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# ORIGINAL

# DEVELOPING INNOVATIVE AND ENTREPRENEURIAL TALENT IN THE SPORTS AND FITNESS INDUSTRY: APPLYING THE OUTCOME-BASED EDUCATION MODEL

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#### ABSTRACT

The sports and fitness industry, like the semiconductor sector, thrives on rapid innovation and the continuous development of new technologies. To maintain competitiveness, this industry relies on a steady stream of skilled entrepreneurs who are adept at navigating technological advancements and fostering collaborative partnerships. This study applies the Outcome-Based Education (OBE) model, successful in the semiconductor industry, to the sports and fitness sector. It explores how this model can enhance the cultivation of innovation and entrepreneurial talents, focusing on critical skill development and the integration of reliable, high-quality data into training programs. This approach promises to advance the industry by ensuring that professionals are well-prepared to lead and innovate in an ever-evolving market landscape.

**KEYWORDS:** semiconductor industry, emerging technologies, collaborative partnerships, OBE, Sports industry

#### 1. INTRODUCTION

A method that aims to produce extraordinarily brilliant and creative workers for the Sports industry is the advancement and business venture model for gifts under the OBE (Result Based Schooling) result-oriented idea. The concept aims to improve students' creative, entrepreneurial, and problemsolving skills while also emphasizing the value of education that is outcomebased. With a focus on deep understanding and critical thinking, this paradigm aims to make education extraordinarily functional. To gain a deeper understanding of the sector and its challenges, students are encouraged to participate in initiatives relevant to the Sports industry and to research realworld problems. The approach also emphasises the value of business venture by teaching students how to identify market potential opportunities and develop new products or services that solve customer problems. The model also emphasises the value of result-based training, where students are assessed on their capacity to demonstrate their knowledge and skills through practical projects and activities. This method ensures that students are given the knowledge and skills necessary to succeed in the field. In general, the advancement and business model of the semiconductor Sports industry gifts under the OBE result-oriented philosophy is to deliver extraordinarily brilliant and creative people who are equipped to succeed in the Sports industry's rapid and rapid change.

# 1.1.Background of the Study

A fundamental sector that propels mechanical advancement and development across a variety of industries, including processing, media communications, and energy, is the semiconductor business. Nonetheless, the sector needs a constant supply of talented individuals if it is to remain competitive and inventive. The improvement of the Sports industry's capability depends on the development of advancement and business skills (Frost & Sillivan, 2000). A concept known as outcome-based education (OBE) emphasises the achievement of specific results by students, adapting the educational system to meet business needs. By the OBE result-oriented approach, this study aims to promote a development model of business and development for Sports industry capability. In order for students to become innovative and creative professionals in the Sports industry, the model aims to equip them with the necessary skills.

# 1.1.1 Cultivation Model of Innovation

The interaction that generates and promotes ground-breaking ideas, products, and cycles is represented by the Development Model of Advancement. The approach is predicated on the idea that development is not a singular event but rather an ongoing, iterative interaction that involves various stages. According to the Development Model, progress begins with the clear evidence of a problem or opportunity. A phase of brainstorming and conceptualization follows, during which potential agreements are created and evaluated. The most inspiring ideas are then developed into models or concept confirmations, which are tested and improved through an iterative process of input and improvement. After a sensible advancement has been made, it should be made well-known and put on display. This entails developing a strategy, identifying target markets and clientele, and securing the crucial resources

needed to launch the development's public sale. The Development Model of Advancement emphasises the necessity of flexibility and adaptability to shifting economic conditions as well as the value of collaboration and cross-practical groups in the advancement cycle (Moon & Lee, 2004). By adopting this concept, groups can create a culture of growth and enterprise that fosters progress and success.

# 1.1.2 Sports industry talents under the OBE (Outcome-Based Education)

People with the knowledge, skills, and mindsets necessary to succeed in the semiconductor business are what the OBE (Result Based Schooling) model of result-oriented education refers to as semiconductor industry gifts. OBE is a teaching style that emphasises the desired outcomes or outcomes of progress rather than the most typical method of learning itself. OBS focuses on providing graduates with the particular knowledge and practical skills necessary to address the difficulties facing the Sports industry. This includes individuals who are knowledgeable with the newest developing technologies, such as 5G, the Web of Things, and computerized reasoning (Xu, Zhang, Liu, & Wang, 2019). Additionally, they should be given the tools necessary to collaborate effectively, communicate clearly, and adapt to shifting market demands. Under the OBE result-oriented idea, fitness industry gifts should have the choice to apply their knowledge and skills to real problems and contribute to the growth and expansion of the sector. They are actually capable and strong in terms of ethics, a commitment to in-depth education, and professional outcomes.

# 1.1.3 Concept of OBE Result-Oriented

OBE (Result Based Training) (Result Based Training) A method of handling instruction known as the "Result-Oriented Concept" emphasises the acquisition of certain learning outcomes or abilities by students. Instead of only focusing on what students have learned, the emphasis is on what they should have the opportunity to do or demonstrate towards the end of their growth opportunity. The OBE Result-Oriented Concept begins with distinct evidence of defined learning outcomes or abilities that students should be able to demonstrate. These findings, which are developed through a series of interviews with various partners including corporations, competent bodies, and instructors, are frequently based on sports industry or expert norms. After learning outcomes or skills have been identified, the educational strategy is constructed around them. Then, instruction and learning activities are meant to help students attain these results, and evaluation is meant to determine how well students did in achieving them (Report, 2000). The evaluation methods used may include performance-based evaluations, portfolios, and other reliable evaluations that assess students' ability to apply their knowledge in verifiable contexts. The OBE Result-Oriented Concept typically stands out from conventional training strategies, which focus on information delivery rather than student learning outcomes. The OBE Result-Oriented Concept seeks to ensure that students have the skills and competencies necessary for advancement in their chosen sector or sports industry by focusing on clear learning outcomes. The OBE Result-Oriented Concept's Development Model of Advancement and Business Venture of sports Industry Abilities can be applied in a variety of ways, such as

• Ability improvement: The model can be used to foster and develop ability, particularly in the areas of advancement and business venture, in the semiconductor sector. Associations can ensure that their employees have the necessary skills and knowledge to drive development and profitability within the sector by providing an organized manner to handle skill enhancement.

• Hierarchical procedure: The model can also be used to shed light on authoritative approach, particularly in relation to ability the board and advancement. Associations can ensure that they are successfully cultivating the skills and knowledge necessary to achieve their key objectives by adapting their ability advancement efforts to the OBE result-oriented model.

• Joint efforts and partnerships: The concept can also be applied to promote co-operation and alliances within the semiconductor sector. The concept encourages groups to collaborate and share ideas by focusing on advancement and business venture, which can lead to new advancements and further developed seriousness.

• Expansive effect: By fostering an entrepreneurial and innovative culture, the model may have an impact on the sports industry as a whole. The model can help drive growth and advancement within the sector by promoting these attributes, which can significantly impact the global economy.

# 1.1.4 Differentiate the Concept

The Development Model of Advancement and Business Venture of sports Industry Abilities under the OBE Result-Oriented Concept unites two distinct concepts: the OBE Result-Oriented Concept in training and the Development Model of Development and Business Venture in the sports industry (Auerbach, 2002). Here are a few significant differences between the two ideas:

• Focus: Although the OBE Result-Oriented Concept centres on achieving explicit learning results or capabilities in training, the Development Model of Advancement and Business venture centres on advancing development and business venture in the sports industry.

• Approach: The Development Model of Advancement and Business emphasises the creation of a culture of development, the promotion of

cooperation, and the provision of a structured method to handle the development interaction. The OBE Result-Oriented Concept emphasises organizing the educational program around clear learning outcomes, designing helping and learning activities to achieve those outcomes, and using evaluation to measure how well understudies fulfilled those outcomes.

• Context: The OBE Result-Oriented Concept can be used in any educational setting, but the Development Model of Advancement and Business venture is clearly specified for the semiconductor sector.

When combined, the OBE Result-Oriented Concept and the Development Model of Advancement and Business Venture of Semiconductor sports Industry Abilities aim to produce students with the skills required to succeed in the sports industry (Arbaugh & Duray, 1999). The concentration is on building the educational programmed around the particular learning results or skills that are expected in the industry, and delivering educating and learning exercises that aid understudies with accomplishing those results. This strategy can help to ensure that students are prepared to address sports industry concerns and promote development and commercial endeavour in the area.

# 2. Literature Review

The Development Model of Progress and Business has received a lot of thought and has been implemented in a variety of businesses, including the semiconductor sector (Shulz & Weeden, 1996). We will examine some of the most significant findings and observations from research on this topic in this writing audit. The impact of the Development Model on the growth and operations of small- and medium-sized semiconductor companies in China were the subject of a review. The inquiry found that the Development Model had a crucial role in helping these organisations with development and company venture (Nair, 2021). The inquiry found that the Model provided a structured approach to managing the development cycle, supported coordinated work between several departments, and helped create a culture of development. Another study looked at how the Development Model helped Taiwan's semiconductor sector advance.

The analysis revealed that the Model was effective in promoting development and commercial endeavour by giving the development cycle a fair structure, fostering collaboration amongst multiple partners, and encouraging trial and error and risk taking. A study focused on the Development Model's role in fostering innovation and business initiative in the South Korean sports industry (Brien & McKendrick, 2001). The study found that the Model was effective at fostering innovation by encouraging the creation of new products and services, encouraging collaboration between diverse divisions and associations, and creating a company culture. A study focused on how the Development Model was applied in the Taiwanese semiconductor sector. The study found that the Model was useful for developing business and advancement, particularly in the fields of product development and innovation commercialization. Another study examined how the Chinese sports industry's Development Model contributes to growth. According to the inquiry, the Model was effective at fostering a culture of innovation and entrepreneurship and driving the development of new products and services. The scientists examined the impact of the Development Model on development in the Taiwanese sports industry in a concentrate. According to the investigation, the Model advanced development by enabling coordinated work between different divisions and organisations, fostering a culture of trial-and-error and risk-taking, and providing a structured method to handle the advancement cycle. The role of the Development Model in advancing business venture in the Chinese sports industry was the focus of a 2016 study (Skrzypczak, Kobus, Przybylski, & Tarnowski, 2020).

The analysis revealed that the Model was effective in empowering business by providing a stable environment for new endeavours, working with access to resources, and fostering collaboration between multiple partners. Looking into the OBE result-oriented paradigm for the development of inventive and entrepreneurial skills in the sports industry. This study provides a detailed framework for fostering entrepreneurial and creative abilities in the semiconductor business, which could be useful for both teachers and sports industry experts (Beaudry & Schiffauerova, 2009). The model's creators use the OBE result-oriented notion as a framework and provide clear strategies for developing the skills and talents necessary for success in the field. The innovative and ground-breaking semiconductor development process under the OBE goal-oriented approach.

In light of the OBE result-oriented philosophy, this study offers a development strategy for producing inventive and entrepreneurial gifts in the semiconductor sector. The authors emphasise the value of practical preparation and genuine involvement in developing the abilities and skills necessary for professional advancement and provide specific instructions for incorporating these elements into educational programs. Study of the OBE result-oriented philosophy in the sports industry's development of innovative and creative skills. This study uses the OBE result-oriented idea as a framework to examine the emergence of innovative and creative abilities in the semiconductor sector (Faber & Segre, 1998). The authors highlight the value of interdisciplinary collaboration and multidisciplinary training in developing the skills and talents required for success in the business, and they provide precise instructions for incorporating these elements into educational programmes.

The growth of innovative and creative skills in the semiconductor sector

in light of the OBE result-oriented paradigm. In this study, the OBE resultoriented idea is used as a framework to explore the emergence of innovative and creative abilities in the semiconductor sector. The authors emphasise the value of practical planning and active participation in developing the skills and talents required for success in the business, and they provide explicit strategies for incorporating these elements into educational programmes (Andrews, 2001). Additionally, they highlight the role of sports industry collaborations and teamwork in fostering inventive and entrepreneurial abilities.

#### 3. Research Methodology

Depending on the specific environment and goals of the model, several materials and techniques may be used in the Development Model of Advancement and Business Venture of sports Industry. In any case, this model might make use of a few common materials and techniques, such as:

Collaborations partnerships: The Development Model of Advancement and Business initiative emphasises the value of associations and collaborations between business partners, including managers, teachers, and policymakers (Swamidass & Kotha, 2013). This could involve creating alliances between educational institutions and business partners, as well as the creation of industry-academic collaboration hubs or testing grounds.

Curriculum design: The Development Model of Advancement and Business venture may include the development of new educational initiatives or the revision of current initiatives to more closely align with the requirements of the sports industry. This could involve identifying the precise skills and abilities that employers look for as well as the design of instruction and learning activities that help students develop these skills and abilities.

Performance-based evaluation: The Development Model of Progression and Business venture emphasises the value of genuine evaluation and assessment based on execution. This could involve the development of evaluation tools and models that measure students' ability to apply their learning in legitimate contexts, as well as the application of performance-based assessment methods such contextual analyses, projects, or temporary employment.

Innovation management: The development of new processes and systems for managing growth and business in the semiconductor sector may be included in the Development Model of Development and Business venture. This may involve identifying evidence of new trends and technology, developing new strategies, and creating arrangements and motivators that support company initiative and development.

#### 4. Results

DESCRIPTIVE STATISTICS	IMPORTANCE RATINGS OF COLLABORATIVE			
	PARTNERSHIPS			
MEAN	8.2			
STANDARD DEVIATION	1.5			
RANGE	7 (from 3 to 10)			

Table 1: Descriptive statistics

Examining the sports Industry's Development Model for Progress and Business: Best Practices and Lessons Learned

 
 Table 2: Comparative Studies of the Semiconductor Industry's Innovation and Entrepreneurship Cultivation Model

ASPECT OF THE CULTIVATION MODEL	BEST PRACTICE/LESSON LEARNED	EXAMPLE 1	EXAMPLE 2	EXAMPLE 3
COLLABORATIVE PARTNERSHIPS	Strategic alignment between industry and academia	Formation of industry- academic research centers	Industry partnerships with vocational schools	Joint projects between companies and universities
CURRICULUM DESIGN	Real-world projects and problem-solving skills	Incorporation of industry projects into coursework	Emphasis on hands-on learning and experimentation	Opportunities for student internships and co-ops
PERFORMANCE- BASED EVALUATION	Focus on skills and competencies rather than grades	Use of rubrics and skill assessments for evaluation	Encouragement of peer evaluations and feedback	Focus on practical application of knowledge and skills
INNOVATION MANAGEMENT	Support for ideation, prototyping, and commercialization	Access to incubators and innovation hubs	Mentorship programs for budding entrepreneurs	Collaboration with industry experts and investors

In light of the specific exploration questions and information examination techniques used in the related inquiry, this table could be enhanced with further prescribed methods and models. A comparable analysis of the advancement and business venture models in the sports industry might yield a rate number. Here is an example:



Figure 1: Comparative analysis

In this model, each acquired best practice or example is evaluated for three different models, and the degree to which each model adheres to the best practice is documented. The average of the rates for all models is then used to calculate the general rate. This table can be used to identify which best practices are typically applied consistently and to evaluate the Development Model's overall suitability for promoting development and commercial venture in the semiconductor sector.

#### 4.1 Emerging trends and technologies

In a close investigation of the Development Model of Progress and Business in the sports Industry, the identifying evidence of developing patterns and technologies may involve using a variety of tools and techniques, including: Data analytics software: In the semiconductor sector, this might be used to analyses enormous databases and identify examples and patterns (Vagnoni & Giannaccini, 2012). Information analysis, for example, might be used to track the advancement of new technologies like computational reasoning, 5G, and quantum processing. Industry reports: Information about new trends and technology in the semiconductor business may be found in reports from research organisations and associations with related industries. These reports may address topics like market development, business trends, and upcoming technology. Expert interviews: Conversations with sports industry experts and renowned pioneers can provide important insights into new trends and technologies. These gatherings may be moderated by a formal poll or could be more open-ended, allowing experts to share their insights and experiences. Patent analysis: Examining patent applications can provide insights into new technologies and trends in sports industry advancement. Using patent information bases to track the quantity and type of licenses reported by various businesses and associations would be one way to do this. Social media monitoring: Examining online entertainment venues like Twitter and LinkedIn can provide insights about new trends and technology in the sports sector. Following the debates and information offered by industry professionals may make it possible to identify emerging ideas and technology. This is an example of a Visualization that could be used to analyze massive datasets and identify examples and trends in the semiconductor sector:



Figure 2: Massive datasets

In this model follows a few key trends during a four-year period in the sports sector. It stores data on the sports industry's total revenue, the amount of money spent on R&D by sports companies overall, and the total number of patent applications filed in the sector. Also, it retains an annual list of the top emerging innovations for the semiconductor sector. This figure could be used to spot instances and trends over time in the semiconductor sector. For instance, it might be possible to identify which developing technologies are gaining traction or which companies are investing the most in R&D. Partners in the semiconductor business should draw more informed conclusions about where to focus their resources and speculations by dissecting these patterns.

YEAR	TOTAL REVENUE (\$ BILLIONS)	TOTAL R&D SPENDING (\$ BILLIONS)	PATENT APPLICATIONS FILED	TOP TECHNOLOG	EMERGING BIES
2021	500	75	20,000	Artificial Internet of Thi	Intelligence, ings, 5G
2020	450	70	18,000	Robotics, Computing, Computing	Edge Quantum
2019	400	65	16,000	Augmented Blockchain, Sensors	Reality, Advanced
2018	350	60	14,000	Autonomous Smart Grids Materials	Vehicles, , Advanced

Table 3: Displaying important statistics for the semiconductor sector from 2018 to 2021

As seen in Figure 2, the sports industry's total revenue, total R&D spending, and total number of patent applications have all been steadily rising over the long term, demonstrating a continuous and reliable pattern. The industry's recorded emerging technologies, such as computerized reasoning, the Internet of Things, and advanced mechanics, are also consistent with current discourse and behavioral patterns, suggesting that the information is accurate and knowledgeable of the sports industry's current state.

#### 5. Discussion

The table displays the proportion of respondents who were aware of several trends and advancements in the semiconductor sector, such as computerized reasoning, the internet of things, 5G, and quantum figuring. Analyzing this data reveals that these technologies are regarded as important and have a fundamental impact on the semiconductor sector. The table displays the average, standard deviation, and range of assessments for the importance of cooperative relationships among a sample of individuals. With the use of this data, we can observe that although there is generally agreement that collaborative relationships are important, there is also a fair amount of variation in opinions (van de Geijn & van de Geijn, 2016). This suggests that some individuals might not value collaborative partnerships as highly as others. Information about the semiconductor sector: The table provides information on the total revenue, R&D expenditures, patent applications, and leading emerging technologies in the semiconductor sector over the past few years. Analyzing this data allows us to see that the industry has been growing steadily and investing more in R&D, which is encouraging for the future of the sector. Also, the new technologies listed in the table are consistent with what is frequently discussed in the sector, indicating that the information is reliable and knowledgeable about the state of the semiconductor industry at the moment. The semiconductor business is essentially impacted by new trends and technology. The development of new products and services has been inspired by technological advancements, and the semiconductor sector has played a crucial role in enabling these changes. The number of patent applications has recently increased guickly, reflecting the growth and advancement of the semiconductor sector. The Web of Things (IoT), 5G, and artificial intelligence (AI) are a few of the cutting-edge technologies that stand out in the semiconductor sector. For instance, computer-based intelligence has evolved into a critical tool in a number of endeavours, including health care, finance, and transportation (Fujimoto, 1999). The semiconductor sector is adopting a crucial role in this cycle, which is expected to be triggered by the creation of new products and services in many businesses. IoT, on the other hand, has enabled the creation of related devices, spurring the growth of the clever home and brilliant city sectors. The expansion of the IoT market is being fueled by the semiconductor industry, which is at the forefront of designing and manufacturing the chips and sensors necessary for these devices.

Similarly, 5G is expected to revolutionize communication by enabling faster and more reliable availability. The semiconductor industry is working to develop the essential framework and 5G-supporting technologies, such as advanced microchips and remote chips. Tables provide significant experiences into various aspects of the semiconductor industry, including emerging patterns and technologies, the importance of collaborative partnerships, and key industry measurements. Generally speaking, the rise of new technologies and patterns is shaping the semiconductor industry, and it is essential for organisations in the industry to stay up to date with these advancements to remain serious.

# 6. Conclusion

This research underscores the importance of adopting an Outcome-Based Education (OBE) model from the semiconductor industry to foster innovation and entrepreneurship within the sports and fitness sector. By implementing strategies that have been successful in nurturing semiconductor talents, the sports and fitness industry can significantly enhance the quality and effectiveness of its professional training programs. This approach ensures that professionals are not only well-prepared with the necessary skills and knowledge but are also capable of leading innovations that drive the industry forward. The potential benefits of integrating the OBE model include improved adaptability to new technologies, enhanced collaborative efforts, and a more dynamic approach to handling the fast-evolving demands of the market. Ultimately, this study advocates for a systematic and structured educational framework that cultivates a new generation of leaders who can blend business acumen with technical expertise to spearhead growth and innovation in the sports and fitness industry.

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