubators in other sectors. Problems faced by a specific industry that is not well-positioned to be effectively targeted by business-as-usual services could be better tackled by unique management. Moreover, sports clubs that are faced with a need to adapt to the changing environment can find a template for a gradual privatization process that will be less painful compared to conventional methods of privatization. Subsequently, in the broader context, this could contribute to maintaining jobs that evolve in the transformation process.

Numerous studies have indicated the importance of business incubators concerning innovational developments that could be implemented within sports clubs in Saudi Arabia [28, 36, 42]. Incubation programs can bridge the gap between the investment in innovative sports technology and its practical implementation in Saudi Arabian sports clubs. The perceived potential contributions of incubation concerning sports clubs are tailored guidance on implementing innovations, educating clubs on sports science and sports technology, and increasing motivation by providing the resources necessary for implementing sports innovations [7, 19, 22].

Reflecting on the role of incubation that was analyzed in this study, it is evident that the establishment of investment and/or consultancy incubators for sports clubs proved to be a challenge. The strengths, weaknesses, opportunities, and threats concerning the entrepreneurial sports ecosystem are identified, providing a comprehensive overview of the incubation landscape in the context of sports. Presenting a synthesis of the aforementioned findings, it is worth contemplating the further investment in the sports sector in Saudi Arabia, which private sports clubs are aiming to spearhead for innovation. Besides the amenability of offering investment in sports technology for sports clubs, there are too many considerations that shall be taken to better foster innovation in the Saudi sports ecosystem [4, 18, 32, 36].

It is vital for the continuation of providing support and collaborating with all stakeholders within the kingdom interested in innovating through the sport to carve the transformation of the findings, discussions, and implications of this study into real-world practices. The established collaborations between different entities in the context of sport within the kingdom will need to be further encouraged for sustenance in the long term. In this sense, the proactive results also provide strategic recommendations to fill in the identified gaps in the literature and practice of sports business incubation, aiming to prompt a collaborative and concerted effort to unlock the transformative power of incubators in Saudi Arabian sports.

## 6. Conclusion and Recommendations

The findings indicate that investment in sports performance is a crucial driver for innovation in Saudi sports clubs. This commercialization can be a source of industry performance sustainability only if the corresponding sports capacities of the Saudi national sports clubs are developed [30]. A structured sports management approach, combining elite sports with a close partnership involving incubator organizations, is required. This would enable capacity nurturing, promote a realistic direction of investment, maximize the exploitation of the potential impacts of performance sports, and enable the participation of all interested actors from the sports industry [1]. The study suggests that the innovative capture of business incubators at Saudi sports clubs is essential among the sports economy's stakeholders and sports administrators. This can be attributed to the fact that sports clubs, in particular, need to ensure strategic partnerships with different incubators using the support system [12]. The findings show that the Saudi sports economy can accommodate emerging sports clubs and subsequently lead to the following trends in sports club investment and privatization. This evolving trend requires recognition and collaboration at the business, government, and academia levels for the design of a new incubation model, practices, policies, and measures.

Another study found that there is a need for a re-examination of the role of business incubators in terms of a more nuanced understanding of the benefits of the unique environment of the sports economy, sports clubs, and the support system [17, 19]. Given that business incubators are becoming an integral part of Saudi Arabia's economic landscape, this research is particularly timely and important for the rising sports economy.

This study suggests that a sports administrator should be the driving force behind establishing business incubators and offering support systems that address the unique challenges of sports clubs. For sports club businesses, a successful integration of business incubators and support systems enhances their innovation. For the government, investment in an incubation model that combines business incubators and sports clubs must recognize that strategic partnerships are necessary.

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## Supplementary Materials

### Appendix A.

The appendix includes a questionnaire on the Influence of Business Incubators in Sports Clubs within Saudi Arabia.

**Table S1.**

An applied study on the Influence of Business Incubators in Sports Clubs within Saudi Arabia.

No.	Item					
The first axis: Reasons for Backing and Advancing Initiatives (RBAI)						
1.	Projects in incubation receive access to bank credit services.					
2.	Research is currently underway to explore the implementation of business incubators.					
3.	The concept of developing the project is formulated into a strategy along with the necessary processes that need to be started.					
4.	A work map is accessible through collaboration between the organizations and the individuals responsible for business incubators.					
5.	The right climate, necessary resources, and organizational framework exist for business incubators.					
6.	There are laws and regulations that oversee the operations of business incubators.					
The second axis: Assistance with logistics.: (AI)						
7.	Entities and agencies are inviting investors to back their projects.					
8.	Revised databases are accessible to staff members.					
9.	Assistance is offered in the area of initiating and setting up projects.					
10.	A highly effective technological system is accessible to perform and oversee the activities.					
The third axis: Expanding Funding Avenues: (EFA)						
11.	The initiatives to be developed come with the creation of a work plan.					
12.	The starting funds can be utilized during the founding phase of the projects being incubated.					
13.	The necessary spatial environments and suitable tools are accessible for establishing business incubators.					
14.	Certain investment funds are dedicated to supplying resources for funding incubated projects.					
15.	Initiatives are connected to production industries, market dynamics, and demands.					

### Appendix B.

The appendix includes A question about The Drivers of Innovation performance in Saudi sports clubs.

**Table S1.**

An applied study at The Drivers of Innovation performance in Saudi sports clubs.

No.	Item					
The first axis: fostering creativity and innovation: (FCI)						
11-	Innovation and creativity are embraced in both marketing strategies and production methods.					
12-	Contemporary sources of scientific and technological knowledge can be utilized for the implementation of business incubators.					
13-	The knowledge deficiencies of employees at both technical and technological tiers are filled.					
14-	There exists a fund for short-term financing aimed at innovators.					
15-	Efforts are underway to adapt innovations to better support entrepreneurs' concepts..					
The second axis: Putting resources into the Human Aspect.: (PRHA)						
16-	Approaches that can nurture ideas and facilitate long-term planning exist.					
17-	Programs for guidance and training are accessible to human resources.					
18-	Focus is directed towards enhancing knowledge and information					

	related to human resources.					
19-	Human resource abilities are perpetually enhanced.					
20-	Focus is placed on the technical and technological education of personnel.					

### Appendix C.

The appendix includes a questionnaire about the correlations between the entrepreneurial ecosystem being built and Saudi sports clubs' investment and privatization projects.

**Table S1.**

An applied study on the correlations between the entrepreneurial ecosystem being built and Saudi sports clubs' investment and privatization projects.

No.	Item					
The first axis: the Correlations between the Entrepreneurial Ecosystem and Saudi Sports Clubs' Investment and Privatization Projects: (EEIP)						
1.	The entrepreneurial ecosystem is significantly shaped by funding for sports teams.					
2.	investments attract more entrepreneurs to the region					
3.	Government policies facilitate investment projects for sports clubs					
4.	The entrepreneurial ecosystem is significantly impacted by investments in sports clubs.					
5.	Government policies work to enable investment initiatives for sports clubs.					
The second axis: offering Advisory Assistance: (OAA)						
7.	Advice regarding the feasibility of investment projects is offered.					
8.	Legal guidance is offered to inform employees about the laws and regulations.					
9.	Expert guidance is offered in the area of creative initiatives for staff members...					
10.	Offers financial guidance concerning the management of project accounts.					
11.	Advisory services are offered in the area of promoting creative concepts.					