Identifying Strategic Framework of Sports Startups to Success Facing Uncertainty

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Zeinab Mondalizadeh[1*]
Elahe Kavyani[2]

[1] Associate Professor of Sports Management, Arak University, Arak, Iran
[2] PhD Student in Sports Management, Arak University, Arak, Iran

*Correspondence:
Zeinab Mondalizadeh, Associate Professor of Sports Management, Arak University, Arak, Iran

Email: zmondalizad@gmail.com
ORCID: 0000-0003-1422-514X
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Abstract

Purpose: Todays, startups need to have a strategic framework to handle challenges and uncertainty in this unpredictable environment. Therefore, the purpose of this research was to identify the strategic framework of sports startups to succeed facing uncertainty.

Methods: The research method was the qualitative one. The research strategy was Grounded theory based on the Glazer approach. In-depth interviews were used to collect data. The purposeful and snowball sampling techniques were employed. Sampling continued until theoretical saturation was achieved. The participants were sports management professors, sports business owners, science and technology park employees and specialists in sports entrepreneurship involved in the study. The analysis of the interview was conducted non-linearly and based on open, selective, and theoretical coding.

Results: Seventy-five open codes, fourteen selective codes, and six theoretical codes were extracted. Theoretical codes include six main dimensions and their sub-components: environmental analysis (market analysis, customer analysis, analysis of regulatory changes), resource assessment (risk assessment, performance metrics, and evaluation), dynamic capability development (branding, competitive intelligence, innovation technology integration), strategic flexibility (agile response to market dynamic, change and adaptation), adaptive resilience (resilient culture, uncertainty management), and strategic ambiguity management (strategic opportunism, strategic adjustment).

Conclusion: Based on the framework, this model illustrates the interconnectedness of the concepts identified in Glazer's grounded theory and how they contribute to the strategic framework of sports startups facing uncertainty. By adopting agile strategies informed by environmental and resource insights, investing in dynamic capabilities, having strategic flexibility, and considering adaptive resilience, sports startups can enhance strategic ambiguity in an uncertain environment. The results have important implications for investor, entrepreneurs, and startups stakeholders in sport sectors.

Keywords: Sports startups, innovation, resources assessment, environmental analysis, strategic flexibility, uncertainty, success.

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Introduction

Todays, startups play a pivotal role in driving innovation and disruption (Ratten, 2020a). A startup is a temporary organization with the characteristics including repeatability, scalability, and profitability of the business model (Blank & Dorf, 2012; Ratten, 2020b). Startups are creating new products and services that should be accepted in the market and ecosystem (Teberga & Oliva, 2018). Indeed, the sports industry is undergoing rapid transformation, changing by technological advancements, shifting consumer behavior, and evolving regulatory landscapes (Pitts & Stotlar, 2002). In this regard, sports startups face several challenges, including a lack of financial support for business, strict rules and regulations, and a shortage of human resource(Parvaz & Eydi, 2022). Further, in the dynamic environment of sports startups in the sports ecosystem, uncertainty is a fundamental challenge (Tomy & Pardede, 2018). From market demands to unpredictable consumer preferences, startups in the sports industry encounter the obstacles to success (FERRARO & Di Francesco, 2016). Uncertainty has the main role in decision-making and is known as a concept that has gained attention in business and management research (Kafetzopoulos et al., 2020; Koh et al., 2005; Sniazhko, 2019; Yustian, 2021). Uncertainty is defined as the lack of knowledge about the status of future events related to business or startups (Knight, 1921; Sniazhko, 2019). Management of the uncertainty could help to improve proactive collaboration, and predict the environment of startups or businesses (Yustian, 2021). Therefore, uncertainty has a significant impact on decision making in companies (Sniazhko, 2019). For reduce uncertainty, the strategic framework is necessities for businesses (Schoemaker, 2012). Understanding the strategic frameworks utilized by successful sports startups is crucial for several reasons. Considering these challenges, a strategic framework tries to overcome the unique challenges of the sports sector and help startups build robust partnerships, leverage synergies, and capitalize on emerging opportunities, thereby fostering sustainable growth and market expansion.

A strategic framework refers to a structured approach or plan that outlines the fundamental components of how a startup will achieve its goals and navigate challenges within the industry (McGrath, 2013a). This strategic framework includes elements such as target market, competitive analysis, key performance indicators, resource allocation, and growth strategies (Snowden, 2005). As sports startups continue to drive innovation and disruption, understanding the strategic frameworks that enable them to succeed is crucial. These startups often operate under resource constraints and face significant risks, making strategic planning and adaptability vital for their survival and growth (Ratten, 2020b). Additionally, as the sports industry becomes increasingly globalized, startups must navigate complex networks of stakeholders and unpredictable market conditions (Demetriou et al., 2022).

As a result, without a clear strategic direction, they may struggle to allocate resources effectively or adapt to changing circumstances (McGrath, 2013b). By uncovering best practices and successful approaches, this research equips startups with actionable knowledge to overcome risks, optimize resource utilization, and enhance their competitive advantage.

There is scattered research related to strategic framework in startups especially sport startups. In this regard, Sommer et al. (2009) showed that startups were insufficient for managing unforeseeable uncertainty and complexity. They found two ways to reduce risk of startups including trial-and-error learning and pursuing several approaches. Research by McGrath (2013) emphasized the importance of adaptability in strategic management and

management agility, particularly uncertainty management in startups. Consideration of this approach led to achieving sustainable competitive advantage in a dynamic environment that is characterized by rapid changes. Similarly, Teece (2014) discussed the concept of dynamic capabilities in firms to apply and exploit opportunities in a changing market. Moreover, the research found that firms should develop the ability to adapt their strategic frameworks in response to changing external conditions to maintain competition. Hamel & Valikangas (2004) showed that resilience and considering strategic planning are importance in changing environment. They argued that resilience organizations could lead to flexibility and redundancy in strategic farmwork to enhance adaptability. Moreover, Chesbrough & Appleyard (2007) showed that collaboration with external stakeholders allows firms to access extra resources, expertise, and markets. As a result, these strategies increase the firm's capacity to respond to unexpected challenges and uncertainty environment. Furthermore, research by Couvelaere & Richelieu (2005) found that strategic planning in sports clubs contributes to the success of strategic thinking. Furr & Eisenhardt (2021) investigated the relationship between resources and performance in determining the strategy in uncertain situation. Resource-based view is critical for understanding strategies for market entry, extending the value of technology resources, and broadening the locus of resources within ecosystems. Vecchiato (2012) surveyed the using of foresight practices and technique for coping with environmental uncertainties in large companies. The result explores the impact of complexity and dynamism in strategic decision making. Based on the conceptual framework, strategic foresight activates was considered as a planned learning process for managers. Ryman & Roach (2024) investigated the distinction between innovation and entrepreneurial processes by differentiating uncertainty from risk. They posited that innovators reduce uncertainty, while entrepreneurs manage it to assess risk. Their effectual innovation approach involves experimentation and flexibility, whereas entrepreneurial risk management focuses on pre-commitments and affordable loss. Analyzing data from 169 US SMEs, their model demonstrated that uncertainty management enhances innovation performance, while risk management improves firm performance. The study suggests that segregating uncertainty and risk at the entrepreneurship–innovation interface may be beneficial.

While existing literature offers valuable insights into various aspects of entrepreneurship and strategic management, there remains a noticeable gap concerning the specific challenges faced by sports startups in uncertain environments. While some studies examine general strategies employed by startups across industries, few have focused specifically on strategic frameworks in sports startups (Stokes, 2000). Furthermore, sports startups encounter unique obstacles, such as limited financial support, strict regulations, and a shortage of specialized human resources, which are not adequately addressed in the broader startup literature. Additionally, the rapid pace of technological change and evolving consumer preferences in the sports sector create further uncertainty, making it difficult for these startups to sustain growth. To address this gap, this research adopts a comprehensive approach, drawing on both theoretical frameworks and qualitative research to demonstrate the strategic pathways to success for sports startups. Therefore, this study aims to answer the question: What is the strategic framework employed by sports startups to achieve success in an uncertain environment? By uncovering best practices and successful strategies, this research can empower sports startups to optimize resource utilization, enhance their competitive advantage, and achieve long-term success in a

highly uncertain environment.

Material and methods

The research method was the qualitative one. We used Grounded theory based on the Glazer approach (1992). In this approach, the researcher should not be limited to a pre-determined pattern and should extract concepts to create a theory. Indeed, the extracted theory derived from data is an inductive theory. The Glazer method, like hermeneutics, emphasizes the internal understanding of subjects to create meaning from data. Therefore, the goal is to discover the main concepts and behavioral patterns of the participants (Khanifar & Moslemi, 2018).

The participants in this research were sports management professors, sports startups owners, science and technology park employees, and specialists in sports entrepreneurship. Table 1 shows the participants characteristics. The purposeful and snowball sampling techniques were employed to carefully select the participants based on their roles within the sports ecosystem. Sampling continued until theoretical saturation was achieved. The researcher received repeated data from the seventh interview onwards, but the interview continued with the ninth person.

Table 1- Profiles of interviewees

Row	Sex	Position	Major	Degree
1	Man	Faculty member	Sports management	Ph.D.
2	Woman	Faculty member	Sports management	Ph.D.
3	Woman	Faculty member	Sports management	Ph.D.
4	Man	Faculty member	Sports marketing	Ph.D.
5	Man	Sports entrepreneurs	Sports engineer	MSc
6	Man	Entrepreneurs	IT Engineer	MSc
7	Man	Science and Technology Park employee	IT Engineer	MSc
8	Man	Science and Technology Park employee	Industrial Management	MSc
9	Woman	University Teacher	Sports management	Ph.D.

First, the unstructured in-depth interviews were conducted. The interview was transcribed into the file line-by-line. The time average of the interview was 30-40 minutes. All interview was recorded with the permission of the interviewees. The analysis of the interview was conducted non-linearly and based on open, substantive, and theoretical coding. Open coding is the initial stage of coding in grounded theory. In this stage, the researcher systematically examines the data to identify initial concepts. After the open code, substantive coding should happen. Substantive coding involves organizing the concept codes into broader categories or themes. Finally, theoretical coding involves integrating the substantive codes into a coherent theoretical framework (Khanifar & Moslemi, 2018).

The coding was done in an open, substantive, and theoretical manner. The research was a continuous process of data collection, followed by memo writing and analysis, which led to new additional data collection. We kept going through the entire data collection and analysis procedure until we had enough data.

Trustworthiness in qualitative research according to Lincoln and Guba (1985) includes

the criteria of credibility, transferability, dependability, and confirmability. As a result, trustworthiness and strengthening of research including credibility, dependability, transferability, and confirmability, explain in the following sections. For credibility, we used peer debriefing to provide an external check on the research process, as well as checking to test the findings and interpretations with the participants (Lincoln & Guba, 1985). Moreover, the double-check of findings with participants was done. As mentioned before, the researchers spent time engaging with the participants to understand them.

For the transferability, authors provide thick descriptions, so that other researchers could transfer the findings to their own research (Lincoln & Guba, 1985). In this regard, a clear description of the methodological approach and findings was presented in detail to ensure transferability.

To achieve dependability, the research process should be logical, traceable, and clearly documented. Therefore, a detailed description of the research process was performed.

Conformability refers to the accuracy of information provided by the participants. Indeed, conformability refers to the objectivity of data collection (Mandal, 2018). The researcher's interpretations and findings were clearly derived from the data that proved confirmability (Tobin & Begley, 2004).

Results

Based on the coding of the first stage, 75 open codes were identified through the review. Table 2 shows open, coding for strategic frameworks of sports startups to success facing uncertainty.

Open coding

After the completion of the first interview, the open coding process began. Open coding is conceptualized at the first level of abstraction. This work is done by coding as many categories as possible and without preconceived codes. Coding is often done in the margins of field notes.

Table 2 shows an example of key points along with initial codes.

Table 2 An example of the key points of the interview text along with the initial coding

Code of the interviewee	key points of the text of the interviews	Open coding
In1, in2, in3	Assessment of economic factors affecting startup success	Economic analysis
In3, in1, in4	Identifying strategic market positioning for a competitive edge	Market positioning
In2, in4, in5	Analysing competitors to identify strengths and weaknesses	Competitive analysis
In1, in2, in3	Utilizing data to inform business decisions and strategies	Data analytics
In1, in2, in3, in4, in5	Exploring various funding sources to ensure financial stability	Funding sources
In1, in2, in3, in4, in5	Tracking key performance indicators to measure success	Performance metrics
In1, in4, in5	Monitoring external factors that may impact the business	Environmental scanning

Selective coding

Selective coding is also done after open coding.

Table 3 shows the concepts and examples of codes resulting from data analysis in the selective coding stage.

Table 3- Codes resulting from data analysis in the selective coding stage

Open codes	selective codes
Economic analysis	Market Analysis
Market positioning	
Competitive analysis	
Data analytics	
Funding sources	
Performance metrics	
Environmental scanning	
Structure analysis	
Organizational law	Analysis of regulatory changes
Legal considerations	
Intellectual property protection	
Regulatory compliance	
Customer segmentation	Customer analysis and segmentation
Survey of social trends	
Consumer analysis	
Customer preferences	
Risk management	Risk assessment
Anticipating changes	
Crisis management	
Crisis anticipation	
Crisis response	
Resource allocation	Performance metrics and evaluation
Customer satisfaction assessment	
Quality control	
Assessment of operational efficiency	
Cost optimization	
Product development	Branding
Brand building	
Networking	
Community engagement	
Brand identity	
Emotional intelligence	Competitive intelligence
Resourcefulness	
Innovative leadership	
Social connection	

Market intelligence	
Trend innovation	Innovation and technology integration
Technology integration	
Value innovation	
Disruptive innovation	
Technological innovation	
Creative thinking	
Having escape plans	Agile response to market dynamic
Product differentiation	
Market agility	
Responsiveness strategic	
Quick response to changes	
Decision-making processes	Change and adaptation
Value proposition changes	
Adaptation to changing trends	
Data-driven decision-making	
Organizational structure	Resilient culture
Learning from failures	
Cultural awareness	
Psychological resilience	
Uncertainty tolerance	
Risk tolerance	
Response to uncertainty	Uncertainty management
Resilience to uncertainty	
Adaptation to uncertainty	
Strategy under uncertainty	
Interactive approach to environmental events	
Market penetration	Strategic opportunism
Marketing strategy	
Growth hacking	
Long-term vision	
Opportunity identification	
Customer retention	

Customer engagement	
Startup scalability	
Product-market fit	
Strategic partnerships	
Strategic fit	Strategic adjustment
Employee empowerment	
Strategic foresight	

Theoretical coding

When the codes and notes are accumulated, we begin to conceptualize and understand the relationships between them using theme analysis. This process is called theoretical coding.

Glaser introduced various "coding families" (like the 6C family, process family, type family, theoretical family, etc.) that provide a systematic way to think about the relationships between the concepts. The researchers are not restricted to only the 18 families that Glaser originally identified. In this regard the researcher can introduce new coding as needed based on their data (Glaser & Strauss, 2017). However, with the investigations carried out by the researcher, it seems that in the current research, it is theoretical coding that has been discussed in the conceptualization and communication of data to each other.

Table 4 shows theoretical coding process.

Table 4- Open, substantive, and theoretical coding of the strategic framework of sports startups open, substantive, and theoretical coding of the strategic framework of sports startups

Open codes	selective codes	Theoretical codes
Economic analysis	Market Analysis	Environmental analysis
Market positioning		
Competitive analysis		
Data analytics		
Funding sources		
Performance metrics		
Environmental scanning		
Structure analysis		
Organizational law	Analysis of regulatory changes	
Legal considerations		
Intellectual property protection		
Regulatory compliance		
Customer segmentation	Customer analysis and segmentation	
Survey of social trends		
Consumer analysis		
Customer preferences		

Risk management	Risk assessment	Resource assessment
Anticipating changes		
Crisis management		
Crisis anticipation		
Crisis response		
Resource allocation	Performance metrics and evaluation	
Customer satisfaction assessment		
Quality control		
Assessment of operational efficiency		
Cost optimization		
Product development	Branding	Dynamic capability development
Brand building		
Networking		
Community engagement		
Brand identity		
Emotional intelligence	Competitive intelligence	
Resourcefulness		
Innovative leadership		
Social connection		
Market intelligence		
Trend innovation	Innovation and technology integration	
Technology integration		
Value innovation		
Disruptive innovation		
Technological innovation		
Creative thinking		
Having escape plans	Agile response to market dynamic	Strategic flexibility
Product differentiation		
Market agility		
Responsiveness strategic		
Quick response to changes		
Decision-making processes	Change and adaptation	
Value proposition changes		

Adaptation to changing trends		
Data-driven decision-making		
Organizational structure	Resilient culture	Adaptive resilience
Learning from failures		
Cultural awareness		
Psychological resilience		
Uncertainty tolerance		
Risk tolerance		
Response to uncertainty	Uncertainty management	
Resilience to uncertainty		
Adaptation to uncertainty		
Strategy under uncertainty		
Interactive approach to environmental events		
Market penetration	Strategic opportunism	Strategic ambiguity management
Marketing strategy		
Growth hacking		
Long-term vision		
Opportunity identification		
Customer retention		
Customer engagement		
Startup scalability		
Product-market fit	Strategic adjustment	
Strategic partnerships		
Strategic fit		
Employee empowerment		
Strategic foresight		

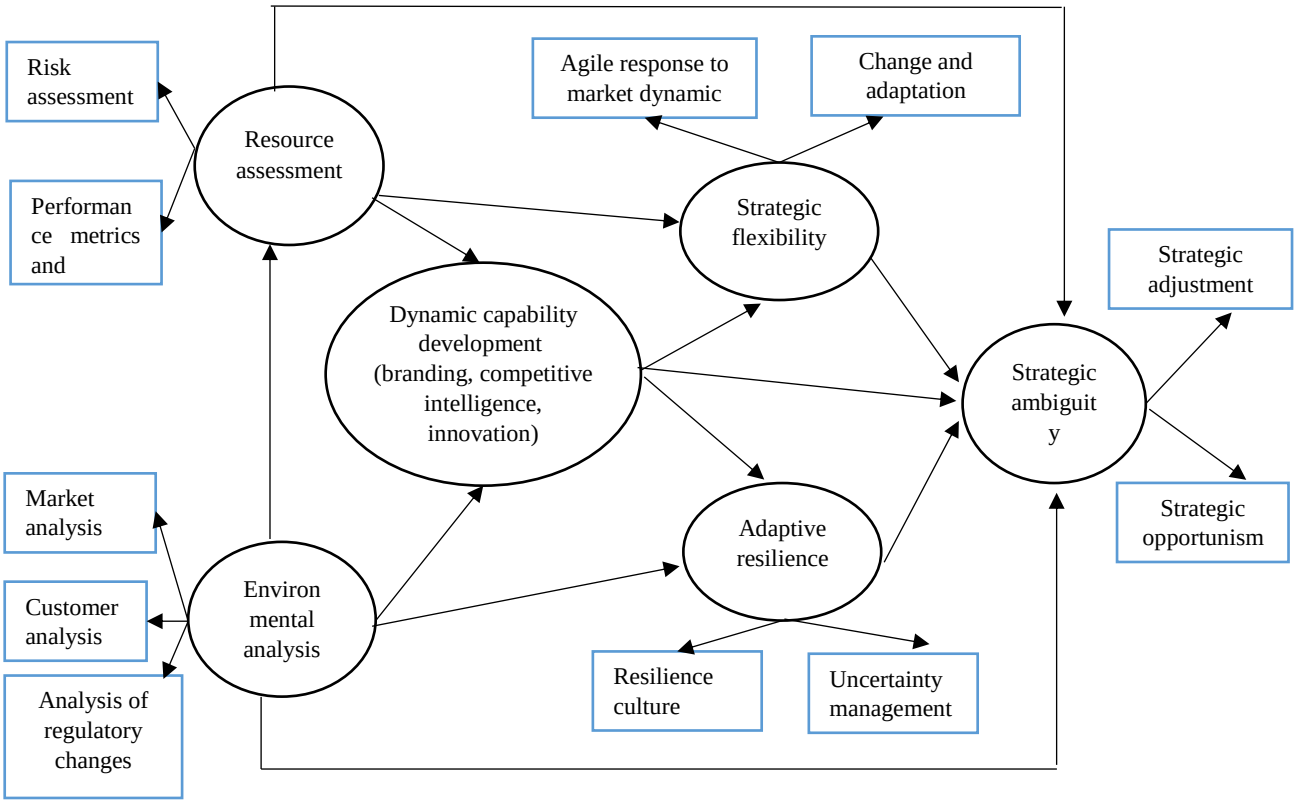

Figure 1- Strategic framework of sports startups to success facing uncertainty

Research framework is shown in Figure 1. Based on the framework, this model illustrates the interconnectedness of the concepts identified in Glazer's grounded theory and how they contribute to the strategic framework of sports startups facing uncertainty. By adopting agile strategies informed by environmental and resource insights, investing in dynamic capabilities, having strategic flexibility, and considering adaptive resilience, startups can enhance strategic ambiguity in an uncertain environment.

Discussion

The purpose of the paper was to identify the strategic framework of sports startups to succeed facing uncertainty. The results based on the grounded theory showed that the strategic framework had six main dimensions including environmental analysis (market analysis, customer analysis, analysis of regulatory changes), resource assessment (risk assessment, performance metrics, and evaluation), dynamic capability development (branding, competitive intelligence, innovation technology integration), strategic flexibility (agile response to market dynamic, change and adaptation), adaptive resilience (resilient culture, uncertainty management), and strategic ambiguity management (strategic opportunism, strategic adjustment).

Environmental analysis is the first step for encountering the uncertainty. Environmental analysis emerged as a fundamental aspect for understanding market trends, customer needs, and analysis of regulatory changes. Comparing this with Porter (2011) five forces framework, which also emphasizes the importance of understanding external environmental factors, our findings extend the significance of regulatory changes specifically in the context of sports startups. Moreover, Daft & Weick (1984) and Day (1994) underscored the importance of environmental scanning as a critical component of strategic management in startups, which aligns with our emphasis on environmental analysis as foundational to strategic management. However, our study

broadens this by incorporating customer analysis as a critical component, a factor less emphasized in earlier frameworks. Eisenhardt & Martin (2000) emphasized that in highly dynamic and uncertain environments, startups must be particularly agile in their environmental analysis. Oliva et al. (2022) highlighted the role of environmental analysis for internationalization and success in startups. Lastly, Cavusgil & Knight (2015) discussed the significance of born-global firms and their ability to leverage environmental analysis to achieve rapid internationalization, despite uncertainty. Their findings suggest that sports startups can similarly benefit from a proactive approach to environmental analysis and strategic adaptability. Environmental analysis provides insights into changing markets, helping organizations anticipate market trends and customer preferences. The environmental analysis enables sports startups to respond proactively to uncertainties and changes (Burgelman & Grove, 1996).

Resource assessment was another key driver for uncertainty management. Resource assessment plays a key role in identifying potential risks associated with a startup's resources and evaluating their overall performance. Resource assessment plays a key role in uncertainty management in sports startups. By scanning risk-related resources and evaluating performance metrics, startups can identify the strengths of operations and the allocation of resources effectively. Moreover, this process could help to decrease risks and capitalize on opportunities in the market. Considering the Resource-Based View (RBV), which traditionally emphasizes the role of internal resources as a source of competitive advantage, our study highlights how resource assessment specifically in uncertain environments can mitigate risks and identify opportunities. This perspective builds on RBV by integrating performance metrics as a tool for ongoing evaluation, which is crucial for startups operating under uncertainty. in this regard, Teece (2014) showed the importance of resource assessment in an uncertain environment. In addition, Eisenhardt & Martin (2000) emphasized the significance of performance metrics in evaluating the effectiveness of strategic initiatives. As a result, sports startups using resource assessment can enhance their ability to respond changing circumstances. De Vasconcelos Gomes et al. (2018) discussed the importance of resource assessment in fostering innovation within uncertain environments. Their study suggests that startups, by regularly assessing their resources, can better manage uncertainty and innovate to stay competitive. Finally, Kamasak (2015) explored the relationship between resource orchestration and firm performance. They found that startups that effectively assess and manage their resources can achieve better performance outcomes, particularly in uncertain environments. This aligns with the idea that resource assessment is integral to uncertainty management in sports startups.

Dynamic capability development was the key factor for uncertainty management in changing environment. Drawing on the dynamic capabilities' framework by Teece et al. (1997) our findings confirm that the ability to integrate, build, and reconfigure resources is essential for responding to uncertainty. However, our study extends this by highlighting the role of branding and competitive intelligence as part of dynamic capabilities specifically within sports startups, aspects that are less emphasized in the traditional dynamic capabilities' literature. Dynamic capability development emerged as a strategic approach to maximize efficiency regarding analysis of environment and resource assessment. Dynamic capability development could lead to sports startups managing uncertainty effectively. Dynamic capability refers to the ability of organization to integrate, build, and reconfigure the internal and external competencies to quick respond to changing environment (Teece et al., 1997). Research by

Teece et al. (1997) highlights the importance of dynamic capabilities for the adaptability of firms in turbulent environments. By enhancing branding strategies, sports startups can build strong connections with their target audience (Keller & Brexendorf, 2019). Mikalef et al. (2019) emphasized that dynamic capabilities and strategic flexibility are crucial for startups to innovate and adapt in uncertain environments. Their study underscores the need for startups to continually assess the external environment, including market trends and customer needs, to develop a robust strategic framework. In addition, Bahramipour (2022) evaluated business plans under conditions of uncertainty and introduced variables as key variables in the selection and development of new products in the organization, including new product development strategy, attracting product development research funds, and attracting research funds. Practical. In fact, this research emphasized on human resource management and resource management in order to create new products. Furthermore, competitive intelligence enables startups to stay proactive by gathering and analyzing information on market trends, competitor strategies and customer behavior (Fuld, 1985). Innovation technology integration is also essential for sports startups to remain agile and responsive to the market. According to Teece (2014), innovation plays a critical role in creating competitive advantage. Sports startups can fulfill customer needs more effectively by applying innovative technologies such as data analytics and digital platforms. Therefore, dynamic capability development is a key factor in the uncertainty management for sports startups that enable them to respond with agility and resilience to changing environment. According to the resource-based view (RBV), a startup's internal resources, such as talent, technology, and innovation, along with the ability to effectively manage these advantages, can be a significant asset in responding to uncertainty and chaotic environments (Olavarrieta & Ellinger, 1997). Moreover, based on the dynamic capabilities' theory, startups develop and reinforce their internal resources and capabilities to adapt uncertainties and search opportunities (Teece, 2014).

Strategic flexibility is considered a pivotal factor in uncertainty management within the dynamic environment. As shown by Eisenhardt & Martin (2000), strategic flexibility enables the organizations to adapt to changing market dynamics. In the context of sports startups, where market trends and consumer preferences can shift rapidly, strategic flexibility becomes even more critical. Research by Teece et al. (1997) suggests that organizations with high levels of strategic flexibility are better equipped to respond to unexpected challenges. In continue, agile strategies allow sports startups to response quickly to changes and uncertainties (Chan & Thong, 2009). Similarly, Supriadi et al. (2020) highlighted that strategic flexibility, when aligned with environmental analysis, enhances a startup's ability to navigate hostile environments effectively. This adaptability is critical for sports startups aiming to thrive amid uncertainty. Based on the strategic adaptation theory (Kimberly & Zajac, 1985), one of the approaches for successful startups is to adapt strategies in response to uncertainties. This adaptability, grounded in the strategic adaptation theory (Kimberly & Zajac, 1985), is expanded in our study to include the specific challenges faced by sports startups, thereby providing a more tailored application of the theory.

Adaptive resilience is a cornerstone for sports startups to manage effectively in a changing environment. According to resilience theory, startups can build resilience to recover unexpected challenges in sports industry (Van Breda, 2001). Research by Rittel & Webber (1973), showed that uncertainty management is a critical capability for organizations in dynamic and complex system. Adaptive resilience leads to the organizational culture

fosters learning from failures (Coutu, 2002; Rittel & Webber, 1973). The findings of Behrens et al. (2022), emphasize the importance of resilience for improving adaptability. Duchek (2020) conceptualizes organizational resilience as a capability that enables startups to not only survive but thrive in dynamic and complex environments. This capability is particularly relevant for sports startups, where the ability to adapt quickly to changes can be a significant competitive advantage. Lengnick-Hall et al. (2011) further emphasize the role of strategic human resource management in fostering a culture that promotes resilience. They suggest that organizations with a resilient culture are better equipped to learn from failures, which is essential for continuous improvement and adaptability. Finally, Hillmann & Guenther (2021) highlight the value of resilience as a construct in management research, noting that resilient organizations are better positioned to manage uncertainty and maintain their adaptability in the face of changing circumstances. This reinforces the importance of adaptive resilience for sports startups as they navigate the uncertainties of the sports industry.

Strategic ambiguity management was the result of strategic framework including strategic adjustment and strategic opportunism. Our study confirms the importance of strategic ambiguity management as described by Eisenhardt & Martin (2000) and Teece (1986), but we further develop this concept by applying it specifically to sports startups. Strategic adjustment involves the startups' ability to modify their strategies in response to changing markets flexibly. Eisenhardt and Martin (2000), emphasized the significance of strategic adjustment in enabling organizations to respond to actions in changing environment. On the other hand, strategic opportunism is related to searching the opportunities in uncertain environment. According to Teece (1986), strategic opportunism involves the proactiveness activity for searching new markets or innovative resources in competitive situations. Strategic ambiguity management can lead to creating a balance between adaptability and certainty and allows sports startups to capitalize on related opportunities (Eisenhardt & Martin, 2000; Teece, 1986). Moreover, de Vasconcelos Gomes et al. (2018) introduced the concept of strategic ambiguity management, where startups deliberately maintain a degree of flexibility in their strategies to better cope with unpredictable changes in the environment. This approach allows sports startups to remain agile and responsive to unforeseen challenges.

Conclusion

Startups can enhance strategic ambiguity in an uncertain environment by adopting agile strategies informed by environmental and resource insights, investing in dynamic capabilities, having strategic flexibility, and considering adaptive resilience. The results have important implications for investors, entrepreneurs, and startups stakeholders in sports sectors. Investors can evaluate the potential of sports startups by understanding the importance of environmental analysis, resource assessment, dynamic capability development, strategic flexibility, adaptive resilience, and strategic ambiguity management.

The findings have several implications for stakeholders in sports sectors. Firstly, considering the importance of adopting agile and adaptive strategies could help uncertainty management and emphasize emerging opportunities. Secondly, sports stakeholders could investigate and pursue technological innovation to drive sustained success. Thirdly, they emphasize the need for ongoing research and collaboration to address the identified gaps and challenges, fostering innovation and growth in the sports startup ecosystem.

Moreover, prioritizing the adoption of agile and adaptive strategies can enhance uncertainty management and enable stakeholders to capitalize on opportunities. As highlighted by

Teece (2007), dynamic capabilities, including agility and adaptability, are essential for organizations to navigate through uncertain environments and maintain a competitive advantage effectively. In addition, stakeholders should explore and pursue technological innovation. Indeed, the potential of sports technology can lead to improving operational efficiency.

There are several limitations for this study. First, the findings are based on a theoretical framework informed by Glazer's grounded theory, which while robust, may not fully capture the diversity of challenges faced by sports startups across different regions, and markets. This limits the generalizability of the results. Additionally, the research was conducted in Iran, which may have unique socio-cultural situations compared to other countries, both developed and developing. Second, we investigated strategic framework of sports startups to success facing uncertainty comprehensively. However, it may be beneficial to use an alternative theoretical approach to develop a model instead of a framework. Based on the limitation, future studies can be investigated through the quantitative methods to provide generalizable insights. Moreover, a mixed-methods approach could combine the depth of qualitative analysis with the statistical rigor of quantitative data, leading to a more comprehensive understanding of the challenges faced by sports startups. Second, future studies could explore the impact of specific external factors, such as regulatory changes, economic shifts, or cultural factors, on the strategic frameworks of sports startups. This would provide a more nuanced view of how these external variables influence strategic decision-making in uncertain environments.

In summary, embracing agile strategies, leveraging technological innovation, and promoting collaboration are key imperatives for stakeholders in the sports sector to navigate uncertainty and foster innovation in the sports startup ecosystem. The results of this study offer several important managerial implications for investors, entrepreneurs, and other stakeholders in the sports startup ecosystem.

The implications of paper were to provide valuable insights for entrepreneurs on how sports startups can effectively implement the proposed strategic framework. In this regard, sport startups should establish a systematic process for environmental analysis. This can be achieved by forming a professional team or utilizing technological tools to continuously monitor market trends. Regular workshops and scenario planning exercise can help startups anticipate and prepare for shifts into new markets. Moreover, sports startups should focus on developing core competencies such as agility, innovation, and learning. This could involve investing in employee training programs, fostering a culture of improvement, and encouraging experimentation. In addition, startups should build flexibility into their business models by maintaining multiple strategic options and being prepared to pivot when necessary. Finally, sports startups should encourage to build resilience by creating contingency plans and establishing strong relationships with key stakeholders.

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